

RCRA Subtitle C Compliance Guide for Hazardous Waste Generators

RCRA Subtitle C establishes a federal program to manage hazardous wastes from “cradle to grave.” Therefore, the regulations apply to hazardous waste generators, transporters, and treatment, storage, and disposal (TSD) facilities. This **FOCUS** provides compliance tools to help generators ensure that RCRA hazardous waste is properly identified, managed, and treated prior to recycling or disposal. A future **FOCUS** will cover the regulations that apply to hazardous waste transporters and TSD facilities.

RCRA Subtitle C regulations only apply to hazardous wastes. “Hazardous waste” is defined in RCRA Section 1004(5) as “a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.”

As defined, hazardous wastes are “solid wastes.” Therefore, the first step in identifying a waste as hazardous is to determine if it is a RCRA solid waste. Generators of solid wastes are required to make a hazardous waste determination for each solid waste. If a hazardous waste is being generated, the generator must comply with the requirements of 40 *CFR* Part 262. The generator’s status, based on the monthly quantity of hazardous waste that is produced, must be determined to identify the applicable RCRA Subtitle C requirements. If a hazardous waste is to be land disposed, the generator must also comply with the land disposal restrictions (LDR) requirements of 40 *CFR* Part 268. However, a universal waste gener-

ator may manage those wastes in compliance with the less stringent management standards of 40 *CFR* Part 273. Finally, management standards for generators of used oil are contained in 40 *CFR* Part 279.

This **FOCUS** provides logic diagrams and tables to help generators:

1. Make solid waste determinations,
2. Determine if a solid waste is a hazardous waste,
3. Identify the generator’s status, and
4. Comply with applicable RCRA requirements.

The titles of the logic diagrams and tables, along with their corresponding page numbers, are provided on page 4.3.

Solid Waste Determination

The determination that a material meets the RCRA definition for a solid waste is not based on its physical form (e.g., a solid waste could be a solid, liquid, or gas). Rather, the determination is based on whether the waste is a discarded material that is 1) being abandoned, 2) inherently waste-like, 3) being recycled, or 4) a regulated military munition. However, numerous wastes fitting into these broad categories are excluded from the definition of solid waste by §261.4(a), or may be excluded from regulation by a variance granted under §§260.30 and 260.31.

Figure 1 (page 4.4) presents a logic diagram for identifying solid wastes and Figure 2 (page 4.5) provides a list of the materials specifically excluded from the definition of solid waste in §261.4(a). Figures 3 and 4 (pages 4.6–4.7) must also be consulted to determine if the subject recycled material or military munition is a solid waste. If a material is not a solid waste, it cannot be a hazard-

ous waste and, therefore, is not subject to regulation under RCRA Subtitle C.

Hazardous Waste Determination

A hazardous waste determination must be made for each solid waste that is produced. Figure 5 (pages 4.8–4.9) can be used to identify a hazardous waste. According to §262.11, a solid waste generator should use the following procedure to determine if a solid waste is a hazardous waste:

1. Is the waste specifically excluded from the regulations under §261.4? (See Figure 6, page 4.10.) If not, the generator must continue with questions 2, 3, and 4.
2. Is the waste a listed hazardous waste in Part 261, Subpart D? (See Figure 7, page 4.11.) Listed hazardous wastes include wastes from generic industrial processes and certain sectors of industry, and unused pure chemical products and formulations.
3. Does the waste exhibit a hazardous waste characteristic of ignitability, corrosivity, reactivity, and/or toxicity, as defined in Part 261, Subpart C? (See Figures 8–11, pages 4.12–4.15.) This determination must be made for each nonlisted solid waste and each listed hazardous waste that must comply with the LDR requirements of Part 268. To make this determination, the generator may 1) test the waste, or 2) apply knowledge of the materials and processes that generated the waste.
4. Does the generator declare the waste to be hazardous?

If the generator answers yes to questions 2, 3, and/or 4, the solid waste is a RCRA hazardous waste and must be managed in accordance with the Subtitle C regulations.

Generator Status

A hazardous waste generator is defined as “any person, by site, whose act or process produces hazardous waste identified or listed in Part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation [§261.10].” Therefore, hazardous waste generators include facilities that produce hazardous waste via an industrial process and those who import a hazardous waste into the United States or initiate a shipment of hazardous waste from a TSD facility.

RCRA Subtitle C requirements vary based on a generator’s status, which is determined by the quantity of hazardous waste that is produced each calendar month. A hazardous waste generator may be a conditionally exempt small-quantity generator (CESQG), a small-quantity generator (SQG), or a large-quantity generator (LQG). The logic diagram presented in Figure 12 (page 4.16) can be used to determine a generator’s status. Hazardous waste generated by a CESQG is primarily regulated under RCRA Subtitle D; however, some Subtitle C requirements also apply.

A generator’s status may change if the quantity of hazardous waste generated varies from one month to the next. In addition, the applicable requirements change if a generator does not comply with the onsite accumulation limits. For example, if the SQG or LQG accumulation limits are exceeded, those generators become a storage facility and are subject to the applicable TSD facility requirements in Parts 264 and 265.

Generator Requirements

Once the generator’s status is determined, Table 1 (pages 4.17–4.22) should be consulted to determine the applicable RCRA Subtitle C requirements, which include:

- Obtaining an EPA identification number,
- Complying with accumulation and storage requirements (including requirements for training, contingency planning, and emergency arrangements),
- Preparing the waste for transport,

- Tracking the shipment and receipt of such waste, and
- Meeting recordkeeping and reporting requirements.

A generator who treats, stores, or disposes hazardous waste onsite need only comply with: §262.12 for obtaining an EPA identification number, §262.34 for accumulation, §262.40(c) and (d) for recordkeeping, §262.43 for additional reporting, and, if applicable, §262.70 for farmers.

LDR Program Requirements

Hazardous waste generators must also comply with the Part 268 LDR program. Figure 13 (page 4.23–4.26) will assist generators in determining the applicable requirements. Specifically, the LDR program requires a hazardous waste generator to:

- Conduct waste analyses (or use knowledge of the waste) to determine if the waste is restricted (see Figure 14, page 4.27);
- Assign the proper waste number (codes) to the waste;
- Prepare a waste analysis plan if the hazardous waste is treated in accumulation units;
- Prepare notifications and certifications required for onsite or offsite waste management (see Table 2, pages 4.28–4.32);
- Obtain variances, as appropriate;
- Maintain proper records; and
- Comply with storage (see Figure 15, page 4.33) and dilution restrictions.

Universal Waste Management Standards

EPA has finalized management standards under Subtitle C for batteries, recalled and unused pesticides, mercury-containing thermostats, and spent hazardous waste lamps in order to reduce the quantity of these wastes that are sent to nonhazardous management facilities. EPA calls these four wastes “universal wastes.” The universal waste management standards, which are less stringent than full Subtitle C regulation, are incorpo-

rated into Part 273. Standards regulate the import, handling, transport, export, treatment, and recycling of these wastes.

Generators of universal wastes are considered “universal waste handlers.” More stringent requirements are applicable to large-quantity universal waste handlers that accumulate 5,000 kg (11,025 lbs) or more of total universal wastes at any time on the handler’s property. Handlers that always have less than this amount on their property are called small-quantity handlers.

Under the Part 273 standards, every generator starts each calendar year as a small-quantity handler, assuming there is less than 5,000 kg (11,025 lbs) of total universal waste onsite. If a handler accumulates 5,000 kg (11,025 lbs) at any one time during the year, the handler becomes regulated as a large-quantity handler for the rest of the year. Table 3 (pages 4.34–4.37) presents the Part 273 requirements for handlers of universal wastes.

Used Oil

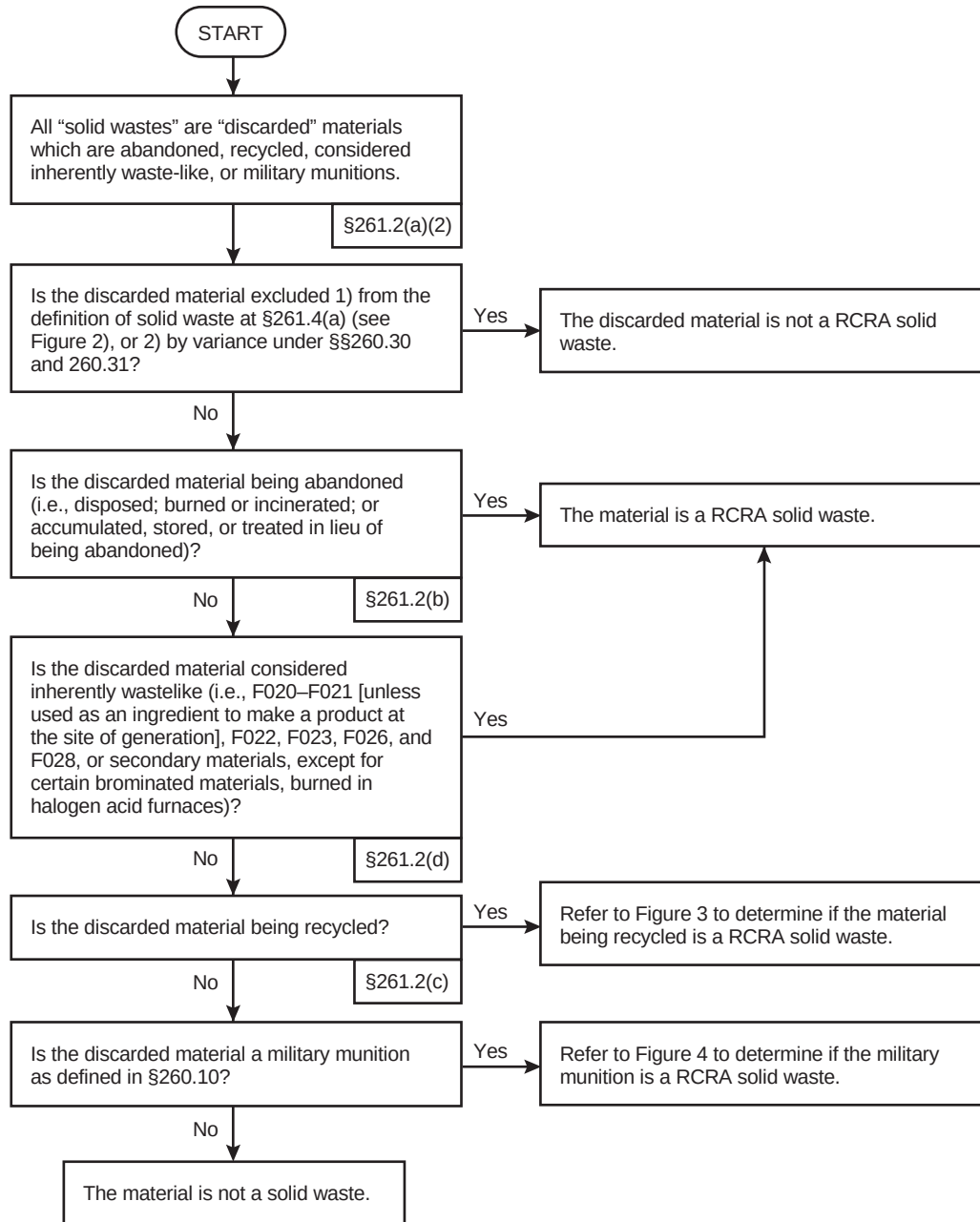
A used oil generator is defined as “any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation [§279.20(a)].” The management standards for generators of used oil are incorporated in 40 *CFR* Part 279. These requirements, which are summarized in Table 4 (pages 4.38–4.39), apply to all used oil generators, except for household “do-it-yourselfers,” vessels at sea or port, mixtures of diesel fuel and used oil, and farmers who generate an average of 25 gallons or less of used oil per month.

Further Information

Additional information regarding RCRA requirements for hazardous waste generators can be obtained via the Internet from EPA’s Office of Solid Waste and Emergency Response (OSWER) homepage at <http://www.epa.gov/oswer>, EPA’s Office of Solid Waste homepage at <http://www.epa.gov/osw>, or the RCRA Hotline at <http://www.epa.gov/epaoswer/hotline>. The Hotline can also be reached at (800) 424-9346. **HWC**

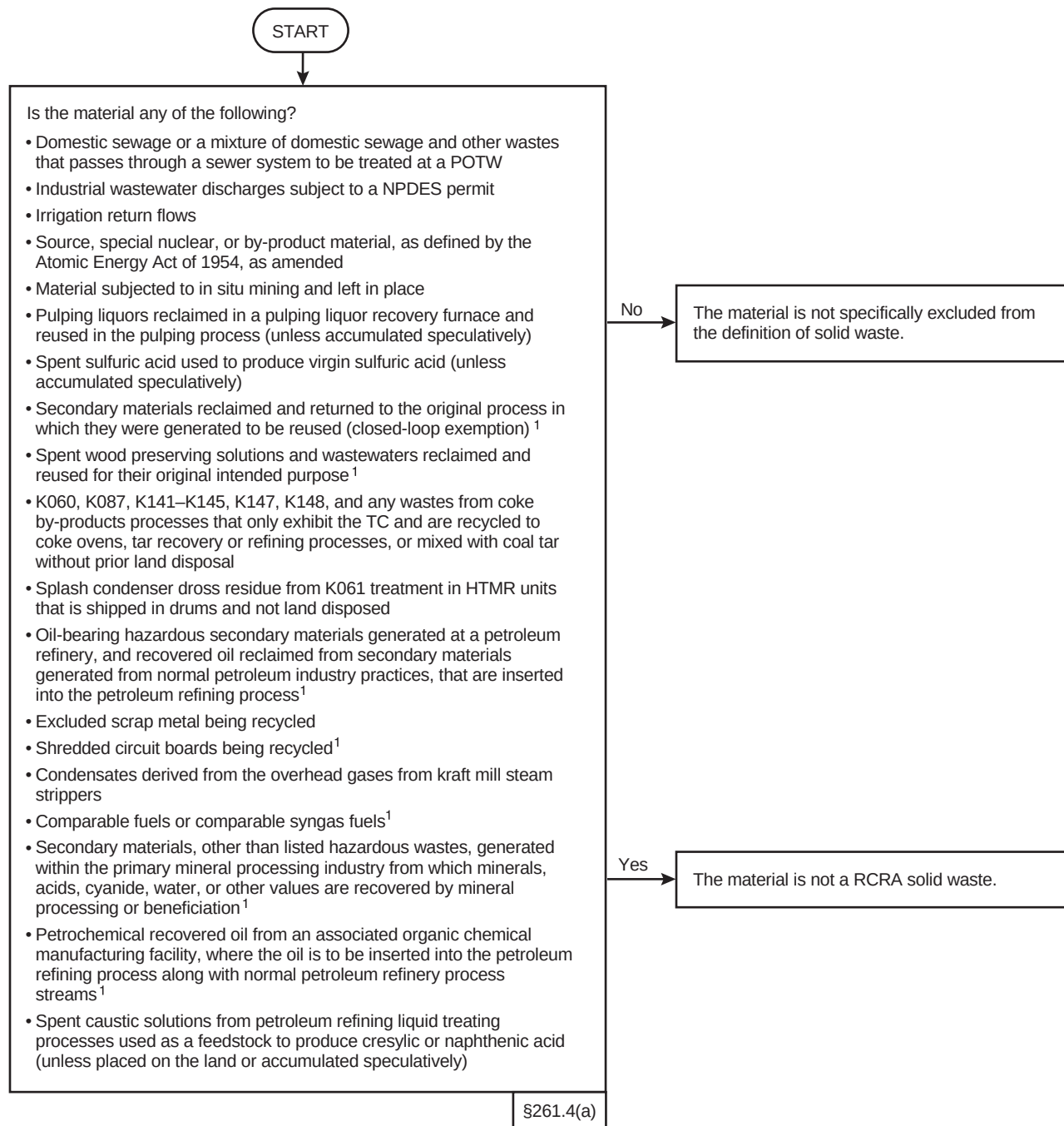
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FIGURE 1
Identifying Solid Wastes



Source: Aspen Law & Business.

