
Solid Waste Definition and Solid and Hazardous Waste Exclusions Guidance Document



**Colorado Department
of Public Health
and Environment**

**Hazardous Materials and Waste Management Division
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Purpose of this Guidance

This is intended as general guidance for generators of hazardous waste and is meant to assist in compliance with the hazardous waste regulations. The guidance is not meant to modify or replace the adopted regulations which undergo periodic revisions. In the event of a conflict between this guidance and adopted regulations, the regulations govern. Some portions of the hazardous waste regulations are complex and this guidance does not go into details of these complex situations. If a regulatory situation is not described in the guidance or clarification is desired, an official interpretation of a specific hazardous waste regulation can be requested by writing to the Hazardous Materials and Waste Management Division at the address on page 23.

We would appreciate any comments or suggestions for making improvements in future editions. Suggestions or comments can be sent to the address on page 23.

Note: This document has been reformatted to improve accessibility in Portable Document Format (PDF). This opportunity was also used to update the contact information and list of available documents. Clarification was added regarding inert material fill on page 7. No other changes were made unless specifically noted.

**SOLID WASTE DEFINITION AND
SOLID AND HAZARDOUS WASTE EXCLUSIONS
GUIDANCE DOCUMENT**

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1.0 INTRODUCTION

Proper hazardous waste identification is important because whether or not a waste qualifies as hazardous usually dictates whether all, some or none of the extensive Resource Conservation and Recovery Act (RCRA) hazardous waste regulations will apply to its handling. Proper hazardous waste identification can also be quite difficult because the hazardous waste regulations establish a complex definition of the term "hazardous waste." Because of the risks posed by mishandled hazardous wastes and the cost of hazardous waste management, the hazardous waste identification process is critical to operating any hazardous waste program effectively.

There are three basic steps in the hazardous waste determination process:

- 1) determine if your waste meets the definition of a RCRA Subtitle C solid waste, (this document);
- 2) if so, determine if your waste is excluded from being a RCRA Subtitle C solid or hazardous waste, ("CDPHE Hazardous Waste Recycling Guidance Document" and this document);
- 3) if not excluded, determine if your waste is a listed hazardous waste and/or exhibits a characteristic of hazardous waste ("CDPHE Hazardous Waste Identification Guidance Document").

Evaluating whether a waste is a RCRA Subtitle C hazardous waste may require detailed process review and reference to EPA background documents, regulatory preambles, Colorado Hazardous Waste Statute Title 25 Article 15 and/or Colorado Hazardous Waste Regulations (CHWR) 6 CCR 1007-3. If you need assistance in this process, you can request an interpretation on the classification of your waste in writing by providing detailed design and/or process knowledge to the Hazardous Materials and Waste Management Division (the Division) of the Colorado Department of Public Health and Environment (CDPHE, the Department). Unless otherwise noted, all regulatory citations in this document refer to the Colorado Hazardous Waste Regulations.

This document is intended to be used as "plain English" guidance on determining if a waste is a RCRA Subtitle C solid waste and if it meets one of the exclusions from regulation as a solid or hazardous waste. The information in this document is by no means a complete representation of U.S. Environmental Protection Agency's (EPA) or the Department's regulations or policies. This document is not intended and cannot be relied upon to create any rights, substantive or procedural, enforceable by any party in litigation with Colorado.

2.0 REGULATORY SUMMARY

Under RCRA Subtitle C, Congress granted EPA the authority to regulate hazardous wastes. The principal objective of hazardous waste regulation is the protection of human health and the environment. Hazardous waste regulation is also intended to encourage the conservation and recovery of valuable materials. The definition of solid waste under RCRA, which serves as the

starting point for the hazardous waste management system, reflects EPA's effort to obtain the proper balance between these two underlying objectives.

According to the hazardous waste regulations, a material must be a solid waste before it can be considered a hazardous waste. The regulatory definition of solid waste, found in the Colorado Hazardous Waste Regulations 6 CCR 1007-3 Section 261.2(a), encompasses: (1) materials that are abandoned; (2) materials that are recycled; (3) materials that are inherently waste-like; and (4) waste military munitions. Materials that do not fall within one of these broad categories are not subject to regulation as hazardous wastes.

Materials that are recycled are a special subset of the solid waste universe. When recycled, some materials may qualify for an exclusion from the definition of solid waste and fall out of hazardous waste regulation or be subject to less stringent regulatory controls. Based on the material and the type of recycling, the generator of a recyclable solid waste must determine if it is excluded, subject to reduced requirements or subject to full regulation.

2.1 HAZARDOUS WASTE IDENTIFICATION PROCESS

To be regulated as a hazardous waste, a material must first be classified as a solid waste. A waste is essentially a thing that someone throws away, an item with no value. RCRA uses the term "solid waste" in place of the common term "waste." Thus, the first step in the RCRA hazardous waste identification process is deciding whether an item qualifies as a RCRA solid waste.

Some materials that would otherwise fit the definition of a solid or hazardous waste under the hazardous waste identification process are specifically excluded from the definition. EPA concluded that these materials should not be regulated as solid or hazardous waste for one or more reasons. Many exclusions are mandated in the federal statute. EPA selected other exclusions to provide an incentive to recycle certain materials, either because there was not enough information on the material to justify its regulation as a solid or hazardous waste, or because the material was already subject to regulation under another statute.

The second step in the hazardous waste determination process requires the generator to determine if the waste fits any of the four categories of exclusions identified in CHWR Section 261.4. The first category includes wastes that are excluded from being solid wastes (FLOWCHART 1). The second category covers wastes that are excluded from being hazardous wastes (FLOWCHART 2). The other two categories are conditional exclusions that only apply when the provisions established under each section are met. The third category contains an exclusion for hazardous waste generated in raw material, product storage, or manufacturing units. The final category is a limited exclusion for laboratory samples and waste treatability studies. If a waste is excluded under any of these categories, the hazardous waste requirements do not apply, but the waste may still be regulated under other regulatory programs.

Certain wastes are exempt from regulation as hazardous wastes or are subject to special requirements if they are recycled in specific ways (FLOWCHART 3-3C). Only after

determining that a solid waste is not somehow excluded from hazardous waste regulation should the analysis proceed to evaluate the actual chemical hazard that a waste poses.

The third step in the hazardous waste identification process is determining whether a waste actually poses a sufficient chemical or physical hazard to merit regulation (FLOWCHART 4 *and* CDPHE Hazardous Waste Identification Guidance Document). Only after determining that a solid waste is not somehow excluded from hazardous waste regulation should the generator determine if the waste is a listed or characteristic hazardous waste.

Since proper hazardous waste identification is essential to the success of the hazardous waste management program, the Colorado Hazardous Waste Regulations (CHWR) at 6 CCR 1007-3 Section 262.11 require that any person who produces or generates a waste must determine if that waste is hazardous. In addition to the wastes that EPA considers hazardous, the Department can determine that certain wastes are hazardous wastes if the Colorado Hazardous Waste Commission makes a written finding that such action is necessary to protect public health and the environment. Such Colorado-specific wastes are not regulated as hazardous waste by EPA and other states. The only examples of Colorado-specific hazardous wastes are the listings of chemical munitions mustard, mustard agent and mustard gas.

Some wastes may be identified as hazardous by one or more RCRA hazardous characteristics and/or listings. Process knowledge and origin of the waste is crucial in determining which, if any, hazardous waste codes apply. All applicable hazardous waste codes must be used when managing these wastes.

Some widely generated wastes are subject to different management standards in order to reduce the regulatory burden while still ensuring the wastes are managed in a way that is protective of human health and the environment. These wastes include certain pesticides, mercury-containing thermostats, batteries, and aerosol cans that contain hazardous waste when discarded [known as Universal Wastes, CHWR Part 273] and used oil that is recycled [CHWR Part 279]. If these wastes are managed in accordance with these management standards, the generator is subject to reduced notification requirements, reduced recordkeeping requirements, does not have to use a hazardous waste manifest or hazardous waste transporter to ship their waste, and can store the waste longer than if it were managed under the full hazardous waste requirements.

2.2 DEFINITION OF SOLID WASTE [CHWR Section 261.2]

The statutory definition of a solid waste is not based on the physical form of the material, (i.e., whether or not it is a solid as opposed to a liquid or gas), but on the fact that the material is a waste. RCRA Section 1004(27) defines solid waste as:

Any garbage, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material, resulting from industrial, commercial, mining, and agricultural operations and from community activities.

The regulatory definition of solid waste is any discarded material that is not specifically excluded by 6 CCR 1007-3 Section 261.4(a) as being a solid waste or that is not otherwise excluded by a variance given by the Colorado Hazardous Waste Commission. Discarded material encompasses three categories of materials: (1) materials that are abandoned; (2) materials that are recycled; or (3) materials that are inherently waste-like.

2.2.1 ABANDONED

A material is abandoned if it is disposed of, burned, or incinerated. In addition, a material that is stored prior to, or in lieu of, one of these activities, is also considered to be abandoned. The term abandoned simply means thrown away.

2.2.2 RECYCLED

A material is recycled if it is used, reused, or reclaimed. These three terms have specific regulatory definitions. A material is reclaimed if it is processed to recover a usable product or if it is regenerated (e.g., regeneration of spent solvents). A material is used or reused if it is either employed as an ingredient in an industrial process to make a product (e.g., distillation bottoms from one process used as feedstock in another process) or if it is employed as an effective substitute for a commercial product (e.g., spent pickle liquor used as a sludge conditioner in wastewater treatment).

Many materials that are recycled are classified as solid wastes. Solid wastes include certain materials that are recycled in a particular manner (i.e. used in a manner constituting disposal, burned for energy recovery, reclaimed, or speculatively accumulated) while it excludes others from regulation. Other materials that are recycled through use or reuse of the material may qualify for exemptions from the solid waste definition under Section 261.2. Materials that are used or reused as ingredients in an industrial process to make a product as long as the materials are not being reclaimed, materials that are used or reused as effective substitutes for commercial products, and materials returned to the original process from which they were generated, as long as they are not first being reclaimed or land disposed, are not solid waste when recycled.

2.2.3 INHERENTLY WASTE-LIKE

In contrast to other recycled materials, some materials are solid wastes under 6 CCR 1007-3 Section 261.2(d) if they are recycled in any manner. They are considered to be “inherently waste-like.” Because these materials may pose a threat to human health and the environment when they are recycled, they do not qualify for any of the recycling exemptions. The dioxin-containing listed wastes F020, F022, F023, F026 and F028 are considered to be inherently waste-like materials. Hazardous waste meeting the F021 listing is also considered inherently waste-like unless it is used at the site of generation as an ingredient in a product.

In addition, any secondary materials that are characteristic or listed hazardous wastes are considered to be inherently waste-like when they are fed to a halogen acid furnace. This provision was added to ensure that halogen acid furnaces, which burn some of the most toxic wastes generated in this country, would be regulated when burning any type of hazardous waste.

After determining that a waste is a solid waste, the next step in the hazardous waste determination process is to determine if the waste fits any of the exclusions identified in Section 261.4 of the Colorado hazardous waste regulations.

2.3 SOLID WASTE EXCLUSIONS [CHWR Section 261.4 (a)]

If a material is listed under CHWR Section 261.4(a), it is not a solid waste and therefore cannot be a hazardous waste. It does not matter if the material exhibits a characteristic of hazardous waste (ignitable, corrosive, reactive, or toxic) or would otherwise be a listed hazardous waste.

Currently there are 15 exclusions under this section. These materials are excluded for a variety of reasons, including public policy, economic impacts, prior regulation, lack of data, or the waste's high volume and low toxicity. The decision to exclude these materials from the solid waste definition is a result of either Congressional action (embodied in the statute) or EPA policy making (embodied in the regulations). The exclusions to solid and hazardous waste cover very specific wastes. Other exclusions exist for recyclable materials that cover less specific wastes. Recyclable materials are discussed in the "CDPHE Hazardous Waste Recycling Guidance Document" available from the Division.

