

RCRA Exclusions, Exemptions & Related Provisions

Reference Guide

40 CFR Part 261 and Related Sections

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The regulatory citations and summaries in this guide are sourced from the current Code of Federal Regulations and represent the letter of the law. The “Explanation” sections are interpretive guidance based on professional experience and are intended to help the reader understand what the regulation means in practice. Where the explanation and the regulatory text conflict, the regulatory text controls. Always consult the current CFR and applicable state regulations for compliance decisions.

How to Use This Guide

This guide organizes RCRA’s exclusions, exemptions, and related provisions into groups based on subject matter. Each group begins with a shared explanation that provides the background and context common to all provisions in that group. Individual provisions then follow in a table format:

Top row: The regulatory citation, the name of the provision, and a summary of what the regulation actually says.

Gray row below: An explanation of what the provision means, why it exists, and how it works in practice. This is where regulatory language is translated into everyday terms.

The groups are organized by topic so you can go directly to the section that applies to your industry or situation. If you work in oil and gas, start with the Bevill Amendment and Petroleum Industry sections. If you deal with recycling or reclamation, go to the Recycling and Definition of Solid Waste section. If you are trying to understand a specific provision, use the citation in the left column to locate it.

Remember: an exclusion or exemption from RCRA hazardous waste requirements does not mean a material is unregulated. Other federal programs (Clean Water Act, Clean Air Act, DOT, NRC, OSHA) and state environmental regulations may still apply.

Clean Water Act Handoffs

These three exclusions all share the same logic: another federal law — the Clean Water Act (CWA) — already regulates these water discharges, so RCRA steps aside to avoid duplicate regulation. The Clean Water Act controls what pollutants can be discharged into the nation’s waterways through a system of permits (called NPDES permits) and pretreatment standards.

The important thing to understand is that these exclusions remove RCRA authority, but the Clean Water Act authority remains fully in effect. Facilities still have to comply with their discharge permits, pretreatment limits, and any state or local sewer use requirements.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(1)	Domestic sewage	Untreated sanitary waste passing through a sewer to a POTW, and any mixture of domestic sewage and other wastes passing through a sewer to a POTW

Explanation

A POTW is a Publicly Owned Treatment Works — your municipal wastewater treatment plant, the facility run by the city or county that treats sewage before discharging it.

Once wastewater enters the sewer system and is flowing toward the POTW, RCRA does not regulate it. This includes industrial wastewater that mixes into the sanitary sewer along the way. The rationale is that the CWA already controls what goes into a POTW through pretreatment standards and local sewer ordinances.

This exclusion covers what is flowing through the sewer. Your facility’s CWA pretreatment permit or local sewer use ordinance still sets limits on what you can discharge. Violating those limits carries its own penalties under the CWA — this RCRA exclusion does not shield you from those requirements.

(a)(2)	CWA point source discharges	Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act
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Explanation

A “point source discharge” is a discharge from a specific, identifiable location — a pipe, a ditch, a channel, an outfall — into a waterway. Section 402 of the CWA is the National Pollutant Discharge Elimination System (NPDES) permit program that regulates these discharges.

If your facility has an NPDES permit and is discharging wastewater through a permitted outfall, the actual discharge itself is excluded from RCRA. However, this exclusion is narrow: it covers only the discharge point. Industrial wastewater being collected, stored, or treated before it reaches the discharge point is not excluded. Sludges generated during wastewater treatment are also not excluded. Those may still need to be evaluated as potential hazardous wastes.

(a)(3)	Irrigation return flows	Agricultural irrigation water returning to surface water or groundwater
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Explanation

Water used to irrigate crops that drains off the field and flows back into a stream, river, or groundwater is excluded from RCRA. This prevents agricultural irrigation runoff from being classified as solid waste even if it picks up residues from fertilizers or pesticides during its passage over farmland. Like the other CWA handoffs, this water is still subject to Clean Water Act regulations and state agricultural runoff programs.

Atomic Energy Act – Radioactive Materials

The Atomic Energy Act (AEA) of 1954 is the federal law that governs radioactive materials in the United States. It created the regulatory framework now administered by the Nuclear Regulatory Commission (NRC) for commercial nuclear activities and the Department of Energy (DOE) for defense-related nuclear activities. The AEA defines three categories of regulated material: “source material” (uranium and thorium ores and concentrates), “special nuclear material” (enriched uranium, plutonium), and “byproduct material” (materials made radioactive by nuclear processes, or certain naturally occurring radioactive material associated with uranium and thorium production).

This exclusion draws a hard line between EPA’s authority under RCRA and the NRC/DOE’s authority under the AEA. Materials that fall under the AEA are not solid wastes under RCRA, which means they cannot be hazardous wastes under RCRA.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(4)	AEA materials	Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954

Explanation

Any material that qualifies as source, special nuclear, or byproduct material under the AEA is completely outside RCRA’s jurisdiction. This means radioactive waste shipments regulated by the NRC do not count toward a facility’s RCRA generator status, do not require a RCRA hazardous waste manifest, and do not appear on the facility’s RCRA biennial report. These shipments are instead regulated by the NRC for the radioactive material itself and by the Department of Transportation under 49 CFR as DOT Class 7 (Radioactive) material for shipping purposes.

Important exception – Mixed Waste: If a material is both radioactive under the AEA AND independently meets the definition of a RCRA hazardous waste (for example, a radioactive liquid that is also ignitable, or a material contaminated with both radioactive constituents and a listed hazardous waste), it is called “mixed waste.” Mixed waste is regulated under both the AEA and RCRA at the same time. The NRC regulates the radioactive component and EPA regulates the hazardous waste component. This dual jurisdiction makes mixed waste one of the most complex compliance situations in environmental management. Specific provisions for managing certain mixed wastes are found in 40 CFR Part 266, Subpart N.

