



COLORADO

**Hazardous Materials
& Waste Management Division**

Department of Public Health & Environment

Guide to Generator Requirements of the Colorado Hazardous Waste Regulations

**Eighth Edition
June 2015**

Purpose of this Guidance

This is intended as general guidance for generators of hazardous waste and is meant to assist in compliance with the Colorado hazardous waste regulations. The guidance is not meant to modify or replace the regulations, which undergo periodic revisions. In the event of a conflict between this guidance and 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 if 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 iii of this guidance.

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. The department reserves the right to act at variance with this guidance and to change it at any time.

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Contact Information

Hazardous Materials and Waste Management Division

Customer Technical Assistance Line (303) 692-3320
Toll-free outside the 303/720 area code (888) 569-1831 ext. 3320
For an EPA I.D. number (Notification Coordinator) (303) 692-3360
For a Generator Assistance Program (GAP) inspection (303) 692-3415
For Self-Certification questions (303) 692-3461
24-hour Emergency Spill/Release Reporting Line (877) 518-5608

Other Phone Numbers:

National Response Center (800) 424-8802
Air Pollution Control Division (303) 692-3100
Small Business Assistance Program (303) 692-3148
Water Quality Control Division (303) 692-3500
Pollution Prevention (303) 692-2977

Send Questions in Writing to:

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

FAX (303) 759-5355

Email comments.hmwm@state.co.us

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

Web Sites

Hazardous Materials & Waste Management Division
www.colorado.gov/cdphe/hm

Hazardous waste guidance
www.colorado.gov/cdphe/hazwaste

Water Quality Control Division
www.colorado.gov/cdphe/wqcd

Air Pollution Control Division
www.colorado.gov/cdphe/apcd

EPA RCRA Online
www.epa.gov/rcraonline

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Introduction

As a result of doing business, your company may generate hazardous wastes that can cause serious health and safety problems if not handled and disposed of properly. Such wastes can cause injury or death and may damage or pollute Colorado's land, air and water. The Colorado Hazardous Waste Regulations (6 CCR 1007-3) are in place to protect human health and the environment from the dangers of mismanaged hazardous wastes. The regulations are designed to protect you, your co-workers, your family and your community.

Rules and Regulations

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA), which directed the U.S. Environmental Protection Agency (EPA) to develop and implement a program to protect human health and the environment from improper hazardous waste management practices. The program is designed to control the management of hazardous waste from its generation to its ultimate disposal -- from "cradle-to-grave."

Colorado passed state laws governing hazardous waste in 1981 and has since adopted regulations that cover hazardous waste management in the state. Congress had also seen the need for states to be the primary enforcement agency for hazardous waste rules. Congress therefore set up a system for authorizing state agencies, using state rules, to implement the federal hazardous waste program in place of the EPA. The Colorado Department of Public Health and Environment, acting through the Hazardous Materials and Waste Management Division (the division, we, us), was authorized to implement the federal hazardous waste program in 1984. One of the conditions for getting that authorization requires that the state hazardous waste rules be at least as stringent as those of EPA. There are numerous instances where Colorado rules are stricter than those of EPA. The guide "Regulations More Stringent Than Federal Regulations," available on our website (see page *iii* of this guidance) and at the end of this guidance, provides more detailed information on key areas of the Colorado hazardous waste regulations that are more stringent than the federal regulations.

During the 1991-92 legislative session, the Colorado General Assembly passed Senate Bill 116, which, among other things, created the Hazardous Waste Commission. In the past, the duties of the commission were the responsibility of the Committee on Hazardous Waste and the Colorado State Board of Health. The Hazardous Waste Commission was renamed the Solid and Hazardous Waste Commission during the 2005-2006 legislative session with the passage of Senate Bill 171. This bill transferred rulemaking authority for solid waste from the Board of Health to the Solid and Hazardous Waste Commission. Rules previously adopted by the Board of Health remain in effect unless amended or repealed by the Solid and Hazardous Waste Commission (the commission). The commission is responsible for developing and adopting rules pertaining to solid waste and hazardous waste management. The commission is also required to conduct public meetings pertaining to hazardous waste issues, issue interpretive rules and hear appeals of administrative law judges' determinations regarding the amount of administrative penalties. The commission is composed of nine members appointed by the governor who equally represent industry, the public and government or academia.

When EPA adopts new hazardous waste rules that are more stringent than before, it enforces the rules until the Solid and Hazardous Waste Commission incorporates the new rules into state regulations. Once the commission formally adopts the new rules, we become the primary regulatory agency for the new regulations. In other cases, EPA may adopt new rules that are less stringent than the current rules. Since authorized states are not required to adopt rules that are less stringent, and may adopt rules that are more stringent, it is very important for companies that generate hazardous waste to become familiar with both state and federal

hazardous waste regulations and to be aware of any changes and differences in these regulations.

Fees

Colorado Solid and Hazardous Waste Commission Fees

The commission is required to generate enough revenue through the imposition of fees to pay for the reasonable actual costs of the commission's activities. The commission adopts rules each fiscal year that set the fees according to the estimated costs for the upcoming year. These fees are billed annually and are due thirty days after the date of receipt.

Commission fees for hazardous waste management, as of the date of this publication, are:

- \$65 for small quantity generators of hazardous waste;
- \$210 for large quantity generators of hazardous waste;
- \$70 for transporters of hazardous waste;
- \$400 for non-commercial treatment, storage or disposal facilities;
- \$600 for commercial treatment, storage or disposal facilities.

6 CCR 1007-3, Part 6

Generator Fees

The Solid and Hazardous Waste Commission adopted rules pertaining to the assessment of fees to offset regulatory oversight program costs from facilities that treat, store or dispose of hazardous waste under a permit or interim status and from generators of hazardous waste. The commission may adjust these fees either on a permanent or temporary basis. These fees are billed annually with the Solid and Hazardous Waste Commission fees and are due thirty days after the date of receipt.

The hazardous waste generator fees, as of the date of this publication, are:

- \$200 per year for a conditionally exempt small quantity generator of hazardous waste generating more than 3 gallons per year of a F001, F002, F004 and/or F005 listed waste.
- \$625 per year for a small quantity generator of hazardous waste;
- \$3,200 per year for a large quantity generator of hazardous waste.

6 CCR 1007-3, section 262.13

Conditionally exempt small quantity generators that operate at the small quantity generator level for four or more months of the year will be assessed the small quantity generator fee. Similarly, small quantity generators that operate at the large quantity generator level for four or more months of the year will be assessed the large quantity generator fee.

Section 25-15-302(3.5) C.R.S., 6 CCR 1007-3, sections 100.31 and 262.13

Notification Fees

Small quantity and large quantity generators submitting a new notification under Part 99 of the hazardous waste regulations must submit a notification fee with their Colorado Hazardous Waste Notification form. If you submit a subsequent notification that downgrades your

hazardous waste notification status (for example, from a large quantity generator to a small quantity generator), you must also submit the notification fee along with your updated form. You do not need to pay a fee for subsequent notifications that are providing or updating other information (for example, contact name change) unless you are also downgrading your notification status. If you submit a subsequent notification that upgrades your notification status, you do not have to pay the notification fee.

Conditionally exempt small quantity generators that generate three (3) or more gallons per calendar year of hazardous waste codes F001, F002, F004 and/or F005 (halogenated and non-halogenated solvents) are required to notify us under Part 99 of the Colorado hazardous waste regulations and obtain an EPA identification number. However, you are not required to pay the notification fee.

The notification fee, as of the date of this publication is \$120.

6 CCR 1007-3, section 100.33

When applicable, the notification fee must accompany the completed and signed notification form. We will not process the notification form without the notification fee. Do not submit the commission or generator fee with the notification form unless we specifically tell you to.

6 CCR 1007-3, section 100.33

Water and Air Regulations

This guidance does not cover the clean air and clean water requirements that also apply to many businesses. These regulations and other information are available on the department's website or by contacting the appropriate division using the information on page *iii* of this guidance.

Company and Personal Liability

Historically, Colorado's hazardous waste compliance and enforcement program focused on the companies that generated the greatest amount of hazardous waste. In recent years, however, public attention has been focused on the potential for environmental and health problems that may result from mismanaging even small quantities of hazardous waste. For example, small amounts of hazardous waste dumped on the land may seep into the earth and contaminate the underground water that supplies drinking water wells.

Companies are liable for clean-up costs from contamination resulting from improper waste management activities. Even those companies classified as conditionally exempt small quantity generators can be held responsible for not complying with the hazardous waste regulations. In addition, non-compliance with the Colorado hazardous waste regulations can result in fines up to \$25,000 a day per violation, as well as possible criminal charges.

Pollution Prevention

Management of hazardous wastes can be an expensive and complicated part of a company's operations. The best way to eliminate or reduce the burden of managing hazardous waste is to generate less waste in the first place.

While it may be impossible for your business to stop producing hazardous waste, there are many things you can do to reduce the amount generated. By now, most small and large

businesses have learned about the benefits of pollution prevention and waste reduction. The Colorado Pollution Prevention Act of 1992 made pollution prevention "the environmental management tool of first choice" in Colorado. By reducing the amount of hazardous waste generated, you not only solve the immediate problem of what to do with that waste, but you reduce your legal liability for future discoveries of contamination that may be attributable to you.

Numerous materials and products that generate hazardous waste have safer substitutes. There are also many proven methods of operating more efficiently that result in reducing the amount of waste generated. These include inventory control and good housekeeping, as well as improved equipment and processes. Many of Colorado's larger industries have embarked on programs to prevent pollution and have realized a variety of benefits.

For more information about pollution prevention in your business, contact the department's Pollution Prevention Program. This program is separate from the regulatory and compliance programs of the department and offers educational materials and services. For information about pollution prevention, visit their website at www.colorado.gov/pacific/cdphe/pollution-prevention.

How to Use This Booklet

We want to help you understand what hazardous waste is and if you're generating hazardous waste at your facility. If you are, we'll help you determine which of the regulatory categories you fit into. Once you know which category you fall under, we'll guide you through the regulations that apply to your generator category.

We have authorization from EPA to implement the hazardous waste program in Colorado. There are numerous instances where our rules are stricter than those of EPA, so you must be familiar with our regulations for all waste management activities occurring in this state. Regulatory requirements listed in the booklet are followed by a regulatory citation beginning with "6 CCR 1007-3." These citations tell you where to look in the Colorado Code of Regulations (CCR) for the specific regulatory language pertaining to that requirement. Knowing the specific regulations that apply to your company is vital in maintaining your company's compliance with the Colorado hazardous waste regulations.

An unofficial copy of the Colorado Hazardous Waste Regulations is available on our website at www.colorado.gov/cdphe/shwc. You may also obtain a hard copy of these regulations for a fee by following the Frequently Requested Information link on that web page. Official publication of the regulations occurs on the Colorado Secretary of State website at www.sos.state.co.us/pubs/CCR/CCRHome.html.

This booklet provides an overview of the requirements for hazardous waste generators. There are numerous other guidance documents, policies and related materials available on our website at www.colorado.gov/cdphe/hazwaste to assist you in determining how the regulations apply to you.

What is Hazardous Waste?

Solid waste is any solid, semi-solid, liquid or contained gaseous material that can no longer be used or that no longer serves the purpose for which it was produced. Hazardous waste is a subset of solid waste that has stricter handling requirements because of the danger it could pose to human health and the environment after it's discarded. Hazardous waste can be one of two types.

Listed Waste

Your company's waste is considered hazardous if it appears on one of four lists in the Colorado hazardous waste regulations. Listed wastes are hazardous regardless of their concentration.

- **F listed** hazardous wastes are wastes from non-specific sources such as spent solvents or wastewater treatment sludge from electroplating.
- **K listed** hazardous wastes are wastes from a specific source such as wastewater treatment sludge from the production of chrome yellow and orange pigments.
- **P and U listed** hazardous wastes are unused off-specification or discarded commercial chemical products, or
 - Any residue remaining in a container that held commercial chemical products in the P or U listing, or
 - Any residue or contaminated media resulting from the cleanup of a spill of a commercial chemical product in the P or U listing, or
 - Any unused formulation containing one or more active ingredients appearing on the P or U list.