CHWR Section 261.4(a) specifically excludes: 1) domestic sewage; 2) industrial wastewater discharges regulated by the Clean Water Act; 3) irrigation return flows; 4) certain radioactive materials as defined by the Atomic Energy Act; 5) materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process; 6) inert material fill; 7) pulping liquors that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process; 8) secondary materials that are reclaimed and returned to the original process in which they were generated in a closed loop process; 9) spent sulfuric acid used to produce virgin sulfuric acid; 10) spent wood preserving solutions and wastewaters from the wood preserving process that are reclaimed and reused for their original intended purpose; 11) certain coke by-products if these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar or mixed with coal tar prior to the sale or refining of the tar; 12) nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units; 13) recovered oil from petroleum refining, exploration and production; 14) scrap metal being recycled; and 15) shredded circuit boards being recycled.

Materials listed in this section are not solid wastes and so cannot be further classified as hazardous waste. Other materials which would normally be classified as solid wastes may qualify for exclusions from regulation if a generator petitions the Colorado Hazardous Waste Commission for a variance from classification as a solid waste. If a material is not excluded by CHWR Section 261.4(a) or by a variance and it is discarded, it meets the definition of a solid waste.

2.3.1 DOMESTIC SEWAGE AND MIXTURES OF DOMESTIC SEWAGE

Sanitary wastes that come from households that pass through a publicly or privately owned sewer system are considered domestic sewage and are excluded from regulation as hazardous

wastes. Mixtures of domestic sewage and other wastes that pass through a sanitary sewer system to a publicly owned treatment works (POTW) are excluded from hazardous waste regulation. Prior to entering the sewer system, the waste may be a hazardous waste subject to hazardous waste regulation during generation, storage, and treatment. Once the waste has been discharged to the POTW, it is regulated under the Clean Water Act regulations. Because POTWs are not designed to handle hazardous wastes and are themselves regulated for their discharges and wastes, waste generators are required to have their discharges meet pretreatment standards imposed by the local POTW under the Clean Water Act.

The exclusion applies to a waste when it first enters a sewer system provided it will mix with domestic sewage prior to storage or treatment by a POTW. The Department interprets this exclusion to begin at the point that the hazardous waste actually mixes with the domestic sewage. Hazardous wastes discharged into a sanitary sewer system in an industrial setting is not subject to this exclusion because the sanitary sewer system is not conveying domestic sewage. Industries and businesses should obtain specific written approval from their POTW before discharging wastes into municipal sewers. This exclusion does not include any waste directly transported to the POTW by truck or rail shipments. In certain circumstances, this exclusion may be applied to domestic sewage and mixtures of domestic sewage that pass through a federally owned treatment works (FOTW).

RCRA hazardous wastes, once mixed with sewage in the POTW's sewer system, are no longer considered solid waste. Therefore, the POTW is not receiving or treating RCRA hazardous wastes. Wastewater discharges from wastewater treatment facilities are strictly regulated under the Clean Water Act. As a practical matter, a POTW will not permit discharges of contaminated wastewaters beyond what their system is designed to handle because they do not want to violate their own discharge permit or dispose of sludge that is a characteristic hazardous waste. When sludge is generated at the POTW from the treatment of the waste, it is subject to a hazardous waste determination because it is a new point of generation. If the newly generated waste exhibits a characteristic of hazardous waste (ignitable, corrosive, reactive, or toxic), it would be subject to hazardous waste regulation.

2.3.2 INDUSTRIAL WASTEWATER DISCHARGE

Industrial wastewater discharges that are subject to the Clean Water Act Section 402, also called point source discharges, are excluded from hazardous waste regulation. Point source discharges are "discernible or discrete conveyances" from which pollutants may be discharged, such as a pipe. The Clean Water Act regulates such discharges under a permitting program. To avoid duplicative regulation, this exclusion applies at the discharge point where the wastes are first subject to Clean Water Act regulation. Any hazardous waste generation, treatment, or storage prior to the point source discharge is subject to the hazardous waste regulations. Many industrial facilities that treat wastewater on-site use this point source discharge exclusion.

2.3.3 IRRIGATION RETURN FLOW

When agricultural land is irrigated, excess water may return to the water basin either as surface water runoff or through groundwater percolation. Though these return flows may often carry

hazardous constituents from pesticides or fertilizers or exhibit a characteristic of hazardous waste, these wastes are excluded from regulation as hazardous waste.

2.3.4 CERTAIN RADIOACTIVE WASTES

To avoid double regulation of some materials under the hazardous waste regulations and the Atomic Energy Act, there is an exclusion for certain radioactive wastes (i.e., source, special nuclear, or by-product materials) since they were first regulated under the Atomic Energy Act. If these radioactive wastes are mixed with a RCRA hazardous waste, however, the commingled waste is regulated by both the Atomic Energy Act of 1954, as amended, and the hazardous waste regulations because mixed wastes generally cannot be easily separated. Where the requirements differ, the more stringent regulations apply. For example, it may be accepted practice under the radiation control regulations to store mixed waste to allow radioactive decay in order to render the waste more suitable for disposal from the radioactive standpoint. This may cause the waste to exceed the hazardous waste storage time limits, however.

2.3.5 IN-SITU MINING

In-situ mining of oil shale, uranium, and other minerals may involve the use of solvent solutions directly in a mineral deposit in the ground. The solvent passes through the ground, collecting the mineral as it moves. The mineral and solvent mixtures are then collected in underground wells where the solution is removed. The solvent-contaminated earth produced by the in-situ mining process is not subject to hazardous waste regulation when left in place. If removed or otherwise disturbed, however, a hazardous waste determination would have to be made for the contaminated media.

2.3.6 INERT MATERIAL FILL

Inert materials that are deposited as fill material in anticipation of construction at the site or for changes in land contours for agricultural or mining purposes are not considered solid wastes for the purposes of hazardous waste regulation. Inert material is defined as any “non-water-soluble and non-decomposable inert solids together with such minor amounts and types of other materials as will not significantly affect the inert nature” of the fill material. For materials to be considered inert, they cannot contain hazardous wastes, or leach hazardous constituents above appropriate surface or groundwater protection levels.* This term includes dirt, sand, gravel, rock, concrete which has been hardened at least 60 days, masonry, asphalt paving fragments and other materials as may be included by the Colorado Hazardous Waste Commission.

It should be noted that for the purposes of the Colorado Solid Waste regulations, a site or facility where inert materials are deposited as fill material is required to obtain a certificate of designation (CD) as a solid waste disposal site. If the inert materials are generated at the same site where they are deposited, a CD may not be required if the design and operations are in compliance with the Colorado Solid Waste regulations [6 CCR 1007-2]. Although the Division must conduct a technical review of the proposed disposal plan, the actual decision to issue a CD is up to the local governing body having jurisdiction.

* Clarification added July 2002

2.3.7 PULPING LIQUORS

Pulping liquor is a corrosive material used to dissolve wood chips. Pulping liquors, also called black liquors, that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process are excluded from being solid waste, unless accumulated speculatively or reclaimed in another manner.

2.3.8 RECLAMATION IN ENCLOSED TANKS

This exclusion, known as the closed-loop recycling exclusion, covers secondary materials (e.g., spent materials or sludges) generated during production processes which are reusable in those same processes. These secondary materials, if reclaimed and returned to the original process(es), are excluded, provided:

- only tank storage is involved and the entire process, through the completion of reclamation, is a closed system by being entirely connected with pipes or other comparable enclosed means of conveyance (i.e., the process does not require any human intervention to occur);
- reclamation does not involve incineration or other controlled-flame combustion (boilers or furnaces);
- secondary materials are never accumulated in tanks for more than 12 months without being reclaimed;
- reclaimed materials are not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.

2.3.9 SPENT SULFURIC ACID

Spent sulfuric acid is typically used to produce virgin sulfuric acid by reintroduction into the sulfuric acid production process. Spent sulfuric acid that is recycled in this manner is excluded from the definition of solid waste, unless accumulated speculatively. Spent sulfuric acid that is not recycled in this manner may still be excluded from being a regulated waste, however, if it is used or reused as an ingredient or as a product substitute.

2.3.10 SPENT WOOD PRESERVATIVES

Spent wood preservatives are typically collected and reclaimed through a series of drip pads connected integrally to the production process, closely resembling a closed-loop scenario. Because the use of drip pads will not allow this reclamation process to fit the closed-loop exclusion, however, EPA developed this exclusion for reclaimed spent wood preserving solutions and wastewaters containing spent preservative that are reused for their original purpose.

Both spent preserving solutions and wastewaters are solid and hazardous wastes until they are reclaimed (normally by filtration), but cease being solid wastes once reclamation is completed if the reclaimed material is used to treat wood.

2.3.11 COKE BY-PRODUCT WASTES

Certain coke by-product wastes are excluded from the definition of solid waste. Coke, a product used in the production of iron, is manufactured by carbonizing coal in high temperature coke ovens. Throughout the production process, many by-products are created. The initial by-product in the production process is coke oven gas, which is refined to create products such as coal tar, light oil, and sodium phenolate. The coal tar is then further refined into pitch, naphthalene, refined tar, bitumen, and creosote oil. The refinement of these coke by-products generates several listed and characteristic wastestreams.

EPA granted an exclusion for K087, K141, K142, K143, K144, K145, K147, and K148 listed wastes, and any other waste coke by-product wastes which exhibit the toxicity characteristic, if they are recycled in one of the following ways:

- returned to the coke oven as a feedstock to produce coke; or
- returned to the tar recovery process as a feedstock to produce coal tar; or
- mixed with coal tar prior to coal tar refining or sale as a product.

In addition, to qualify for the exclusion, the coke by-product waste cannot be placed on the land from the time it is generated to the point it is recycled. EPA based its decision to exclude coke by-product wastes on the fact that recycling these wastes did not have a significant effect on the chemical composition of the products. Further, coke by-product residues are often managed as raw materials rather than wastes, thereby reducing the risk posed to human health and the environment because the material has an intrinsic value that promotes its safe management.

2.3.12 SPLASH CONDENSER DROSS RESIDUE

The treatment of emission control dust/sludge from the primary production of steel in electric furnaces (K061) generates a zinc-laden dross residue from the splash condenser in a high temperature metal recovery process, known as splash condenser dross residue. This splash condenser dross residue is typically considered a partially reclaimed secondary material because it contains 50 to 60 percent zinc. Splash condenser dross residue is commonly sent off-site for further reclamation, reused on-site in the high temperature metal recovery process, or reprocessed by the high temperature metal recovery process on-site.

EPA determined that the splash condenser dross residue material generated by certain high temperature metal recovery processes does not pose a significant threat to human health and the environment as managed currently and therefore is exempted from hazardous waste regulation. The splash condenser dross residue exclusion applies when the material is used as a source of

zinc in zinc recovery operations, provided it is shipped in drums (if sent off-site) and not disposed of on the land at any point prior to further recovery.

2.3.13 RECOVERED OIL FROM PETROLEUM OPERATIONS

Recovered oil is a generic term that refers to secondary materials such as oil/water separator skimmings from plant wastewaters, slop oil and emulsions, oil skimmed from ballast water tanks, oil from refinery process units, oil recovered from oil and gas drilling operations, and oil recovered from wastes removed from crude oil storage tanks. It does not include used oil as defined in the used oil management standards of CHWR Part 279.

This exclusion from the definition of solid waste applies to the recovered oil that is returned to the petroleum refinery along with the normal process streams, provided the oil is not managed on the land or accumulated speculatively before placement in the refinery process. The exclusion does not apply to water-in-oil emulsions before the oils are recovered. Thus management of these wastes before separation could be subject to hazardous waste management requirements.