FIGURE 2
Exclusions From the Definition of Solid Waste

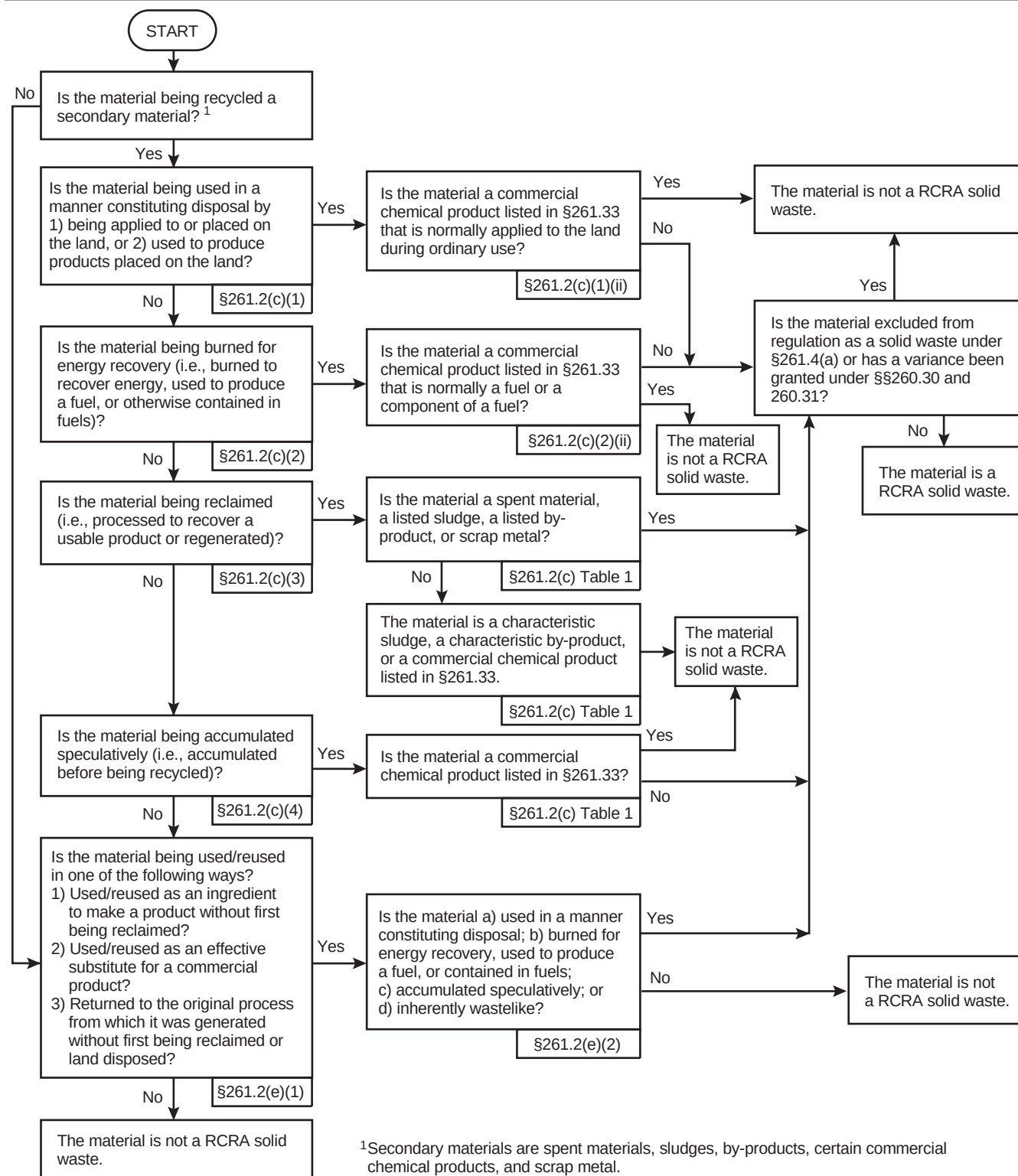


HTMR = high-temperature metals recovery; NPDES = National Pollutant Discharge Elimination System; POTW = publicly owned treatment works; TC = toxicity characteristic.

¹Certain conditions must be met to qualify for the exclusion.

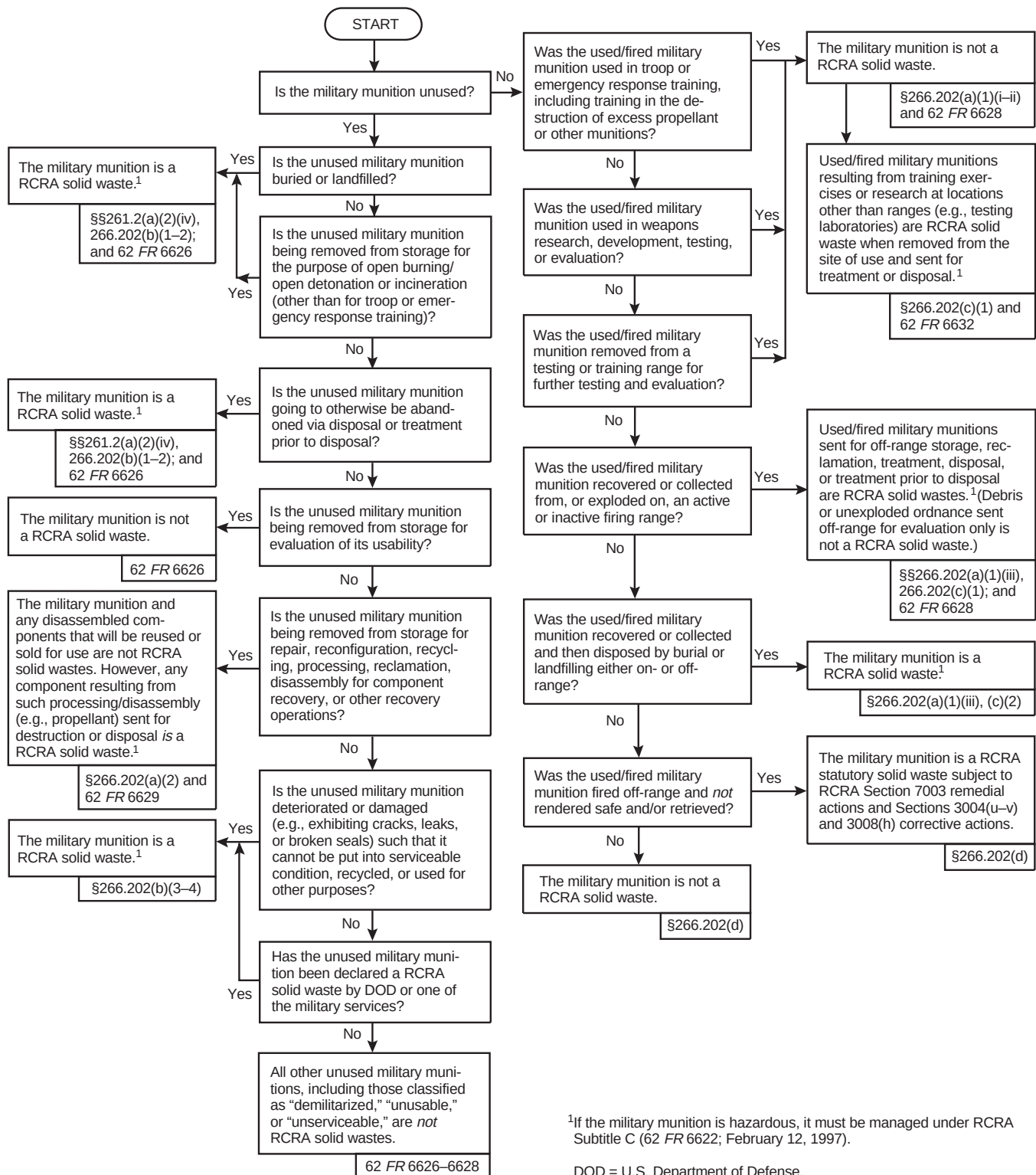
Source: Aspen Law & Business.

FIGURE 3
Determining When a Recycled Material Is a Solid Waste



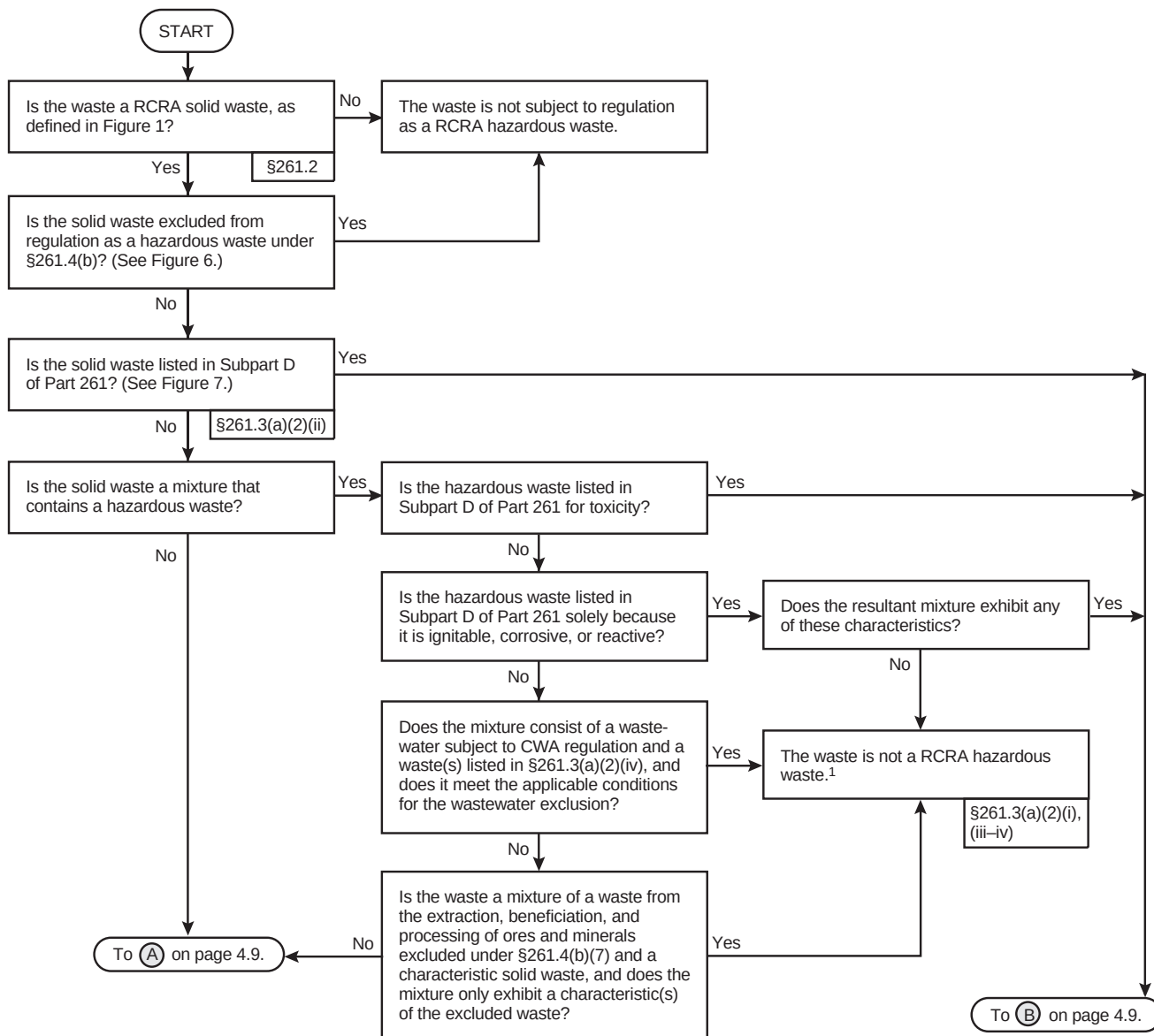
Source: Aspen Law & Business.

FIGURE 4
Determining When a Military Munition Is a Solid Waste



Source: Aspen Law & Business.

FIGURE 5
Identifying Hazardous Wastes

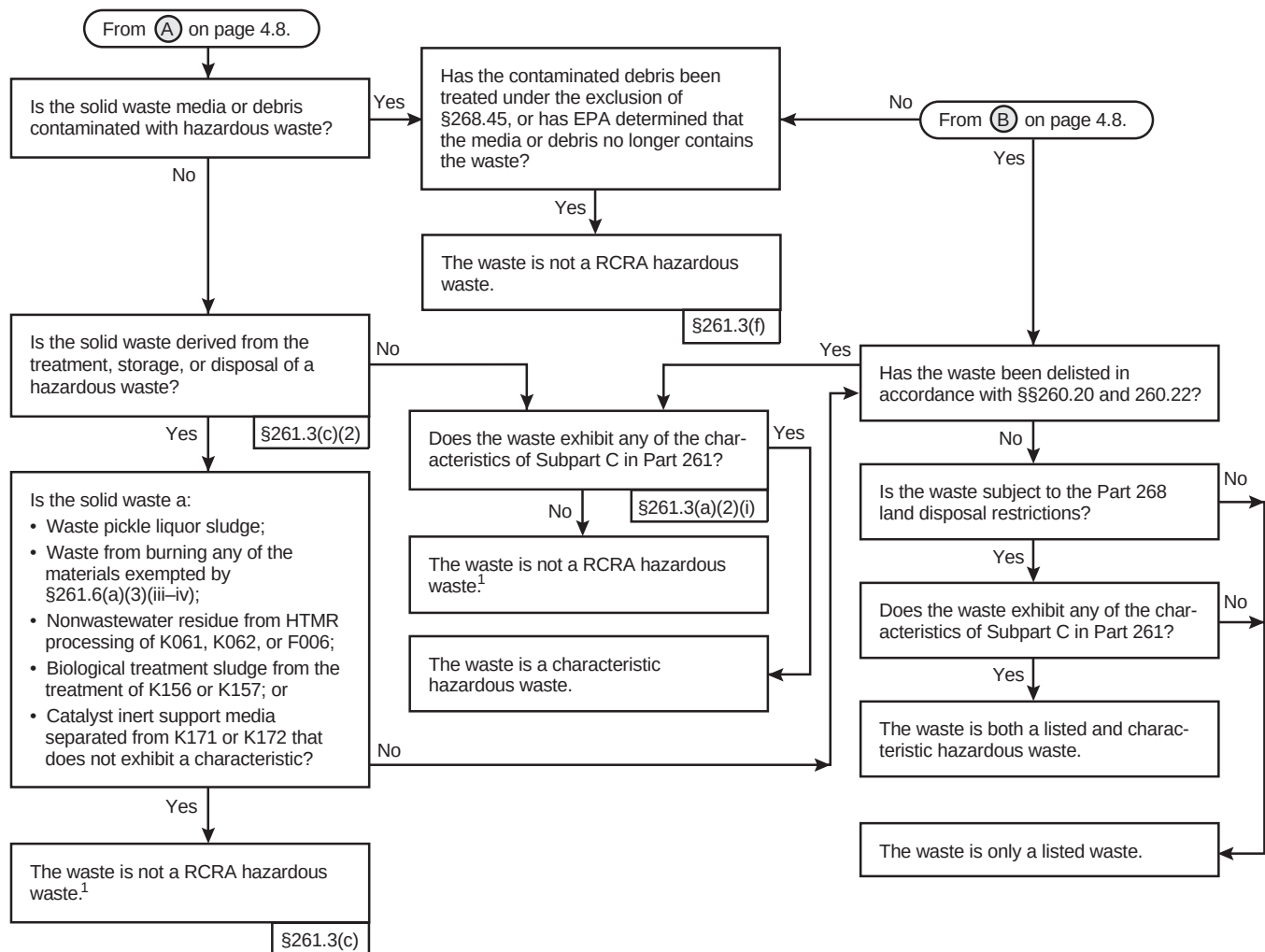


CWA = Clean Water Act; LDR = land disposal restrictions.