Bevill Amendment Exemptions

What is the Bevill Amendment? In 1980, Congress passed an amendment to RCRA sponsored by Representative Tom Bevill of Alabama. The amendment directed EPA to study several categories of high-volume, low-toxicity wastes before deciding whether to regulate them as hazardous waste under Subtitle C. Until EPA completed those studies and made a regulatory determination, these wastes were temporarily exempt from hazardous waste requirements. EPA subsequently studied each category and, in most cases, determined that full Subtitle C regulation was not warranted. The exemptions have remained in place.

What “exempt” means here: These materials are solid wastes — unlike the 261.4(a) exclusions, they do meet the definition of solid waste. But they are exempt from being classified as hazardous waste even if testing shows they exhibit a hazardous characteristic. They are instead regulated as non-hazardous solid wastes under RCRA Subtitle D, and most states have additional regulations that specifically address these waste categories. Exempt from hazardous waste rules does not mean unregulated.

Cite	Exclusion/Exemption	Regulatory Summary
(b)(4)	Fossil fuel combustion waste	Fly ash, bottom ash, slag, and flue gas emission control waste generated primarily from combustion of coal or other fossil fuels. Also includes supporting process wastes (coal pile run-off, boiler cleaning solutions, boiler blowdown, cooling tower blowdown, and others) when co-disposed with combustion wastes

Explanation

Power plants and industrial boilers that burn coal, oil, or natural gas produce enormous volumes of ash and other residuals. Fly ash is the fine particulate captured by air pollution control equipment. Bottom ash is the heavier material that falls to the bottom of the combustion chamber. Slag is the molite material that forms when ash melite at high temperatures. Flue gas emission control waste is the residue from scrubbers and other equipment used to clean exhaust gases.

All of these are exempt from hazardous waste classification when generated primarily from burning fossil fuels. EPA also extended the exemption to several supporting process wastes — things like water used to clean boilers, cooling tower water, and wastewater treatment sludges from treating these process waters — as long as they are disposed of together with the combustion wastes.

These wastes are instead regulated under the Coal Combustion Residuals (CCR) rule at 40 CFR Part 257, Subpart D, which establishes requirements for disposal in landfills and surface impoundments. State environmental agencies may have additional requirements.

(b)(5)	E&P oil and gas wastes	Drilling fluids, produced waters, and other wastes associated with exploration, development, or production of crude oil, natural gas, or geothermal energy
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Explanation

Wastes generated by the process of finding and extracting oil and gas from the ground are exempt from RCRA hazardous waste rules. This includes drilling muds, produced water (the water that comes up from the well along with oil and gas), fracturing fluids, completion fluids, workover wastes, and similar materials generated at or near the wellhead or at the gas processing plant.

EPA studied these wastes in the 1980s and determined in 1988 that Subtitle C regulation was not warranted. The exemption has been reviewed and reaffirmed, most recently in 2019.

Where the exemption ends: The exemption covers exploration and production activities — operations at or near the wellhead and at the gas plant. It does not cover petroleum refining, transportation of finished products, or marketing. Wastes generated at refineries, pipeline terminals, or bulk storage facilities are not E&P wastes. The most common question is where “production” ends and “midstream processing” begins. Gas sweetening and dehydration at the production site are generally considered production. Once materials leave the production site for midstream infrastructure (gathering systems, central processing facilities, compressor stations), the exemption may no longer apply and requires a case-by-case analysis.

Still regulated: These wastes are still solid wastes under RCRA Subtitle D and are subject to state oil and gas waste management regulations, which vary significantly from state to state. Clean Water Act, Safe Drinking Water Act (underground injection control), and state oil and gas commission rules all still apply.

(b)(7)	Mining and mineral processing waste	Solid waste from extraction, beneficiation, and processing of ores and minerals, including coal, phosphate rock, and uranium ore overburden. Twenty specific mineral processing wastes are listed
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Explanation

Mining operations produce massive volumes of waste rock, tailings, and processing residuals. This exemption covers wastes from digging material out of the ground (extraction), separating the valuable minerals from the waste rock (beneficiation), and certain processing steps. EPA identified 20 specific mineral processing wastes that qualify, including slags from copper, lead, and zinc smelting; red and brown muds from aluminum production; phosphogypsum; and various blast furnace and steel production residuals.

Beneficiation is specifically defined and limited to physical and chemical separation processes like crushing, grinding, flotation, magnetic separation, leaching, and similar activities. Not every industrial process that uses a mineral as a raw material qualifies.

Like other Bevill wastes, these are regulated under Subtitle D and state mining regulations rather than Subtitle C hazardous waste rules.

(b)(8)	Cement kiln dust	Waste dust from cement manufacturing
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Explanation

Cement production involves heating limestone and other raw materials in large rotary kilns at very high temperatures. The process generates fine particulate dust that is captured by air pollution control equipment. This cement kiln dust (CKD) is produced in large volumes and was included in the Bevill Amendment’s temporary exemption.

EPA studied CKD and determined in 1995 that Subtitle C regulation was not warranted at the federal level but encouraged states to develop their own management standards. CKD is regulated as a non-hazardous solid waste under Subtitle D.

Petroleum Industry Exclusions

Petroleum products and petroleum industry wastes have several overlapping provisions in RCRA that can be confusing when viewed individually but make more sense when seen together. The general theme is that petroleum products being used as products (including as fuels) are not wastes, and petroleum refinery operations have specific recycling pathways that keep certain materials within the refining process rather than sending them to hazardous waste disposal.

Understanding these provisions requires keeping a few concepts straight: Is the material still a product (never a waste)? Is it a refinery-specific recycling situation? Is it used oil under Part 279? Or is it a hazardous waste that needs to be managed under full Subtitle C requirements? The answer depends on what the material is, where it came from, and what is being done with it.