The original exclusion required the placement of the recovered oil back into the process at a point prior to distillation or catalytic cracking. EPA has since amended this exclusion to include points elsewhere in the refining process where separation of contaminants occurs. The current exclusion applies to recovered oil inserted into the petroleum refining process at or before a point "where contaminants are removed."

2.3.14 SCRAP METAL

Processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal being recycled are all excluded from the definition of solid waste and are therefore not subject to the hazardous waste regulations. Excluded scrap metal being recycled is distinct from other secondary materials defined as wastes when recycled because of the established markets for the material's use, inherent positive economic value of the material, the physical form of the material, and the absence of damage incidents attributed to the material.

Processed scrap metal is scrap metal which has been manually or mechanically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes scrap metal which has been bailed, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type, and fines, drosses and related materials which have been agglomerated. Home scrap is scrap metal generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings. Prompt scrap, also known as industrial or new scrap metal, is generated by the metal working/fabrication industries and includes scrap such as turning, cuttings, punchings, and borings.

Scrap metal not meeting the requirements of this exemption that are being reclaimed still qualify for exclusion under CHWR Section 261.6(a)(3)(ii).

2.3.15 SHREDDED CIRCUIT BOARDS

Shredded circuit boards being recycled are excluded from the definition of solid waste provided they are stored in containers sufficient to prevent release to the environment and are free of mercury switches, mercury relays, and batteries. Shredded circuit boards that are not free of these materials are solid wastes (spent materials) when reclaimed. At this time, whole circuit boards meet the definition of scrap metal and are exempt from regulation when recycled. Since shredded circuit boards do not meet the definition of scrap metal, they are no longer exempt from regulation as scrap metal, even when being recycled. This exclusion is justified because of the positive economic value and marketability of the shredded material, as long as they are managed in a manner that minimizes environmental risk.

2.4 DEFINITION OF HAZARDOUS WASTE [CHWR Section 261.3]

A solid waste is a hazardous waste if it has no commercial use or value and:

- it's not specifically excluded from regulation;
- it exhibits any of the characteristics of hazardous waste (ignitable, corrosive, reactive, toxic);
- it is a listed hazardous waste;
- it is a spent material that can no longer be used for its intended purpose;
- it is a mixture of a solid waste and a hazardous waste; and/or
- it is used oil with more than 1000 ppm total halogens.

A solid waste becomes a hazardous waste when it first meets the listing description in CHWR Part 261 Subpart D, when the waste first exhibits any of the characteristics in CHWR Part 261 Subpart C, or when a listed waste is first added to a solid waste. A solid waste will remain a hazardous waste unless and until it no longer exhibits any of the characteristics of hazardous waste and, in the case of a listed waste, it also has been excluded from regulation by a variance from the Colorado Hazardous Waste Commission.

Generally, waste generated by the treatment, storage, or disposal of hazardous waste is also hazardous waste ["derived-from rule," CHWR, Section 261.3(c)(2)]. There are four exclusions from the "derived-from rule", unless the waste exhibits one or more hazardous waste characteristics. These include:

- 1) waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry;
- 2) wastes from burning hazardous waste fuel produced or reclaimed from oil-bearing hazardous waste from petroleum refining, production, or transportation operations so

long as the resulting fuel meets the used oil specifications in CHWR Part 279 and no other hazardous wastes were used to produce the fuel;

- 3) non-wastewater residues resulting from high temperature metals recovery processing of K061, K062, or F006 waste in specified units; and
- 4) biological treatment sludge from the treatment of organic waste or wastewaters from the production of carbamates and carbamoyl oximes.

2.5 HAZARDOUS WASTE EXCLUSIONS [CHWR Section 261.4 (b)]

Certain materials, while meeting the description of being a solid waste, are specifically excluded from being a hazardous waste. If a material is listed under Section 261.4(b), it is a solid waste, but not a hazardous waste, even if the material technically meets one or more listing descriptions and/or it exhibits a characteristic of hazardous waste (ignitable, corrosive, reactive, or toxic). If such an excluded waste is mixed with a listed or characteristic hazardous waste, it may no longer be excluded. Presently there are 13 exclusions of solid wastes from being hazardous wastes.

2.5.1 HOUSEHOLD WASTE

Household waste is exempt from the Colorado hazardous waste regulations. The term household waste refers to any garbage, trash, and sanitary waste from septic tanks derived from single and multiple residences, and other residential units such as hotels and motels. EPA expanded the definition of household wastes to include wastes from bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. In order for household waste to be exempt from regulation, it must meet two criteria: the waste has to be generated by individuals on the premises of a household, and the waste must be composed primarily of materials found in the waste generated by consumers in their homes. This exclusion applies to all household waste, including household hazardous wastes normally found in household wastestreams such as paint cans, bug spray, and cleaning fluids. Although the collection, transportation, treatment, and disposal of household wastes are not subject to the hazardous waste regulations, they are subject to federal, state, and local requirements concerning management of solid waste.

2.5.2 AGRICULTURAL WASTE

Solid wastes generated by crop or animal farming are excluded from hazardous waste regulation provided the wastes are returned to the ground as fertilizers or soil conditioners. Examples of such waste would be crop residues and manures. Congress did not intend to include silviculture waste (forestry waste such as foliage and branches) in this hazardous waste exclusion. As a result, generators of forestry waste need to determine whether their waste is hazardous.

2.5.3 MINING OVERBURDEN

Reclamation of surface mines commonly involves returning waste overburden (dirt, rocks) that is removed to gain access to the ore deposit in the mine. EPA excluded this waste since mining

overburden is not a discarded material within the scope of RCRA. This exclusion is limited to overburden that is overlying a mineral deposit.

2.5.4 FOSSIL FUEL COMBUSTION WASTE

Fossil fuel combustion wastes are one of the many wastes EPA excluded from hazardous waste regulations until further studies could be done on the potential hazards posed by the common management practices used for these wastes. In order to accommodate effective study, fossil fuel combustion wastes were divided into two categories: large-volume coal-fired utility wastes and remaining wastes.

In 1993, EPA made the final regulatory determination on the first category, permanently excluding large-volume coal-fired utility wastes. This category includes fly ash, bottom ash, boiler slag, and flue gas emission control waste. Although EPA has deferred the final regulatory determination on the remaining wastes, these wastes continue to be exempt from regulation as hazardous wastes until that determination is made. This waste category includes wastes from utilities burning other non-coal fossil fuels, wastes from non-utility boilers burning any type of fossil fuel, large-volume coal-fired utility wastes that are co-managed with low-volume coal-fired utility wastes, and wastes generated by fluidized bed combustion operations.

Note: EPA concluded in the May 22, 2000 Federal Register 32213-32237 that the second category of wastes do not warrant regulation under RCRA Subtitle C and retained the hazardous waste exemption for these wastes. The wastes included in this decision were: large-volume coal combustion wastes generated at electric utility and independent power producing facilities that are co-managed together with certain other coal combustion wastes; coal combustion wastes generated by non-utilities; coal combustion wastes generated at facilities with fluidized bed combustion technology; petroleum coke combustion wastes; wastes from the combustion of mixtures of coal and other fuels (i.e., co-burning); wastes from the combustion of oil; and wastes from the combustion of natural gas.

Low volume wastes that are not co-managed with large-volume coal combustion wastes, such as boiler blowdown, coal pile runoff, cooling tower blowdown, demineralizer regenerant and rinses, metal and boiler cleaning wastes, pyrites, and sump effluents, are not included in either of these categories. Based on the original scope of the exclusion, they have always been subject to regulation as hazardous waste when managed independently.

Fossil fuel combustion wastes that are generated by co-processing raw materials and hazardous wastes are also exempt under this exclusion provided the wastes meet specific criteria outlined in 40 CFR 266.112.

2.5.5 OIL, GAS, AND GEOTHERMAL WASTES

After a study on the management, volume, and toxicity of waste generated by the exploration, development, and production of crude oil, natural gas, and geothermal energy, these wastes were permanently excluded by EPA from regulation as hazardous wastes. To be excluded, the waste must be associated with operations to locate or remove oil or gas from the ground or to remove

impurities from such substances and it must be intrinsic to and uniquely associated with oil and gas exploration, development or production operations. Examples of excluded wastes include produced water, drilling fluids, drill cuttings, used well completion, treatment and stimulation fluids, and workover wastes. Examples of nonexcluded wastes include unused fracturing fluids and service company wastes such as empty drums, spent solvents, spilled chemicals, and used oil.

EPA further clarified the scope of the exclusion by stating that wastes that have been brought to the surface during oil and gas exploration and production operations, or wastes that have otherwise been generated by contact with the oil and gas production stream during the removal of produced water or other contaminants, are generally covered by the exclusion, whether generated onsite by the principal operator or by a service company.

Wastes generated from the exploration, development, and production of oil, gas and geothermal energy are regulated as nonhazardous wastes by the Oil and Gas Conservation Commission of the Colorado Department of Natural Resources.

This exclusion ends once the product is transported from the exploration/production site and production-related activities cease. In the case of crude oil, a custody transfer of the oil or, in the absence of custody transfer, the end point of initial product separation of the oil and water (i.e. the point at which crude oil leaves the last vessel in the tank battery associated with the well or wells) defines the end of primary field operations and the beginning of transportation. For natural gas, primary field operations include those production-related activities at or near the wellhead and at the gas plant (regardless of whether or not the gas plant is at or near the wellhead), but prior to transport of the natural gas from the gas plant to market. Wastes generated at compressor stations and facilities located along the transportation and distribution network downstream from the gas plant are not covered by this exemption.

2.5.6 TRIVALENT CHROMIUM WASTES

Chromium-bearing toxicity characteristic wastes from certain industries were excluded from regulation as hazardous wastes because specific industries petitioned EPA to exclude their wastes from the hazardous waste lists for the following reasons:

- the chrome they produce is nearly exclusively trivalent, which is not considered hazardous;
- their process does not generate hexavalent chromium (a known carcinogen);
- the waste they produce is handled in a nonoxidizing environment (i.e., the trivalent chrome could not oxidize to hexavalent chrome).

EPA agreed with the data submitted by these industries and excluded three groups of wastes:

- Tannery wastes including chrome (blue) trimmings, shavings, buffing dust, sewer screenings, and wastewater treatment sludges from particular subcategories of the leather tanning and

finishing industry (wastes fitting these descriptions had been listed as K053-K058, but these waste codes were subsequently deleted).

- Leather scrap wastes from the leather tanning, shoe manufacturing, and other leather manufacturing industries.
- Wastewater treatment sludges from the production of titanium oxide (TiO₂) pigment using chromium-bearing ores by the chloride process (waste fitting this description was listed as K074, but the waste code was subsequently deleted).

The exclusion is necessary despite the deletion of waste codes K053-K058 and K074 from the regulations because these wastes could still exhibit the toxicity characteristic for chromium, since the Toxicity Characteristic Leaching Procedure (TCLP) does not distinguish between hexavalent and trivalent chromium.

Only chromium-bearing wastes from these three industry groups discussed above automatically qualify for the exclusion. Other industries or individual generators who believe their wastes meet the same criteria must petition the Colorado Hazardous Waste Commission to be added to this exclusion or to delist their waste.

2.5.7 MINING AND MINERAL PROCESSING WASTES

When Congress enacted the Solid Waste Disposal Act of 1980, it added a section that created an exclusion from the definition of hazardous waste for wastes from the extraction, beneficiation, and processing of ores and minerals, pending further study on the hazards of these wastes and a final regulatory determination. EPA subsequently developed an exclusion for "solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal), including phosphate rock, and overburden for the mining of uranium ore". This is one of the exclusions commonly referred to as a Bevill exclusion, named after a co-author of the statutory amendment, Congressman Bevill.