¹Decharacterized wastes may be subject to Part 268 LDR requirements, even if they no longer exhibit a characteristic at the point of land disposal [§261.3(a)(2)(iii), (d)(i)].

Source: Aspen Law & Business.

FIGURE 5
Identifying Hazardous Wastes—Continued

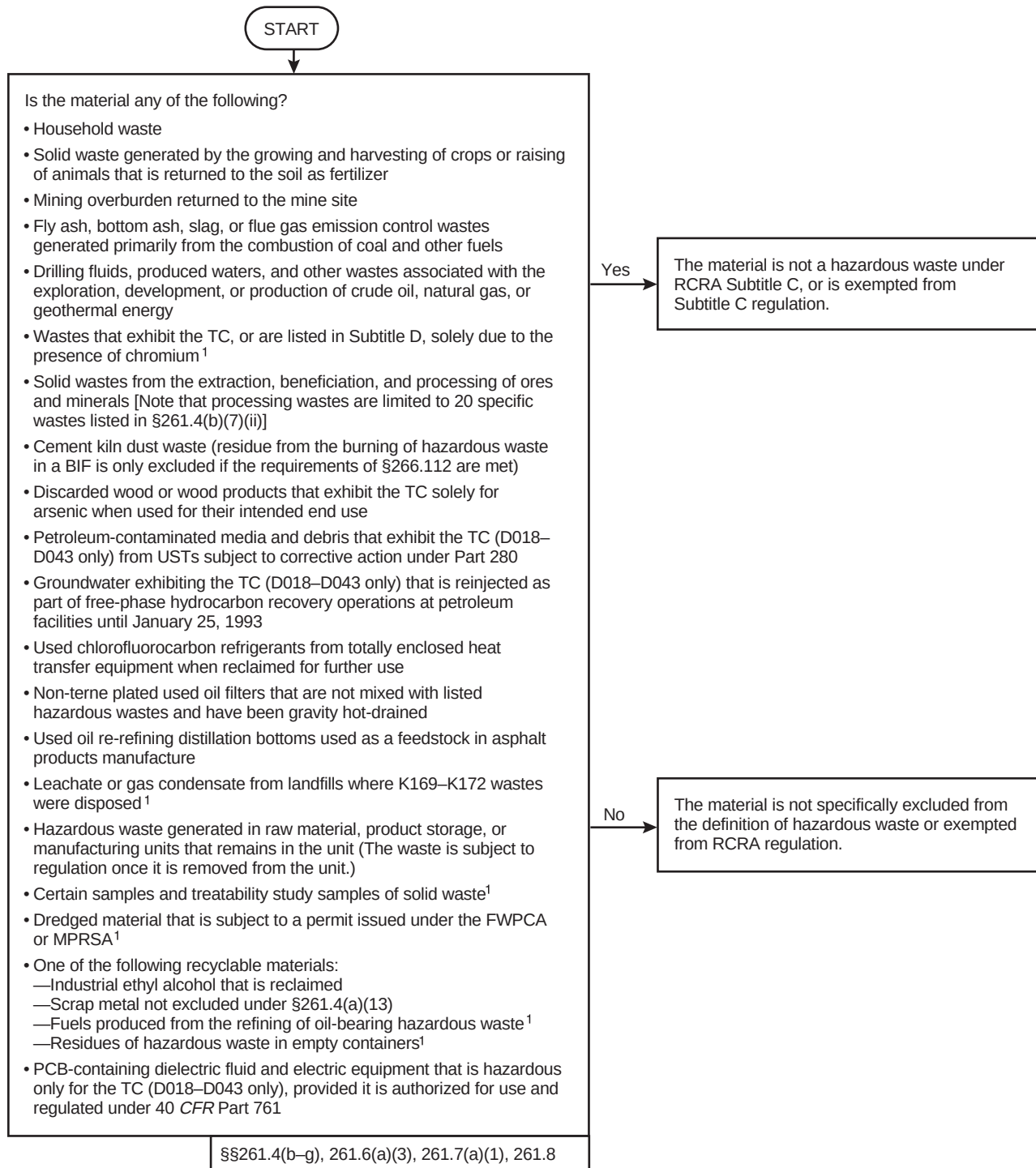


HTMR = high-temperature metals recovery; LDR = land disposal restrictions.

¹Decharacterized wastes may be subject to Part 268 LDR requirements, even if they no longer exhibit a characteristic at the point of land disposal [§261.3(a)(2)(iii), (d)(i)].

Source: Aspen Law & Business.

FIGURE 6
Exclusions From the Definition of Hazardous Waste

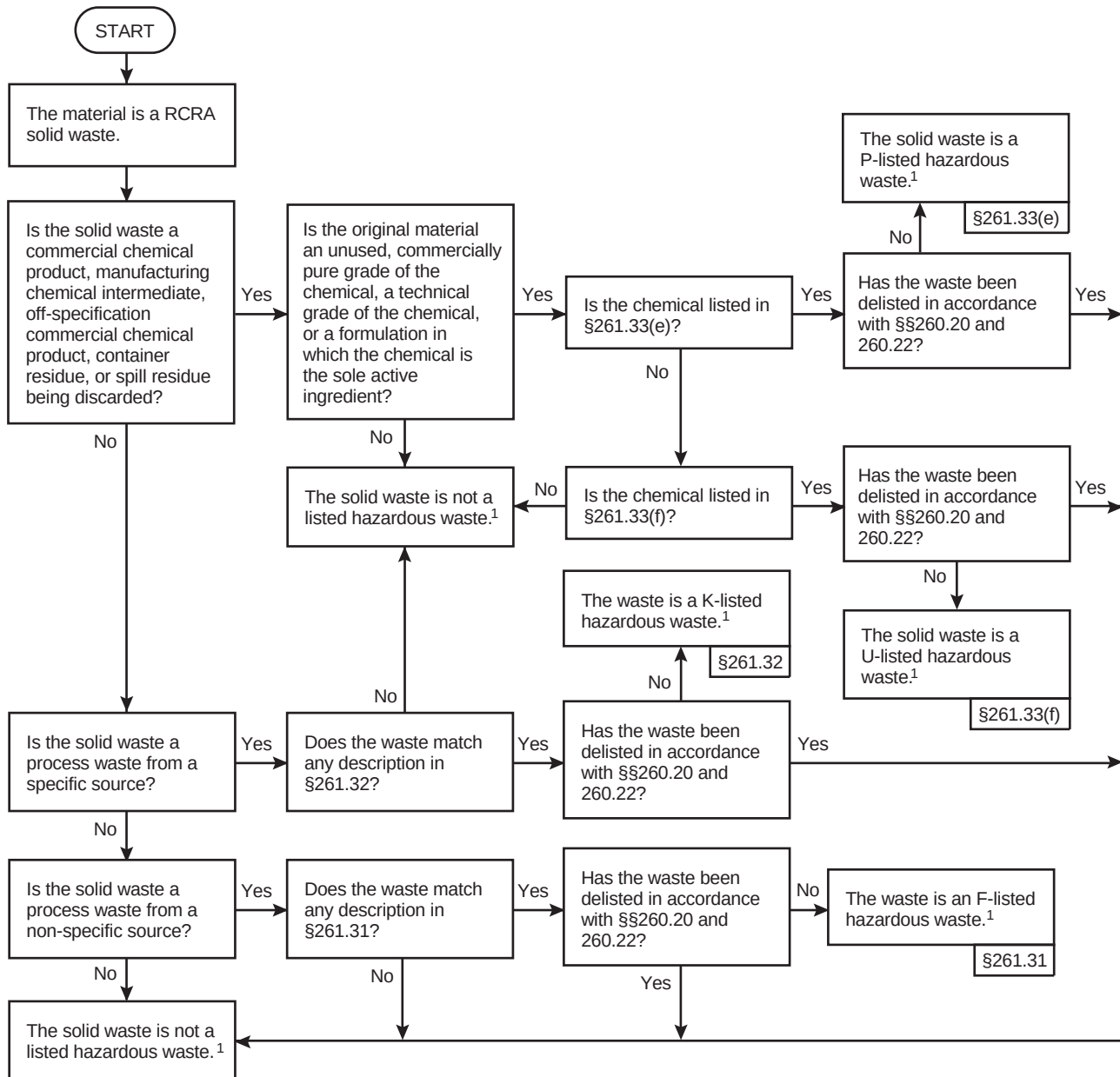


BIF = boiler or industrial furnace; FWPCA = Federal Water Pollution Control Act; MPRSA = Marine Protection, Research, and Sanctuaries Act of 1972; PCB = polychlorinated biphenyl; TC = toxicity characteristic; UST = underground storage tank.

¹Certain conditions must be met to qualify for the exclusion.

Source: Aspen Law & Business.

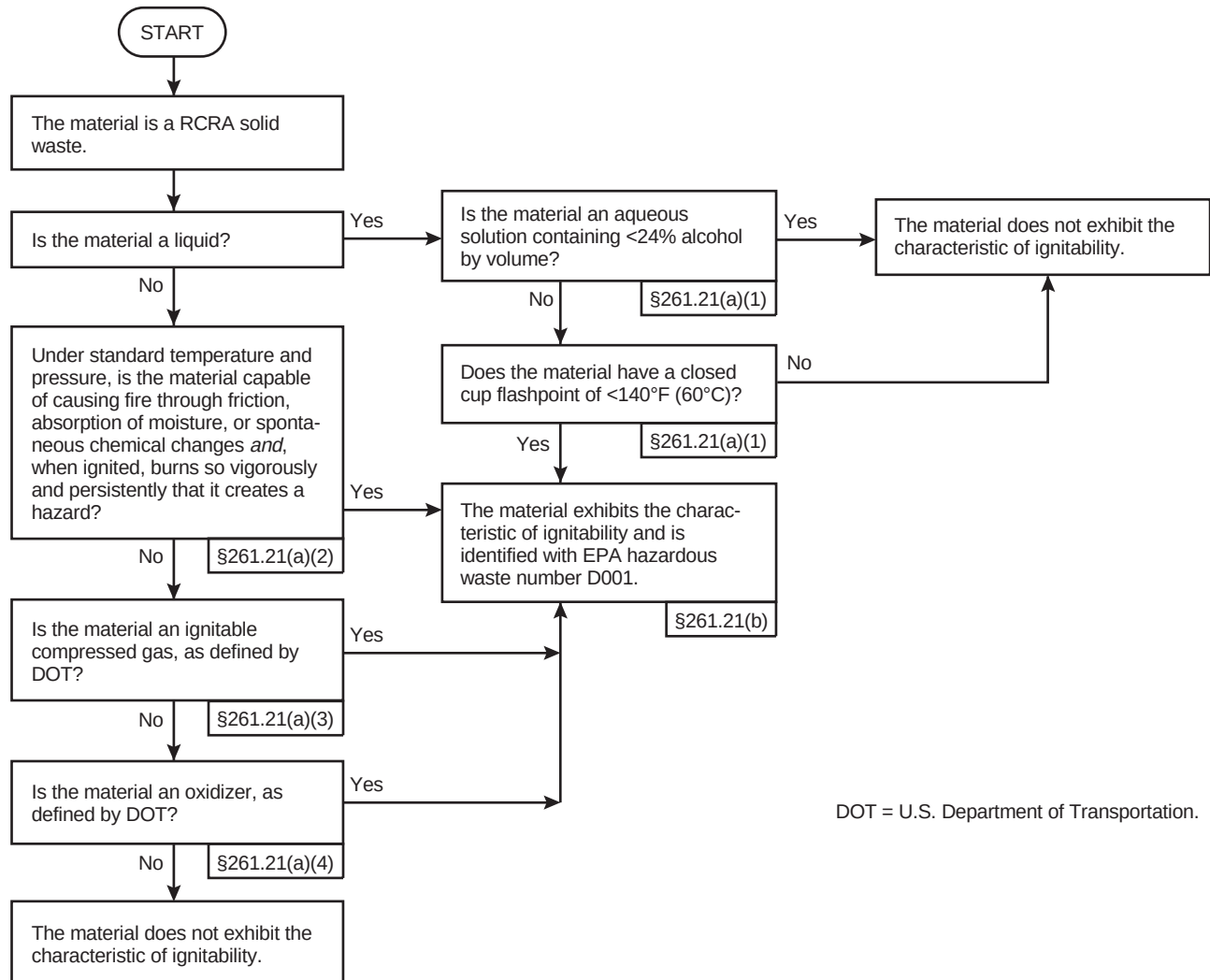
FIGURE 7
Determining If a Solid Waste Is a Listed Hazardous Waste



¹The generator must determine if an unlisted solid waste and, for purposes of compliance with the land disposal restrictions of Part 268, a listed waste, exhibits any of the hazardous waste characteristics.

Source: Aspen Law & Business.

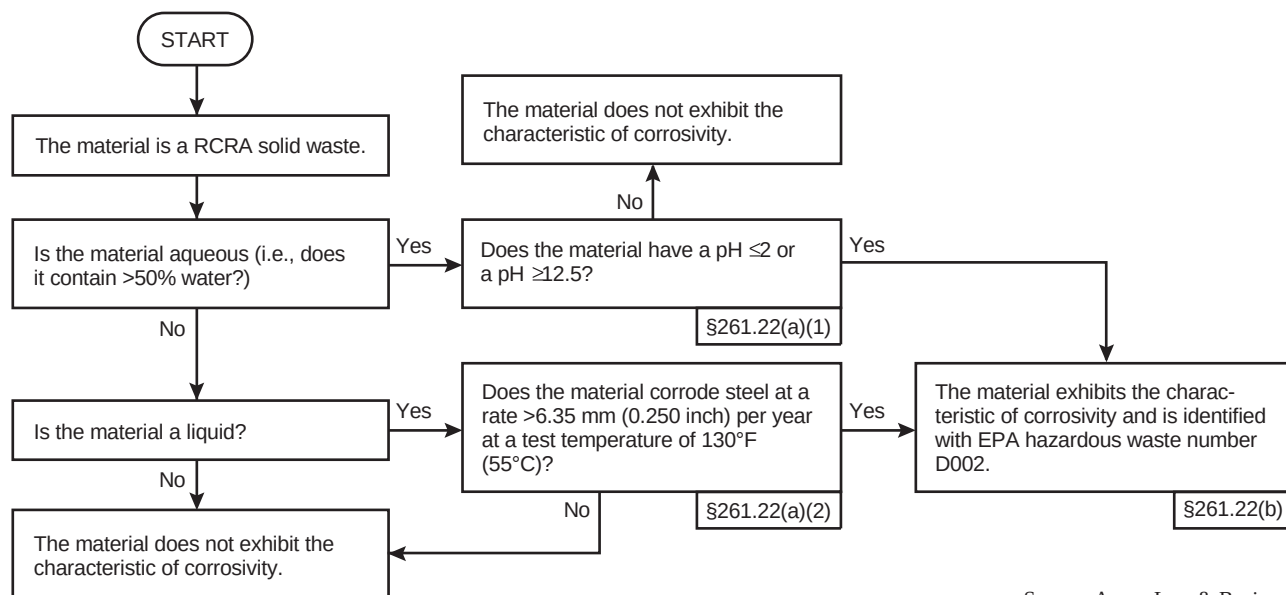
FIGURE 8
Determining If a Solid Waste Exhibits the Characteristic of Ignitability



DOT = U.S. Department of Transportation.