Cite	Exclusion/Exemption	Regulatory Summary
261.2(c)(2)(ii)	Commercial chemical product fuels	Commercial chemical products that are themselves fuels — including gasoline, jet fuel, kerosene, diesel — are NOT solid wastes when burned for energy recovery. Per EPA guidance, extends to off-spec versions reclaimed to produce fuel

Explanation

This provision lives upstream of the exclusions — it determines whether the material is even a solid waste in the first place. Fuel is a product. When you burn fuel as fuel, you are using a product for its intended purpose, not discarding a waste. Gasoline, jet fuel, diesel, kerosene, and similar petroleum products are not solid wastes when burned for energy recovery.

EPA has confirmed through multiple guidance documents that this also applies to off-specification versions of these fuels. If jet fuel fails a quality control test, or gasoline is slightly out of spec, it is still fundamentally a fuel product. When it is burned for energy recovery or reclaimed to produce fuel, it is not a solid waste. No RCRA waste determination is needed, no manifest, no EPA ID number, no generator status implications.

The judgment call: EPA has not established a minimum fuel percentage or bright-line cutoff for when off-spec fuel stops being “product” and becomes “waste.” The determination is case-specific: is the material more product-like or more waste-like? Factors include whether the material still has recoverable fuel value, whether it requires significant processing to become usable, and how it is managed and marketed. A drum of jet fuel that is slightly off-spec is clearly still product. A tank of heavily contaminated liquid that happens to contain some fuel is a different situation.

(a)(12)	Oil-bearing secondary materials at refineries	Sludges, byproducts, and spent materials generated at a petroleum refinery (SIC 2911) inserted back into the refining process. Includes recovered oil from petroleum industry sources
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Explanation

Petroleum refineries generate various oil-bearing sludges, tank bottoms, and other secondary materials during normal refining operations. When these materials are recycled back into the refining process (distillation, catalytic cracking, fractionation, thermal cracking), they are excluded from the definition of solid waste.

This recognizes that returning oil-bearing materials to the refinery process is normal industry practice and recovers valuable petroleum products. The material cannot be placed on the land or speculatively accumulated before being recycled. The exclusion also covers recovered oil from other petroleum industry operations (exploration, production, bulk storage, transportation) recycled the same way.

(a)(18)	Petrochemical recovered oil	Oil recovered from an associated organic chemical manufacturing facility co-located with a petroleum refinery, recycled into the refining process. Must be ignitability and/or benzene TC only
<p><u>Explanation</u></p> <p>This is a narrower version of the refinery recycling exclusion. It applies specifically to oil recovered from an organic chemical manufacturing facility (SIC 2869) that is physically co-located with a petroleum refinery and receives hydrocarbon feedstocks from that refinery. The recovered oil can be inserted into the refinery process, but only if it is hazardous solely because of ignitability and/or the toxicity characteristic for benzene.</p>		
(a)(19)	Spent caustic from petroleum refining	Spent caustic solutions from liquid treating processes used as feedstock to produce cresylic or naphthenic acid
<p><u>Explanation</u></p> <p>Petroleum refining uses caustic (sodium hydroxide) solutions to remove sulfur compounds and organic acids from petroleum products. The spent caustic becomes contaminated with these removed materials. When this spent caustic is used as feedstock to produce cresylic acid or naphthenic acid (both commercially valuable chemicals), it is excluded from the definition of solid waste. This is a specific, narrowly defined industrial recycling pathway.</p>		
§261.6(a)(3)(iii)	Waste-derived fuels from petroleum refining	Fuels produced from refining oil-bearing hazardous waste along with normal process streams at a petroleum refinery, from normal petroleum refining, production, and transportation practices
<p><u>Explanation</u></p> <p>When a petroleum refinery processes oil-bearing hazardous waste through its normal refining operations (including distillation) alongside its regular petroleum feedstocks, the resulting fuel products are exempt from Subtitle C regulation. This recognizes that the refining process effectively converts the hazardous waste into a standard commercial fuel product.</p>		
§261.6(a)(3)(iv)	Unrefined waste-derived fuels and oils	Hazardous waste fuel from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, reintroduced into non-distillation refinery processes; also reclaimed oil burned as fuel. Both must meet used oil fuel specification at §279.11
<p><u>Explanation</u></p> <p>This covers two related scenarios. First, hazardous waste fuel produced from petroleum industry oil-bearing wastes that are reintroduced into refinery processes that do not involve distillation (downstream processes). Second, oil reclaimed from petroleum industry hazardous wastes and burned directly as fuel without going back through a refinery. In both cases, the resulting fuel must meet the used oil fuel specification at 40 CFR 279.11, which sets maximum levels for arsenic, cadmium, chromium, lead, total halogens, and a minimum flash point.</p>		
(b)(10)	Petroleum-contaminated media from UST corrective action	Media and debris failing the Toxicity Characteristic for D018–D043 only, subject to corrective action under Part 280

Explanation

UST stands for Underground Storage Tank. When a gasoline station or other facility with underground fuel tanks has a leak, the contaminated soil and groundwater must be cleaned up under the UST corrective action program (40 CFR Part 280). The contaminated soil and debris from these cleanups are exempt from hazardous waste classification, but only if they are hazardous solely because they fail the Toxicity Characteristic for organic constituents (waste codes D018 through D043, which include benzene, toluene, and similar petroleum compounds), and only while they are actively subject to the Part 280 corrective action program.

This prevents a common cleanup situation — digging up gasoline-contaminated soil from a leaking tank — from triggering full RCRA Subtitle C requirements on top of the existing UST cleanup program.