After studying these mining wastes, EPA concluded that regulation as hazardous waste was not appropriate. As a result, wastes from the extraction and beneficiation of ores and minerals remained exempt from hazardous waste management requirements. EPA limited the term beneficiation for the exemption to include only the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove waste and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where this produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap dump, vat, tank, and in situ leaching.

From 1980 until 1989, all wastes that met the descriptive definition of "...solid waste from the exploration, mining, milling, smelting and refining of ores and minerals" were considered exempt mineral processing wastes. In 1989, EPA published a rule that narrowed the scope of the exclusion as it applies to mineral processing by identifying and listing 25 excluded mineral

processing wastes. Specifically, EPA finalized the exclusion for 5 mineral processing wastes and conditionally excluded 20 wastes pending additional studies. After completing a study of the remaining 20 wastes, EPA removed 5 of the wastes that had been subject to the 1989 conditional exclusion, bringing the total number of final excluded mineral processing wastes to 20. The excluded processing wastes include:

- (i) Slag from primary copper processing;
- (ii) Slag from primary lead processing;
- (iii) Red and brown muds from bauxite refining;
- (iv) Phosphogypsum from phosphoric acid production;
- (v) Slag from elemental phosphorus production;
- (vi) Gasifier ash from coal gasification;
- (vii) Process wastewater from coal gasification;
- (viii) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- (ix) Slag tailings from primary copper processing;
- (x) Fluorogypsum from hydrofluoric acid production;
- (xi) Process wastewater from hydrofluoric acid production;
- (xii) Air pollution control dust/sludge from iron blast furnaces;
- (xiii) Iron blast furnace slag;
- (xiv) Treated residue from roasting/leaching of chrome ore;
- (xv) Process wastewater from primary magnesium processing by the anhydrous process;
- (xvi) Process wastewater from phosphoric acid production;
- (xvii) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
- (xviii) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- (xix) Chloride process waste solids from titanium tetrachloride production;
- (xx) Slag from primary zinc processing.

EPA made special distinctions between extraction/beneficiation and mineral processing wastes. Wastes determined by EPA to be from the extraction/beneficiation of ores and minerals are covered by the exclusion, while wastes from mineral processing, except for the 20 wastes listed above, are subject to the hazardous waste regulations.

The beneficiation and processing of ores and minerals frequently occurs in industrial furnaces. These industrial furnaces can be fueled with a combination of fossil fuel and hazardous waste. Beneficiation and mineral processing wastes generated in industrial furnaces which combine fossil and hazardous waste fuel do not automatically fall within the scope of the exclusion. The beneficiation and mineral processing waste would remain exempt only if the residues were below levels established in 40 CFR 266.112.

2.5.8 CEMENT KILN DUST

Cement kiln dust is a fine-grained solid by-product generated by the control of particulate matter in stack emissions at cement production facilities. It is composed predominantly of substances present in the feed material and products of combustion, along with trace amounts of high-boiling point heavy metals that were not exhausted with gaseous emissions. Cement kiln dust can be reused in cement kilns (insufflation), blended with sewage sludge for subsequent land application, used to produce lime products for agricultural applications, or landfilled.

In 1995, EPA issued a final regulatory determination concluding that cement kiln dust requires stricter management controls, but should not be placed under full hazardous waste regulation. EPA is expecting to develop tailor-made regulations for cement kiln dust under the joint authority of RCRA and the Clean Air Act. Until EPA develops these new regulatory controls, however, cement kiln dust will remain exempt from all hazardous waste management requirements.

Often cement kilns combine fossil fuel with hazardous waste to heat the kilns. EPA is concerned about the industry's growing use of hazardous wastes as fuel and the potential impact this has on the character of the dust. Cement kiln dust generated in cement kilns which combine fossil and hazardous waste fuel do not automatically fall within the scope of the exclusion. The cement kiln dust would remain exempt under this exclusion only if the residues were below levels established in 40 CFR 266.112.

Cement kilns are subject to hazardous waste regulations regarding the storage of hazardous waste. Kilns that burn hazardous waste are also subject to the hazardous waste combustion requirements for boilers and industrial furnaces.

2.5.9 ARSENICALLY TREATED WOOD

A solid waste that consists of discarded arsenical-treated wood or wood products that fails the Toxicity Characteristic Leaching Procedure (TCLP) for D004 - D017 only, and is not hazardous for any other reason, is excluded from hazardous waste regulation. Once such treated wood is used, it may be disposed of by the user (commercial or residential) without being subject to hazardous waste regulation. This exclusion was granted in response to a petition from the

American Wood Preserving Institute on the grounds that the use of arsenically treated wood in contact with the ground presents risks which are similar to land disposal of wood. Note that this exclusion applies only to end-users and not to manufacturers. Wastes generated by facilities which apply the arsenic formulation to the wood are regulated under the hazardous waste regulations.

Although there is no specific regulatory exclusion, a similar situation applies to creosote-treated wood or wood products such as railroad ties and telephone poles. As long as they are not hazardous for any other reason, the treated wood is not likely to fail TCLP for cresols because of the extractive process required in the testing procedure. Most creosote-treated wood wastes are disposed of as nonhazardous solid wastes or recycled for other uses.

2.5.10 PETROLEUM-CONTAMINATED MEDIA AND DEBRIS FROM UNDERGROUND STORAGE TANKS (USTs)

EPA has deferred the application of the toxicity characteristic to petroleum-contaminated media and debris from underground storage tanks subject to 40 CFR Part 280 corrective action requirements and the equivalent Colorado Revised Statute Title 8 Article 20.5 [8-20.5-101 et seq CRS], and only to the 25 newly identified organic constituents (D018 through D043) under the toxicity characteristic in CHWR Section 261.24. This deferral does not apply to petroleum-contaminated media and debris from aboveground storage tanks or other surface spillage.

In order to fall under this exclusion, the waste must meet the specific criteria listed above. For example, this exclusion would not apply if soil failed the TCLP for lead (D008), since lead is not a newly identified waste under the TCLP. Rather, it would be subject to full hazardous waste regulation. On the other hand, if the soil only failed the TCLP for one of the new organic constituents, such as benzene (D018), the contaminated soil would not be a hazardous waste but would be subject to the corrective action requirements under 40 CFR Part 280 and 8-20.5-101 et seq CRS and to the Colorado solid waste regulations.

2.5.11 USED CHLOROFLUOROCARBON REFRIGERANTS

Chlorofluorocarbons (CFCs) released to the atmosphere damage the ozone layer. To decrease the practice of venting used CFCs into the atmosphere in order to avoid regulation as hazardous waste, EPA suspended application of the toxicity characteristic rule to certain CFCs. These include used CFCs from totally enclosed heat transfer equipment including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use CFCs as the heat transfer fluid in a refrigeration cycle, and only when the CFCs are reclaimed for reuse. It does not include CFCs used as solvents.

An example of this exclusion would be refrigerants containing CFC-11 that are likely to exhibit the toxicity characteristic for carbon tetrachloride or chloroform. If the spent refrigerants exhibited the toxicity characteristic for mercury (D009), a previously identified hazardous waste, they would be regulated as a hazardous waste. If the refrigerants failed the TCLP only for carbon tetrachloride (D019) or chloroform (D020), they would not be subject to hazardous waste regulations, as long as they were refrigerants being sent for reclamation.

Used oil includes heat transfer fluids such as refrigeration oils, which are sometimes contaminated with minor amounts of CFCs. Used oil contaminated with CFCs are not hazardous wastes if managed under the used oil management standards of CHWR Part 279. To be exempt from the rebuttable presumption, the used oil cannot be mixed with used oil from sources other than refrigeration units [CHWR Section 279.10 (1)(ii)(B)].

2.5.12 USED OIL FILTERS

EPA has established an exclusion from the definition of hazardous waste for certain used oil filters. The exclusion is for nonterne-plated used oil filters provided the filters are gravity hot-drained by one of the following methods:

- puncturing the filter anti-drain back valve or the filter dome end and hot-draining (with this method, EPA recommends hot-draining for a minimum of 12 hours);
- hot draining and crushing;
- dismantling and hot-draining (EPA recommends separating each component and recycling it);
- any equivalent method of hot-draining that will remove the oil.

As a practical matter, if an oil filter is picked up by hand or lifted by machinery and used oil immediately drips or runs from the filter, the filter would not be considered drained. Properly drained nonterne-plated used oil filters may be recycled or disposed of as solid wastes.

Terne-plated used oil filters contain an alloy of tin and lead. They are not included in this exclusion because terne-plated filters often exhibit the toxicity characteristic for lead (D008) and therefore are subject to hazardous waste regulation (i.e., a hazardous waste determination). A terne-plated used oil filter that has been hot-drained using one of the methods listed above may be considered scrap metal, which is exempt from hazardous waste regulation when recycled.

The used oil filter exemption does not apply to fuel filters, transmission oil filters, or specialty filters such as cloth or railroad filters because EPA did not have sufficient quantitative data on these types of filters to include them in the categorical exemption. This exemption included only nonterne-plated used oil filters used in light duty and heavy duty vehicles. A hazardous waste determination must be made on non-exempted used oil filters prior to disposal to determine whether the used filters exhibit any of the characteristics of hazardous waste. EPA guidance states that TCLP can be performed on used filters by crushing, grinding, or cutting the filter and its contents until the pieces are smaller than one centimeter and will pass through a 9.5 mm standard sieve. If the filters exhibit any of the characteristics of hazardous waste, the generator must manage them as hazardous waste and they cannot go to a solid waste landfill.

Used oil that is removed from filters is subject to regulation under 6 CCR 1007-3 Part 279 used oil management standards.

2.5.13 USED OIL DISTILLATION BOTTOMS

Distillation bottoms from the re-refining of used oil are exempted from regulation under the used oil management standards in CHWR Part 279 when the bottoms are used as ingredients in asphalt paving and roofing materials. EPA's decision not to regulate the bottoms is based on data indicating that these wastes do not exhibit the toxicity characteristic and that common industry practices are protective of human health and the environment.

2.6 EXCLUSIONS FOR RAW MATERIAL, PRODUCT AND PROCESS UNIT WASTES [CHWR Section 261.4(c)]

Hazardous waste generated in raw material, product storage, or manufacturing units is excluded from hazardous waste regulation until it exits the unit in which it was generated. These units include tanks, pipelines, vehicles, and vessels used in the manufacturing process, for transportation, or for storing raw materials or products. Surface impoundments are not included in this exclusion.

Once the waste is removed from the unit, the waste is considered to be generated and is subject to regulation. Thus, the generator accumulation standards apply once the waste is removed from a unit, or when a unit temporarily or permanently ceases operation for more than 90 days.

2.7 WASTE CHARACTERIZATION SAMPLE EXCLUSION [CHWR Section 261.4(d)]

Because samples are small, discrete amounts of hazardous waste that are essential to accurate characterization and proper hazardous waste management, samples of wastes are excluded from the requirements of CHWR Parts 262 through 266, 268, 100, and the notification requirements under Part 99. Excluded samples include small amounts of solid waste, water, soil, or air provided that the samples are collected and shipped for the sole purpose of determining hazardous waste characteristics or composition. Storage, transportation, and testing of the sample are excluded from hazardous waste regulation even when the lab testing is complete as long as the sample is returned to the generator. The exemption does not apply if the laboratory determines that the sample is hazardous but the laboratory is no longer meeting any of the conditions stated in this exclusion. Similarly, if the sample is determined to be hazardous, it should be managed as a hazardous waste once it is returned to the generator. When shipping the sample to or from the laboratory, the sample collector must comply with certain labeling requirements as well as any applicable postal carrier or Department of Transportation shipping requirements.

The lab sample exclusion is intended to apply to small samples (typically under one gallon). Even though the regulations do not specify a size limit, EPA has stated that typically no more than one gallon is needed to completely characterize a sample for purposes of compliance with the hazardous waste regulations or other federal, state, or local regulations.