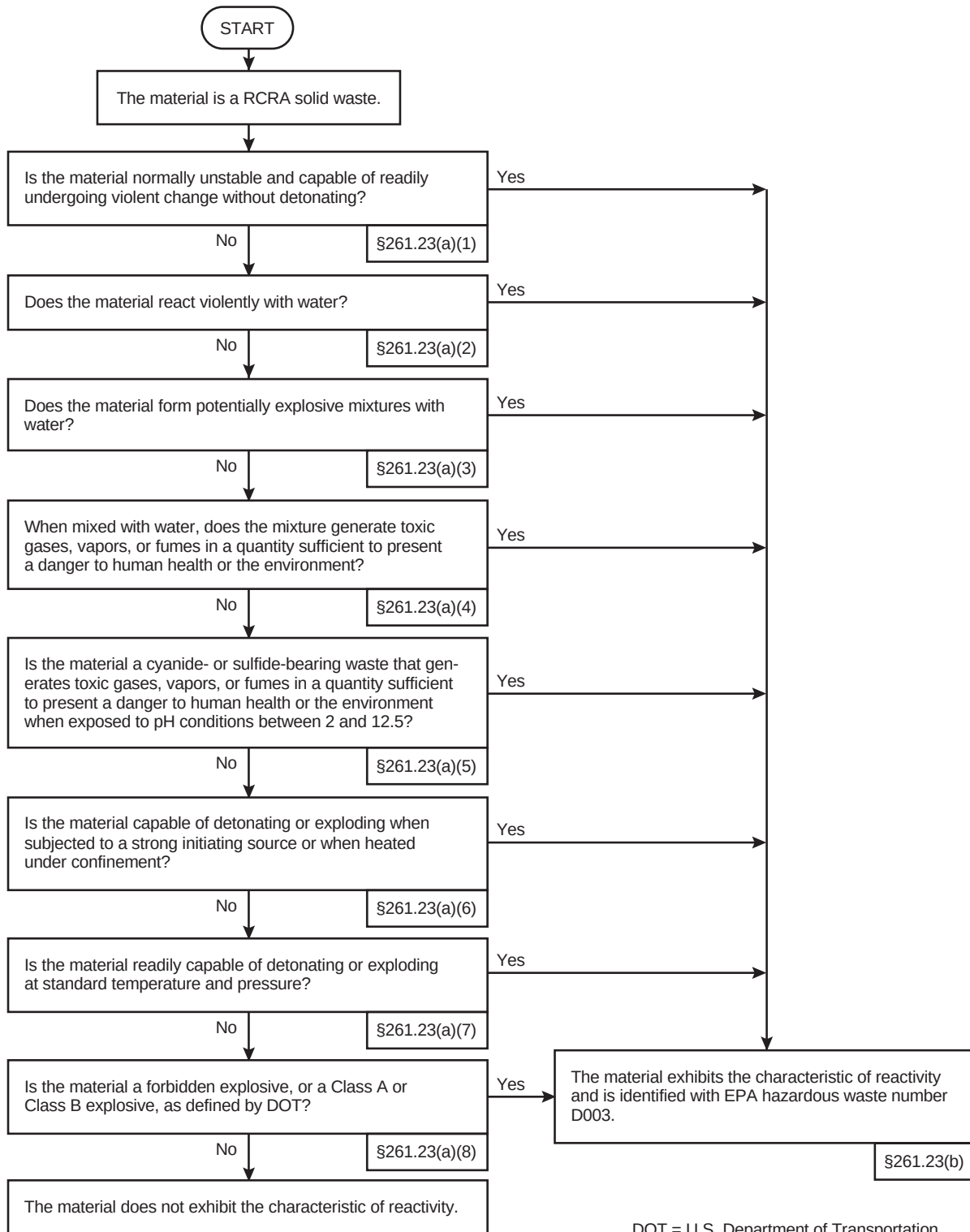
Source: Aspen Law & Business.

FIGURE 9
Determining If a Solid Waste Exhibits the Characteristic of Corrosivity



Source: Aspen Law & Business.

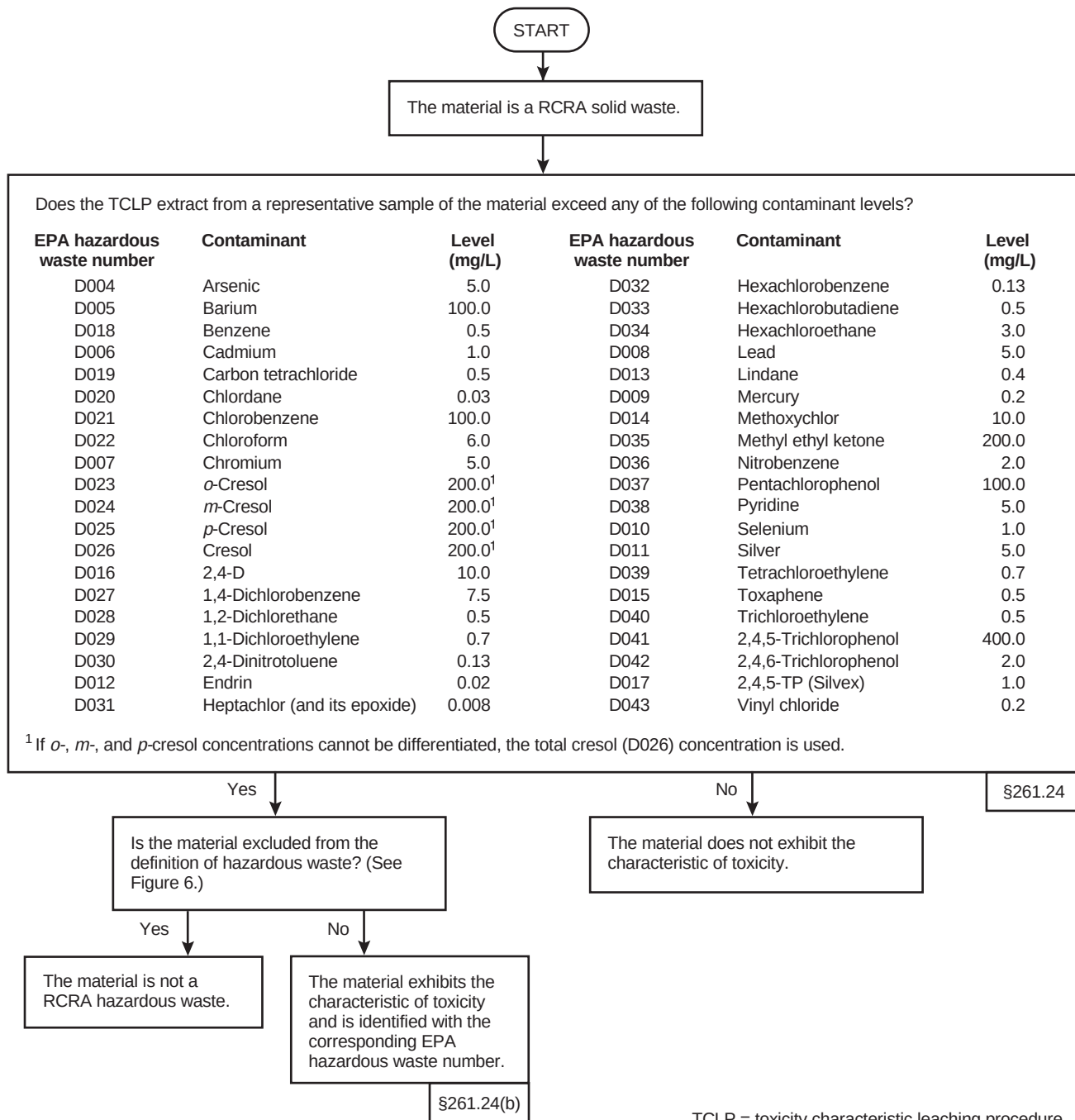
FIGURE 10
Determining If a Solid Waste Exhibits the Characteristic of Reactivity



DOT = U.S. Department of Transportation.

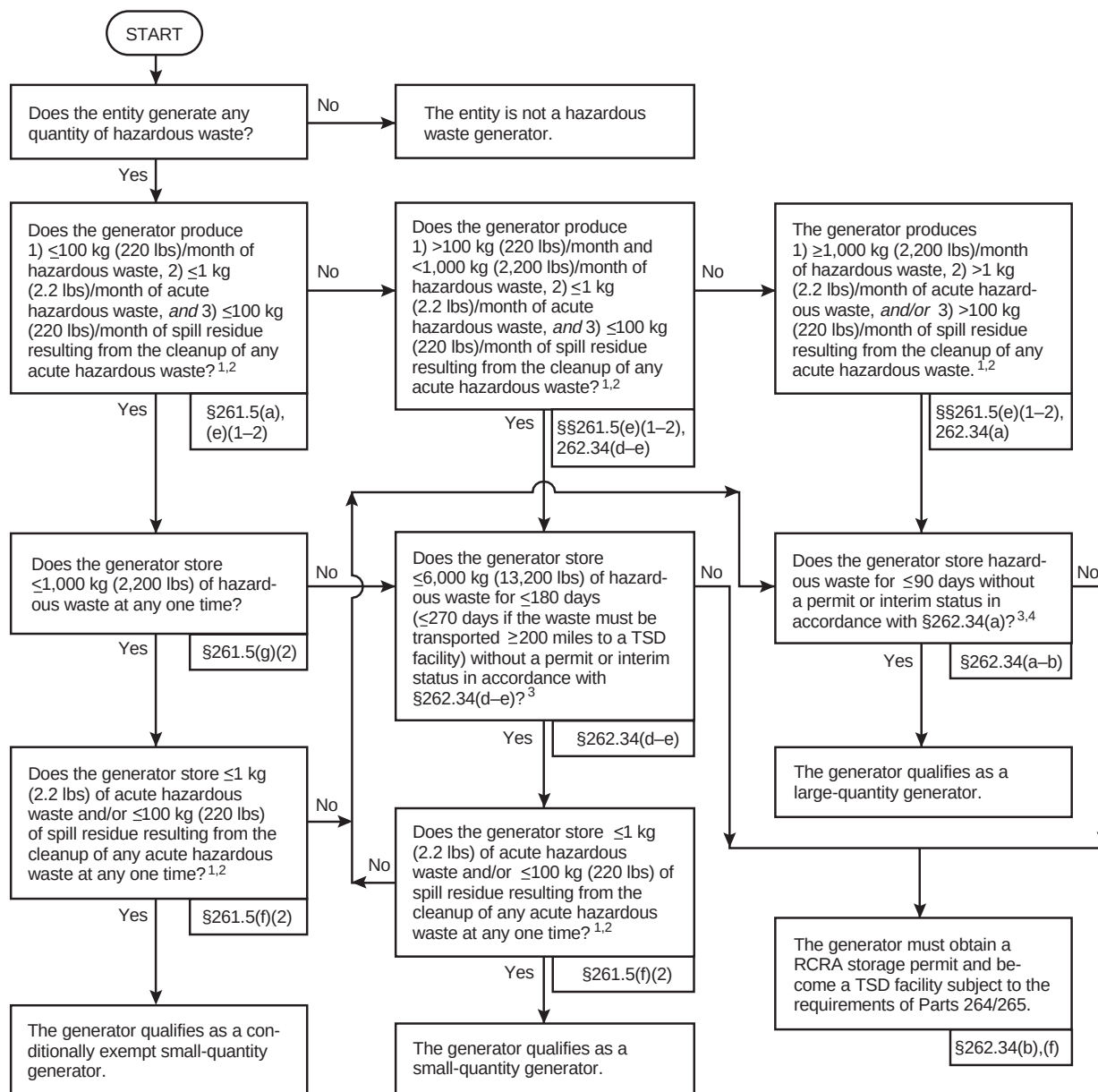
Source: Aspen Law & Business.

FIGURE 11
Determining If a Solid Waste Exhibits the Characteristic of Toxicity



Source: Aspen Law & Business.

FIGURE 12
Determining Hazardous Waste Generator Status



TSD = treatment, storage, and disposal.

Note: Generally, one full 55-gal drum holds about 200 kg (440 lbs) of hazardous waste. See §261.5 for a list of the hazardous wastes that must be included in quantity determinations.

¹ Acute hazardous wastes include dioxin wastes (F020–F023 and F026–F027) and all P-wastes listed in §261.33(e).

² Such spill residue includes contaminated soil, debris, water, or waste.

³ An extension to the accumulation period limit of up to 30 days may be granted by EPA on a case-by-case basis due to unforeseen, temporary, and uncontrollable circumstances.

⁴ Up to 20,000 kg (44,100 lbs) of F006 wastes may be stored onsite for up to 180 days (270 days if the waste must be transported more than 200 miles to a TSD facility) if certain conditions are met (65 FR 12378; March 8, 2000).

Source: Aspen Law & Business.