6 CCR 1007-3, Part 261, Subpart D

All P-listed wastes are acutely hazardous wastes, as are specified dioxin wastes (F020, F021, F022, F023, F026 and F027). An acutely hazardous waste is any waste that has been found to be fatal to humans or animals in low doses or can cause or contribute to an increase in serious irreversible, or incapacitating reversible, illness. *6 CCR 1007-3, section 261.11*

Since chemicals are often identified by many different names, we recommend that you start with the Chemical Abstract Number (CAS) and a list of chemical synonyms to identify the correct chemical. The "EPCRA/CERCLA/CAA §112(r) Consolidated List of Lists" is one reference that identifies chemicals by common synonyms. The List of Lists is available on EPA's website at www.epa.gov/osweroe1/tools.htm.

You may also want to seek advice from a chemist or environmental consultant. Determining if a compound is listed can be complicated and you can't rely solely on the CAS number. CAS numbers were added to the tables in section 261.33 "as an identification aid" in 1986 (51 FR 28296). If the CAS number for your waste is identical to the CAS number in the P- or U-list, then the listing obviously applies to your waste. But the P- and U-listings apply to all commercial chemical products or manufacturing chemical intermediates having the generic names listed in section 261.33 and to any off-specification commercial chemical products or manufacturing chemical intermediates that would have the generic name listed if it met specifications, regardless of the CAS number. (EPA RCRA Online 14175)

You may be confused by the salts¹ or esters² of a compound listed in section 261.33. Some listings specify a parent compound along with their salts and/or esters (e.g., U240 - "2,4-D, salts & esters") but others do not specify that the salts or esters are included. If a parent compound is listed, but the salt or ester of that compound is not, then only the parent compound is covered by the listing. (EPA RCRA Online 12155)

Isomers³ add to the confusion. In some cases, EPA chose to include all isomers of a chemical by listing the mixed isomer or generic name of the compound. If the generic mixed isomer name and CAS number of a compound appear on one of the lists, then any individual isomers and all mixtures of isomers of that compound meet the listing. But if a specific isomer is listed, then only that isomer is covered by that particular listing. (EPA RCRA Online 13760)

Characteristic Waste

Even if a waste does not appear on one of the lists, it is considered hazardous if it falls under one of the following hazardous waste categories:

- **Ignitable** - EPA hazardous waste number **D001**
 - It is a liquid with a flash point less than 140°F (60°C),
 - It is not a liquid but is capable of causing a fire that burns so vigorously that it creates a hazard,
 - It is an ignitable compressed gas, or
 - It is an oxidizer as defined by the U. S. Department of Transportation.
- **Corrosive** - EPA hazardous waste number **D002**
 - It is a liquid with a pH of less than or equal to 2 or greater than or equal to 12.5, or
 - It is a liquid and dissolves steel.
- **Reactive** - EPA hazardous waste number **D003**
 - It is unstable,
 - It is explosive,
 - It undergoes rapid or violent chemical reaction,
 - It reacts violently with water, forms potentially explosive mixtures with water or produces toxic gases, vapors or fumes when mixed with water, or
 - It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes. We consider a waste to be reactive if it contains:
 - ◆ A total releasable sulfide concentration of 500 mg H₂S/kg, or
 - ◆ A total releasable cyanide concentration of 250 mg HCN/kg.
- **Toxic** - EPA hazardous waste numbers **D004 through D043**
 - It is a metal, pesticide, herbicide or organic chemical at a concentration that exceeds its regulatory limit using the Toxicity Characteristic Leaching Procedure (TCLP). Such wastes are likely to leach dangerous concentrations of certain known toxic chemicals into groundwater, potentially contaminating drinking water supplies.

6 CCR 1007-3, Part 261, Subpart C

¹ Salt = compounds that result from the neutralization reaction of an acid and a base.

² Ester = organic compounds formed when an organic acid and an alcohol combine and release water.

³ Isomer = any of two or more substances that are composed of the same elements in the same proportions, but differ in properties because of differences in the arrangement of atoms. Isomers do not necessarily share similar properties.

Mixture and Derived-From Rules

The mixture and derived-from rules operate differently for listed waste and characteristic waste. The mixture rule essentially states that unless it meets one of the regulatory exclusions, a mixture of any amount of nonhazardous solid waste and any amount of listed hazardous waste is listed hazardous waste. A mixture of nonhazardous solid waste and characteristic-only hazardous waste is hazardous waste if the mixture exhibits one or more hazardous characteristics. Remember, however, that dilution is prohibited as a substitute for treatment in order to get around land disposal treatment standards or disposal prohibitions. Mixing nonhazardous solid waste with hazardous waste is a form of dilution.

The mixture rule applies to the mixture at the point the material is determined to be a waste, not to its status while still a useful product. There is a difference between a chemical that is mixed with other materials in order to use the chemical for its intended purpose versus mixing the chemical after it is determined to be a waste.

The derived-from rule applies to treatment residues and states that residue from the treatment of a listed hazardous waste remains a listed hazardous waste. Residues derived from the treatment of characteristic hazardous waste are hazardous if they exhibit a hazardous characteristic.

6 CCR 1007-3 sections 261.3(a), 261.3(b), 261.3(c), 261.3(g) and 268.3

The guidance document “Hazardous Waste Identification,” available on our website (see page *iii* of this guidance), provides more detailed information on the mixture and derived-from rules.

Universal Waste

Colorado includes the following six hazardous wastes in our universal waste regulations:

- Waste batteries.
- Certain pesticides.
- Mercury-containing devices.
- Aerosol cans that contain hazardous waste when discarded.
- Mercury-containing lamps.
- Electronic devices and components derived from the disassembly of electronic devices.

6 CCR 1007-3, Part 273

EPA originally enacted the federal universal waste regulations in May 1995 and included waste batteries, certain pesticides and mercury thermostats. Mercury-containing lamps were added to the federal rule in 1999, while “mercury thermostats” was broadened to include other mercury-containing equipment in 2005. The Colorado Solid and Hazardous Waste Commission adopted state universal waste regulations for waste batteries, certain pesticides and mercury thermostats as 6 CCR 1007-3 Part 273 in October 1995. Since Part 273 includes provisions for adding additional state-specific waste types, we added aerosol cans containing hazardous waste in 1996; mercury-containing lamps in 1999; broadened mercury thermostats to include other mercury-containing devices in 2000; and added electronic devices and components in 2001.

While universal wastes are still hazardous wastes, Part 273 provides an alternative set of reduced management standards for these widely generated hazardous wastes. These regulations are designed to encourage recycling and decrease the amount of these wastes illegally sent to municipal solid waste landfills, thus reducing a potential threat to public health

and the environment. Wastes managed under the universal waste rule do not count toward your generator category.

Anyone that generates a universal waste, or the owner/operator of a facility that consolidates universal waste from other universal waste handlers before sending it to a destination facility, is called a universal waste handler. There are two categories of universal waste handler. If you accumulate less than 5000 kilograms of universal waste, calculated by adding all types of universal waste onsite at any one time, you are a small quantity handler of universal waste. If you accumulate more than 5000 kilograms of universal waste onsite at one time, you are a large quantity handler. The requirements for both handler categories are the same except that a large quantity handler must also notify us of their universal waste handling activities using the Colorado Hazardous Waste Notification form, even if they have previously notified and obtained an EPA identification number. In addition, large quantity handlers are required to keep records of universal wastes shipped to and from their facility.

As a small or large quantity universal waste handler, you may accumulate universal wastes onsite for up to one year in order to facilitate recycling or proper disposal. You must manage your wastes in a way that prevents releases, but if a release occurs, you must clean it up promptly. Containers must be kept in good condition, closed and of the appropriate type to contain the waste. Individual wastes or the waste accumulation container must be labeled with the words "Used (waste type)," "Waste (waste type)" or "Universal Waste (waste type)." Your staff must be trained in waste handling requirements for the types of wastes managed onsite and in emergency response actions relative to their job responsibilities. You can only conduct treatment of universal waste as specifically allowed by Part 273. If conducting treatment, you must have written procedures and train your staff to follow those procedures. Your written procedures must include the type(s) of equipment to be used; how to use the equipment; operation and maintenance of the equipment; segregation of the waste after treatment; precautions to protect your staff; and a description of waste characterization, management and disposal requirements.

Universal waste can only be shipped to another universal waste handler or to an appropriate destination facility for recycling or disposal. Universal waste can't be disposed of onsite or put in the regular trash.

Compliance with the reduced requirements of Part 273 is optional. If you choose to manage your universal wastes under Part 273 but fail to meet those requirements, you remain subject to and must comply with all applicable requirements of the Colorado hazardous waste regulations Parts 260 through 268, 99 and 100, including potential enforcement actions and fines.

The "Universal Waste Rule" compliance bulletin and numerous waste-specific compliance bulletins are available on our website (see page *iii* of this guidance) and provide more detailed information regarding the management of universal waste.

Management of Used Oil

"Used oil" means any oil that has been refined from crude oil or any synthetic oil made from coal, shale or polymer-based starting material that has been used and, as a result of such use, is contaminated by physical or chemical impurities.

EPA enacted the used oil regulations effective March 8, 1993, placing them under the scope of the Resource Conservation and Recovery Act (RCRA). The Colorado Solid and Hazardous Waste Commission adopted the used oil regulations as 6 CCR 1007-3 Part 279, effective October 31, 1994.

Although EPA evaluated used oil for possible listing as a hazardous waste, they determined that used oil that is recycled does not pose a substantial hazard to human health or the environment when the used oil is managed properly from the time it is generated until it is recycled. Therefore, used oil destined for recycling is generally not regulated as hazardous waste unless it is mixed with hazardous waste. Used oil that exhibits one or more hazardous characteristics by its own nature is managed as used oil when recycled, not hazardous waste. Since the used oil management standards are designed to control the accumulation, storage, transportation and general management of used oil, used oil is not counted towards your hazardous waste generator category. Used oil that will be recycled is managed under Part 279 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

As a generator of used oil managed under these regulations, you must label all tanks, containers, fill ports leading to remote tanks, drain pans and anything else that contains used oil, even temporarily, with the words “used oil.” Tanks and containers of used oil that are located outdoors must be kept closed except when used oil is being added or removed. It’s a best management practice to keep tanks and containers closed even when stored indoors. Tanks and containers must be kept in good condition and not leaking. If a release occurs, the used oil and any contaminated soil or water should be cleaned up promptly. In some cases, you may also be subject to EPA’s Spill Prevention, Control and Countermeasure (SPCC) requirements and/or the storage tank requirements of the Division of Oil and Public Safety at the Colorado Department of Labor and Employment.

The “Management Standards for Used Oil Generators” guidance document, available on our website (see page *iii* of this guidance), provides more detailed information on the management of used oil.

Used oil that will not be recycled, and soil or water contaminated with used oil, are regulated as hazardous waste if the waste exhibits one or more hazardous waste characteristics or contains a listed hazardous waste. If the waste does not exhibit a characteristic or contain a listed waste, then the waste can be managed in compliance with the Colorado solid waste regulations.

How do you know if you’re generating hazardous waste?

You’re required to make a hazardous waste determination on all solid wastes generated at your facility at the time the waste is first generated. You may utilize the services of a consultant or waste broker, but you are ultimately responsible for ensuring the determination is accurate and timely.

There are three basic steps in determining if your waste is a hazardous waste:

1. Determine if your waste meets the definition of solid waste. A material is a solid waste if it is disposed of, burned, incinerated or abandoned. Most materials are solid waste even if they will be recycled.
2. If it meets the definition, determine if your waste is specifically excluded from being a solid or hazardous waste. The regulations list 21 materials that are specifically excluded from the definition of solid waste and 15 materials that are specifically excluded from the definition of hazardous waste in section 261.4.
3. If not excluded, determine if your waste is a listed or characteristic hazardous waste.

The guidance documents “Hazardous Waste Identification” and “Hazardous Waste Exclusions,” available on our website (see page *iii* of this guidance), provide more detailed information on making this determination.

You should also obtain a copy of the Colorado Hazardous Waste Regulations (6 CCR 1007-3), referring to Part 261 which describes the listing and identification of hazardous wastes.