2.8 TREATABILITY STUDY SAMPLE EXCLUSION [CHWR Sections 261.4(e) & (f)]

Various industry groups and individuals expressed concern that the waste characterization sample exclusion was too restrictive. In response to these comments, EPA developed regulations for waste samples used in small-scale waste treatability studies. Section 261.4(e) conditionally exempts persons who generate or collect samples for the sole purpose of conducting treatability studies. Treatability studies are used to determine information such as whether a treatment process is efficient, or what types of wastes remain after the treatment is complete. Treatability samples are exempt from the requirements of Parts 261 through 263 and the notification requirements of Part 99 of the Colorado Hazardous Waste Regulations, as long as specific conditions are met. These requirements include quantity limitations, packaging and labeling requirements, recordkeeping requirements, and shipment to a qualified facility.

Both the treatability samples and the laboratories conducting such treatability studies are excluded from the requirements in 6 CCR 1007-3 Parts 261 through 268, Part 100, and the notification requirements of Part 99 as long as the provisions in Sections 261.4(f)(1) through (14) are met.

3.0 SPECIAL ISSUES

Although the scope of the exclusions is usually straightforward, there are many issues requiring clarification beyond the regulatory or statutory descriptions of the exclusions.

3.1 FEDERALLY OWNED TREATMENT WORKS

The original exclusion for domestic sewage and mixtures of domestic sewage only applied to wastes that passed through a sewer system to a publicly owned treatment works. However, the Federal Facilities Compliance Act of 1990 amended RCRA's statutory language to include solid or dissolved material introduced by a source into a federally owned treatment works. This expanded the scope of the exclusion to include both publicly owned treatment works and federally owned treatment works.

3.2 HOUSEHOLD HAZARDOUS WASTE COLLECTION PROGRAMS

Household hazardous wastes are solid wastes that are exempt from the definition of hazardous waste, but are still subject to the requirements of the Colorado solid waste regulations. This exclusion extends to those who collect household hazardous waste, either in community collection programs or private sector collection programs. Household hazardous waste that is mixed with commercial or industrial hazardous wastes, however, may be subject to full regulation as hazardous wastes if the waste streams can no longer be differentiated. In addition, Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) liability may exist for persons managing household hazardous wastes that contain a hazardous substance as defined by CERCLA, even if it is not within the definition of a RCRA hazardous waste.

3.3 MUNICIPAL WASTE COMBUSTION ASH

Municipal waste combustion ash generated by waste-to-energy facilities burning household waste and nonhazardous commercial and industrial waste is not exempt from hazardous waste regulations based on a judicial interpretation of RCRA Section 3001(i). The court stated that even though the waste-to-energy facilities remain exempt from hazardous waste requirements as a treatment, storage, or disposal facility, the ash they produce is subject to hazardous waste determination under the hazardous waste regulations.

4.0 CONTACT INFORMATION

24-hour Emergency Response Line (toll-free)	(877) 518-5608
Colorado Department of Public Health and Environment:	(303) 692-2000
(CDPHE) toll-free	(800) 886-7689
Pollution Prevention Program	(303) 692-2977
Hazardous Materials and Waste Management Division	(303) 692-3300
(HMWMD) toll-free	(888) 569-1831
HMWMD Technical Assistance Line	(303) 692-3320
toll-free	(888) 569-1831 ext. 3320

CDPHE Website	http://www.cdphe.state.co.us/
HMWMD Website	http://www.cdphe.state.co.us/hm/
Downloadable Regulations	http://www.cdphe.state.co.us/regulate.asp
HMWMD Internet e-mail	comments.hmwmd@state.co.us

Other Phone Numbers:

National Response Center	(800) 424-8802
RCRA/Superfund Hotline	(800) 424-9346

Send questions in writing to:

Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
Technical Assistance
4300 Cherry Creek Drive South
Denver, CO 80246-1530

OR

FAX (303) 759-5355

Please provide as much detail as possible regarding your question and the waste or process to which it applies.

5.0 RELATED CDPHE REFERENCES

These documents are available on our website or by contacting the HMWMD technical assistance line.

Colorado Hazardous Waste Statute Title 25 Article 15 Part 101 et seq CRS 1992, as amended.
Colorado Hazardous Waste Regulations 6 CCR 1007-3.

RCRA Policy and Guidance

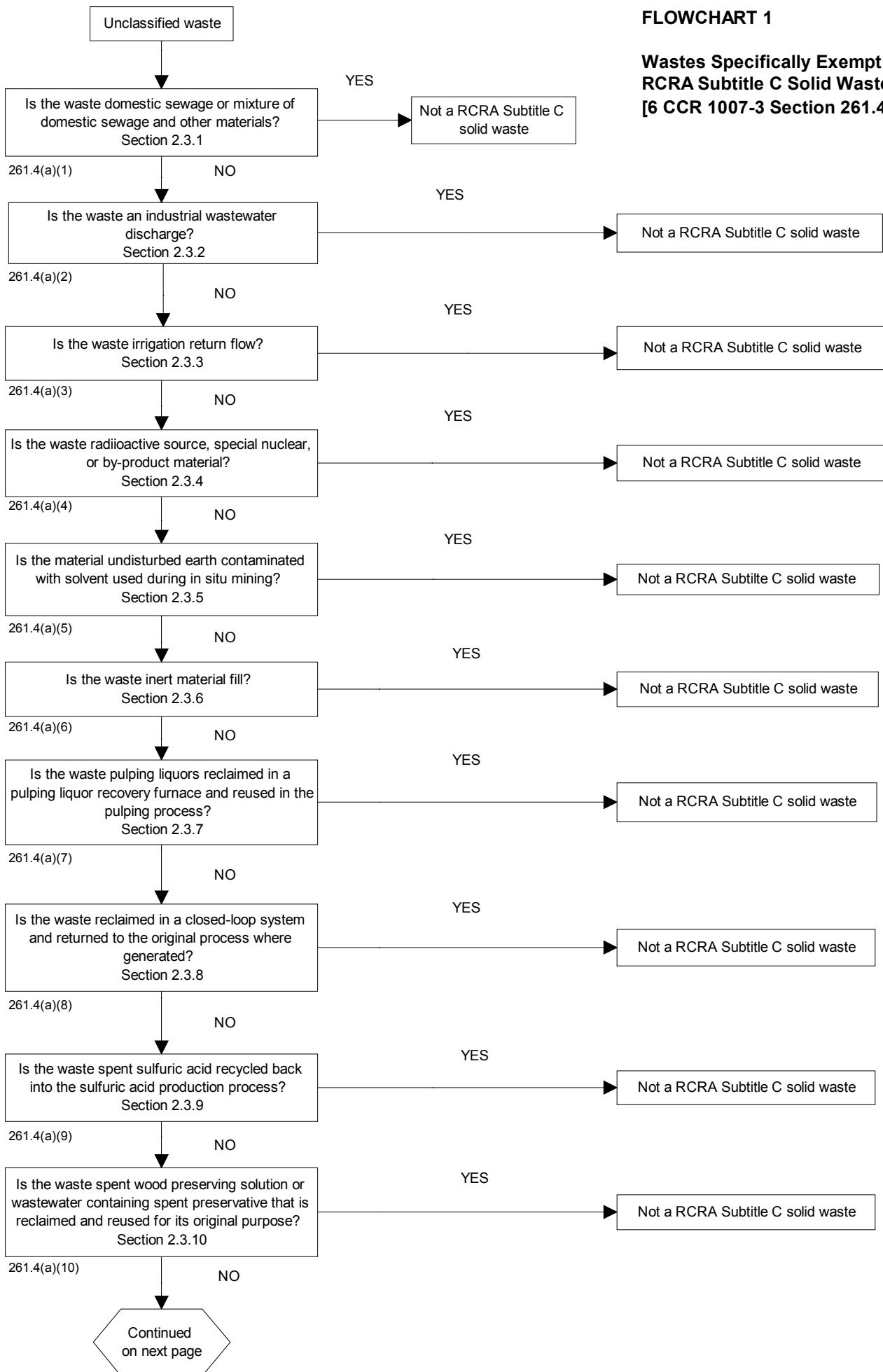
Groundwater VOC Sample Preservation Policy (6/98)
Guidance for Analysis of Indoor Air Samples (4/00)
Guide to Generator Requirements of the Colorado Hazardous Waste Regulations (3/98)
Guide to Implementing the Division's Wastewater Treatment Unit Policy (1/00), Includes Policy on Wastewater Treatment Unit Exemption (6/91)
Hazardous Waste Control Program PENALTY POLICY (1/00)
Hazardous Waste Identification Guidance Document (9/98)
Hazardous Waste Recycling Guidance Document (1/99)
Hazardous Waste Transporters Guidance Document (11/99)
Interim Final Policy and Guidance on Investigation Derived Waste (IDW) at RCRA Facilities
Interim Final Policy and Guidance on Risk Assessments for Corrective Action at RCRA Facilities (11/93)
Personnel Training & Emergency Response/Preparedness and Prevention for Small Quantity Generators (4/98)
Personnel Training for Large Quantity Generators of Hazardous Waste (3/97)
Preparedness and Prevention Contingency Plan Emergency Procedures for Large Quantity Generators of Hazardous Waste (3/97)
Proposed Soil Remediation Objectives Policy Document (12/97)
RCRA Integrated Corrective Action Plan Application Guidance Document and Checklist (1/00)
Satellite Accumulation for Small and Large Quantity Generators of Hazardous Waste (2/98)
Solid Waste Definition and Solid and Hazardous Waste Exclusions Guidance Document (9/98)
State of Colorado Policy: Early Transfer of Federal Property (6/98)
Summary Table of Hazardous Waste Generator Requirements (3/01)
Treatment of Hazardous Waste by Generators Guidance Document (4/00)