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹

<i>CESQGs</i>	<i>SQGs</i>	<i>LQGs</i>
Amount of hazardous waste generated in one month		
Generates ≤100 kg (220 lbs) of hazardous waste, ≤1 kg (2.2 lbs) of acute hazardous waste², and ≤100 kg (220 lbs) of spill residue resulting from the cleanup of any acute hazardous waste^{2,3} [§261.5 (a), (e)(1–2)]	Generates 100 kg (220 lbs) and 1,000 kg (2,200 lbs) [§262.34(d–f)]	Generates ≥1,000 kg (2,200 lbs) of hazardous waste, >1 kg (2.2 lbs) of acute hazardous waste², and/or >100 kg (220 lbs) of spill residue resulting from the cleanup of any acute hazardous waste^{2,3} [§§261.5(e)(1–2), 262.34(a)]
Hazardous waste determinations⁴		
Determine if a solid waste is a declared, characteristic, or listed hazardous waste, or if it is a hazardous waste mixture [§§261.5(f)(1), (g)(1); 262.11]	Determine if a solid waste is a declared, characteristic, or listed hazardous waste, or if it is a hazardous waste mixture [§262.11]	Determine if a solid waste is a declared, characteristic, or listed hazardous waste, or if it is a hazardous waste mixture [§262.11]
Onsite accumulation limits		
- Allowed to store ≤1,000 kg (2,200 lbs) of hazardous waste at any one time—greater amounts move the CESQG into the SQG category for the 180- or 270-day accumulation period per §262.34 (d) or (e) [§261.5(g)(2)] - Allowed to store ≤1 kg (2.2 lbs) of acute hazardous waste² and/or ≤100 kg (220 lbs) of spill residue resulting from the cleanup of any acute hazardous waste^{2,3}—greater amounts move the CESQG into the LQG category for 90-day accumulation per §262.34(a) [§261.5(f)(2)]	Allowed to store ≤6,000 kg (13,228 lbs) of hazardous wastes for up to 180 days without a permit or interim status (270 days if the waste must be transported 200 miles or more to a TSD facility)—greater amounts or exceedances of the time limits require the SQG to obtain a RCRA storage permit and comply with Parts 264/265 requirements⁵ [§262.34(d)(1), (f)]	- Allowed to store any quantity of hazardous waste for up to 90 days without a permit or interim status—exceedances of the 90-day limit require the LQG to obtain a RCRA storage permit and comply with Parts 264/265 requirements⁵ [§262.34(a–b)] - Up to 20,000 kg (44,100 lbs) of F006 wastes may be stored onsite for up to 180 days (270 days if the waste must be transported 200 miles or more to a TSD facility) if certain conditions are met [§262.34(g)]
EPA identification number		
RCRA does not require an EPA identification number [§261.5(b)]; however, some states and hazardous waste transporters may require a CESQG to have one	Must notify EPA and obtain an EPA identification number [§262.12(a–b)]	Must notify EPA and obtain an EPA identification number [§262.12(a–b)]

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹—Continued

<i>CESQs</i>	<i>SQGs</i>	<i>LQGs</i>
Storage requirements		
Exempt [§261.5(b)]	- Hazardous waste must be stored in containers that meet Part 265, Subpart I requirements (except for the §265.176 location requirements and the §265.178 air emission standards), or tanks meeting §265.201 requirements [§262.34(d)(2–3)] - Each unit must be labeled as “Hazardous Waste,” and marked with the date the accumulation period began [§262.34(d)(4)]	- Hazardous waste must be stored in containers that meet Part 265, Subparts AA, BB, CC, and I requirements; in tanks that meet Part 265, Subparts AA, BB, CC, and J requirements [except §§265.197(c) and 265.200]; on drip pads that meet Part 265, Subpart W requirements; or in containment buildings that meet Part 265, Subpart DD requirements [§262.34(a)(1)] - Each unit must be labeled as “Hazardous Waste,” and marked with the date the accumulation period began [§262.34(a)(2–3)]
Satellite Accumulation Areas		
Exempt [§261.5(b)]	Must comply with §262.34(c) when up to 55 gallons of hazardous waste, or 1 quart of acutely hazardous waste, is stored in satellite accumulation containers at or near any point of initial generation [§262.34(c)]	Must comply with §262.34(c) when up to 55 gallons of hazardous waste, or 1 quart of acutely hazardous waste, is stored in satellite accumulation containers at or near any point of initial generation [§262.34(c)]
Mixing hazardous waste with nonhazardous waste		
If CESQG hazardous waste that meets the generation and storage quantity limitations described above is mixed with a nonhazardous waste, the mixture continues to be considered an exempt waste—even if the mixture exceeds the quantity limitations—as long as the mixture does not exhibit a characteristic⁶ [§261.5(h)]	- If SQG characteristic hazardous waste is mixed with nonhazardous waste, the resulting mixture is regulated as: —Hazardous waste if the resultant mixture is characteristically hazardous [§261.3(b)(3)] —Nonhazardous waste if the resultant mixture does not exhibit a characteristic [§261.3(b)(3)] - If SQG listed hazardous waste that is listed solely because it exhibits a characteristic is mixed with nonhazardous waste, the resulting mixture is regulated as: —Listed hazardous waste if the resultant mixture is characteristically hazardous [§261.3(a)(2)(iii)] —Nonhazardous waste if the resultant mixture does not exhibit a characteristic [§261.3(a)(2)(iii)]	- If LQG characteristic hazardous waste is mixed with nonhazardous waste, the resulting mixture is regulated as: —Hazardous waste if the resultant mixture is characteristically hazardous [§261.3(b)(3)] —Nonhazardous waste if the resultant mixture does not exhibit a characteristic [§261.3(b)(3)] - If LQG listed hazardous waste that is listed solely because it exhibits a characteristic is mixed with nonhazardous waste, the resulting mixture is regulated as: —Listed hazardous waste if the resultant mixture is characteristically hazardous [§261.3(a)(2)(iii)] —Nonhazardous waste if the resultant mixture does not exhibit a characteristic [§261.3(a)(2)(iii)]

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹—Continued

<i>CESQs</i>	<i>SQGs</i>	<i>LQGs</i>
Mixing hazardous waste with nonhazardous waste—Continued		
	If SQG other listed hazardous waste is mixed with nonhazardous waste, the resulting mixture is regulated as a listed hazardous waste [§261.3(a)(2)(iv), (b)(2)]	If LQG other listed hazardous waste is mixed with nonhazardous waste, the resulting mixture is regulated as a listed hazardous waste [§261.3(a)(2)(iv), (b)(2)]
Transporters and receiving TSD facilities		
CESQG waste must be managed in an onsite or offsite TSD facility that: 1) has a proper state or federal permit, or interim status, to treat hazardous, municipal, or industrial wastes; 2) uses, reuses, reclaims, or recycles the waste; or 3) is a universal waste handler or destination facility (for universal wastes only)⁷ [§261.5(f)(3), (g)(3)]	- Must ensure that transporters and designated receiving TSD facilities have been licensed and have EPA identification numbers [§262.12(c)] - Must ship wastes to a RCRA permitted or interim status facility⁷ [§262.20(b)]	- Must ensure that transporters and designated receiving TSD facilities have been licensed and have EPA identification numbers [§262.12(c)] - Must ship wastes to a RCRA permitted or interim status facility⁷ [§262.20(b)]
DOT standards		
Exempt [§261.5(b)], but may be required by DOT to comply with certain requirements	Must comply with DOT regulations, including standards for packaging wastes [§262.30]; labeling and marking packages of hazardous wastes [§§262.31 and 262.32]; and placarding each bulk package container, vehicle, or railcar [§262.33] (Onsite transportation is not subject to DOT regulations.)	Must comply with DOT regulations, including standards for packaging wastes [§262.30]; labeling and marking packages of hazardous wastes [§§262.31 and 262.32]; and placarding each bulk package container, vehicle, or railcar [§262.33] (Onsite transportation is not subject to DOT regulations.)
Use of generator's vehicles		
Exempt [§261.5(b)]	If the generator's own vehicles are used to transport hazardous waste offsite, an EPA identification number must be obtained, vehicles must be identified with placards, and DOT hazardous materials regulations must be met [§263.10(b)]	If the generator's own vehicles are used to transport hazardous waste offsite, an EPA identification number must be obtained, vehicles must be identified with placards, and DOT hazardous materials regulations must be met [§263.10(b)]
Manifests		
Not required by Subtitle C to prepare hazardous waste manifests [§261.5(b)]; however, if a hazardous waste transporter is used to ship CESQG hazardous waste, the transporter may require a manifest	Must prepare hazardous waste manifests for all offsite shipments of hazardous waste, including the information required in §§262.20 and 262.23^{8,9} [§§262.20–262.23]	- Must prepare hazardous waste manifests for all offsite shipments of hazardous waste, including the information required in §§262.20 and 262.23 [§§262.20–262.23]⁹ - Must contact the transporter and/or TSD facility if a signed copy of the manifest was not received from the TSD facility within 35 days of the date the waste was shipped [§262.42(a)(1)]

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹—Continued

<i>CESQs</i>	<i>SQGs</i>	<i>LQGs</i>
LDR requirements		
Exempt [§261.5(b)]	- Must comply with LDR requirements (See Figure 13) [§268.1(b)], including: - Determining (via testing or process knowledge) if hazardous waste must be treated before land disposal; - Ensuring waste meets LDR treatment standards before land disposal; - Preparing LDR notifications and certifications; and - Complying with the waste analysis plan requirements of §268.7(a)(5) if the wastes are treated in accumulation containers or tanks to meet LDR treatment standards	- Must comply with LDR requirements (See Figure 13) [§268.1(b)], including: - Determining (via testing or process knowledge) if hazardous waste must be treated before land disposal; - Ensuring waste meets LDR treatment standards before land disposal; - Preparing LDR notifications and certifications; and - Complying with the waste analysis plan requirements of §268.7(a)(5) if the wastes are treated in accumulation containers or tanks to meet LDR treatment standards
Universal waste management standards		
- Exempt [§261.5(b)]; however, CESQs may comply with the Part 273 requirements and wastes managed in accordance with Part 273 may be excluded from the quantity calculation used to determine generator status [§261.5(c)(6)] - If universal wastes generated by CESQs become co-mingled with SQG- or LQG-universal wastes, the co-mingled wastes must be managed under Part 273 [§273.8(b)]	Universal wastes (i.e., batteries, recalled and unused pesticides, mercury-containing thermostats, and spent hazardous waste lamps) are subject to the less stringent requirements of Part 273 (See Table 3) [§261.9]	Universal wastes (i.e., batteries, recalled and unused pesticides, mercury-containing thermostats, and spent hazardous waste lamps) are subject to the less stringent requirements of Part 273 (See Table 3) [§261.9]
Used oil management standards		
Subject to Part 279 requirements (See Table 4) [§279.10]	Subject to Part 279 requirements (See Table 4) [§279.10]	Subject to Part 279 requirements (See Table 4) [§279.10]
Emergency preparedness and prevention		
Exempt [§261.5(b)]	Must comply with the emergency preparedness and prevention requirements of Part 265, Subpart C [§262.34(d)(4)]	Must comply with the emergency preparedness and prevention requirements of Part 265, Subpart C [§262.34(a)(4)]
Contingency plan and emergency procedures		
Exempt [§261.5(b)]	Must comply with emergency procedure requirements of §262.34(d)(5)(i), (ii), and (iv); not required to have written contingency plans, but must be prepared for emergencies [§262.34(d)(5)]	Must comply with the requirements of Part 265, Subpart D, including having a written contingency plan and emergency procedures [§262.34(a)(4)]

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹—Continued

<i>CESQGs</i>	<i>SQGs</i>	<i>LQGs</i>
Personnel training requirements		
Exempt [§261.5(b)]	Not required to have an established personnel training program, but the minimal training requirements in §262.34(d)(5)(iii) must be met to ensure that employees can handle hazardous wastes safely [§262.34(d)(4)]	All personnel involved in hazardous waste management must successfully complete a program of classroom instruction or on-the-job training within six months of being employed, and an annual review of the initial training, in accordance with §265.16(a) [§262.34(a)(4)]
Export/import		
Exempt [§261.5(b)]	- Must comply with the export/import requirements of Part 262, Subparts E and F [§§262.50–262.60] - Must comply with Part 262, Subpart H if wastes are shipped to or from OECD countries for recovery [§262.10(d)]	- Must comply with the export/import requirements of Part 262, Subparts E and F [§§262.50–262.60] - Must comply with Part 262, Subpart H if wastes are shipped to or from OECD countries for recovery [§262.10(d)]
Reporting		
Exempt [§261.5(b)]	- Required to provide EPA with copies of open manifests (i.e., those for which the generator has not received a signed copy of the manifest from the designated TSD facility within 60 days of the date the waste was shipped) and some indication that confirmation of delivery has not been received [§262.42(b)] - EPA may require generators to submit additional reports [§§262.43, 262.44(b)]	- Required to submit the following to EPA: —A biennial report each even-numbered year [§262.41], and —Manifest exception reports when a signed copy of the manifest is not received from the TSD facility within 45 days of the date the waste was shipped [§262.42(a)(2)] - EPA may require generators to submit additional reports [§262.43]
Recordkeeping		
Must maintain documentation of hazardous waste quantities showing basis for eligibility as a CESQG for each month that status is claimed [§262.40(c)]	- Must maintain documentation of hazardous waste quantities showing basis for eligibility as a SQG for each month that status is claimed [§262.40(c)] - Must maintain copies of the following records for three years: —LDR notifications and certifications, waste analysis data, and other LDR determinations —Manifests; and —Test results, waste analyses, and other waste determinations [§§262.44(a), 268.7(a)(8)]	- Must maintain copies of the following records for three years: —Biennial reports; —LDR notifications and certifications, waste analysis data, and other LDR determinations; —Manifests; —Manifest exception reports; and —Test results, waste analyses, and other waste determinations [§§262.40, 268.7(a)(8)]

TABLE 1
Summary of RCRA Requirements for Hazardous Waste Generators¹—Continued

<i>CESQs</i>	<i>SQGs</i>	<i>LQs</i>
Recordkeeping—Continued		
		• Documentation of personnel training must be maintained in accordance with §265.16(d–e) [§262.34(a)(4)] • Must document that wastes are sent offsite within 90 days [§262.34(a)(1)(iii)(b), (iv)(B)]
Waste minimization		
Exempt [§261.5(b)]	• Must take steps to minimize hazardous waste generation and look for minimization opportunities [Part 262, Appendix, Item 16]	• Must develop a waste minimization program [Part 262, Appendix, Item 16]
Closure requirements		
Exempt [§261.5(b)]	• Exempt [§262.34(d)]	• Must comply with closure requirements for accumulation units per §§265.111 and 265.114 [§262.34(a)(1)]

CESQG = conditionally exempt small-quantity generator; DOT = U.S. Department of Transportation; LDR = land disposal restrictions; LQG = large-quantity generator; OECD = Organization for Economic Cooperation and Development; SQG = small-quantity generator; TSD = treatment, storage, and disposal.

¹The following generators are exempt from the requirements of Part 262 (and may also be exempt from other RCRA regulations): 1) farmers who manage waste pesticides in accordance with §262.70, and 2) persons responding to certain explosives or munitions emergencies. In addition, certain New York state public utility facilities and laboratories at designated universities are subject to site-specific requirements in accordance with Project XL agreements.

²Acute hazardous wastes include dioxin wastes (F020–F023 and F026–F027) and all P-wastes listed in §261.33(e).

³Such spill residue includes contaminated soil, debris, water, or waste.

⁴In making hazardous waste determinations, the generator should exclude the wastes identified in §261.5(c–d) from the quantity calculations [see §262.10(b)].

⁵An extension to the accumulation period of up to 30 days may be granted on a case-by-case basis by the EPA regional administrator due to unforeseen, temporary, and uncontrollable circumstances.

⁶If the hazardous waste exceeds a generation or storage quantity limitation, the resulting mixture of the hazardous waste and nonhazardous waste is subject to full RCRA Subtitle C regulation. EPA has interpreted §261.5(h) as applying only to the CESQG and not to a subsequent manager of the CESQG waste described in §261.5(f)(3) or (g)(3). Therefore, facilities receiving and mixing CESQG waste with, for example, exempt household hazardous waste, are subject only to applicable state municipal or industrial regulations and not Subtitle C requirements, even if the resulting mixture exhibits a hazardous characteristic (OSWER Directive 9574.00-02; July 22, 1992).