1. Apply knowledge of your process and use Safety Data Sheets (SDS) for information regarding the products you use to determine if hazardous waste is generated at your facility.

Be aware that Safety Data Sheets probably won't provide all the information that you need to make a hazardous waste determination. Although chemicals that pose an extreme health or physical hazard must be listed on the SDS in concentrations less than 1%, most chemicals are not listed until the chemical comprises 1% or greater of the total composition of the product. 1% = 10,000 parts per million, but many hazardous waste constituents are regulated at any concentration or at concentrations in the parts per billion range. Thus, ingredients in a product that have the potential to generate a hazardous waste may not be listed on the SDS. SDSs are useful in determining physical characteristics like flashpoint or pH and if a solvent is listed based on its before-use concentration.

2. Send a representative sample of the waste to a lab that is familiar with the analytical test methods for hazardous waste.
3. Talk to your trade organization. They should be familiar with the types of waste you are likely to generate.
4. Contact the product manufacturer for a list of active ingredients.
5. Call our Customer Technical Assistance Line at (303) 692-3320. We can provide guidance to assist you in making this determination.

Your business is likely to produce hazardous waste if you:

- Use petroleum products.
- Use dyes, paints, printing inks, lacquer thinners, solvents or cleaning fluids.
- Use pesticides or other related chemicals.
- Use materials that dissolve metals, paint, wood, paper or clothing.
- Use flammable materials.
- Use materials that burn or itch upon contact with skin.
- Use materials that bubble or fume upon contact with water.
- Receive products accompanied by a shipping paper indicating the product is hazardous.

What are the Land Disposal Restrictions?

Hazardous wastes require treatment prior to being land disposed to protect human health and the environment. The Land Disposal Restrictions (LDR) require fundamental chemical changes to the waste to diminish the toxicity and mobility of the waste, rather than just a barrier between the waste and groundwater. The LDR treatment standards apply to all characteristic and listed hazardous waste. Waste that meets the LDR treatment standards may be disposed of in a permitted hazardous waste landfill without additional treatment. Wastes that do not meet the standards must be treated until all applicable treatment standards have been met.

The hazardous waste generator is responsible for determining if their waste has to be treated before it can be land disposed. You can make the LDR determination using your knowledge of the waste, analytical testing of the waste, or both. You may rely on your hazardous waste transporter or designated disposal facility to make the LDR determination and to complete the LDR form for you. However, it remains **your responsibility** to ensure that a correct LDR determination is made and that the LDR form is properly completed.

Depending on the outcome of the determination, either a certification or a notification of this determination must be included with each initial shipment of waste to each designated facility. A designated facility is the facility you identify on your hazardous waste manifest that is permitted by EPA or an authorized state to accept hazardous waste. A copy of the completed LDR form, and all records and analytical data used to make the LDR determination, must be kept in your files for at least three years. If you perform onsite treatment of your waste or operate a wastewater treatment unit, you must maintain a one-time LDR notification in your files for at least three years from the date the waste was last treated.

6 CCR 1007-3, Part 268

The guidance document “Land Disposal Restrictions,” available on our website (see page *iii* of this guidance), provides more detailed information on the land disposal.

Can generators treat their hazardous wastes?

Treatment means any method, technique or process that changes the physical, chemical or biological character or composition of hazardous waste so as to neutralize the waste or to render the waste less hazardous, safer for transport, more amenable for recovery, reuse or storage, or reduced in volume. *6 CCR 1007-3, section 260.10*

Treatment is primarily to make management of the waste safer and/or less expensive, not to remove the waste from hazardous waste regulation. Even after treatment, most hazardous wastes must still be disposed of at a permitted hazardous waste facility.

Treatment usually requires a permit, though there are several exceptions for generators of hazardous waste if certain conditions are met. In most cases, these conditions include developing and maintaining an onsite waste analysis plan and complying with requirements applicable to accumulation tanks and containers. Common options for generators include:

A conditionally exempt small quantity generator may:

- Treat their hazardous waste onsite without a permit and without notifying us.
 - Although not required, you should follow sound practices and have a thorough understanding of the chemical and physical reactions that may occur during treatment. We also strongly encourage you to provide appropriate training to those that will be conducting treatment activities.
 - Your facility must be maintained and operated to minimize the possibility of a fire, explosion or any unplanned release.
 - Once treated, the waste must be transported to a disposal facility or legitimate recycling facility that is permitted to take it. You can't dispose of the waste onsite without a permit.

6 CCR 1007-3, section 100.10(a)(3) and 261.5

Any generator may conduct the following without a treatment permit:

- Add absorbent material to an accumulation container.
 - The waste must be managed in containers that are in good condition.
 - The waste must be compatible with the absorbent.
 - You must comply with the accumulation container requirements.

6 CCR 1007-3, section 100.10(a)(9)

- Conduct elementary neutralization of wastes that are hazardous only because they are corrosive.
 - The waste must not exhibit any other characteristic (i.e., toxicity).
 - Treatment must occur in a tank, tank system, container or transport vessel.
 - The land disposal restrictions require treatment of the underlying hazardous constituents to meet the universal treatment standards.
 - A one-time land disposal restriction (LDR) notification and certification must be submitted to us with a copy kept in your onsite files for at least three years.

6 CCR 1007-3, section 100.10(a)(6)

- Treat waste to meet land disposal restriction (LDR) treatment standards.
 - The waste must be treated to meet at least one LDR treatment standard.
 - Treatment must occur in a tank, container or containment building.
 - You must comply with the accumulation tank/container requirements.
 - You must modify your waste analysis plan, contingency plan, emergency procedures and training plan to reflect changes in processes required for treatment.
 - A one-time LDR notification must be kept in your onsite files for at least three years.

6 CCR 1007-3, section 268.7(a)(5)

- Treat waste under the permit-by-rule provisions.
 - Treatment must occur in an accumulation tank or container.
 - You must comply with the accumulation tank/container requirements.
 - You must modify your waste analysis plan, contingency plan, emergency procedures and training plan to reflect changes in processes required for treatment.
 - Thermal treatment and treatment of reactive wastes are not allowed.

6 CCR 1007-3, section 100.21(d)

- Treat hazardous wastewater in a wastewater treatment unit.
 - The wastewater must be regulated as hazardous waste.
 - Treatment must occur in a tank or tank system that is a dedicated part of the wastewater treatment unit.
 - Discharge from the unit must be regulated by our Water Quality Control Division and/or your local wastewater treatment authority.
 - A one-time LDR notification must be kept in your onsite files for at least three years.

6 CCR 1007-3, sections 100.10(a)(6) and 260.10

- Universal waste treatment including discharging batteries, puncturing aerosol cans, draining mercury and removing mercury ampules from mercury-containing devices, crushing mercury-containing lamps and disassembling or size-reducing electronic devices and components.
 - Treatment must be done in a manner to prevent releases of hazardous constituents to the environment.
 - You must have written procedures for conducting treatment activity.
 - Your employees must be thoroughly familiar with, and follow, the written procedures and waste handling techniques specific to their job duties.

6 CCR 1007-3, Part 273

It is important that you check the regulations very carefully before performing treatment of your hazardous waste, especially if you will do so without a permit from us. During the permitting process, we conduct an extensive review of your waste analysis plan, proposed treatment methods, etc. Without this oversight, you must conduct an honest evaluation of your understanding of the characteristics of your waste, potential chemical reactions and required treatment standards. You must also be aware of other regulations that apply to these activities, such as wastewater discharge, air emissions permits, OSHA health and safety, etc.

The guidance document “Treatment of Hazardous Waste by Generators,” available on our website (see page *iii* of this guidance), provides more detailed information on allowed waste treatment activities.

Can a hazardous waste be recycled?

A material is recycled if it is used, reused or reclaimed. These three terms have specific regulatory definitions. A material is used or reused if it is either employed as an ingredient in an industrial process to make a product or if it is employed as an effective substitute for a commercial product without being reclaimed first. A material is reclaimed if it is processed to recover a usable product or if it is regenerated. Wastes are regenerated when they are processed to remove contaminants in a way that restores them to their usable condition.

To encourage legitimate recycling, the Colorado hazardous waste regulations provide reduced requirements for certain activities. When a material is recycled, its regulatory classification depends on two factors: what type of material is being recycled and what type of recycling is occurring. Some wastes that are recycled fall out of regulation as hazardous waste completely and some have only reduced requirements, but most just fall out of the requirement to obtain a treatment permit. For example, if you manage materials from which precious metals will be recovered, you are subject to the notification and manifesting requirements, but you aren’t required to count these wastes toward your generator category or get a treatment permit.

Generators of most recyclable materials are subject to the same regulations as other generators of hazardous waste and must follow all of the applicable requirements of Part 262 of the regulations. While generation and storage of a recyclable hazardous waste is regulated, the recycling unit itself is generally exempt from hazardous waste regulation. If the waste is immediately put into the recycling unit, it is not necessary to manage the recycling unit under the generator requirements. We interpret “immediately” in this case to mean within 24 hours of generation. On the other hand, recyclable hazardous wastes that are accumulated in tanks or containers prior to being placed in the recycling unit must be managed as any other hazardous waste, including container or tank labeling and accumulation limits.

Because there are significant economic incentives to manage hazardous materials outside of the hazardous waste regulatory system, there is a potential for some handlers to claim that they are recycling, when in fact, they are conducting waste treatment, storage or disposal in the guise of recycling. The Solid and Hazardous Waste Commission has adopted regulations that formalize the criteria used to determine if legitimate recycling is occurring. The four general criteria are:

- The material provides a useful contribution to the recycling process or to a product or intermediate of the recycling process, and the recycling process produces a valuable product or intermediate;
- The recycling process yields a valuable product or intermediate that is sold to a third party or is used by the recycler or the generator as an effective substitute for a commercial product or as a useful ingredient or intermediate that is fed directly into a manufacturing process;

- The material to be recycled is managed as a valuable commodity; and
- The product of the recycling process does not contain significant concentrations of any hazardous constituents that are not found in analogous products, does not contain significantly elevated levels of any hazardous constituents that are found in analogous products and does not exhibit a hazardous waste characteristic that analogous products do not exhibit.

To show that the material is not being accumulated speculatively, you must maintain documentation, such as a contract, demonstrating that there is a known market for the material and that the material is being used. If you are the one doing the recycling, you must document that you have the necessary equipment to do so. Your records must show that 75 percent or more of the material (by weight or volume) is recycled or sent offsite for recycling each calendar year. You must also maintain documentation that you are managing the material as a valuable commodity and that the recycling of your hazardous waste is legitimate.

6 CCR 1007-3 section 261.2(f)

We may require you to meet additional portions of the generator, transporter, storage, financial assurance, land disposal, notification and permitting regulations if we determine that you are not legitimately recycling the material and/or managing the material in a manner that is protective of human health and the environment. *6 CCR 1007-3 section 260.40*

The guidance document “Hazardous Waste Recycling,” available on our website (see page *iii* of this guidance), provides more detailed information on recycling and reclamation requirements.

Generator Categories

There are three hazardous waste generator categories. These categories are based on the cumulative amount of hazardous waste generated per calendar month, measured in kilograms.

6 CCR 1007-3 sections 261.5(a) and 262.34

In order to measure your hazardous waste, you may need to convert from gallons or pounds to kilograms. For solids, 2.2 pounds is equivalent to 1 kilogram. In order to measure your liquid wastes, which are commonly measured in gallons, you will need to convert from gallons to kilograms. To do this, you must know the density or specific gravity of the liquid. Then multiply the density/specific gravity by 3.79 to calculate kilograms per gallon. The Safety Data Sheet (SDS) should list the before-use density and/or specific gravity of the liquid. For most wastes, this is an adequate approximation of the after-use density of the liquid for this calculation.

A rough guide is that about half of a 55-gallon drum of waste with a density similar to water (density = 1.0) weighs about 100 kilograms (220 pounds); about five 55-gallon drums of a waste with a density similar to water weighs about 1,000 kilograms (2,200 pounds). It is important to calculate the weight of your particular wastes because there can be large differences in quantity based on the density of the waste. For example, tetrachloroethylene (density = 1.62) weighs 6.15 kilograms per gallon or about 338 kilograms (743 pounds) per drum, while toluene (density = 0.86) only weighs 3.27 kilograms per gallon or about 180 kilograms (396 pounds) per drum.