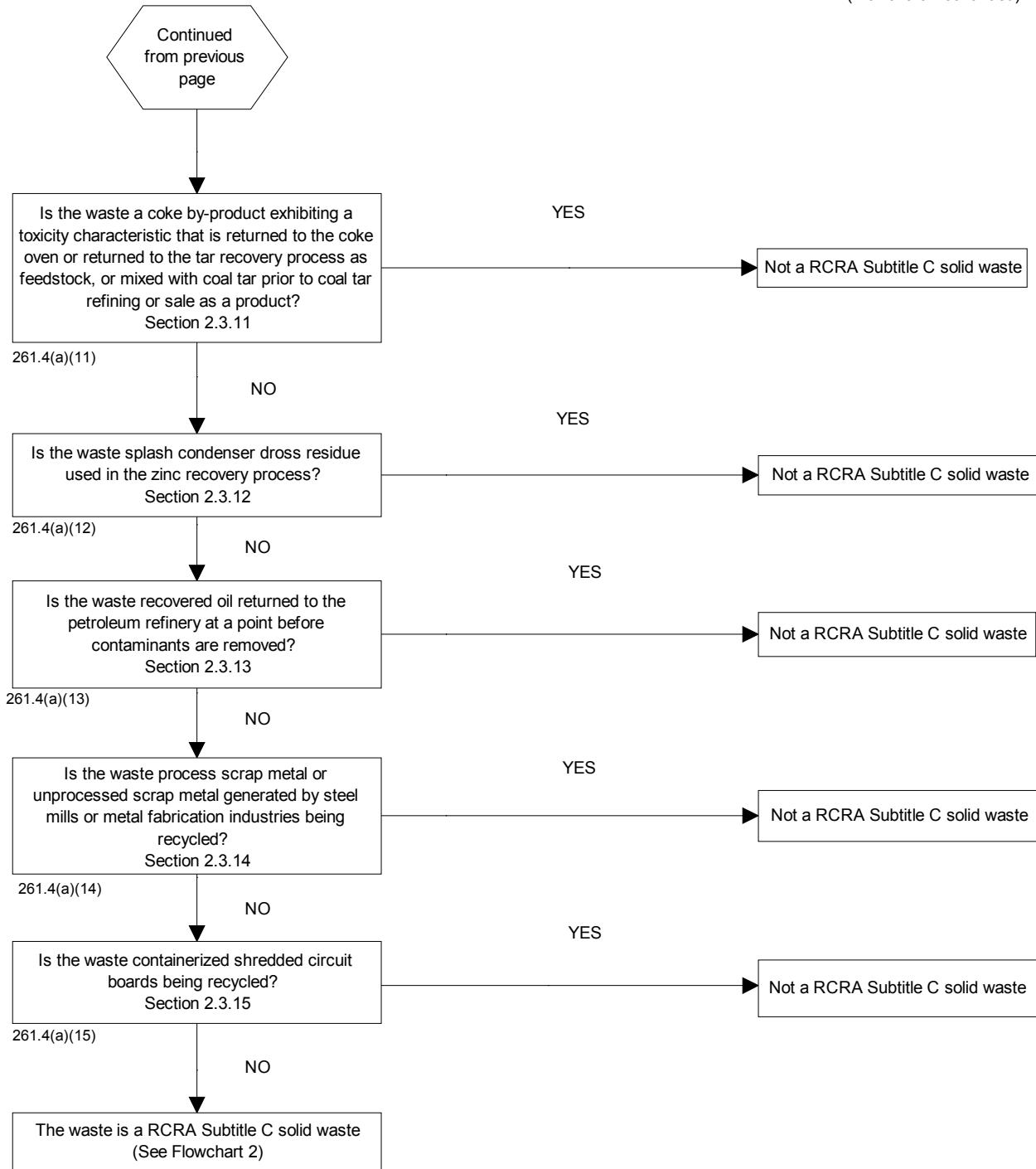
RCRA Compliance Bulletins

Batteries
Contaminated Shop Towels and Reusable Absorbents
EPA Identification Number
Lead-Based Paint Abatement and Waste Management
Lighting Wastes
Management of Electronics Waste
Management of Waste Aerosol Cans
Photographic, X-ray and Dental Wastes
Universal Waste Rule
Used Antifreeze

FLOWCHART 1

Wastes Specifically Exempt as RCRA Subtitle C Solid Wastes [6 CCR 1007-3 Section 261.4(a)]





Key

Is the waste an industrial wastewater discharge?
Section 2.3.2

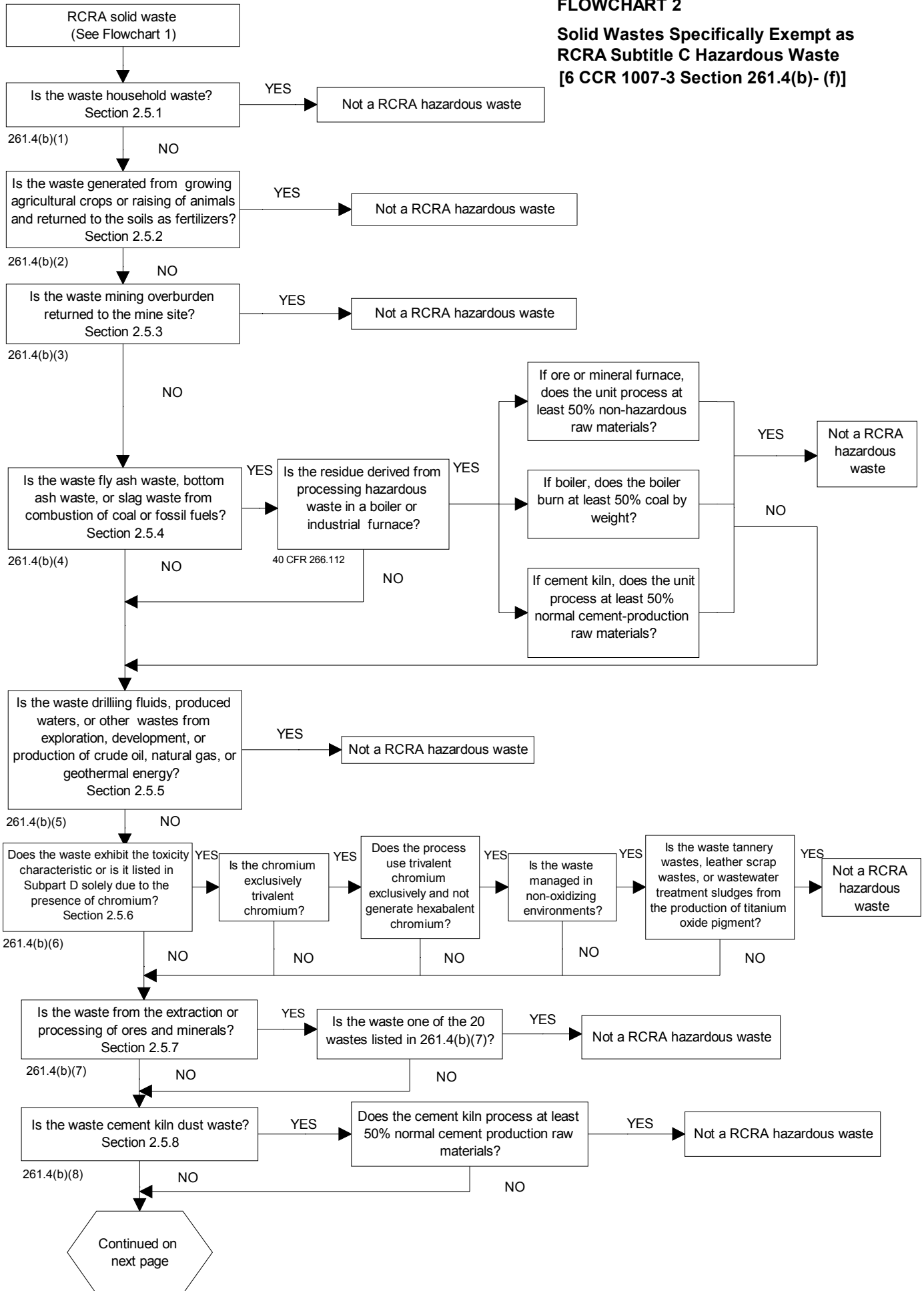
Refers to the "CDPHE Solid Waste Definition and Solid and Hazardous Waste Exclusions Guidance Document"

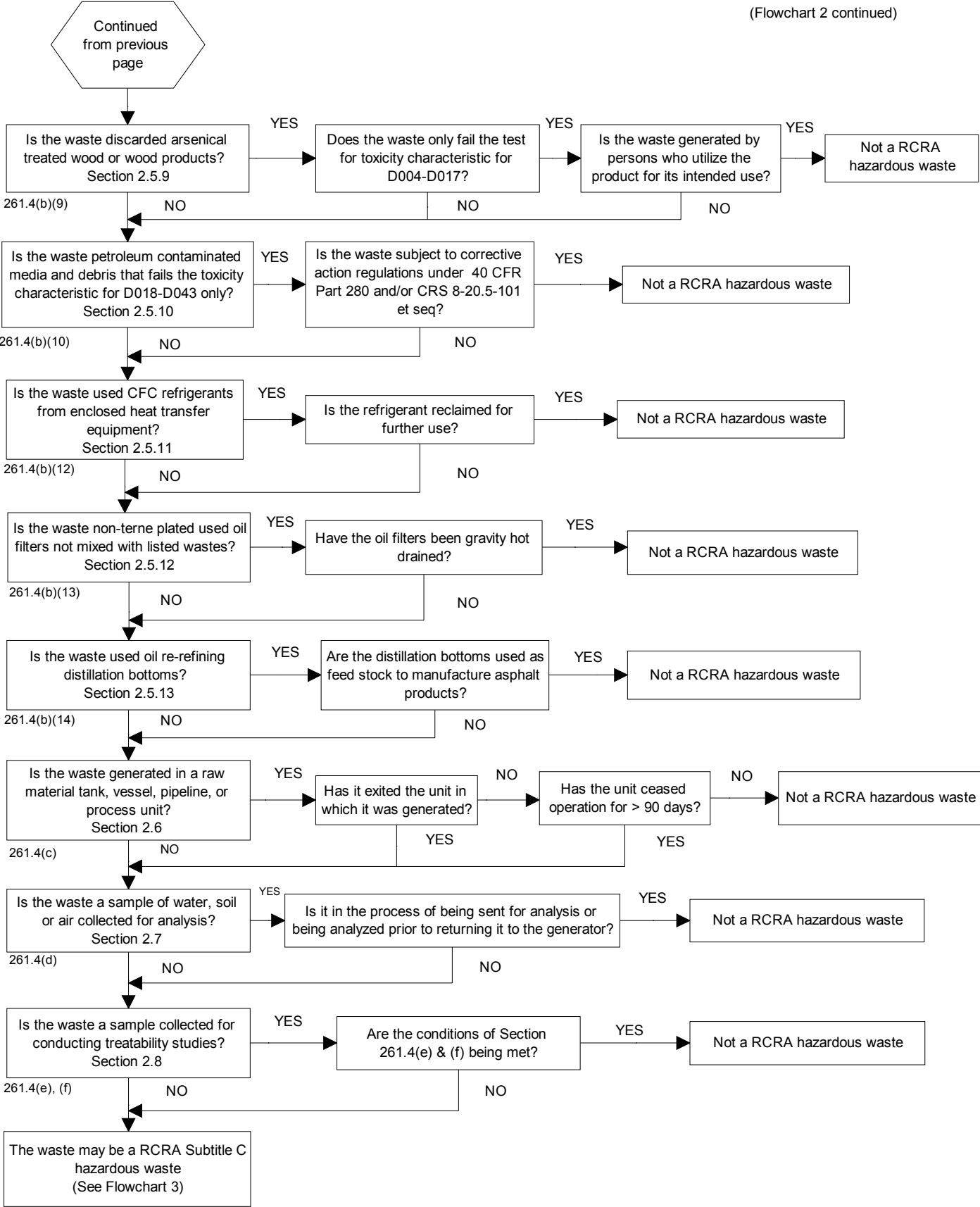
261.4(a)(2)

Refers to the Colorado Hazardous Waste Regulations 6 CCR 1007-3

Note: Wastes that are not regulated as RCRA Subtitle C solid or hazardous wastes may be regulated under other statutes and/or regulations such as the Colorado Solid Waste Regulations, Colorado Water Quality Control Regulations, Colorado Radiation Control Regulations, Atomic Energy Act, and Clean Water Act.