Recycling, Reclamation & the Definition of Solid Waste

One of the most complex areas of RCRA is determining when a material being recycled is a solid waste and when it is not. EPA has developed multiple pathways over the years that allow materials to be excluded from the definition of solid waste (or exempt from hazardous waste regulation) when they are legitimately recycled. These provisions are sometimes collectively referred to as the Definition of Solid Waste (DSW) rules.

The core principle is that EPA wants to encourage legitimate recycling while preventing “sham recycling” — situations where someone claims to be recycling a material but is actually just disposing of it or avoiding hazardous waste requirements. Every recycling exclusion requires the recycling to be “legitimate” as defined in 40 CFR 260.43.

Legitimate recycling (260.43) has four factors: (1) The material must provide a useful contribution to the recycling process or product. (2) The recycling process must produce a valuable product or intermediate. (3) The generator and recycler must manage the material as a valuable commodity. These three factors are mandatory. (4) The recycled product must be comparable to a legitimate product or intermediate — this fourth factor must be “considered” but is not an automatic disqualifier.

Cite	Exclusion/Exemption	Regulatory Summary
261.2(e)(1)	Use/reuse without reclamation	Materials used as ingredients in an industrial process, as effective substitutes for commercial products, or returned to the original process are NOT solid wastes — but NOT if burned for energy recovery, used to produce fuel, or applied to land

Explanation

This is what most people mean when they say “beneficial reuse.” If you can directly use a secondary material as an ingredient or substitute in a process — without having to process, purify, or reclaim it first — the material is not a solid waste.

Example: Spent pickle liquor (acid used to clean steel surfaces) used directly as a wastewater treatment chemical. The acid still has useful chemical properties and is used as-is for a productive purpose. That is legitimate direct reuse.

Two critical limitations: First, this provision does NOT apply to materials burned for energy recovery or used to produce fuel. Fuel blending is specifically outside this pathway — if someone takes your spent material and burns it or blends it into fuel, this exclusion does not apply and the material is a solid waste under 261.2(c)(2). Second, if the material needs to be processed, distilled, purified, or otherwise reclaimed before it can be used, that is reclamation, not reuse, and different rules apply.

(a)(8)	Closed-loop reclamation	Secondary materials reclaimed and returned to the original process in which they were generated. Tank storage only, closed system, no combustion, not accumulated >12 months, not used as fuel or applied to land
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Explanation

This is the simplest form of on-site recycling. If a manufacturing process generates a secondary material, and that material is reclaimed (processed to recover its useful properties) and returned to the same process it came from, all within a closed system connected by pipes or enclosed conveyance, the material is not a solid waste.

Think of it as a closed loop: material leaves the process, gets cleaned up or reconstituted, and goes right back in. The system must be entirely enclosed (no open tanks or pits), must use only tank

Explanation (con't)

storage, cannot involve burning the material, and the material cannot sit around for more than 12 months without being reclaimed.

(a)(23)**Generator-controlled recycling**

Hazardous secondary materials generated and legitimately reclaimed under the control of the generator. Same facility, commonly controlled facilities, or tolling arrangements

Explanation

This exclusion from the 2008/2015 DSW rules allows hazardous secondary materials to be excluded from solid waste when they are legitimately reclaimed, as long as the generator maintains control over the material throughout the process. "Control" can mean: reclaiming the material at the same facility where it was generated; sending it to a facility that the generator owns or controls; or a tolling arrangement where a contractor processes the material and the generator retains ownership.

The material must be contained (no releases to the environment), not speculatively accumulated (at least 75% of what is accumulated must be recycled within a calendar year), and the recycling must meet the legitimacy criteria at 260.43. The generator must notify EPA or the state and maintain documentation of the legitimacy determination.

(a)(24)**Transfer-based reclamation**

Hazardous secondary materials transferred to another person for reclamation. Reasonable efforts, recordkeeping, financial assurance, legitimacy per 260.43

Explanation

This exclusion allows a generator to send hazardous secondary materials to a separate, unrelated company for reclamation without the materials being classified as solid waste. It is more complex than generator-controlled recycling because the generator is giving up physical control of the material.

To use this exclusion, the generator must perform "reasonable efforts" to verify that the reclaimer will handle the material properly and legitimately. This includes checking that the reclaimer has notified the appropriate authorities, has no significant RCRA compliance violations in the past three years, has the equipment and personnel to do the work, and has proper permits for any residuals. The reclaimer must maintain financial assurance (similar to closure financial assurance for permitted facilities). Both parties must keep shipping and receipt records for at least three years.

(a)(25)**Export for reclamation**

Hazardous secondary materials exported to a foreign country for reclamation. Same requirements as (a)(24) plus export notification and EPA consent

Explanation

This extends the transfer-based reclamation exclusion to materials sent to reclaimers in other countries. All the same requirements as (a)(24) apply, plus the generator must notify EPA at least 60 days before the first shipment, obtain an EPA Acknowledgment of Consent documenting that the receiving country agrees to accept the material, and file annual reports summarizing all exports.

(a)(27)**Spent solvent remanufacturing**

Specific spent solvents from specific industries sent to a remanufacturer in the same industries. Air emission controls, notification, and recordkeeping required

Explanation

This exclusion, added in the 2015 DSW rule, allows certain spent solvents to be sent to another facility for remanufacturing into commercial-grade solvents. It is limited to a specific list of solvents (including toluene, xylenes, methanol, ethanol, acetonitrile, dichloromethane, and others)

Explanation (con't)

generated in specific industry sectors: pharmaceutical manufacturing, basic organic chemical manufacturing, plastics and resins manufacturing, and paints and coatings manufacturing.

The remanufactured solvent must be used for the same types of chemical processes (reacting, extracting, purifying, blending) or as a product ingredient — it cannot be used for cleaning or degreasing. Both the generator and remanufacturer must notify EPA, maintain a remanufacturing plan, keep shipping records, and operate with air emission controls meeting Clean Air Act standards.