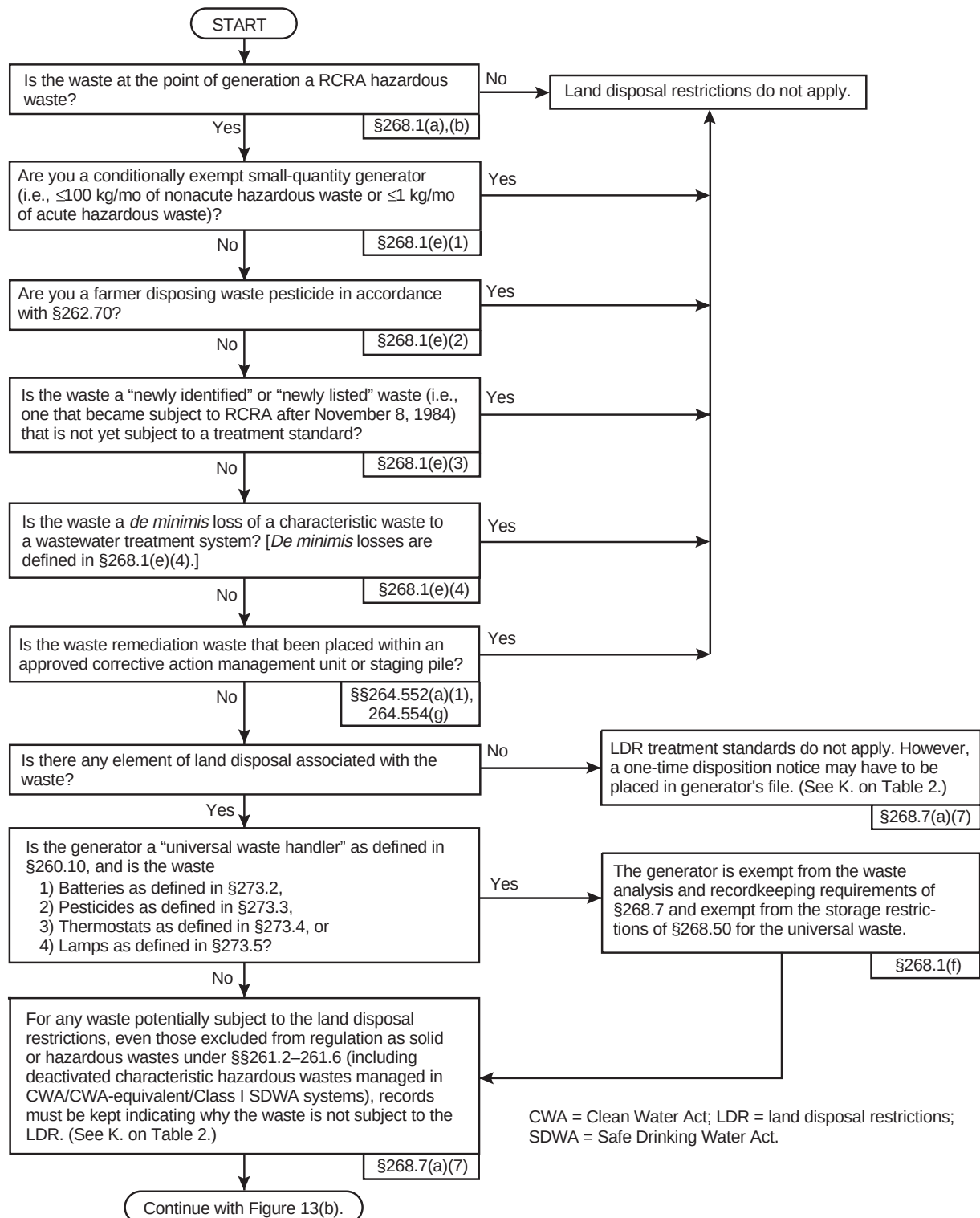
⁷EPA recommends that receiving facilities be inspected every two years, which should include a determination of whether the facility has been the subject of a RCRA enforcement action.

⁸EPA allows an exception to the manifest requirements when SQGs ship hazardous waste (e.g., spent solvents) offsite for recycling pursuant to a contractual recycling (tolling) agreement with a recycling firm. In such a situation, a manifest is not required, as long as the following criteria are met: 1) the contractual agreement specifies the type of waste and frequency of recycling shipments, 2) the waste is transported to the recycling facility and the regenerated product is returned to the SQG in a vehicle that is owned and operated by the recycling facility, and 3) the SQG retains a copy of the recycling agreement on file for at least three years following termination of the agreement [see §262.20(e)].

⁹Manifest requirements do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way [§262.20(f)].

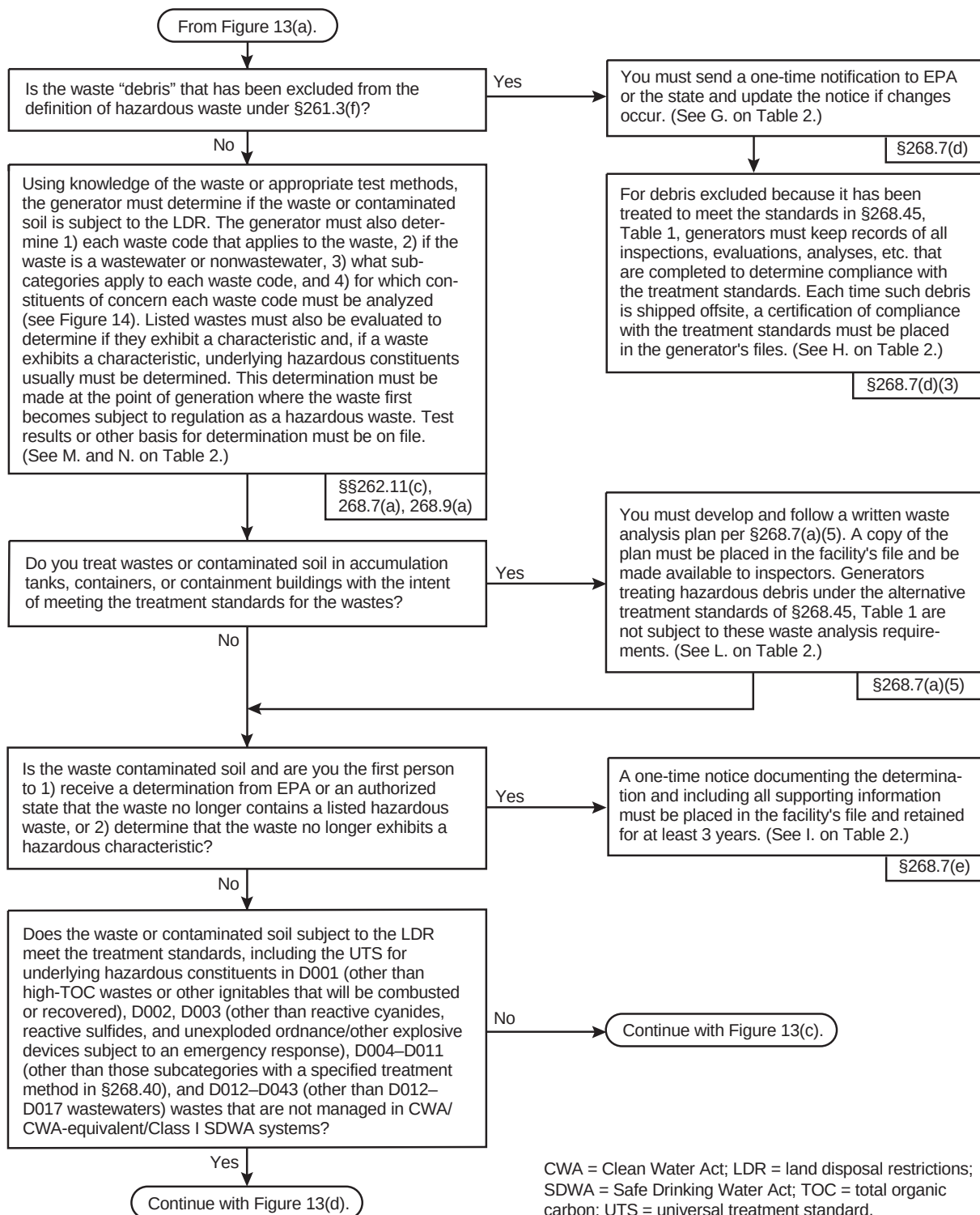
Source: Aspen Law & Business.

FIGURE 13(a)
Requirements Applicable to Generators of Wastes
Subject to the Land Disposal Restrictions



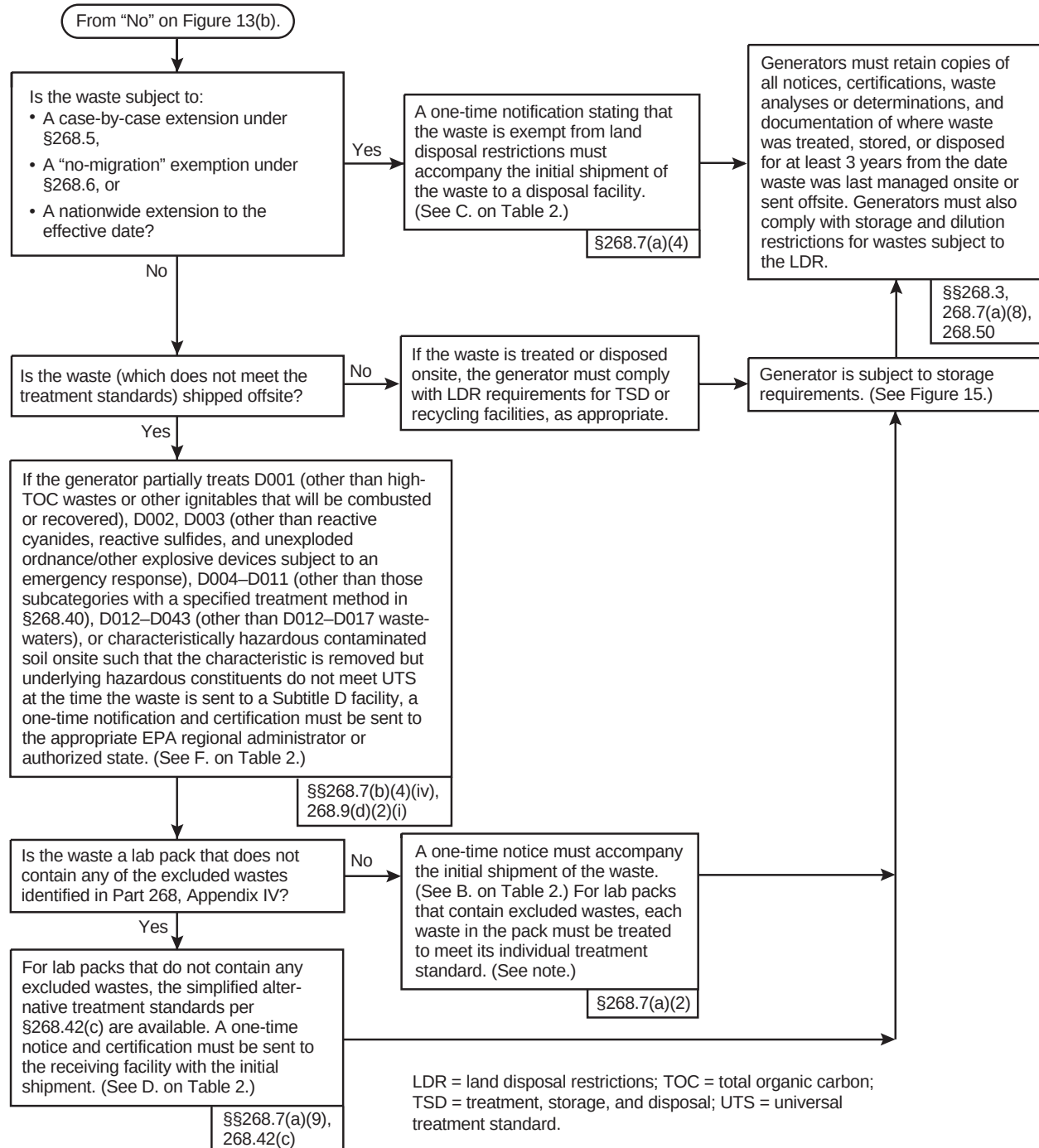
Source: Aspen Law & Business.

FIGURE 13(b)
Requirements Applicable to Generators of Wastes
Subject to the Land Disposal Restrictions—Continued



Source: Aspen Law & Business.

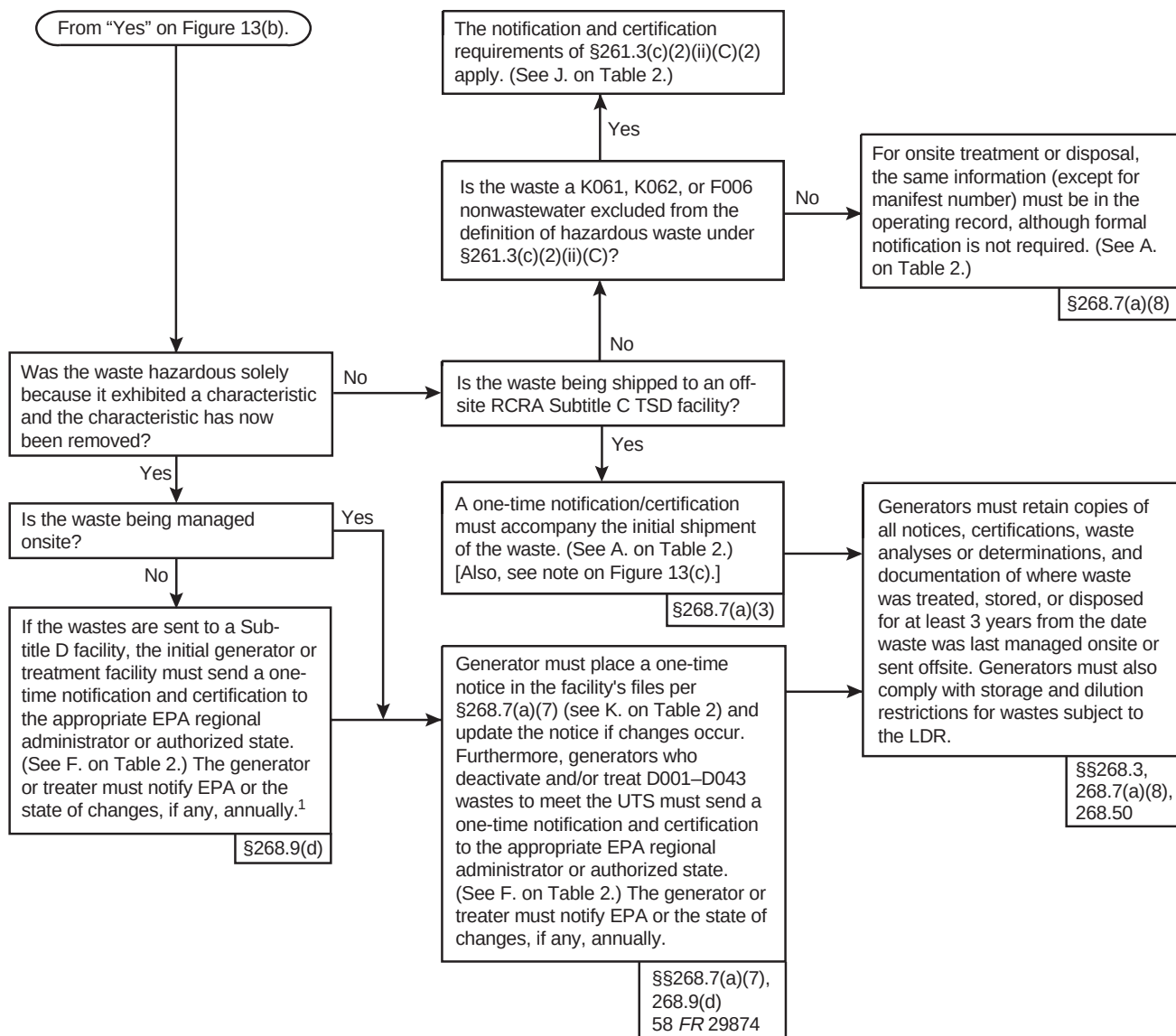
FIGURE 13(c)
Requirements Applicable to Generators of Wastes
Subject to the Land Disposal Restrictions—Continued



Note: Small-quantity generators with tolling agreements pursuant to §262.20(e) must comply with the applicable notification and certification requirements for the initial shipment of the waste subject to the agreement. Such generators must retain onsite a copy of the notification and certification, together with the tolling agreement, for at least 3 years after termination or expiration of the agreement [§268.7(a)(10)]. (See E. on Table 2.)