FLOWCHART 2
Solid Wastes Specifically Exempt as
RCRA Subtitle C Hazardous Waste
[6 CCR 1007-3 Section 261.4(b)- (f)]





Key

Is the waste cement kiln dust waste? **Section 2.5.8**

Refers to the "CDPHE Solid Waste Definition and Solid and Hazardous Waste Exclusions Guidance Document"

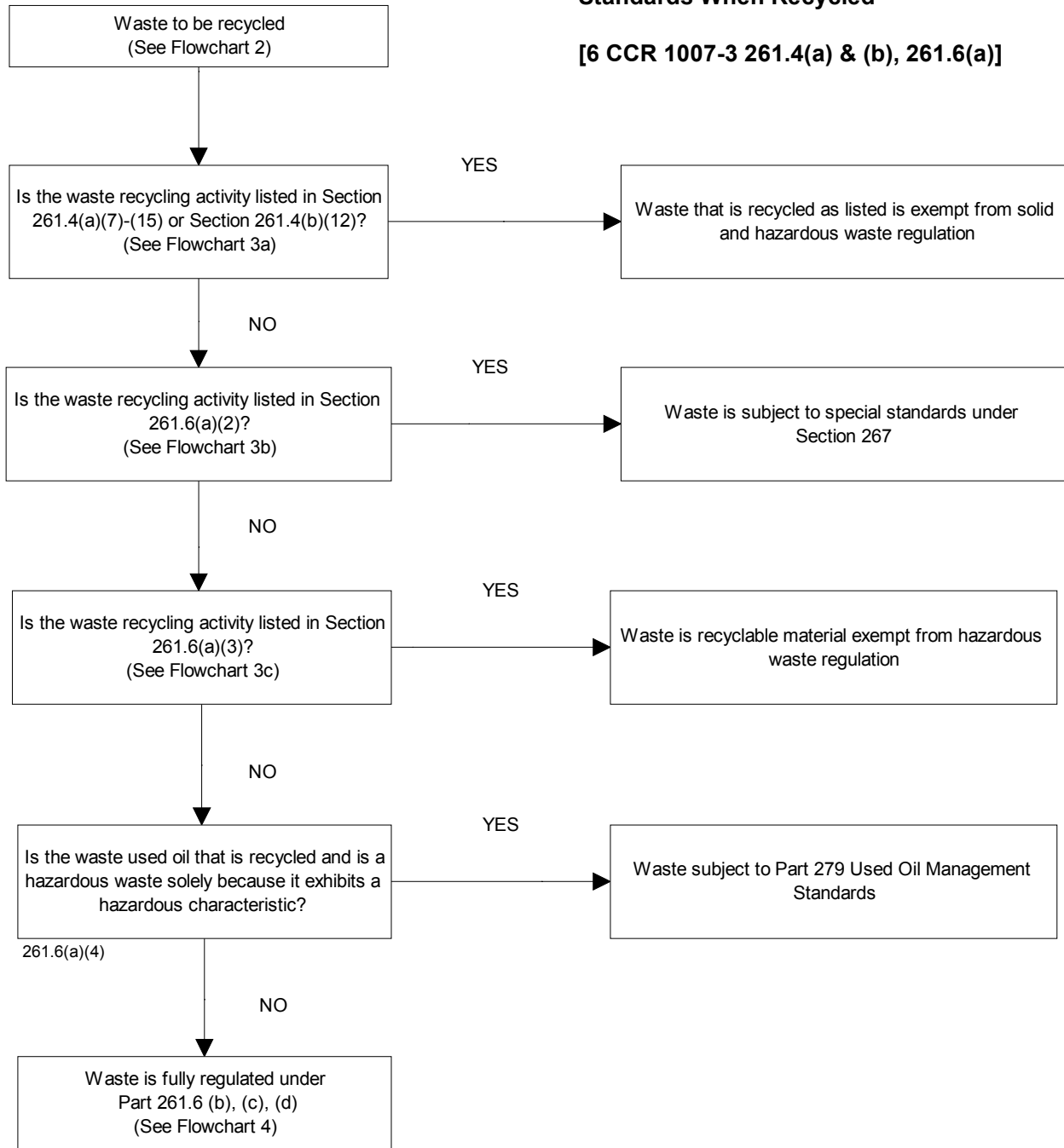
261.4(b)(8)

Refers to the Colorado Hazardous Waste Regulations 6 CCR 1007-3 unless otherwise noted

FLOWCHART 3

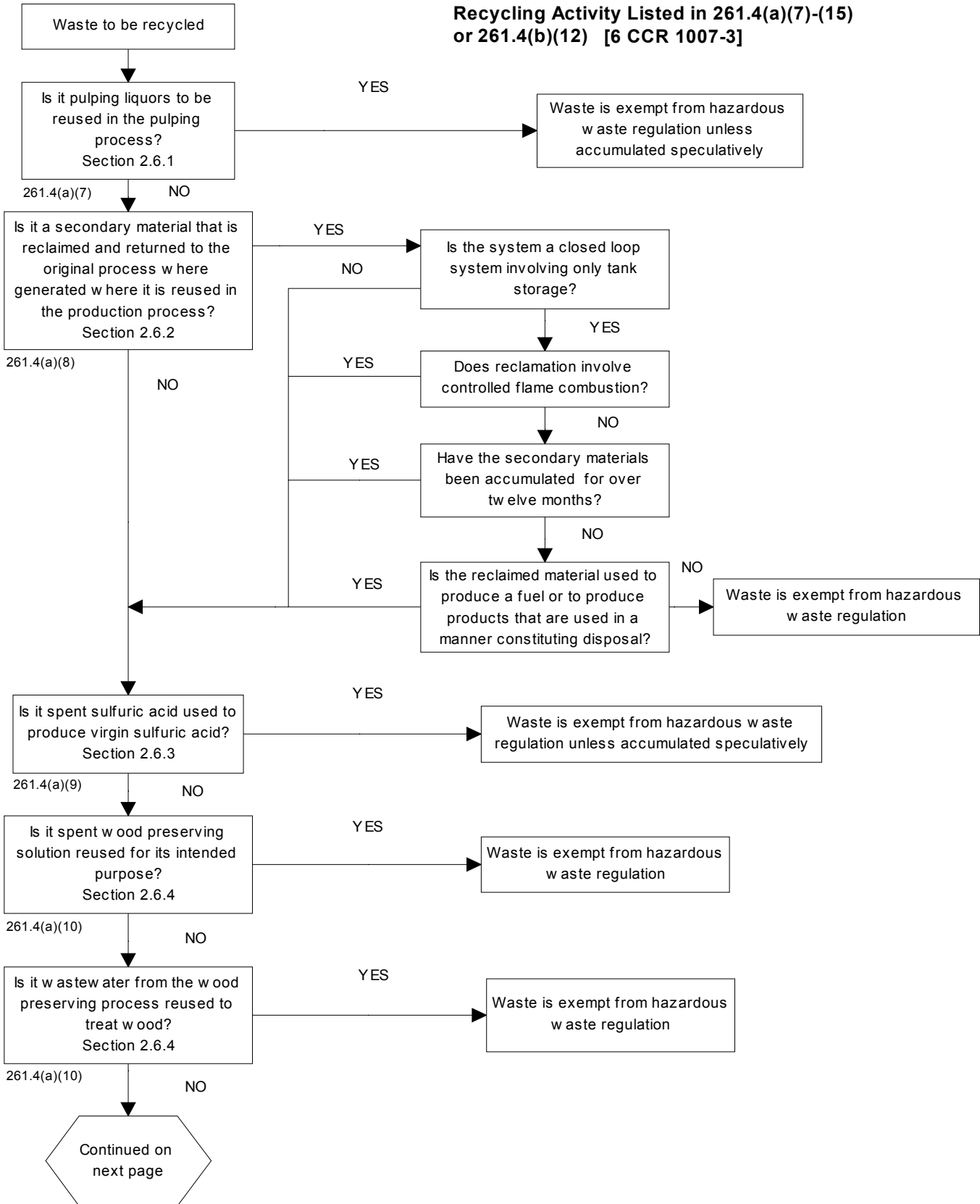
Solid Wastes Specifically Exempt as Hazardous Wastes or Subject to Special Standards When Recycled

[6 CCR 1007-3 261.4(a) & (b), 261.6(a)]

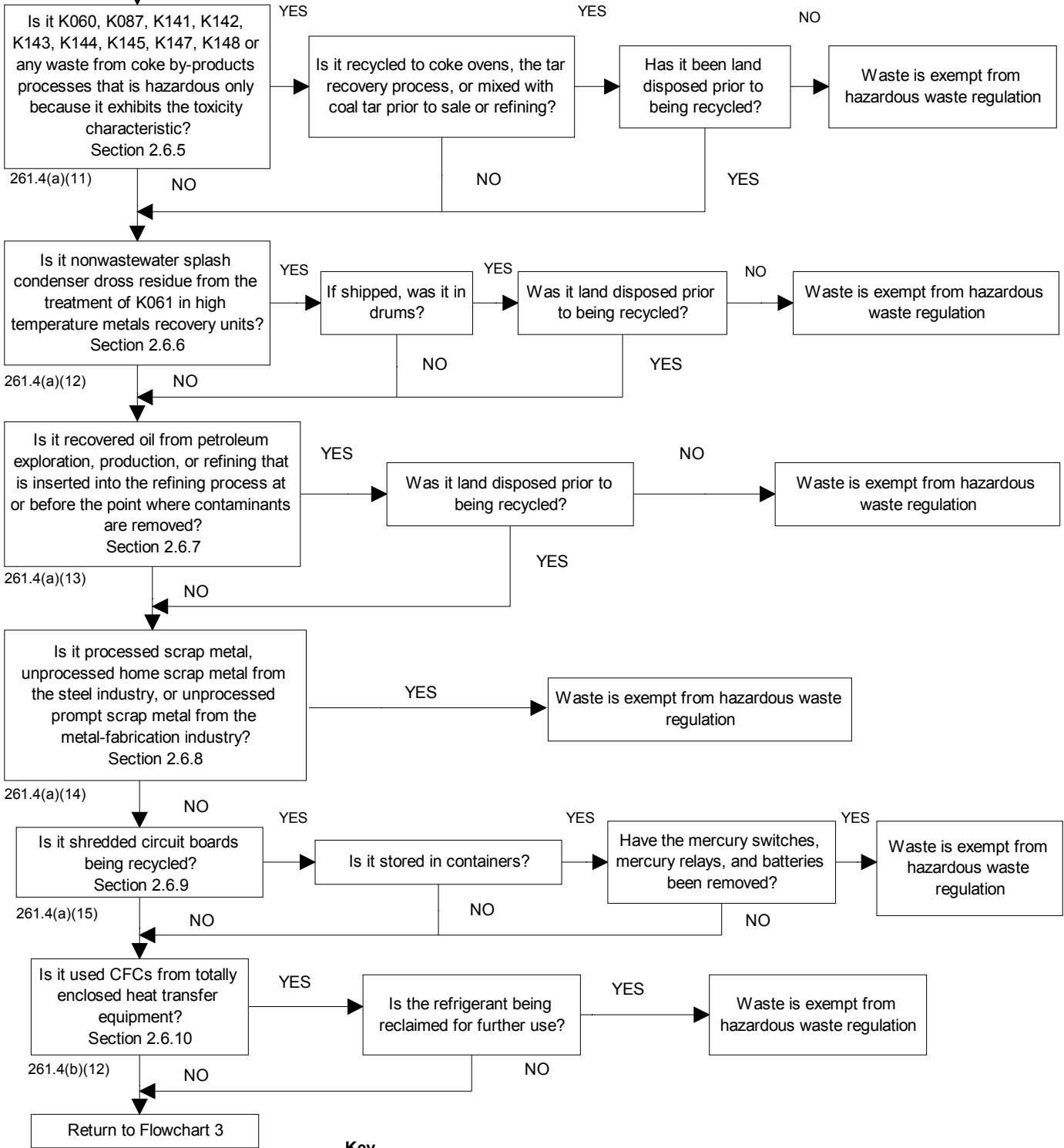


FLOWCHART 3A

Recycling Activity Listed in 261.4(a)(7)-(15) or 261.4(b)(12) [6 CCR 1007-3]