**261.2(g) /
260.43**

Sham recycling

Hazardous secondary material found to be sham recycled is considered discarded and a solid waste

Explanation

Sham recycling is the term EPA uses for recycling activities that are not genuine — where someone claims to be recycling a material but is actually just disposing of it or avoiding hazardous waste management costs. If EPA determines that recycling is a sham, the material is classified as discarded and is a solid waste (and potentially a hazardous waste) subject to full RCRA regulation.

Common indicators of sham recycling: The material is ineffective or only marginally effective for its claimed use (for example, adding heavy metal sludge to concrete when it contributes nothing to the concrete's properties). The material is used in amounts far exceeding what the process requires. The recycled product has no market value and no one actually buys or uses it. The material is not managed like a valuable commodity — it is stored in deteriorating containers, left in piles on the ground, or accumulated indefinitely.

The legitimacy criteria at 260.43 (useful contribution, valuable product, managed as commodity, comparable product) are the regulatory test that distinguishes legitimate recycling from sham recycling. Every recycling exclusion in RCRA requires the recycling to meet these criteria.

Solvent-Contaminated Wipes

EPA created two parallel provisions for solvent-contaminated wipes (rags, towels, disposable wipes used to clean up solvent spills or wipe down equipment). The pathway depends on what happens to the wipes after use: are they laundered and reused, or are they thrown away? Both provisions have similar management requirements but are located in different parts of the regulation and have slightly different scopes.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(26)	Solvent wipes sent for cleaning and reuse	Wipes contaminated with listed solvents (F001–F005) sent to a laundry or dry cleaner. Non-leaking closed labeled containers, 180-day accumulation limit, no free liquids at transport
<p><u>Explanation</u></p> <p>If your facility uses shop rags or towels that get contaminated with listed solvents (the F001 through F005 solvent listings, which include common solvents like trichloroethylene, methylene chloride, acetone, toluene, xylene, and methyl ethyl ketone), and those wipes are sent to an industrial laundry or dry cleaner to be washed and returned for reuse, the wipes are excluded from the definition of solid waste entirely.</p> <p>The wipes must be kept in non-leaking, closed containers labeled “Excluded Solvent-Contaminated Wipes.” You can accumulate them for up to 180 days before sending them out. At the point of transport, there must be no free liquids in the container — if liquid pools at the bottom, it must be drained and managed separately as hazardous waste. The laundry or dry cleaner must have a discharge regulated under the Clean Water Act.</p>		
(b)(18)	Solvent wipes sent for disposal	Wipes exhibiting a hazardous characteristic (except trichloroethylene) sent for disposal in a landfill or combustor. Same container and accumulation requirements as (a)(26)
<p><u>Explanation</u></p> <p>If your solvent-contaminated wipes are going to be thrown away rather than laundered, this exemption applies — but only if the wipes are hazardous solely because they exhibit a characteristic (ignitability, corrosivity, reactivity, or toxicity). Wipes that are hazardous because of trichloroethylene (TCE) contamination specifically do not qualify for this exemption when sent for disposal.</p> <p>The management requirements are nearly identical to the reuse pathway: non-leaking, closed, labeled containers; 180-day accumulation limit; no free liquids at the point of transport. The wipes must be sent to either a municipal solid waste landfill with a composite liner meeting 40 CFR 258.40, a combustor regulated under Section 129 of the Clean Air Act, or a RCRA-permitted hazardous waste landfill or combustor.</p>		

Scrap Metal, Circuit Boards & Cathode Ray Tubes

These provisions address recyclable commodity materials — things that have established commercial recycling markets and are routinely bought and sold as feedstocks for smelting, refining, or materials recovery. The general principle is that materials flowing through legitimate commodity recycling channels do not need to be treated as hazardous waste.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(13)	Excluded scrap metal	Processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal being recycled
<p><u>Explanation</u></p> <p>“Processed” scrap metal has been prepared for recycling (shredded, sheared, baled). “Home scrap” is generated and recycled within the same manufacturing facility. “Prompt scrap” is cuttings, stampings, and trimmings from manufacturing operations that go directly to recycling. All three are excluded from the definition of solid waste when being recycled. This reflects the reality that scrap metal recycling is a well-established industry with its own infrastructure and market mechanisms.</p>		
(a)(14)	Shredded circuit boards	Shredded circuit boards being recycled. Must be stored in containers to prevent release and free of mercury switches/relays and NiCd/lithium batteries
<p><u>Explanation</u></p> <p>Electronic circuit boards contain recoverable metals (copper, gold, silver, palladium). When circuit boards are shredded for metals recovery, they are excluded from solid waste — but only if they are stored in proper containers and hazardous components have been removed first. Mercury switches and relays, nickel-cadmium batteries, and lithium batteries must be taken out before the boards are shredded. Those removed components must be managed separately under their applicable regulations (typically Universal Waste for batteries and mercury devices).</p>		
(a)(22)	Used cathode ray tubes (CRTs)	Intact CRTs not speculatively accumulated; broken CRTs meeting specific management requirements; glass removed from CRTs meeting specific requirements
<p><u>Explanation</u></p> <p>Cathode ray tubes are the glass display components from older televisions and computer monitors. They contain lead in the glass. When CRTs are recycled for glass or lead recovery, they can be excluded from solid waste. Intact CRTs are excluded as long as they are not speculatively accumulated (at least 75% must move to recycling within a calendar year). Broken CRTs must meet specific handling and storage requirements at 40 CFR 261.39 because breaking the tube can release lead-containing dust. Export of CRTs for recycling requires advance notification to EPA.</p>		
§261.6(a)(3)(ii)	Scrap metal — recycling exemption	Scrap metal not excluded under 261.4(a)(13) is exempt from Subtitle C requirements when recycled
<p><u>Explanation</u></p> <p>This is a catch-all for scrap metal recycling that does not fit the specific categories in (a)(13). Even if scrap metal does not meet the definitions of processed, home, or prompt scrap, it is still exempt from the full hazardous waste regulations (Parts 262 through 268) when it is being recycled. The material is still technically a hazardous waste, but it is not subject to the generator, transporter, storage facility, or treatment/disposal facility requirements.</p>		