What wastes don't count towards your generator category?

1. Wastes that are specifically exempted from counting. Examples include lead-acid batteries that will be reclaimed, scrap metal that will be recycled, used oil managed under the used oil provisions of 6 CCR 1007-3, Part 279 and universal wastes managed under the universal waste provisions of 6 CCR 1007-3, Part 273.
2. Wastes that remain in an empty container that has been thoroughly emptied through conventional means such as pouring or pumping.
3. Wastes that are reclaimed continuously onsite without storing prior to reclamation, such as dry cleaning solvents.
4. Wastes that are left as residue in the bottom of tanks storing products if the tank continues to store these products and if the residue is not removed from the product tank.
5. Wastes that are managed in an elementary neutralization unit, a totally enclosed treatment facility or a wastewater treatment unit without being stored in containers first. (See 6 CCR 1007-3, section 260.10 for the definitions of these units.)
6. Wastes that are discharged directly to Publicly Owned Treatment Works (POTWs) without being stored or accumulated first. Discharges to a POTW must comply with the Clean Water Act. POTWs are public utilities, usually owned by the city, special districts or the county, that treat industrial and domestic sewage for disposal (i.e., wastewater treatment plant, sewage treatment plant).

7. Wastes that have already been counted once during the calendar month that are treated onsite or reclaimed in some manner, and used again. For example, solvent that is re-distilled onsite.

What are the three generator categories?

Conditionally Exempt Small Quantity Generators (CESQG)

If you generate no more than 100 kilograms (about 220 pounds or 27 gallons) of hazardous waste and no more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste in any calendar month, you are a conditionally exempt small quantity generator of hazardous waste. See page 18 in this guidance for the Colorado hazardous waste requirements for conditionally exempt small quantity generators.

Small Quantity Generators (SQG)

If you generate more than 100 but less than 1,000 kilograms (between 220 and 2,200 pounds, or about 27 to 270 gallons) of hazardous waste and no more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste in any month, you are a small quantity generator of hazardous waste. See page 21 in this guidance for the Colorado hazardous waste requirements for small quantity generators.

Large Quantity Generators (LQG)

If you generate 1,000 kilograms (about 2,200 pounds, or 270 gallons) or more of hazardous waste or more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste in any month, you are a large quantity generator of hazardous waste. See page 32 in this guidance for the Colorado hazardous waste requirements for large quantity generators.

Is it possible for a generator to change categories?

Yes, because your generator category is related to the cumulative amount of hazardous waste you produce on a monthly basis and this amount may vary from month to month.

Small and large quantity generators, and conditionally exempt small quantity generators that generate three or more gallons per calendar year of hazardous waste codes F001, F002, F004 and/or F005, must notify us of their hazardous waste activities and obtain an EPA identification number.

Part 99(e) of the Colorado hazardous waste regulations was modified to clarify that generators who have previously filed a notification of hazardous waste activity are required to file an updated notification whenever their generator status, location, facility ownership, facility contact and/or general description of activities change. Updated notifications are not required solely for changes in the types of the hazardous waste generated. An updated notification should be submitted to us as soon as possible. The option to delay notification until the annual commission fee is due was eliminated.

6 CCR 1007-3, sections 99(e), 261.5 and 262.12

Conditionally Exempt Small Quantity Generators

What is a conditionally exempt small quantity generator of hazardous waste?

A conditionally exempt small quantity generator (CESQG) of hazardous waste is one that generates no more than 100 kilograms (about 220 pounds or 27 gallons) of hazardous waste and no more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste in any calendar month. You may accumulate up to 1,000 kilograms of non-acutely hazardous waste onsite at any one time. If you exceed the generation limit for non-acutely hazardous waste, you become subject to the small quantity generator requirements. If you exceed the accumulation quantity limit, you are a non-permitted storage facility and are subject to enforcement. If you exceed the generation or accumulation limits for acutely hazardous waste, you become subject to the requirements applicable to large quantity generators.

6 CCR 1007-3, section 261.5

What are the requirements for a conditionally exempt small quantity generator of hazardous waste?

Notification

1. If you generate three (3) gallons or more in a calendar year of used solvents associated with hazardous waste codes F001, F002, F004, and/or F005, you must file for and receive an EPA identification number (EPA I.D. number). You obtain an EPA I.D. number by completing the Colorado Hazardous Waste Notification form and submitting it to us at the address on the form. If the form is complete, we will issue a unique EPA I.D. number to your facility. You are not required to pay the notification fee with a new notification. The notification form is available on our website or by contacting our notification coordinator (see page *iii* of this guidance). *6 CCR 1007-3, sections 261.5(b)(2), 261.31 and 262.1*
2. The EPA I.D. number is assigned to the facility and stays with the site (i.e., the EPA I.D. number is address-specific). If your facility changes ownership, a revised notification form must be submitted to notify us of the change in ownership. The facility's EPA I.D. number will not change. If you move your facility to a new location, you must notify us of the new address and submit a new notification form. That facility will receive a new EPA I.D. number that is unique to the new location.
3. Part 99(e) of the Colorado hazardous waste regulations was modified to clarify that generators who have previously filed a notification of hazardous waste activity are required to file an updated notification whenever their generator status and/or general description of activities change. An updated notification should be submitted to us as soon as possible. The option to delay notification until the annual commission fee is due was eliminated. Updated notifications are not required solely for changes in the types of hazardous waste generated.
4. If you generate hazardous waste episodically at the level of a small or large quantity generator, you must be in compliance with the appropriate generator requirements for any month during which you operate at that level. You are considered to be a small or large

quantity generator until all waste generated during any month you met or exceeded the limits of that generator category is transported off site to a designated facility.

6 CCR 1007-3, Part 99

An EPA I.D. number is NOT a hazardous waste permit. This number just identifies your hazardous waste activities for us.

Note: Conditionally exempt small quantity generators that do not generate hazardous waste codes F001, F002, F004 and/or F005 are not required to file for or receive an EPA I.D. number, though they may choose to do so for other business reasons. *6 CCR 1007-3, section 261.5(b)(1)*

One-Time Generator

If you conduct a one-time cleanout of old chemicals, have a spill or have an unusual amount of waste generated due to a change in your process, you can obtain a “one-time” EPA I.D. number by submitting a completed Colorado notification form with the appropriate box checked in section 10.A.2. The notification fee must accompany the completed form if you are notifying as a small or large quantity generator. The EPA I.D. number is recorded in the notification database, but is not kept active for more than one month. If you need to keep this EPA I.D. number active for a longer period of time, you should follow the regular notification procedures and then notify us when the number is no longer needed.

Making a Hazardous Waste Determination

1. You must make a hazardous waste determination for all wastes generated. You may make this determination on the basis of your knowledge of the waste, laboratory testing of the waste, or both. *6 CCR 1007-3, sections 261.5(g)(1) and 262.11*
2. Although you are not required to keep records of test results, waste analyses or other determinations, we recommend as a best management practice that you keep these records onsite for at least three years.

The guidance documents “Hazardous Waste Identification” and “Hazardous Waste Exclusions,” available on our website (see page *iii* of this guidance), provide more detailed information on making the hazardous waste determination.

Accumulation of Hazardous Waste

1. You must never accumulate 1,000 kilograms (about 2,200 pounds) or more of hazardous waste at any one time (less than five 55-gallon drums at approximately 200 kilograms per drum). *6 CCR 1007-3, section 261.5(g)*
2. You must never accumulate more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste onsite at any one time. *6 CCR 1007-3, section 261.5(e)*

Shipping Hazardous Waste Off Site

1. You may either treat your hazardous waste onsite or must ensure delivery of your waste to a facility that is authorized by EPA or an authorized state to accept hazardous waste. *6 CCR 1007-3, sections 261.5(f) and (g)*
 - a. You are not allowed to dispose of your hazardous wastes on the ground, to the sanitary sewer, to a storm drain or other body of water or into the trash. Solid waste landfills in Colorado are not allowed to accept any hazardous waste for disposal from conditionally exempt small quantity generators.
 - b. Although not required, we recommend that you use a hazardous waste manifest as a best management practice when shipping your hazardous waste offsite. The hazardous waste manifest is a multi-copy document designed so that the shipping of hazardous waste can be tracked from the point of generation to the final destination. If used, you will receive a final copy of the manifest that has the signature of each transporter and the owner or operator of the selected treatment, storage or disposal facility, verifying delivery of the hazardous waste to the designated facility. This final copy is usually sent to you within one to two months of the waste being accepted by the first transporter. We suggest you attach the final copy of the manifest to the original manifest copy and keep your hazardous waste manifests or other shipping records on file for review.

Employee Training

Although not required, we recommend as a best management practice that you provide hazardous waste and emergency response training to employees that handle hazardous waste. Employees should be familiar with proper waste handling procedures relevant to their job duties.

Preparedness

1. You must maintain and operate your facility to minimize the possibility of fire, explosion, or any unplanned release of hazardous waste. *6 CCR 1007-3, section 261.5(b)(5)*
 - a. Although not required, we recommend as a best management practice that you store your waste in containers that are in good condition (not rusted, dented, bulging or leaking), kept closed except when waste is being added or removed, labeled with the words "Hazardous Waste" and inspected weekly to make sure they are not leaking. The containers should not be stored in a manner that could cause a rupture or a leak.
 - b. Although not required, we recommend as a best management practice that you post emergency response information by the telephone, including phone numbers for the fire department and the location of emergency equipment such as fire extinguishers, spill cleanup materials and emergency alarms.

Self-Certification

You must complete and submit a self-certification checklist if notified by us to do so. Failure to complete and submit the checklist in a timely manner will subject you to a formal enforcement action and an administrative penalty.

6 CCR 1007-3, sections 261.5(b)(4), 262.43(b) and 262.44

Small Quantity Generators

What is a small quantity generator of hazardous waste?

A small quantity generator (SQG) is one that generates more than 100 kilograms but less than 1,000 kilograms (between about 220 and 2,200 pounds or about 27 to 270 gallons) of hazardous waste and no more than 1 kilogram (about 2.2 pounds) of acutely hazardous waste in any calendar month. You may accumulate up to 6,000 kilograms of non-acutely hazardous waste onsite at any one time and may accumulate waste onsite for up to 180 days (270 days if the waste must be transported a distance of 200 miles or more). If you exceed these generation limits, you become subject to the large quantity generator requirements. If you exceed the accumulation quantity or time limits, you are a non-permitted storage facility and are subject to enforcement.

6 CCR 1007-3, section 262.34(d)

What are the requirements for a small quantity generator of hazardous waste?

Notification

1. You must file for and receive an EPA identification number (EPA I.D. number). You obtain an EPA I.D. number by completing the Colorado Hazardous Waste Notification form and submitting it to us at the address on the form. If the form is complete and is accompanied by the notification fee (if applicable), we will issue a unique EPA I.D. number to your facility. The form is available on our website or by contacting our notification coordinator (see page *iii* of this guidance). *6 CCR 1007-3, section 262.12*
2. The EPA I.D. number is assigned to the facility and stays with the site (i.e., the EPA I.D. number is address-specific). If your facility changes ownership, a revised notification form must be submitted to notify us of the change in ownership. The facility's EPA I.D. number will not change. If you move your facility to a new location, you must notify us of the new address and submit a new notification form. That facility will receive a new EPA I.D. number that is unique to the new location.
3. Part 99(e) of the Colorado hazardous waste regulations was modified to clarify that generators who have previously filed a notification of hazardous waste activity are required to file an updated notification whenever their generator status and/or general description of activities change. An updated notification should be submitted to us as soon as possible. The option to delay notification until the annual commission fee is due was eliminated. Updated notifications are not required solely for changes in the types of hazardous waste generated.
4. If you episodically generate hazardous waste at the level of a large quantity generator, you must be in compliance with the large quantity generator requirements for any month during which you operate at that level. You are considered to be a large quantity generator until all waste generated during any month you met or exceeded the limits of a large quantity generator is transported off site to a designated facility.