Source: Aspen Law & Business.

FIGURE 13(d)
Requirements Applicable to Generators of Wastes
Subject to the Land Disposal Restrictions—Continued

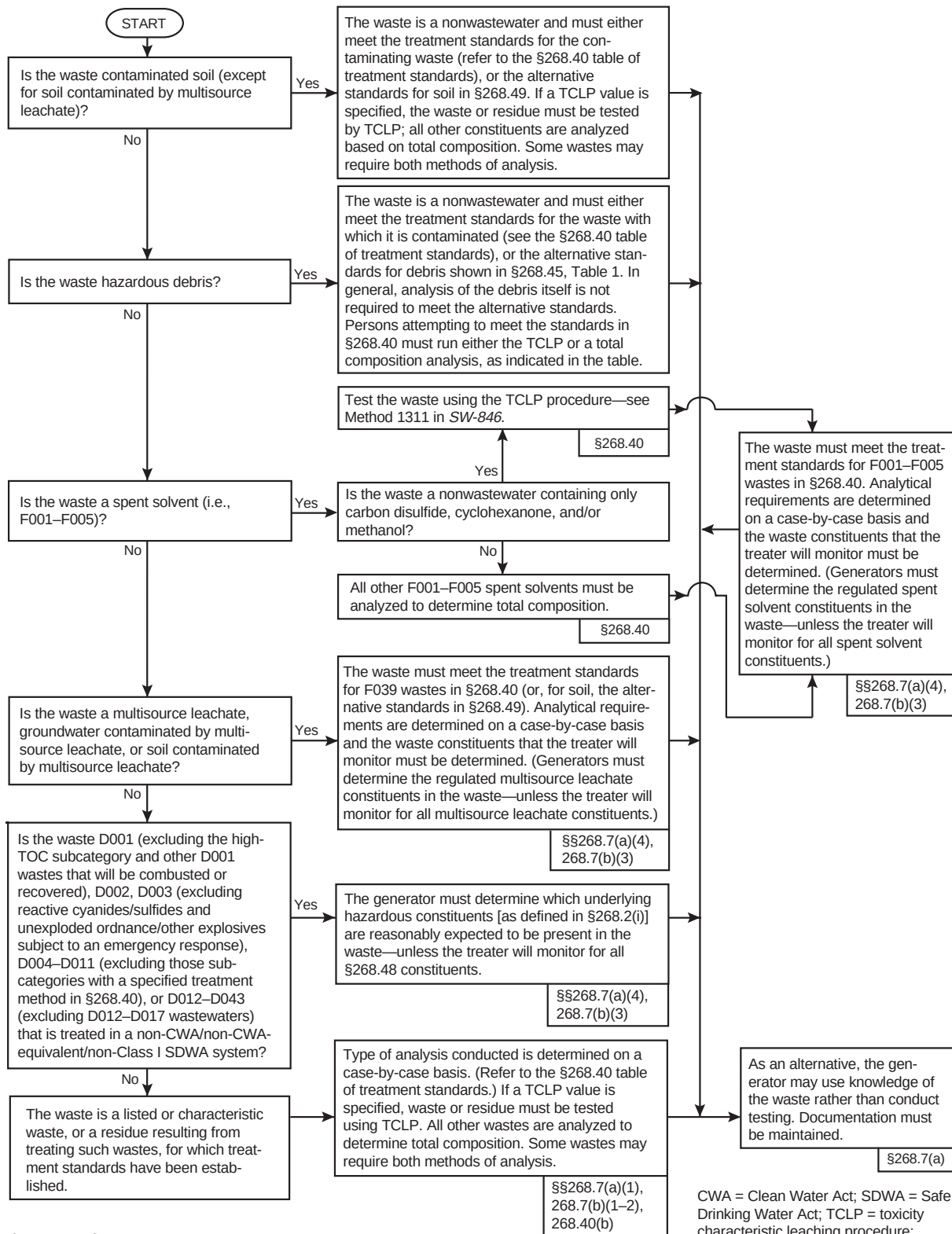


LDR = land disposal restrictions; TSD = treatment, storage, and disposal; UTS = universal treatment standards.

¹Although the regulations do not specify requirements for decharacterized wastes sent to a Subtitle C facility, it would be a good management practice to send a one-time notification/certification with the initial shipment of the waste.

Source: Aspen Law & Business.

FIGURE 14
Analytical Requirements for Wastes Subject to the Land Disposal Restrictions



Source: Aspen Law & Business.

CWA = Clean Water Act; SDWA = Safe Drinking Water Act; TCLP = toxicity characteristic leaching procedure; TOC = total organic carbon.

TABLE 2
Summary of Generator Notification, Certification, and
Recordkeeping Requirements for the LDR Program

<i>Scenario</i>	<i>Frequency</i>	<i>Recipient of notification</i>	<i>Notification, certification, and recordkeeping requirements</i>
A. Waste or contaminated soil meets applicable treatment standards at the original point of generation [§268.7(a)(3)]	One-time	TSD facility and generator's file	Notice must include: • EPA hazardous waste numbers and manifest number of first shipment • Statement that the waste is subject to LDR • Constituents of concern for certain wastes unless the waste will be monitored for all constituents • Treatability group and subcategory • Waste analysis data (if available) • Certification statement as provided in §268.7(a)(3) stating that the waste complies with the treatment standards • For contaminated soil subject to the alternative standards, the contaminants subject to treatment as described in §268.49(d) and the certification statement provided in the table in §268.7(a)(4) Generators of hazardous debris that is excluded from the definition of hazardous waste under §261.3(f) are exempt from these notification and certification requirements New notice and certification are required if waste changes¹
B. Waste or contaminated soil does not meet applicable treatment standards [§268.7(a)(2)]	One-time	Treatment or storage facility and generator's file	Notice must include: • EPA hazardous waste numbers and manifest number of first shipment • Constituents of concern for certain wastes unless the waste will be treated and monitored for all constituents • Treatability group and subcategory • Waste analysis data (if available) • For hazardous debris (when using the alternative treatment technologies in §268.45), the contaminants subject to treatment and an indication that these contaminants are being treated to comply with §268.45 • For contaminated soil subject to the alternative standards, the contaminants subject to treatment as described in §268.49(d) and the certification statements as provided in §268.7(a)(2)(i) and the table in §268.7(a)(4) New notice required if waste¹ or receiving facility changes

TABLE 2
Summary of Generator Notification, Certification, and
Recordkeeping Requirements for the LDR Program—Continued

<i>Scenario</i>	<i>Frequency</i>	<i>Recipient of notification</i>	<i>Notification, certification, and recordkeeping requirements</i>
C. Waste or contaminated soil is subject to exemption from a land disposal prohibition, such as a case-by-case extension under §268.5, disposal in a no-migration unit under §268.6, or a nationwide capacity variance under Subpart C of Part 268 [§268.7(a)(4)]	One-time	Disposal facility and generator's file	Notice must include: • EPA hazardous waste and manifest numbers • Statement that waste is not prohibited from land disposal • Waste analysis data (where available) • Date the waste is subject to prohibition • For hazardous debris (when using the alternative treatment technologies in §268.45), the contaminants subject to treatment and an indication that these contaminants are being treated to comply with §268.45 are required New notice required if waste changes
D. Generator is managing a lab pack containing certain wastes and wishes to use the alternative treatment standard under §268.42(c) [§268.7(a)(9)]	One-time	Treatment facility and generator's file	Notice must include: • EPA hazardous waste and manifest numbers • Certification statement as provided in §268.7(a)(9) stating that the waste complies with the treatment standards If lab pack contains D001–D043 wastes, underlying hazardous constituents need not be determined Generator must comply with §268.7(a)(6) and (a)(7) where applicable New notice required if waste or treatment facility changes
E. Small-quantity generators with tolling agreements pursuant to §262.20(e) [§268.7(a)(10)]	One-time	Treatment facility and generator's file	Must comply with applicable notification and certification requirements in §268.7(a) Generator must also retain onsite a copy of the notification and certification, together with the tolling agreement, for at least 3 years after termination or expiration of agreement; this period is automatically extended during enforcement actions or as requested by EPA

TABLE 2
Summary of Generator Notification, Certification, and
Recordkeeping Requirements for the LDR Program—Continued

<i>Scenario</i>	<i>Frequency</i>	<i>Recipient of notification</i>	<i>Notification, certification, and recordkeeping requirements</i>
F. Generator who first claims that characteristic wastes are no longer hazardous [§268.9(d)]	One-time	EPA region or authorized state and generator's file	Notice must include: • Name and address of Subtitle D facility receiving the waste • Description of waste as initially generated, including EPA hazardous waste numbers, treatability groups, and underlying hazardous constituents (unless the waste will be treated and monitored for all constituents) • Certification in accordance with §268.7(b)(4); if the characteristic waste has been deactivated by the generator, but there are underlying hazardous constituents that require further treatment to meet the UTS, a certification in accordance with §268.7(b)(4)(iv) is required New notice and certification are required if the process or operation generating the waste or the receiving facility changes; new forms must be submitted by December 31 of the year the change occurred
G. Generator who first claims that hazardous debris is excluded from the definition of hazardous waste under §261.3(f) [§268.7(d)(1–2)]	One-time	EPA regional hazardous waste management division director or authorized state	Notice must include: • Name and address of Subtitle D facility receiving the treated debris • EPA hazardous waste number and description of hazardous debris as initially generated • Technology used to treat the debris (Table 1 of §268.45) New notice required if debris, treatment facility, or treatment technology changes
H. Hazardous debris that is treated using one of the extraction or destruction technologies in Table 1 of §268.45 and is thus excluded from the definition of hazardous waste under §261.3(f)(1) [§268.7(d)(3)]	Each shipment	Generator's file	Recordkeeping in accordance with §268.7(d)(3)(i–ii) For each shipment of treated debris, a certification of compliance with applicable treatment standards in accordance with §268.7(d)(3)(iii) is required

TABLE 2
Summary of Generator Notification, Certification, and
Recordkeeping Requirements for the LDR Program—Continued

<i>Scenario</i>	<i>Frequency</i>	<i>Recipient of notification</i>	<i>Notification, certification, and recordkeeping requirements</i>
I. Generator who either 1) first receives a determination from EPA or an authorized state that a contaminated soil no longer contains a listed hazardous waste, or 2) first determines that a contaminated soil no longer exhibits a hazardous characteristic [§268.7(e)]	One-time	Generator's file	All supporting data must be retained onsite in generator's files for a minimum of 3 years
J. Generator who claims that HTMR residues from processing F006, K061, or K062 are excluded from the definition of hazardous waste under §261.3(c)(2)(ii)(C) [§261.3(c)(2)(ii)(C)(2)]	One-time	EPA region or authorized state and generator's file	Notice must include: • Name and address of Subtitle D facility receiving the treated residue • EPA hazardous waste number and treatability group as initially generated • Treatment standards applicable to the waste as initially generated • Certification statement as provided in §261.3(c)(2)(ii)(C)(2) stating that the residue complies with the generic exclusion levels and is not characteristic New notice and certification are required if the process or operation generating the waste or the receiving facility changes; new forms must be submitted by December 31 of the year the change occurred
K. Generator has determined that the waste is excluded from the definition of hazardous or solid waste or is exempt from Subtitle C regulation (including deactivated characteristic hazardous wastes managed in CWA/CWA-equivalent/Class I SDWA systems [§268.7(a)(7)])	One-time	Generator's file	Notice must include: • Description of waste generation • Subsequent exclusion from definition of hazardous or solid waste or exemption from Subtitle C regulation • Disposition of waste

TABLE 2
Summary of Generator Notification, Certification, and
Recordkeeping Requirements for the LDR Program—Continued

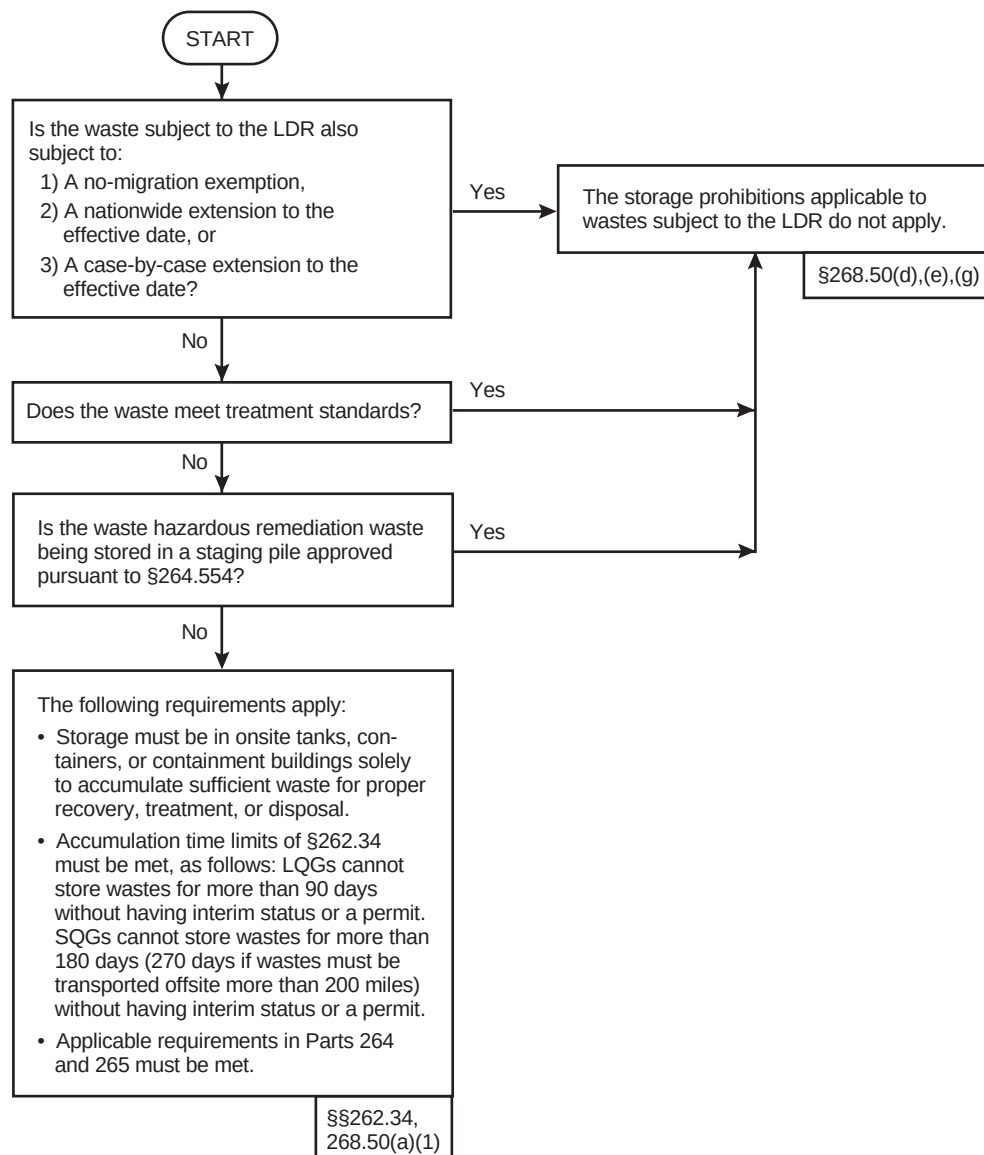
<i>Scenario</i>	<i>Frequency</i>	<i>Recipient of notification</i>	<i>Notification, certification, and recordkeeping requirements</i>
L. Waste or contaminated soil is managed in tanks, containers, or containment buildings regulated under §262.34 (accumulated waste) and is being treated in such devices to meet applicable treatment standards under Subpart D of Part 268 [§268.7(a)(5)]	NA	Generator's file	Generator must develop and follow a written waste analysis plan describing procedures used to comply with the treatment standards Plan must be kept onsite and made available to inspectors If waste is shipped offsite, generator must also comply with notification requirements of §268.7(a)(3) Generators treating hazardous debris under the alternative treatment standards of Table 1, §268.45 are exempt from the waste analysis requirements
M. Generator has determined whether the waste is restricted based solely on knowledge of the waste [§268.7(a)(6)]	NA	Generator's file	All supporting data must be retained onsite in generator's files
N. Generator has determined whether the waste is restricted based on testing the waste or an extract [§268.7(a)(6)]	NA	Generator's file	All waste analysis data must be retained onsite in generator's files
O. Other recordkeeping requirements [§268.7(a)(8)]	NA	Generator's file	Generator must retain onsite a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to §268.7 for at least 3 years from the date that the waste was last sent to onsite or offsite treatment, storage, or disposal; this period is automatically extended during enforcement actions or as requested by EPA