Industry-Specific Process Exclusions

These exclusions apply to specific industrial processes where a material is recovered, reclaimed, or recycled as part of the manufacturing process itself. In most cases, EPA determined that the material either never truly becomes a “waste” because it stays within the production cycle, or that the specific industry already has adequate controls in place. These exclusions are narrow — they apply only to the specific industries and materials described.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(5)	In-situ mining waste	Materials subjected to in-situ mining techniques that are not removed from the ground as part of the extraction process
<p><u>Explanation</u></p> <p>In-situ mining (also called solution mining or in-place leaching) involves injecting a solution into an underground ore body to dissolve minerals, then pumping the solution back up to the surface for processing. The dissolved minerals and residual materials that remain underground — because they were never brought to the surface — are excluded from the definition of solid waste. Only material that stays in the ground qualifies. Anything brought to the surface for processing may be subject to RCRA.</p>		
(a)(6)	Pulping liquors	Black liquor reclaimed in a pulping liquor recovery furnace and reused in the pulping process
<p><u>Explanation</u></p> <p>Paper mills use chemicals to break down wood into pulp (the pulping process). The spent chemical solution, called black liquor, is burned in a recovery furnace to recover the chemicals and generate energy, then the recovered chemicals are reused in the pulping process. This closed-loop recovery is excluded from the definition of solid waste as long as the black liquor is not speculatively accumulated.</p>		
(a)(7)	Spent sulfuric acid	Used to produce virgin sulfuric acid
<p><u>Explanation</u></p> <p>Sulfuric acid is one of the most widely used industrial chemicals. Spent sulfuric acid from various industrial processes can be reprocessed to produce new (virgin) sulfuric acid. When spent acid is destined for this reprocessing, it is excluded from solid waste as long as it is not speculatively accumulated.</p>		
(a)(9)	Wood preserving solutions	Spent wood preserving solutions and wastewaters reclaimed and reused for their original purpose at on-site waterborne plants
<p><u>Explanation</u></p> <p>Wood treatment facilities use chemical solutions (such as chromated copper arsenate, or CCA) to pressure-treat lumber. The spent solutions and process wastewaters can be reclaimed and reused in the treatment process. This exclusion requires that the reclamation and reuse happen on-site at waterborne plants, that the materials are managed to prevent releases to land or groundwater, and that the facility files a one-time notification stating its intent to claim the exclusion.</p>		
(a)(10)	Coke byproduct wastes	Specific K-listed wastes from coke production recycled to coke ovens, tar recovery, or mixed with coal tar

Explanation

Coke production (heating coal in the absence of air to produce coke for steelmaking) generates various byproduct wastes, several of which are listed hazardous wastes (K060, K087, K141–K145, K147, K148). When these wastes are recycled back to coke ovens, used as feedstock in tar recovery, or mixed with coal tar before sale or refining, they are excluded from solid waste. The material cannot be placed on the land between generation and recycling.

(a)(11)

Splash condenser dross

Nonwastewater splash condenser dross from high-temperature metals recovery treatment of K061

Explanation

K061 is emission control dust from electric arc furnaces in the steel industry. When K061 is processed in a high-temperature metals recovery unit to recover zinc and other metals, the residue (called splash condenser dross) is excluded from solid waste as long as it is shipped in drums and not placed on the land before the metals are recovered. This is a very narrow, industry-specific exclusion.

(a)(15)

Kraft mill condensates

Condensates from kraft mill steam strippers used to comply with Clean Air Act requirements at 40 CFR 63.446(e)

Explanation

Kraft pulp mills (a type of paper mill) generate condensates from steam stripping operations. When these condensates are burned at the mill that generated them to comply with Clean Air Act emission standards, they are excluded from solid waste. The exclusion applies only to combustion at the generating mill — the condensates cannot be shipped elsewhere for burning.

(a)(17)

Primary mineral processing spent materials

Spent materials from primary mineral processing legitimately recycled to recover minerals, acids, cyanide, water, or other values

Explanation

Primary mineral processing operations (smelters, refineries, and similar facilities that process ores into metals or other mineral products) generate spent materials that still contain recoverable minerals, acids, cyanide, or water. When these spent materials are legitimately recycled to recover those values, they are excluded from solid waste. This exclusion has specific requirements for storage (must be in tanks, containers, or buildings — not on open ground), notification to EPA or the state, and a prohibition on speculative accumulation. Listed hazardous wastes from non-mineral-processing industries do not qualify.

Zinc Fertilizers from Hazardous Waste

EPA created a paired set of provisions specifically for the manufacture of zinc micronutrient fertilizers from hazardous secondary materials. Zinc is an essential plant nutrient, and several industrial waste streams (such as brass foundry dust and electric arc furnace dust) contain recoverable zinc. These provisions allow those materials to be used as fertilizer feedstock while controlling potential contaminant levels in the finished product.