Continued from previous page



Key

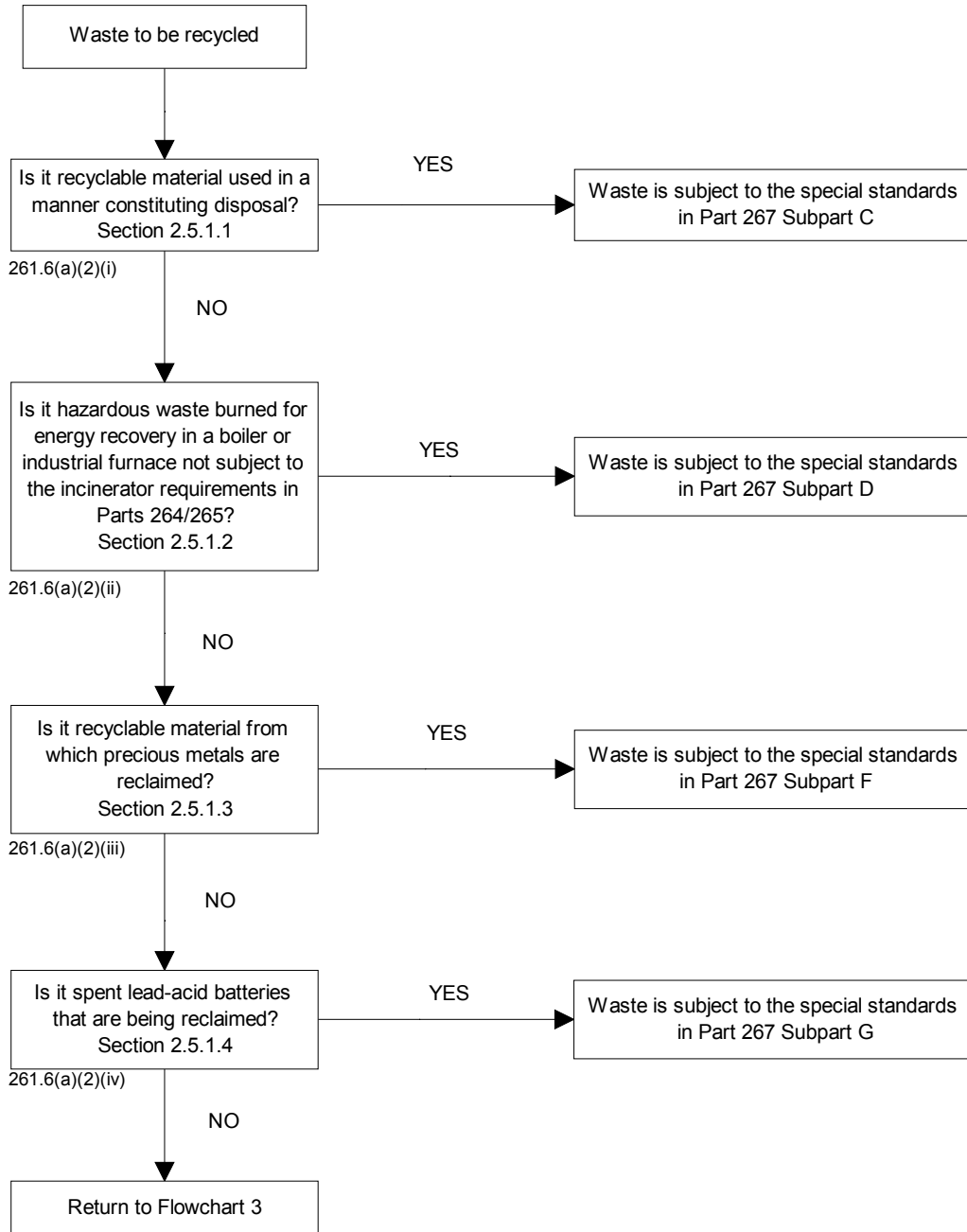
Is it spent sulfuric acid used to produce virgin sulfuric acid? **Section 2.6.3**

Refers to the "CDPHE Hazardous Waste Recycling Guidance Document"

261.4(a)(9) ← Refers to the Colorado Hazardous Waste Regulations 6 CCR 1007-3

FLOWCHART 3B

Recycling Activity Listed in 261.6(a)(2) [6 CCR 1007-3]



Key

Is it spent lead-acid batteries that are being reclaimed?
Section 2.5.1.4

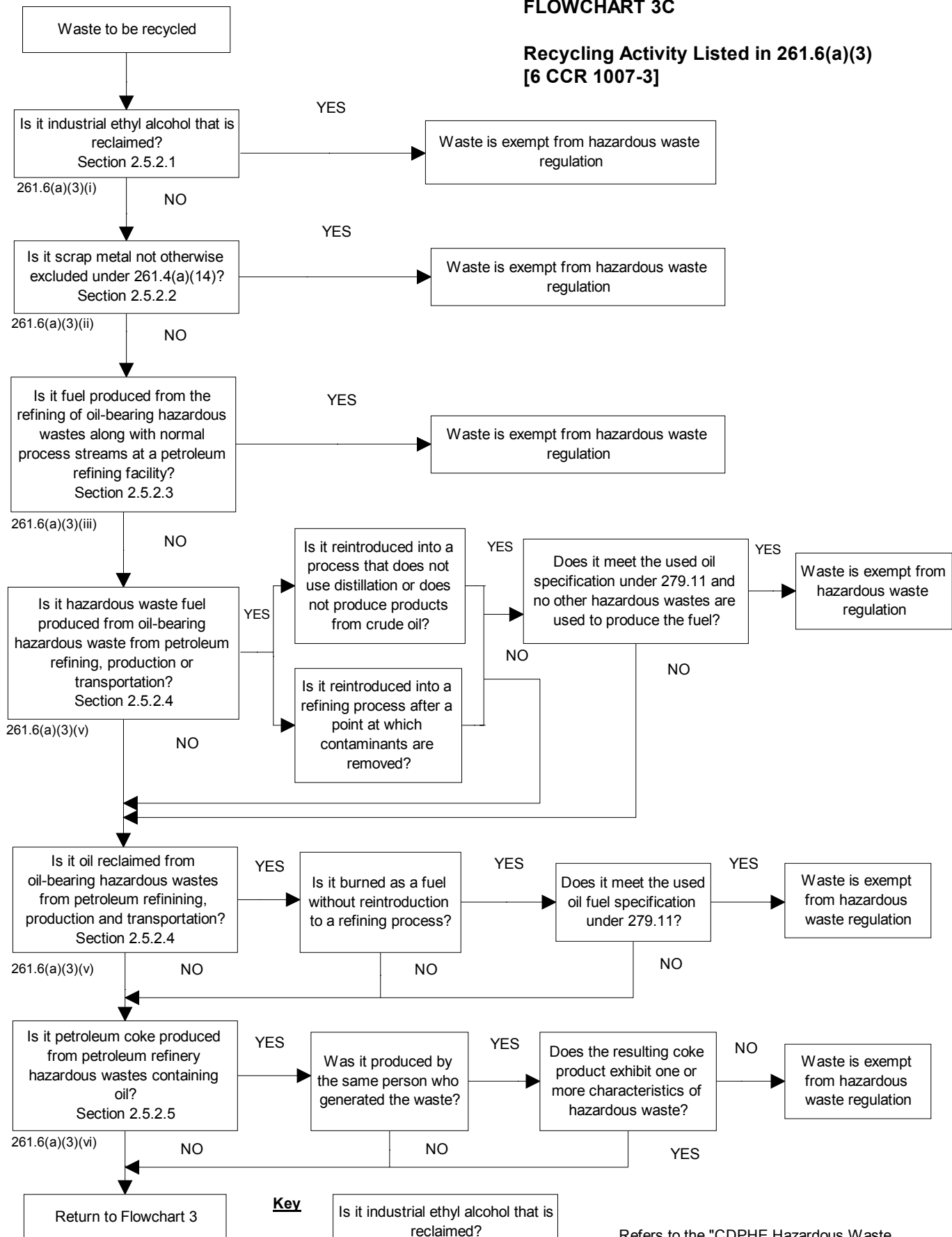
Refers to the "CDPHE Hazardous Waste Recycling Guidance Document"

261.6(a)(2)(iv)

Refers to the Colorado Hazardous Waste Regulations 6 CCR 1007-3

FLOWCHART 3C

**Recycling Activity Listed in 261.6(a)(3)
[6 CCR 1007-3]**



Key

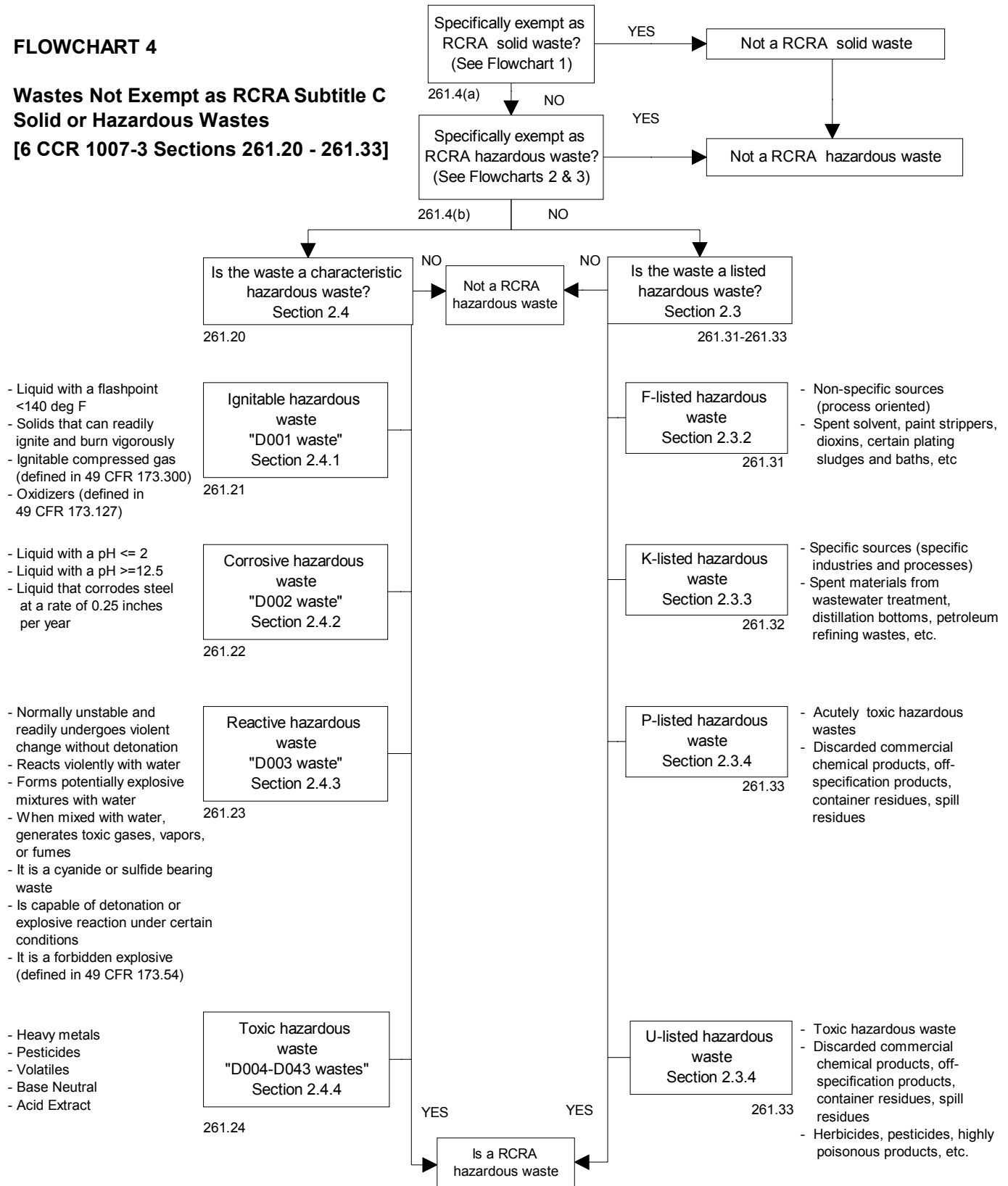
Is it industrial ethyl alcohol that is reclaimed?
Section 2.5.2.1

Refers to the "CDPHE Hazardous Waste Recycling Guidance Document"

261.6(a)(3)(i) Refers to the Colorado Hazardous Waste Regulations 6 CCR 1007-3

FLOWCHART 4

Wastes Not Exempt as RCRA Subtitle C Solid or Hazardous Wastes [6 CCR 1007-3 Sections 261.20 - 261.33]



Key