6 CCR 1007-3, Part 99

An EPA I.D. number is NOT a hazardous waste permit. This number just identifies your hazardous waste activities for us.

One-Time Generator

If you conduct a one-time cleanout of old chemicals, have a spill or have an unusual amount of waste generated due to a change in your process, you can obtain a “one-time” EPA I.D. number by submitting a completed Colorado notification form with the appropriate box checked in section 10.A.2. The notification fee must accompany the completed form. The EPA I.D. number is recorded in the notification database, but is not kept active for more than one month. If you need to keep this EPA I.D. number active for a longer period of time, you should follow the regular notification procedures and then notify us when the number is no longer needed.

Making a Hazardous Waste Determination

1. You must make a hazardous waste determination for all wastes generated. You may make this determination on the basis of your knowledge of the waste, laboratory testing of the waste, or both. *6 CCR 1007-3, section 262.11*
2. You must keep records of all test results, waste analyses or other determinations for at least three years. *6 CCR 1007-3, section 262.40(c)*

The guidance documents “Hazardous Waste Identification” and “Hazardous Waste Exclusions,” available on our website (see page *iii* of this guidance), provide more detailed information on making the hazardous waste determination.

Accumulation of Hazardous Waste

Waste Accumulation Limits

1. You must have no more than 6000 kilograms (about thirty 55-gallon drums) onsite at any one time. *6 CCR 1007-3, section 262.34(d)(1)*
2. You must not accumulate waste onsite for more than 180 days. If you must ship waste farther than 200 miles from your facility, accumulation may be for no longer than 270 days. A one-time 30-day extension to the 180/270-day accumulation time limit may be granted at our discretion on a case-by-case basis. *6 CCR 1007-3, section 262.34(f)*
3. Accumulation in excess of these time or quantity limits requires a permit. *6 CCR 1007-3, section 100.10*

Accumulation of Waste in Containers

1. If you accumulate hazardous waste in containers, you must comply with the following requirements:
 - a. Hazardous waste accumulation containers must be marked or labeled with the words "Hazardous Waste." *6 CCR 1007-3, sections 262.34(d)(4) and 262.34(a)(3)*
 - b. The accumulation start date (the date when waste was first placed into the container) must be clearly marked on the container. *6 CCR 1007-3, sections 262.34(d)(4) and 262.34(a)(2)*

- c. The containers used for the accumulation of hazardous waste must be in good condition and not leaking. A container that is bulging, severely dented, rusted or cracked would not be considered a container in good condition. If a container holding hazardous waste is not in good condition or is leaking, you must transfer the waste to a container that is in good condition. *6 CCR 1007-3, sections 262.34(d)(2) and 265.171*
- d. The containers must be made of, or lined with, materials which will not react with, and that will be compatible with, the hazardous waste. For example, highly corrosive nitric acid is not compatible with a steel drum because the acid reacts with the steel. *6 CCR 1007-3, sections 262.34(d)(2) and 265.172*
- e. The containers must be kept closed except when waste is being added or removed. A container is generally considered to be open when the contents of the container would spill out if the container is tipped over. Examples of when a container is considered closed include:
- The waste is a solid and there is a lid on the container.
 - The waste is a liquid that is stored in a container with a closed screw top lid.
 - The waste is a liquid that is stored in a closed head drum with closed bung hole openings.
 - The waste is a liquid that is stored in a closed head drum with closed bung hole openings except there is a funnel with a lid that is securely fastened into one of the bung hole openings. The funnel lid must be closed and secured with a latch or lock immediately after waste is added or removed. If present, other bung hole openings are closed.
 - The waste is a liquid that is stored in an open head drum with a ring and bolt securing the drum's lid to the container. If present, bung hole openings are closed.
 - The waste is a liquid that is stored in an open head drum with a ring and bolt securing the drum's lid to the container and there is a funnel with a lid that is securely fastened into a bung hole opening. The funnel lid must be closed and secured with a latch or lock immediately after waste is added or removed. If present, other bung hole openings are closed.
- 6 CCR 1007-3, sections 262.34(d)(2) and 265.173*
- f. The container cannot be stored in a manner to cause a rupture or leak. Ways to avoid ruptures or leaks may include such things as locating hazardous waste containers indoors away from high-traffic areas and maintenance of adequate aisle space. *6 CCR 1007-3, sections 262.34(d)(2), 265.171 and 265.173*
- g. The container must be inspected weekly for leaks, deterioration, compatibility with the hazardous waste accumulated inside the container, and whether it is closed. Problems identified during the weekly inspection must be corrected on a schedule that ensures that the problem does not lead to an environmental or human health hazard. If there is an imminent hazard or a hazard has already occurred, action must be taken immediately to correct the problem. We recommend you keep a log of the weekly container inspections for documentation purposes. *6 CCR 1007-3, sections 262.34(d)(2), and 265.174*
- h. Wastes that could react together (for example could cause a fire, explosion, toxic gases or are otherwise incompatible) must not be placed in the same container or in an

unwashed container that previously held an incompatible material. An accumulation container holding hazardous waste that is incompatible with wastes or materials in containers nearby must be separated from the other materials by a dike, berm, wall, etc. *6 CCR 1007-3, sections 262.34(d)(2) and 265.177*

2. A container is considered empty if:
 - a. All material has been removed from the container that can be removed using the practices that are commonly used for that container, and
 - There is no more than one inch of residue on the bottom of the container or inner liner, or
 - For a container of 119 gallons or less, the remaining residue can be no more than 3% by weight of the total capacity of the container, or
 - For a container of more than 119 gallons, the remaining residue can be no more than 0.3% by weight of the total capacity of the container.
 - b. If the container held an acutely hazardous waste, the liner must be removed or the container must be triple rinsed with a suitable solvent.
 - c. The residue in an empty container is not regulated as a hazardous waste.

6 CCR 1007-3, section 261.7

Accumulation of Waste in Tanks

1. You must label hazardous waste accumulation tanks with the words "Hazardous Waste." *6 CCR 1007-3, section 262.34(a)(3)*
2. You must ensure that waste has not been accumulated in the tank for more than 180/270 days. *6 CCR 1007-3, section 265.201(a)*
3. The accumulation start date (the date when waste was first placed into the tank) must be clearly marked on or attached to each tank, or on a tank log sheet that is maintained at your facility. *6 CCR 1007-3, section 262.34(a)(2)*
4. You must comply with the following requirements:
 - a. Treatment or storage of hazardous waste must comply with the requirements for ignitable, reactive or incompatible wastes. *6 CCR 1007-3, section 265.17*
 - b. Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode or fail before the end of its intended life.
 - c. Uncovered tanks must have two feet of freeboard (empty space at the top of the tank) or a containment structure that equals or exceeds the volume of the top two feet of the tank.
 - d. Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow.

- e. Where present, discharge control equipment, data gathered from monitoring equipment and the level of waste in the tank must be inspected each operating day.

An operating day is defined as every day that the tank contains hazardous waste.

- f. The construction materials of the tanks as well as the materials surrounding the structure should be inspected weekly to detect corrosion or leaking. We suggest you keep a log of all inspections for documentation purposes.
- g. Incompatible wastes must not be placed in the same tank as, or in an unwashed tank that previously held, an incompatible waste.
- h. Upon closure of the facility, all hazardous waste must be removed from the tanks as well as discharge control equipment and discharge confinement structures.
- i. Ignitable or reactive waste:
 - Must not be placed in tank systems unless the waste is rendered non-ignitable or non-reactive, or
 - The waste is protected from materials or conditions which might cause it to ignite or react, or
 - The tank is used solely for emergencies.
- j. Accumulation of ignitable or reactive wastes in tanks must comply with the buffer zone requirements for tanks of the National Fire Protection Association (NFPA). We recommend you also check with your local fire department for its requirements.
- k. If you accumulate hazardous waste in tanks or tank systems that have full secondary containment and that use leak detection equipment or workplace practices to detect leaks, you must inspect discharge control equipment, data gathered from monitoring equipment, levels of waste in the tank, and construction materials of the tank and confinement structures at least weekly.

6 CCR 1007-3, sections 262.34(d)(3) and 265.201

Limits on Accumulation near the Site of Generation (Satellite Accumulation Areas)

1. You may accumulate as much as 55 gallons of a hazardous waste or one quart of an acutely hazardous waste in containers at or near any point of generation where wastes initially accumulate. The 55 gallon/one quart limit applies to the total amount of waste in a satellite accumulation area, not per waste stream or waste type.

"At or near" is interpreted to mean that the satellite accumulation area is near enough to the location where the waste is generated so that there are no other areas, process equipment, etc., which might interfere with the transportation of the waste to the satellite area. Some examples of items that might interfere with transportation of the waste might be: flights of stairs, parking lots, frequent foot traffic, elevators, other hazardous waste or chemical storage areas or physical distance.

2. The satellite accumulation area must meet the following requirements:

- a. The area must be under the control of the operator of the process generating the waste. Control may include visual observation by the operator or a locking device.
- b. Containers must be marked with the words "Hazardous Waste" or with other words that identify the contents of the containers. We recommend including the word "Waste" in all cases to differentiate a hazardous waste container from a product container (e.g., "Waste Solvent" as opposed to "Solvent").
- c. You must comply with all the regulations applicable to containers (6 CCR 1007-3, Part 265, Subpart I) in the satellite accumulation area, with the exception that the accumulation start date on the container begins on the date on which the 55-gallon or one-quart limit is exceeded, or when the container is removed from the satellite accumulation area if removed prior to reaching the limit. The container must be dated immediately (within a few minutes) of becoming full.
- d. You must comply with the requirements for preparedness and prevention in the satellite accumulation area.
- e. You must move a container from the satellite accumulation area to a 180 day or permitted area immediately when it becomes full. In this case, we interpret "immediately" to mean within 24 hours.

6 CCR 1007-3, section 262.34(g)

3. You may have more than one satellite accumulation area at your facility if different processes are involved. However, you must manage each one independently and follow all satellite accumulation area requirements for each.

We interpret "process" to mean a unique, distinguishable activity generating separate waste.

4. Wastes that are still "in process" do not need to be managed according to the requirements for satellite accumulation areas until they leave the process that generated them. In-process waste refers to waste that is continuously generated and is an integral part of the system generating the waste. "Integral to the process" is the primary condition for in-process waste, and may include a hard-piped container or other physical connection. However, physical connection is not a required condition. In-process waste also refers to waste that is accumulated during a process and is moved to a satellite accumulation or 180/270-day accumulation area at the end of the work shift. For example, a group of employees are working at the same bench cleaning equipment with listed solvents on a cotton swab. Each employee uses about 100 swabs over the course of an hour. Each employee has a one-gallon container for the used swabs at their work site. A 55-gallon container is located at the end of the bench, where the employees consolidate the used swabs at the end of the shift. In this example, as long as the waste is moved to the 55-gallon container (the satellite accumulation area) by the end of the shift, the waste is considered "in process." If the waste is not moved to the satellite accumulation area by the end of the shift, the initial one-gallon container becomes subject to satellite accumulation area requirements.

The guidance document "Satellite Accumulation Areas – Small Quantity Generators," available on our website (see page *iii* of this guidance), provides more detailed information on satellite accumulation area requirements.

Shipping Hazardous Waste Off Site

1. You must use a properly completed hazardous waste manifest when shipping your hazardous waste off site. *6 CCR 1007-3, section 262.20*
 - a. The manifest is a multi-copy shipping document designed so that shipments of hazardous wastes can be tracked from their point of generation to their final destination - "cradle to grave." The manifest must be completed in accordance with the appendix to 6 CCR 1007-3, Part 262. You, the transporter(s) and the designated facility must each sign this document and keep a copy. The manifest must include your EPA I.D. number and the EPA I.D. numbers of all transporters and the designated treatment, storage and disposal (TSD) facility. *6 CCR 1007-3, section 262.23*

The designated facility or the transporter usually supplies its customers with blank manifest forms, or you may obtain the manifest form from any source that has registered with EPA to print and distribute the form. *6 CCR 1007-3, section 262.21*

- b. You must receive a copy of the manifest with the signature of the owner or operator of the designated facility within 60 days of the waste being accepted by the initial transporter.