Cite	Exclusion/Exemption	Regulatory Summary
(a)(20)	Zinc fertilizer feedstock	Hazardous secondary materials used to make zinc fertilizers. Storage, one-time notification, recordkeeping, and shipping notice requirements
<p><u>Explanation</u></p> <p>Hazardous secondary materials containing zinc can be sent to a fertilizer manufacturer to be made into zinc micronutrient fertilizers without being classified as solid waste. The generator must store the materials in proper tanks, containers, or buildings; file a one-time notification with EPA or the state; include a written notice with each shipment; and keep records of all shipments for at least three years.</p>		
(a)(21)	Zinc fertilizers — contaminant limits	Finished zinc fertilizers must meet contaminant limits for metals (arsenic, cadmium, chromium, lead, mercury per unit of zinc) and dioxins (≤ 8 ppt TEQ). Testing required
<p><u>Explanation</u></p> <p>The finished fertilizer product must meet specific contaminant concentration limits for five metals (arsenic, cadmium, chromium, lead, and mercury, each expressed as a maximum per unit of zinc content) and for dioxins (no more than 8 parts per trillion measured as toxic equivalent). The manufacturer must test the product for metals at least every six months and for dioxins at least every twelve months, and must keep records of all testing for at least three years.</p>		

Standalone Exemptions

These exemptions each stand on their own and do not fit neatly into the other groups. They cover a range of materials and situations where EPA determined that full hazardous waste regulation under Subtitle C was not needed, either because the material poses a lower risk, because another regulatory program provides adequate protection, or because the material is being managed in a way that reduces its hazard.

Cite	Exclusion/Exemption	Regulatory Summary
(b)(1)	Household hazardous waste	Any waste material from households, including single/multiple residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas

Explanation

Paint, batteries, cleaners, pesticides, motor oil, and other hazardous products generated by households are exempt from RCRA hazardous waste regulation regardless of their chemical composition. A can of the same paint that would be hazardous waste if discarded by a business is not hazardous waste when discarded by a homeowner. The exemption follows the source, not the material. It extends to all residential settings, including hotels, motels, and campgrounds. Communities typically collect household hazardous waste through special collection events or permanent drop-off facilities.

(b)(2)	Agricultural waste	Solid waste from growing/harvesting crops or raising animals, including animal manures, returned to soil as fertilizer
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Explanation

Crop residues, animal manures, and other agricultural wastes that are returned to the soil as fertilizers or soil amendments are not hazardous wastes. This reflects the longstanding agricultural practice of recycling organic matter back into cropland. The exemption applies to wastes from both crop production and animal husbandry.

(b)(3)	Mining overburden	Overburden returned to the mine site
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Explanation

Overburden is the rock and soil that must be removed to access an ore body or mineral deposit. When this material is returned to the mine site (for example, to backfill a mined-out area), it is exempt from hazardous waste classification. This is separate from the Bevill mining exemption at (b)(7) and covers the non-mineral-bearing material overlying the deposit.

(b)(6)	Trivalent chromium wastes	Wastes hazardous only due to chromium, where chromium is exclusively trivalent, from a process using trivalent chromium, managed in non-oxidizing environments. Specific qualifying wastes from leather tanning and TiO ₂ production listed
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Explanation

Chromium exists in two common forms: trivalent chromium (Cr-III) and hexavalent chromium (Cr-VI). Hexavalent chromium is significantly more toxic and is a known carcinogen. Trivalent chromium is much less hazardous. This exemption recognizes that distinction by exempting wastes that contain only trivalent chromium, generated from processes that use only trivalent chromium, and managed in environments where the chromium will not be oxidized to the hexavalent form. The regulation lists specific qualifying wastes, primarily from the leather tanning industry (chrome trimmings, shavings, buffing dust, sewer screenings, wastewater treatment sludges) and from titanium dioxide production using chromium-bearing ores. This is not a Bevill Amendment exemption — it is based on the lower toxicity of trivalent chromium.

(b)(9)	CCA-treated wood — end users	Discarded arsenical-treated wood or wood products failing the Toxicity Characteristic for D004–D017, generated by persons who use the wood for its intended end use
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Explanation

CCA stands for Chromated Copper Arsenate, a chemical preservative pressure-treated into lumber to prevent rot and insect damage. CCA-treated wood is commonly used for decks, fences, utility poles, and other outdoor structures. When people or businesses who used CCA-treated wood for its intended purpose (building a deck, installing fence posts) later discard it, the wood is exempt from hazardous waste rules even though it would likely fail the Toxicity

Explanation (con't)

Characteristic for arsenic and possibly chromium. This exemption applies only to end users — not to the wood treatment facilities that manufacture the product or to construction/demolition contractors who handle large volumes.

(b)(12)	CFC refrigerants	Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment reclaimed for further use
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Explanation

CFCs (chlorofluorocarbons) such as Freon were widely used as refrigerants in air conditioning systems, refrigerators, and industrial cooling equipment. When used CFC refrigerants are recovered from these systems and reclaimed (purified) for reuse as refrigerants, they are exempt from hazardous waste classification. The equipment must be a totally enclosed system (the refrigerant circulates in a sealed loop), and the recovered refrigerant must actually be reclaimed for reuse. Note that CFC production has been phased out under the Clean Air Act due to ozone depletion concerns, but existing CFC systems still operate and require refrigerant management when serviced or decommissioned.

(b)(13)	Used oil filters	Non-terne plated used oil filters, not mixed with listed wastes, gravity hot-drained by approved methods
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Explanation

Used oil filters from automotive and industrial equipment are exempt from hazardous waste classification if they are properly drained and are not terne-plated (terne is a lead-tin alloy that was historically used to coat oil filter casings). “Hot-draining” means draining the filter while it is still warm from use, which allows more complete removal of residual oil. Acceptable methods include puncturing the anti-drain back valve and draining, hot-draining and crushing, or dismantling and draining. The drained oil must be managed as used oil under Part 279.

(b)(14)	Used oil re-refining distillation bottoms	Used as feedstock to manufacture asphalt products
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Explanation

Used oil re-refining is the process of cleaning and reprocessing used motor oil and other used oils back into base lubricating oil. The distillation step in this process produces a heavy residual material (bottoms) that is not suitable for making lubricant but can be used as a component in asphalt products. When these distillation bottoms are used as asphalt feedstock, they are exempt from hazardous waste classification.