HTMR = high-temperature metals recovery; LDR = land disposal restrictions; NA = not applicable; SDWA = Safe Drinking Water Act; TSD = treatment, storage, and disposal; UTS = universal treatment standards.

¹A new notification is required only when a change in the waste affects the determination of which treatment standards apply.

Source: Aspen Law & Business; adapted from §§261.3, 268.7, and 268.9.

FIGURE 15
LDR Storage Requirements for Generators



LDR = land disposal restrictions; LQG = large-quantity generator; SQG = small-quantity generator.

Source: Aspen Law & Business.

TABLE 3
Summary of the Part 273 Universal Waste Management Standards

<i>Small-quantity handlers</i>	<i>Large-quantity handlers</i>
Prohibitions	
Disposal, dilution, and treatment of universal wastes are prohibited, except for management and release response activities specifically noted below	Disposal, dilution, and treatment of universal wastes are prohibited, except for management and release response activities specifically noted below
Notification requirements	
NA	- Must send one-time notification of universal waste management to EPA and receive an EPA identification number <i>before</i> ≥5,000 kg of universal waste are stored (unless the handler already has an EPA identification number, or has notified EPA of pesticide management under Part 165) - Notification must give information on the handler's facility and indicate the types of universal waste the handler is accumulating above the 5,000-kg limit
Personnel training	
Must inform all involved employees of proper waste handling and emergency procedures	Must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures
Importing requirements	
- Upon receipt of universal waste imported from a foreign destination, handler is subject to requirements of Part 273, Subpart B - Universal wastes imported from OECD countries for recovery are subject to Part 262, Subpart H	- Upon receipt of universal waste imported from a foreign destination, handler is subject to requirements of Part 273, Subpart C - Universal wastes imported from OECD countries for recovery are subject to Part 262, Subpart H
Shipment tracking	
No records of universal waste shipments must be retained	- Must keep records (e.g., logs, invoices, bills of lading) of each shipment of universal waste received onsite, including the quantity of each type of universal waste - Must keep records (e.g., logs, invoices, bills of lading) of each shipment of universal waste shipped offsite, including the quantity of each type of universal waste - Must maintain all shipment tracking records for at least 3 years from the date of receipt onsite or shipment offsite
<i>Both small-quantity handlers and large-quantity handlers</i>	

Storage requirements

- Universal wastes may be accumulated up to 1 year from the date the wastes are generated or are received from another universal waste handler
- Accumulation for longer than 1 year is allowed only if the purpose is to accumulate such quantities of universal waste to facilitate proper recovery, treatment, or disposal
- An inventory or labeling system is required to demonstrate the length of time the universal wastes have been accumulated from the date they become wastes or are received from another universal waste handler

TABLE 3
Summary of the Part 273 Universal Waste Management Standards—Continued

Both small-quantity handlers and large-quantity handlers

Management requirements

General:

- Must manage batteries, pesticides, mercury-containing thermostats, and lamps to prevent releases of any components or materials

Batteries:

- Any batteries that show evidence of leakage or spillage, or show damage that could result in leakage or spillage, must be placed in containers that are in good condition¹
- The following management activities may be conducted, as long as battery cell casings remain intact and closed:
 - Sort batteries by type,
 - Mix battery types in one container,
 - Discharge batteries to remove electrical charge,
 - Regenerate used batteries,
 - Disassemble batteries or battery packs into individual cells or batteries,
 - Remove batteries from consumer products, and
 - Remove electrolyte from batteries (cells must be closed immediately after removal)
- If the electrolyte or any other solid waste (e.g., battery pack materials or discarded consumer products) generated during the management activities noted above exhibits a characteristic, it must be managed under the full RCRA hazardous waste requirements of 40 *CFR* Parts 260–272

Pesticides:

- Pesticides must be contained in:
 - Containers that are in good condition¹;
 - Overpackaging containers that are in good condition¹ and that contain pesticides in other, unacceptable packaging;
 - Tanks meeting the requirements of Part 265, Subpart J [except for §§265.197(c) and 265.200–201]; or
 - Transport vehicles or vessels that are in good condition¹

Mercury-containing thermostats:

- Any thermostats that show evidence of leakage or spillage, or show damage that could result in leakage or spillage, must be placed in containers that are in good condition¹
- Mercury-containing ampules may be removed from thermostats, as long as the following provisions are met:
 - Removal technique must prevent breakage of ampules;
 - Removal must be 1) conducted over or in a containment device², 2) conducted in a well-ventilated area, and 3) monitored to ensure compliance with OSHA exposure levels for mercury;
 - A mercury cleanup system must be readily available, such that any spilled/released mercury may be transferred immediately from the containment device to a container meeting the requirements of §262.34(a)(1)(i);
 - Employees responsible for ampule removal must be thoroughly familiar with proper waste mercury handling and emergency procedures; and
 - Removed ampules must be packed in containers that are in good condition¹ and the packing material must be adequate to prevent breakage during storage, handling, and transportation
- If cleanup residue resulting from spills/releases of mercury or any other solid waste (e.g., discarded thermostat units that have had the mercury ampule removed) generated during the ampule removal activities noted above exhibits a characteristic, it must be managed under the full RCRA hazardous waste requirements of 40 *CFR* Parts 260–272

TABLE 3
Summary of the Part 273 Universal Waste Management Standards—Continued

Both small-quantity handlers and large-quantity handlers

Management requirements—Continued

Lamps:

- Lamps must be placed in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. The containers and packages must remain closed and show no evidence of leakage, spillage, or damage
- Any lamp that is broken must be immediately cleaned up and placed in a container meeting these requirements

Labeling/marketing requirements

Batteries:

- Each battery or container of batteries must be labeled/marked with any one of the following:
 - “Universal Waste—Batteries,”
 - “Waste Batteries,” or
 - “Used Batteries”

Pesticides:

- Each container, overpackaging container, tank, and transport vehicle or vessel containing recalled pesticides that are suspended and/or canceled must be labeled/marked with the following:
 - The label that was on the tank or container when the pesticide was distributed or sold, *and*
 - “Universal Waste—Pesticides” or “Waste Pesticides”
- Each container, overpackaging container, tank, and transport vehicle or vessel containing other unused pesticides (i.e., those not recalled and suspended and/or canceled) must be labeled/marked with the following:
 - The label that was on the tank or container when the pesticide was distributed or sold, the required DOT shipping label meeting the requirements of 49 *CFR* Part 172, *or* another label approved by the state-administered or recognized pesticide collection program; *and*
 - “Universal Waste—Pesticides” or “Waste Pesticides”

Mercury-containing thermostats:

- Each thermostat or container of thermostats must be labeled/marked with any one of the following:
 - “Universal Waste—Mercury Thermostats,”
 - “Waste Mercury Thermostats,” or
 - “Used Mercury Thermostats”

Lamps:

- Each lamp or container or package containing lamps must be labeled/marked with any one of the following:
 - “Universal Waste—Lamps,”
 - “Waste Lamps,” or
 - “Used Lamps”

TABLE 3
Summary of the Part 273 Universal Waste Management Standards—Continued

Both small-quantity handlers and large-quantity handlers

Offsite shipment requirements

- May ship to other universal waste handlers, destination facilities, or foreign destinations only
- If the universal waste meets the definition of a DOT hazardous material under 49 *CFR* Parts 171–180, the handler must package, label, mark, and placard the shipment and prepare the proper shipping papers meeting the DOT requirements of 49 *CFR* Parts 172–180
- Receiving handler must agree to accept the shipment before originating handler ships the universal wastes
- If a shipment (or portion of a shipment) is rejected by either another handler or a destination facility, the originating handler must 1) receive the waste back, or 2) agree on an alternate destination facility
- Must immediately notify EPA upon receipt of any shipment containing hazardous waste that is not universal waste
- A handler who self-transportes universal waste offsite becomes a universal waste transporter and must comply with Part 273, Subpart D while transporting the waste

Release response

- Immediately contain all releases of universal wastes and residues from universal wastes
- Determine if any release-contaminated materials are hazardous; if determined to be hazardous, the materials must be managed under the full RCRA hazardous waste management requirements of Parts 260–272

Export requirements

- If universal wastes are shipped to a foreign destination, other than those OECD countries specified in §262.58(a)(1), the originating handler must:
 - Notify EPA of intent to export (§262.53);
 - Obtain the consent of the receiving country and conform to EPA’s Acknowledgment of Consent;
 - Provide a copy of EPA’s Acknowledgment of Consent to transporters;
 - Provide EPA with annual reports of exporting activities (§262.56); and
 - Maintain for at least 3 years copies of all notifications of intent to export, EPA Acknowledgments of Consent, delivery confirmations, and annual reports of exporting activities (§262.57)
- Handlers who ship universal wastes to the OECD countries specified in §262.58(a)(1) must comply with the requirements of Part 262, Subpart H

DOT = U.S. Department of Transportation; NA = not applicable; OECD = Organization for Economic Cooperation and Development; OSHA = Occupational Safety and Health Act.

¹“Good condition” is defined by EPA as “closed, structurally sound, compatible with the [universal waste contained], and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions [§273.13].”

²A “containment device” is defined by EPA as a “tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage [§273.13(c)(2)(ii)].”

Source: Aspen Law & Business; compiled from 40 *CFR* Part 273, Subparts B–F.

TABLE 4
Summary of Used Oil Management Standards for Generators

Storage requirements

- Subject to SPCC requirements of Part 112 and UST standards of Part 280
- Used oil must be stored in tanks, containers, or other Parts 264/265 units that are in good condition with no visible leaks
- Tanks, containers, and associated piping must be labeled “Used Oil”
- Storage of used oil in surface impoundments or waste piles is prohibited, unless the units are in compliance with Parts 264/265 requirements

Transportation requirements

- May transport ≤55 gallons of used oil at one time in generator’s own vehicle to a permitted used oil collection center or generator’s own aggregation point
- May contract (tolling agreement) with a transporter (without an EPA identification number) to transport used oil to a re-refiner/processor from which reclaimed oil is returned to the generator; the vehicle used for transport of both the used oil and the reclaimed oil must be owned by the re-refiner/processor
- Generators who otherwise transport used oil must also comply with Part 279, Subpart E

Shipment tracking

- Record each shipment of used oil delivered to a burner

Onsite burning in space heaters

- Used oil may be burned in space heaters if 1) the used oil was generated onsite or received from household do-it-yourselfer used oil generators, 2) the heater’s maximum capacity is ≤0.5 million Btu per hour, and 3) the combustion gases are vented to the ambient air

Spill response

- Stop the releases, contain the released oil, and clean up the released oil
- Prevent future releases (repair or replace storage tanks or containers)

Mixing hazardous waste with used oil

- A mixture of CESQG hazardous waste with used oil, and any material produced from the processing, blending, or other treatment of such a CESQG hazardous waste/used oil mixture, that is destined to be burned for energy recovery must be managed per Part 279 [§§261.5(j), 279.10(b)(3)]
- If SQG or LQG characteristic hazardous waste, or listed hazardous waste that is listed solely because it exhibits a characteristic, is mixed with used oil, the resulting mixture is regulated as:
 - Hazardous waste, if the resultant mixture is characteristically hazardous [§279.10(b)(2)(i)]
 - Used oil, if the resultant mixture does not exhibit a characteristic [§279.10(b)(2)(ii–iii)]
- If SQG or LQG other listed hazardous waste is mixed with used oil, the resulting mixture is regulated as a listed hazardous waste [§279.10(b)(1)]

Processing or re-refining used oil

- May perform minimal processing/re-refining without complying with the processor standards if the used oil is generated onsite and is not being sent offsite for burning

Rebuttable presumption

- Used oil containing >1,000 ppm total halogens is presumed to be hazardous and must be managed as such, unless the presumption is rebutted. The rebuttable presumption, however, does not apply to certain metal working oils/fluids and certain used oils removed from refrigeration units

TABLE 4
Summary of Used Oil Management Standards for Generators—Continued

Certification requirements

- Must obtain a one-time notice from the burner for the first shipment of off-specification used oil fuel which states that 1) EPA has been notified of the burning, and 2) the used oil will only be burned in a BIF
- Owners/operators of used oil collection centers must be registered, licensed, or permitted by a state, county, or municipality

Recordkeeping requirements

- Maintain the following records for three years:
 - Analyses of on-specification used oil to be burned (onsite or offsite) for energy recovery
 - Shipment tracking records
 - Certifications from burners of off-specification used oil fuel

Other requirements

- Generators who direct shipments of off-specification used oil from their facility to a used oil burner, or who first claim that used oil burned for energy recovery meets the used oil fuel specifications of §279.11, must also comply with Part 279, Subpart H
 - Generators who dispose of used oil as a dust suppressant must also comply with Part 279, Subpart I
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BIF = boiler or industrial furnace; CESQG = conditionally exempt small-quantity generator; LQG = large-quantity generator; SPCC = spill prevention, control, and countermeasures; SQG = small-quantity generator; UST = underground storage tank.

Source: Aspen Law & Business; adapted from 40 *CFR* Part 279, Subpart C.

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