We recommend you contact the designated facility after about 45 days to request a copy of your final signed manifest if you haven't received one yet. If you don't receive a copy of the final signed manifest within 60 days of the date the waste was accepted, you need to submit a legible copy of the manifest to us with an indication that you have not received confirmation of delivery. *6 CCR 1007-3, section 262.42(c)*

- c. Properly signed manifests must be kept in your records for at least three years. *6 CCR 1007-3, sections 262.40 and 262.44(a)*
2. All hazardous wastes must be shipped to the facility designated on the manifest that is permitted to handle the waste. *6 CCR 1007-3, section 262.20(b)*
3. All hazardous waste must be packaged in accordance with the U.S. Department of Transportation (DOT) regulations per 49 CFR, Parts 173, 178 and 179. *6 CCR 1007-3, section 262.30 through 262.33.*
4. If you have a contract with a company to reclaim your hazardous waste or a "Reclamation Agreement," the manifesting requirements of 6 CCR 1007-3 described above do not apply if:
 - a. The waste is reclaimed under the contractual agreement.
 - b. The type of waste and frequency of shipments are specified in the agreement.
 - c. The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to you is owned and operated by the reclaimer of the waste.
 - d. You maintain a copy of the reclamation agreement in your records for a period of at least three years after termination or expiration of the agreement.

6 CCR 1007-3, section 262.20(e)

Land Disposal Restriction Determination

1. You must determine if your waste is restricted from land disposal. You can make the land disposal restriction (LDR) determination on the basis of your knowledge of the waste, laboratory testing of the waste, or both. Making an accurate hazardous waste determination provides most of the information needed for the land disposal restriction determination.
2. You are required to complete one LDR notification form per waste stream per treatment facility. A new LDR form is required whenever the waste changes or if you change the facility that will be receiving the waste. There is no specific form to use as long as all of the required information is provided. Treatment, storage and disposal (TSD) facilities often have their own forms available, and many generators rely on their transporter or their TSD to make the LDR determination and to complete the LDR form for them. However, it is your responsibility for making sure that a correct LDR determination is made and that the LDR form is properly completed.
 - a. If the waste does not meet the LDR treatment standards, the notification form must include the manifest number of the first shipment and a description of the waste as initially generated, including all significant waste codes, constituents of concern, treatability group(s), treatment subcategory(s), and underlying hazardous constituents, if applicable.
 - b. If the waste meets the LDR treatment standards at the original point of generation, you must submit an LDR notification form as described above, and include the specific certification statement as provided in section 268.7(a)(3)(i) of the regulations.
3. You must maintain a copy of all waste analysis information and documentation used to make the land disposal restriction determination, copies of final signed manifests and copies of LDR notifications/certifications onsite in your records for at least three years. We recommend that copies of the LDR forms be attached to the appropriate hazardous waste manifests being retained onsite.

6 CCR 1007-3, section 268.7

Employee Training

1. You must ensure that all employees involved in the management of hazardous waste and the documentation of hazardous waste activities have training relevant to their job duties during normal facility operations and during emergencies. Training requirements are performance based. Therefore, employees must not only receive training, they must put their training into practice to ensure compliance with applicable hazardous waste regulations.

Employees must receive training specific to hazardous waste management such as how to make a hazardous waste determination, container requirements, accumulation limits, recordkeeping, etc. While necessary and useful, U.S. Department of Transportation and Occupational Health and Safety Administration (OSHA) training like Hazwoper (29 CFR 1910.120) or HazCom (29 CFR 1910.1200) are not sufficient to meet the hazardous waste training requirements.

2. You must retain documentation onsite that training has been provided for all current employees. We recommend that a written training plan and a roster of employees' names,

dates of training, and signatures documenting completion of training be kept in your records to document compliance with the training requirements.

3. Hazardous waste training is only required to be a one-time activity for each employee. However, our inspectors evaluate training based on performance observed at your facility. If an inspector observes multiple violations, it is an indication of a lack of staff training. Therefore, we strongly recommend annual refresher training to ensure that all employees are aware of their responsibilities as they relate to management of hazardous waste and emergency response.

6 CCR 1007-3, section 262.34(d)(5)(iii)

The guidance document “Hazardous Waste Training – Small Quantity Generators,” available on our website (see page *iii* of this guidance), provides more detailed information on training requirements.

Emergency Response/Preparedness

1. You must have one employee onsite or on call with the responsibility for coordinating emergency response measures 24 hours a day. This employee is the emergency coordinator. The emergency coordinator's responsibilities include the following:
 - a. In the event of a fire, call the fire department or attempt to extinguish the fire.
 - b. In the event of a spill, contain the hazardous waste to the extent possible and clean up the waste and any contaminated surfaces, materials or soils as soon as possible.
 - c. In the event of fire, explosion or any other incident which could threaten human health off site, or where a spill has reached surface water (including storm sewers), the emergency coordinator must immediately contact the National Response Center (1-800-424-8802). Other reporting requirements may also apply depending on the type, quantity and location of material spilled. The guidance document “Reporting Environmental Releases in Colorado,” available on our website (see page *iii* of this guidance), provides more detailed information on spill and incident reporting requirements.

You are not specifically required to have an alternate emergency coordinator, but we recommend as a best management practice that you have one in case the primary emergency coordinator is not available due to illness, vacation, etc.

6 CCR 1007-3, section 262.34(d)(5)(iv)

2. You must post the following information by the telephone:
 - a. Name and telephone number of the emergency response coordinator.
 - b. The telephone number of the fire department, unless the facility has a direct alarm.
 - c. Location of fire extinguishers, spill control materials and, if present, the location of the fire alarm.

You must keep this information up to date. An example emergency contact information form is included in at the back of the small quantity generator guidance document “Emergency Response/ Preparedness and Prevention,” available on our website (see page *iii* of this guidance).

6 CCR 1007-3, section 262.34(d)(5)(ii)

3. You must comply with the following requirements for preparedness and prevention:
 - a. Your facility must be maintained and operated in a manner to minimize the possibility of a fire, explosion or any release of hazardous waste or hazardous waste constituents to the air, soil or water which could threaten human health or the environment. *6 CCR 1007,3 section 265.31(a)*
 - b. If your facility is not provided with fire protection services by a fire protection district, you must operate the facility in accordance with your own plan for fire protection and prevention. The plan must be prepared by a professional engineer registered in Colorado that is knowledgeable in fire protection, and be approved by us. *6 CCR 1007-3, section 265.31(b)*
 - c. Required equipment for preparedness and prevention includes:
 - Internal communication or alarm system capable of providing emergency instructions to facility personnel.
 - A telephone, a hand-held two-way radio or other device capable of summoning emergency assistance such as the police, fire department or local emergency response teams.
 - Fire control equipment, spill control equipment and decontamination equipment appropriate for the needs of your facility.
 - Water at adequate volume and pressure to supply hydrants, fire hoses, or automatic sprinklers, or special extinguishing equipment like foam if needed.
 - d. All facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment must be tested and maintained as necessary to assure its proper operation in time of emergency. *6 CCR 1007-3, section 265.33*
 - e. Whenever hazardous waste is being handled, all personnel involved must have immediate access to an internal alarm or emergency communication device. This could include visual or voice contact with another employee. *6 CCR 1007-3, section 265.34*
 - f. Aisle space between containers and tanks must be maintained to allow unobstructed movement of emergency response personnel or equipment. The hazardous waste regulations don't specify the width of aisle space. This is a performance-based standard which is dependent on the type of containers, tanks, wastes and waste management practices at your facility. From a practical standpoint, aisle space should be wide enough for equipment used to move containers of hazardous waste in response to an emergency and for the inspection of tanks and containers. The Occupational Health and

Safety Administration (OSHA) and many fire departments require a minimum aisle space of 28 inches. *6 CCR 1007-3, section 265.35*

- g. You must attempt to make arrangements with local authorities such as police, fire, local health departments, emergency response teams and local hospitals to familiarize them with waste handling activities at your facility.

The information given to the authorities should include a layout of your facility, the properties and associated hazards of the hazardous waste handled at the facility, where personnel would be working, entrances to roads inside the facility and possible evacuation routes.

At a minimum, you should contact your local fire protection district and ensure that they are capable of providing an adequate response to an emergency at your facility. If state or local authorities decline to enter into an arrangement, you need to document this refusal in your facility operating record.

6 CCR 1007-3, section 265.37

The guidance document “Emergency Response/Preparedness and Prevention – Small Quantity Generators,” available on our website (see page *iii* of this guidance) provides more detailed information on emergency planning and preparedness.

Self-Certification

You must complete and submit a self-certification checklist if notified by us to do so. Failure to complete and submit the checklist in a timely manner will subject you to a formal enforcement action and an administrative penalty.

6 CCR 1007-3, sections 262.43(b) and 262.44

Large Quantity Generators

What is a large quantity generator of hazardous waste?

A large quantity generator (LQG) is one that generates 1,000 kilograms (about 2,200 pounds or about 270 gallons) or more of hazardous waste and/or more than one kilogram (about 2.2 pounds) of acutely hazardous waste in any calendar month. You must not accumulate waste onsite for more than 90 days. If you exceed the accumulation time limit, you are a non-permitted storage facility and are subject to enforcement.

What are the requirements for a large quantity generator of hazardous waste?

Notification

1. You must file for and receive an EPA identification number (EPA I.D. number). You obtain an EPA I.D. number by completing the Colorado Hazardous Waste Notification form and submitting it to us at the address on the form. If the form is complete and is accompanied by the notification fee (if applicable), we will issue a unique EPA I.D. number to your facility. The form is available on our website or by contacting our notification coordinator (see page *iii* of this guidance). *6 CCR 1007-3, section 262.12*
2. The EPA I.D. number is assigned to the facility and stays with the site (i.e., the EPA I.D. number is address-specific). If your facility changes ownership, a revised notification form should be submitted to notify us of the change in ownership. The facility's EPA I.D. number will not change. If you move your facility to a new location, you must notify us of the new address and submit a new notification form. The new facility will receive a new EPA I.D. number that is unique to the new location.
3. Part 99(e) of the Colorado hazardous waste regulations was modified to clarify that persons who have previously filed a notification of hazardous waste activity are required to file an updated notification whenever their generator status and/or general description of activities change. An updated notification should be submitted to us as soon as possible. The option to delay notification until the annual commission fee is due was eliminated. Updated notifications are not required solely for changes in the types of hazardous waste generated.
4. A conditionally exempt small quantity generator or a small quantity generator may generate hazardous waste episodically at the level of a large quantity generator. If you episodically generate hazardous waste at the level of a large quantity generator, you must be in compliance with the large quantity generator requirements for any month during which you operate at that level. You are considered to be a large quantity generator until all waste generated during any month you met or exceeded the limits of a large quantity generator is transported off site to a designated facility.

6 CCR 1007-3, Part 99

An EPA I.D. number is NOT a hazardous waste permit. This number just identifies your hazardous waste activities for us.

One-Time Generator

If you conduct a one-time cleanout of old chemicals, have a spill or have an unusual amount of waste generated due to a change in your process, you can obtain a “one-time” EPA I.D. number by submitting a completed Colorado notification form with the appropriate box checked in section 10.A.2. The notification fee must accompany the completed form. The EPA I.D. number is recorded in the notification database, but is not kept active for more than one month. If you need to keep this EPA I.D. number active for a longer period of time, you should follow the regular notification procedures and then notify us when the number is no longer needed.

Making a Hazardous Waste Determination

1. You must make a hazardous waste determination for all wastes generated. You may make this determination on the basis of your knowledge of the waste, laboratory testing of the waste, or both. *6 CCR 1007-3, section 262.11*
2. You must keep records of all test results, waste analyses or other determinations for at least three years. *6 CCR 1007-3, section 262.40(c)*

The guidance documents “Hazardous Waste Identification” and “Hazardous Waste Exclusions,” available on our website (see page *iii* of this guidance), provide more detailed information on making the hazardous waste determination.