(b)(11)	Injected groundwater — UST recovery	Groundwater hazardous only for organic TCs (D018–D043), reinjected during free-phase petroleum recovery at petroleum facilities
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Explanation

This exemption applied to contaminated groundwater being pumped up and reinjected during petroleum cleanup operations at gas stations, refineries, and pipeline facilities. It was a temporary compliance date extension that expired on January 25, 1993 for most operations. It is included here for completeness but has limited current applicability.

(b)(15)	Landfill leachate and gas condensate	From landfills where specific K-listed wastes were disposed before the listing took effect. Leachate must not exhibit any characteristic or derive from other listed wastes
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Explanation

When EPA lists a new hazardous waste, landfills that received that waste before the listing date may generate leachate (liquid that drains through the waste) or gas condensate that contains constituents from the newly listed waste. This exemption allows that leachate and gas condensate to be managed as non-hazardous as long as it does not independently exhibit a hazardous characteristic, is not derived from any other listed waste, and its discharge is regulated under the Clean Water Act. This prevents retroactive Subtitle C obligations on landfills that accepted waste legally before it was listed.

Operational Exemptions

These exemptions are based on where a material is in the process or why it is being handled, rather than what the material is. They recognize that there are situations where applying full RCRA hazardous waste requirements would be impractical or counterproductive — such as while a material is still inside a manufacturing unit, or when a sample is being sent to a lab for testing.

Cite	Exclusion/Exemption	Regulatory Summary
261.4(c)	In-process exemption	Hazardous waste generated in a product/raw material storage tank, transport vehicle, pipeline, manufacturing process unit, or associated non-waste-treatment unit is NOT subject to RCRA until it exits the unit

Explanation

This exemption recognizes that many manufacturing processes generate hazardous materials as part of normal operations. The sludge that accumulates in a reactor, the residue in a process pipeline, the sediment in a raw material storage tank — these materials may technically meet the definition of hazardous waste, but regulating them while they are still inside the manufacturing equipment would be impractical and would interfere with normal industrial operations.

As long as the material stays inside the unit where it was generated, RCRA does not regulate it. The moment the material exits that unit — for example, when you drain a tank for cleaning and put the residue into a drum, or when you scrape out a reactor and put the material in a container — it becomes subject to RCRA and you must make a hazardous waste determination.

Two exceptions: This exemption does not apply to surface impoundments (open pits or ponds). And if the unit ceases operations (stops being used for manufacturing, storage, or transport), the hazardous waste must be removed within 90 days.

261.4(d)	Samples	Samples collected solely for testing to determine characteristics or composition are exempt during transport and storage at labs
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Explanation

When you collect a sample of a material specifically to test it — to find out whether it is hazardous, what it contains, or what its properties are — the sample is exempt from RCRA during its entire journey: while being collected, transported to the lab, stored at the lab before and after testing, and transported back. DOT or postal shipping requirements still apply during transport. For samples being shipped internationally (import or export), the sample cannot exceed 25 kg. This exemption ensures that the act of testing a material to determine its regulatory status does not itself trigger the regulations you are trying to determine apply.

261.4(e)	Treatability study samples	Samples for treatability studies exempt during collection, storage, and transport. Quantity limits and recordkeeping apply
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Explanation

A treatability study is a test to evaluate whether a particular treatment technology will work on a specific waste — for example, testing whether a bioremediation process will break down contaminants in soil from a cleanup site. Samples collected for treatability studies are exempt from most RCRA requirements, but with quantity limits: no more than 10,000 kg of contaminated media, 1,000 kg of non-acute hazardous waste, or 1 kg of acute hazardous waste per process being evaluated per waste stream. The generator must keep records of all shipments and report treatability study information in its biennial report.

Industrial Ethyl Alcohol

This exemption has its own section because it has a unique regulatory history and a recent reinterpretation that changed how it applies in practice.

Cite	Exclusion/Exemption	Regulatory Summary
§261.6(a)(3)(i)	Industrial ethyl alcohol	Industrial ethyl alcohol that is reclaimed is exempt from Parts 262–268, 270, and 124. Reclaimer must hold TTB permits. Applies to spent AND unused IEA per EPA’s 2023 reinterpretation. Must meet legitimacy criteria at 260.43

Explanation

Industrial ethyl alcohol (ethanol used for industrial purposes, not for drinking) is regulated by the Alcohol and Tobacco Tax and Trade Bureau (TTB), a division of the U.S. Department of the Treasury. TTB regulates the production, distribution, and use of industrial alcohol to prevent its diversion into untaxed beverage use. Because TTB already has a regulatory program covering industrial ethanol, EPA determined in 1985 that additional RCRA regulation was redundant.

When industrial ethyl alcohol is reclaimed (distilled or processed to recover usable ethanol), it is exempt from RCRA hazardous waste requirements. The facility performing the reclamation must hold the appropriate TTB permits, and the recycling must meet the legitimacy criteria at 260.43.

2023 reinterpretation — hand sanitizer: During the COVID-19 pandemic, large quantities of alcohol-based hand sanitizer were produced and later became surplus when demand dropped. Hand sanitizer contains at least 60% ethyl or isopropyl alcohol and is ignitable (D001). EPA originally stated in 2022 that the industrial ethyl alcohol exemption applied only to “spent” IEA — material that had been used and was no longer fit for its original purpose. In May 2023, EPA reversed this position and confirmed that both spent and unused industrial ethyl alcohol (including unused hand sanitizer) qualifies for the exemption when reclaimed at a TTB-permitted facility. This reinterpretation opened a pathway for businesses to recycle stockpiled hand sanitizer rather than disposing of it as hazardous waste.