Biennial Report

1. You must submit a biennial report to us by March 1st of each even numbered year or upon our request.
2. The biennial report is submitted on EPA form 8700-13A/B and must cover activities during the previous odd numbered year. You must keep a copy of your report on file for at least three years.
3. One-time and episodic generators must submit a biennial report if they were a large quantity generator in an odd numbered year.

6 CCR 1007-3, sections 262.41 and 262.40(b)

Accumulation of Hazardous Waste

Waste Accumulation Limits

1. You must not accumulate hazardous waste onsite for more than 90 days. *6 CCR 1007-3, section 262.34(a)*
2. Accumulation in excess of 90 days requires a permit. *6 CCR 1007-3, section 100.10*

A one-time 30-day extension to the 90-day accumulation time limit may be granted at our discretion on a case-by-case basis.

Accumulation of Waste in Containers

1. If you accumulate hazardous waste in containers, you must comply with the following requirements:

- a. Hazardous waste accumulation containers must be marked or labeled with the words "Hazardous Waste." 6 CCR 1007-3, section 262.34(a)(3)
 - b. The accumulation start date (the date when waste was first placed into the container) must be clearly marked on the container. 6 CCR 1007-3, section 262.34(a)(2)
 - c. The containers used for the accumulation of hazardous waste must be in good condition and not leaking. A container that is bulging, severely dented, rusted or cracked would not be considered a container in good condition. If a container holding hazardous waste is not in good condition or is leaking, you must transfer the waste to a container that is in good condition. 6 CCR 1007-3, sections 262.34(a)(1) and 265.171
 - d. The containers must be made of, or lined with, materials which will not react with, and that will be compatible with, the hazardous waste. For example, highly corrosive nitric acid is not compatible with a steel drum because the acid reacts with the steel. 6 CCR 1007-3, section 265.172
 - e. The containers must be kept closed except when waste is being added or removed. A container is generally considered to be open when the contents of the container would spill out if the container is tipped over. Examples of when a container is considered closed include:
 - The waste is a solid and there is a lid on the container.
 - The waste is a liquid that is stored in a container with a closed screw top lid.
 - The waste is a liquid that is stored in a closed head drum with closed bung hole openings.
 - The waste is a liquid that is stored in a closed head drum with closed bung hole openings except there is a funnel with a lid that is securely fastened into one of the bung hole openings. The funnel lid must be closed and secured with a latch or lock immediately after waste is added or removed. If present, other bung hole openings are closed.
 - The waste is a liquid that is stored in an open head drum with a ring and bolt securing the drum's lid to the container. If present, bung hole openings are closed.
 - The waste is a liquid that is stored in an open head drum with a ring and bolt securing the drum's lid to the container and there is a funnel with a lid that is securely fastened into a bung hole opening. The funnel lid must be closed and secured with a latch or lock immediately after waste is added or removed. If present, other bung hole openings are closed.
- 6 CCR 1007-3, sections 262.34(a)(1) and 265.173(a)
- f. The containers cannot be stored in a manner to cause a rupture or leak. Ways to avoid ruptures or leaks may include such things as locating hazardous waste containers indoors away from high-traffic areas and maintenance of adequate aisle space. 6 CCR 1007-3, sections 262.34(a)(1) and 265.173(b)
 - g. The containers must be inspected weekly for leaks, deterioration, compatibility with the hazardous waste accumulated inside the container, and whether it is closed. Problems identified during the weekly inspections must be corrected on a schedule that ensures that the problem does not lead to an environmental or human health hazard. If there is an imminent hazard or a hazard has already occurred, action must be taken immediately

to correct the problem. We recommend that you keep a log of the weekly container inspections for documentation purposes. *6 CCR 1007-3, sections 262.34(a)(1) and 265.174*

- h. Wastes that could react together (for example could cause a fire, explosion, toxic gases or are otherwise incompatible) must not be placed in the same container or in an unwashed container that previously held an incompatible material. An accumulation container holding hazardous waste that is incompatible with wastes or materials in containers nearby must be separated from the other materials by a dike, berm, wall, etc. *6 CCR 1007-3, sections 262.34(a)(1) and 265.177*
 - i. The containers must be managed in compliance with applicable RCRA air emission standards in 6 CCR 1007-3, Part 265 subparts AA, BB and CC. *6 CCR 1007-3, section 262.34(a)(1)(i)*
2. A container is considered empty if:
 - a. All material has been removed from the container that can be removed using the practices that are commonly used for that container, and
 - There is no more than one inch of residue on the bottom of the container or inner liner, or
 - For a container of 119 gallons or less, the remaining residue can be no more than 3% by weight of the total capacity of the container, or
 - For a container of more than 119 gallons, the remaining residue can be no more than 0.3% by weight of the total capacity of the container.
 - b. If the container held an acutely hazardous waste, the liner must be removed or the container must be triple rinsed with a suitable solvent.
 - c. The residue in an empty container is not regulated as hazardous waste.

6 CCR 1007-3, section 261.7

Accumulation of Waste in Tanks

1. You must have hazardous waste accumulation tanks labeled with the words "Hazardous Waste." *6 CCR 1007-3, section 262.34(a)(3)*
2. You must ensure that waste has not been accumulated in the tank for more than 90 days. *6 CCR 1007-3, section 262.34(b)*
3. The accumulation start date (the date when waste was first placed into the tank) must be clearly marked on or attached to each tank, or on a tank log sheet that is maintained at your facility. *6 CCR 1007-3, section 262.34(a)(2)*

Please refer to 6 CCR 1007-3, Part 265, Subpart J. The regulations for large quantity generators accumulating hazardous waste in tanks are too lengthy to include all of them in this guidance; some of them are listed below.

4. In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets all of the requirements of 6 CCR 1007-3, section 265.193 must be provided.
 - a. Secondary containment systems must be designed, installed and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater or surface water at any time during the use of the tank system. *6 CCR 1007-3, section 265.193(b)(1)*
 - b. Secondary containment systems must be capable of detecting and collecting releases and accumulated liquids until the collected material is removed. *6 CCR 1007-3, section 265.193(b)(2)*
 - c. Ancillary equipment, such as transfer piping and welded connections, also require secondary containment unless inspected daily. *6 CCR 1007-3, section 265.193(f)*
 - d. If the facility is using the building as secondary containment, the floors must be coated with an impermeable coating and the doors must be bermed. *6 CCR 1007-3, section 265.193(e)*
5. For existing tanks that do not have secondary containment meeting the requirements of 6 CCR 1007-3, section 265.193, the owner/operator must determine that the tank system is not leaking or unfit for use. *6 CCR 1007-3, section 265.191*
6. Hazardous wastes must not be accumulated in a tank if it could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode or otherwise fail. *6 CCR 1007-3, section 265.194(a)*
7. The tank must be equipped with appropriate controls to prevent spills and overflows:
 - a. Spill prevention controls such as check valves or dry disconnect couplings.
 - b. If the tank has equipment that allows the waste to flow into it, a level sensing device, high level alarm, automatic waste-feed cutoff or bypass system is necessary to stop the flow in case of problems.

6 CCR 1007-3, section 265.194(b)
8. The tank must be inspected to ensure it is in good condition and operating as designed.
 - a. A schedule and procedure for inspecting overflow controls daily must be developed and followed. *6 CCR 1007-3, section 265.195(a)*
 - b. The following must be inspected at least once each operating day (operating day is defined as each day there is hazardous waste in the tank):
 - Data gathered from monitoring and leak detection equipment. *6 CCR 1007-3, section 265.195(b)*
 - Above ground portions of the tank system, if any, to detect corrosion or releases of waste. *6 CCR 1007-3, section 265.195(c)(2)*

- The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation). *6 CCR 1007-3, section 265.195(c)(4)*
- c. If you are accumulating hazardous waste in tanks or tank systems that have full secondary containment and that use leak detection equipment or workplace practices to detect leaks, you must inspect discharge control equipment, data gathered from monitoring equipment, levels of waste in the tank, and construction materials of the tank and confinement structures at least weekly. *6 CCR 1007-3, section 265.195(d)*
 - d. Cathodic protection systems, if present, must be inspected within six months of installation and annually thereafter. Sources of impressed current must be inspected as appropriate. *6 CCR 1007-3, section 265.195(g)*
 - e. Inspections must be documented in the operating record of the facility. *6 CCR 1007-3, section 265.195(h)*
9. Upon closure of a tank system, you must remove or decontaminate all waste residues, contaminated containment system components, and contaminated soils, structures and equipment contaminated with waste, and manage them as hazardous waste. *6 CCR 1007-3, section 265.197*
10. Ignitable or reactive waste:
 - a. Must not be placed in tank systems unless the waste is rendered non-ignitable or non-reactive, or
 - b. Must be protected from materials or conditions which might cause it to ignite or react, or
 - c. The tank is used solely for emergencies.*6 CCR 1007-3, section 265.198(a)*
 11. A large quantity generator that accumulates ignitable or reactive wastes in tanks must comply with the buffer zone requirements for tanks of the National Fire Protection Associations (NFPA). *6 CCR 1007-3, section 265.198(b)*

We recommend you also check with your local fire department for its requirements.

12. Wastes that could react together must not be accumulated in the same tank or be placed in a tank that previously held an incompatible waste and that has not been decontaminated. *6 CCR 1007-3, section 265.199.*
13. Tanks installed after September 30, 1988 ("new tanks") must have a tank integrity assessment performed prior to being used. *6 CCR 1007-3, section 265.192(a)*
14. Hazardous waste may not be accumulated in open top tanks installed after September 30, 1988. *6 CCR 1007-3, section 265.192(h)*

Limits on Accumulation near Site of Generation (Satellite Accumulation Areas)

1. You may accumulate as much as 55 gallons of a hazardous waste or one quart of an acutely hazardous waste in containers at or near any point of generation where wastes initially accumulate. The 55 gallon/one quart limit applies to the total amount of waste in a satellite accumulation area, not per waste stream or waste type.

"At or near" is interpreted to mean that the satellite accumulation area is near enough to the location where the waste is generated so that there are no other areas, process equipment, etc., which might interfere with the transportation of the waste to the satellite area. Some examples of items that might interfere with transportation of the waste might be: flights of stairs, parking lots, frequent foot traffic, elevators, other hazardous waste or chemical storage areas or physical distance.

2. The satellite accumulation area must meet the following requirements:
 - a. The area must be under the control of the operator of the process generating the waste. Control may include visual observation by the operator or a locking device.
 - b. Containers must be labeled with the words "Hazardous Waste" or with other words that identify the contents of the containers. We recommend including the word "Waste" in all cases to differentiate a hazardous waste container from a product container (e.g., "Waste Solvent" as opposed to "Solvent").
 - c. You must comply with all the regulations applicable to containers (6 CCR 1007-3, Part 265, Subpart I) in the satellite accumulation area, with the exception that the accumulation start date on the container begins on the date on which the 55-gallon or one-quart limit is exceeded, or when the container is removed from the satellite accumulation area if removed prior to reaching the limit. The container must be dated immediately (within a few minutes) of becoming full.
 - d. You must comply with the requirements for preparedness and prevention in the satellite accumulation area and designate the location of each satellite accumulation area in your contingency plan.
 - e. The container must be moved immediately from the satellite area to a 90-day or permitted area when it becomes full. In this case, we interpret "immediately" to mean within 24 hours.

6 CCR 1007-3, section 262.34(c)

3. There may be more than one satellite accumulation area at a particular location if different processes are involved. However, you must manage each area independently and follow all satellite accumulation area requirements.

We interpret "process" to mean a unique, distinguishable activity generating separate waste.

4. Wastes that are still "in process" do not need to be managed according to the requirements for satellite accumulation areas until they leave the process that generated them. In-process waste refers to waste that is continuously generated and is an integral part of the system generating the waste. "Integral to the process" is the primary condition for in-process waste, and may include a hard-piped container or other physical connection. However,

physical connection is not a required condition. In-process waste also refers to waste that is accumulated during a process and is moved to a satellite accumulation or 90-day accumulation area at the end of the work shift. For example, a group of employees are working at the same bench cleaning equipment with listed solvents on a cotton swab. Each employee uses about 100 swabs over the course of an hour. Each employee has a one-gallon container for the used swabs at their work site. A 55-gallon container is located at the end of the bench, where the employees consolidate the used swabs at the end of the shift. In this example, as long as the waste is moved to the 55-gallon container (the satellite accumulation area) by the end of the shift, the waste is considered "in process." If the waste is not moved to the satellite accumulation area by the end of the shift, the initial one-gallon container becomes subject to satellite accumulation area requirements.

The guidance document "Satellite Accumulation Areas – Large Quantity Generators," available on our website (see page *iii* of this guidance), provides more detailed information on satellite accumulation area requirements.

Shipping Hazardous Waste Off Site

1. You must use a properly completed hazardous waste manifest when shipping your hazardous waste off site. *6 CCR 1007-3, section 262.20*
 - a. The manifest is a multi-copy shipping document designed so that shipments of hazardous waste can be tracked from their point of generation to their final destination – "cradle to grave." The manifest must be completed in accordance with the appendix to 6 CCR 1007-3, Part 262. You, the transporter(s) and the designated facility must each sign this document and keep a copy. The manifest must include your EPA I.D. number and the EPA ID numbers of all transporters and the designated treatment, storage and disposal (TSD) facility. *6 CCR 1007-3, section 262.23*

The designated facility or the transporter usually supplies its customers with blank manifest forms, or you may obtain the manifest form from any source that has registered with EPA to print and distribute the form. *6 CCR 1007-3, section 262.21*
 - b. If you have not received a copy of the manifest with the signature of the owner or operator of the designated facility within 35 days of the waste being accepted by the initial transporter, you must contact the transporter and/or the owner or operator of the designated facility to determine the status of your waste.

If a copy of the final signed manifest is not received within 45 days of the date the waste was first accepted, you need to submit an exception report to us that includes a legible copy of the manifest and a cover letter explaining your efforts to locate the waste and the results of those efforts. *6 CCR 1007-3, section 262.42(a) and (b)*
 - c. Properly signed manifests must be kept in your records for at least three years. *6 CCR 1007-3 section 262.40(a)*
2. All hazardous wastes must be shipped to the facility designated on the manifest which is permitted to handle the waste. *6 CCR 1007-3, section 262.20(b)*
3. All hazardous waste must be packaged in accordance with the U.S. Department of Transportation (DOT) regulations per 49 CFR, Parts 172, 173, 178 and 179. *6 CCR 1007-3, sections 262.30 through 262.33*

Land Disposal Restriction Determination

1. You must determine if your waste is restricted from land disposal. You may make the land disposal restriction determination on the basis of your knowledge of the waste, laboratory testing of the waste, or both. Making an accurate hazardous waste determination provides most of the information needed for the Land Disposal Restriction (LDR) determination.
2. You are required to complete one LDR notification form per waste stream per treatment facility. A new LDR form is required whenever the waste changes or if you change the facility that will be receiving the waste. There is no specific form to use as long as all of the required information is provided. Treatment, storage and disposal (TSD) facilities often have their own forms available, and many generators rely on their transporter or their TSD to make the LDR determination and to complete the LDR form for them. However, it is your responsibility for making sure that a correct LDR determination is made and that the LDR form is properly completed.
 - a. If the waste does not meet the LDR treatment standards, the notification form must include the manifest number of the first shipment and a description of the waste as initially generated, including all significant waste codes, constituents of concern, treatability group(s), treatment subcategory(s), and underlying hazardous constituents, if applicable.
 - b. If the waste meets the LDR treatment standards at the original point of generation, you must submit an LDR notification form as described above, and include the specific certification statement as provided in section 268.7(a)(3)(i) of the regulations.
3. You must maintain a copy of all waste analysis information and documentation used to make the land disposal restriction determination, copies of final signed manifests and copies of LDR notifications/certifications in your records for at least three years. We recommend that copies of the LDR forms be attached to the appropriate hazardous wastes manifests being retained onsite.

6 CCR 1007-3, section 268.7

Employee Training

1. You must ensure that all employees involved in the management of hazardous waste and the documentation of hazardous waste activities have classroom and on-the-job training relevant to their job duties during normal facility operations and emergencies. Employees must be adequately trained in hazardous waste job activities to ensure compliance with applicable hazardous waste regulations.
 - a. A person trained in hazardous waste management procedures must conduct this training program. This person should be knowledgeable in hazardous waste regulatory requirements and implementation, and needs to be familiar with the specific hazardous waste issues at your facility.
 - b. This training must include instruction in waste management procedures and contingency plan implementation relevant to the employee's job duties. All personnel must have emergency response training so they can respond effectively in an emergency.

- c. This training should include instruction in the Colorado and EPA hazardous waste regulations that apply to your facility.
- d. Facility personnel must not work unsupervised prior to training and must receive training within six months of new or changed employment.
- e. Facility personnel must receive an annual review in their hazardous waste training. Refresher training may be conducted as part of regularly scheduled meetings such as monthly safety meeting for work groups. We interpret “annually” in this case to mean within 13 months of the last training.

6 CCR 1007-3, sections 262.34(a)(4) and 265.16(a), (b) and (c)

Employees must receive training specific to hazardous waste management such as how to make a hazardous waste determination, container requirements, accumulation limits, recordkeeping, etc. While necessary and useful, U.S. Department of Transportation and Occupational Health and Safety Administration (OSHA) training like Hazwoper (29 CFR 1910.120) or HazCom (29 CFR 1910.1200) are not sufficient to meet the hazardous waste training requirements.

- 2. You must maintain the following training records onsite:
 - a. The job title for each position at the site related to hazardous waste management and the name of the employee filling each job, as well as a written job description including requisite skills, education and duties for that position.
 - b. These records must include a written outline of introductory and review training to be given for each job position. A training matrix that illustrates the different types of job titles and the training requirements associated with each job title may be used to fulfill this requirement.
 - c. These records must include documentation that required site personnel successfully completed training and that the training is updated annually (e.g., class lists with signatures, individual training logs in personnel files or spreadsheets).
 - d. These records must be maintained onsite for current personnel and for past personnel employed within the last three years.

6 CCR 1007-3, sections 265.16(d) and (e)

The guidance document “Personnel Training for Large Quantity Generators of Hazardous Waste,” available on our website (see page *iii* of this guidance), provides more detailed information on training requirements.

Emergency Response

You are required to plan and prepare for an emergency such as a fire, explosion or unplanned release of hazardous waste. Planning ahead helps minimize the severity of incidents if they occur by ensuring proper equipment is available and that facility personnel know how and when to use it.

Contingency Plan

1. You must have an emergency response/contingency plan designed to minimize hazards to human health and environment in the event of an accident involving hazardous wastes. The contingency plan must be specific to your facility and contain the following:
 - a. A description of the actions personnel must take in response to fire, explosions or any unplanned release of hazardous waste to air, soil or groundwater.
 - b. A description of arrangements made with local emergency response authorities.
 - c. Lists of the names, addresses, office and home phone numbers for designated emergency response coordinators, with one emergency response coordinator listed as the primary coordinator. For easy access during an emergency, we recommend posting the list of emergency response coordinators and their contact information along with phone numbers of local police and fire departments next to telephones at your facility where hazardous waste is managed.
 - d. An up-to-date list of all emergency equipment onsite including a physical description of each piece of equipment, its location and a brief outline of its capabilities and limitations.
 - e. An evacuation plan for facility personnel including signal(s) to be used to begin evacuation and descriptions of primary and alternative evacuation routes.
 - f. The location of all permanent and temporary 90-day and satellite accumulation areas. The locations can be noted on a facility map or compiled into a list of all areas.
 - g. Identifies the local fire protection district and the local emergency planning committee. The plan must specify if the facility is not within a fire protection district and state that the facility is operating under its own fire protection plan that has been approved by us. The plan must be certified by a professional engineer registered in Colorado and knowledgeable in fire protection. *6 CCR 1007-3, section 265.31(b)*

6 CCR 1007-3, section 265.52

If you have already prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan or other emergency preparedness plans for your facility, amendments to that plan may fulfill your hazardous waste contingency plan requirements, providing all of the requirements of 6 CCR 1007-3 Part 265 Subpart D are met.

2. A copy of the contingency plan and all revisions must be maintained in your records and be submitted to all local police and fire departments, hospitals, local emergency planning committees, and state and local emergency response teams that may be called upon to provide emergency services. *6 CCR 1007-3, section 265.53*
3. There must be one employee designated as the primary emergency coordinator who is onsite or on-call at all times to coordinate emergency response activities. One or more other employees should be designated as alternates to act as emergency coordinator if the primary emergency coordinator is unavailable (due to vacation, illness, etc.). Your emergency coordinator must have the authority to commit resources needed to implement the contingency plan.

The emergency coordinator:

- a. Must be thoroughly familiar with the contingency plan, site operations, layout of the facility, the location and characteristics of waste handled onsite, and the location of all records necessary to implement the contingency plan.
- b. Must activate internal alarms and notify appropriate state and local response authorities.
- c. Must be able to follow procedures outlined in the contingency plan to identify the character, source, amount and extent of released materials.
- d. Must assess possible hazards to human health and the environment that may result from the release, fire or explosion.
- e. Must notify the appropriate authorities if the facility has had a release, fire or explosion that could threaten human health or the environment outside the facility.
- f. Must take measures to ensure that fires, explosions and releases do not occur, recur or spread to other hazardous waste at the facility.
- g. Must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment if the facility stops operations in response to a fire, explosion or release.
- h. Must ensure that no waste that may be incompatible with the released material is processed until cleanup procedures are completed after an incident.
- i. Must ensure all equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed after an incident.
- j. Must provide measures to properly manage hazardous waste generated as a result of an incident.

6 CCR 1007-3, sections 265.55 and 265.56

4. The owner or operator of the facility must notify us and appropriate local authorities that your facility is in compliance before operations are resumed in affected areas. *6 CCR 1007-3, section 265.56(i)*
5. The owner or operator of the facility must record the time, date and details of any incident that requires implementing the contingency plan and submit a written report to us within 15 days after an incident. *6 CCR 1007-3, section 265.56(j)*
6. The contingency plan must be reviewed and amended when necessary. *6 CCR 1007-3, section 265.54*

Your plan should be reviewed at least annually or whenever changes occur that will significantly affect the ability of your facility to respond to an emergency situation, such as if the list of emergency coordinators changes, the list of emergency equipment changes or the regulations are revised. These revisions should be made to the plan immediately (within 24 hours).

Preparedness/Prevention

You must comply with the requirements of 6 CCR 1007-3, section 262.34(a)(4) for preparedness and prevention.

1. Your facility must be maintained and operated in a manner to minimize the possibility of a fire, explosion or any release of hazardous waste or hazardous waste constituents to the air, soil or water which could threaten human health or the environment. *6 CCR 1007-3, section 265.31*
2. Your facility must be equipped with the following:
 - a. Internal communications or alarm system capable of providing emergency instruction to facility personnel.
 - b. A telephone, a hand-held two-way radio or other device capable of summoning emergency assistance.
 - c. Fire control equipment, spill control equipment and decontamination equipment appropriate to the needs at the facility.
 - d. Water at adequate volume and pressure to supply a fire hose, hydrant or automatic sprinklers. For fires that can't be extinguished with water, special equipment may be required (e.g., foam, dry chemical, carbon dioxide, etc.).

6 CCR 1007-3, section 265.32

3. All facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment must be tested and maintained as necessary to assure its proper operation in time of emergency. *6 CCR 1007-3, section 265.33*
4. Whenever hazardous waste is being handled, all personnel involved must have immediate access to an internal alarm or emergency communication device. This could include visual or voice contact with another employee. *6 CCR 1007-3, section 265.34*
5. Aisle space between containers and tanks must be maintained to allow unobstructed movement of emergency response personnel or equipment. The hazardous waste regulations don't specify the width of aisle space. This is a performance-based standard which is dependent on the type of containers, tanks, wastes and waste management practices at your facility. From a practical standpoint, aisle space should be wide enough for equipment used to move containers of hazardous waste in response to an emergency and for the inspection of tanks and containers. The Occupational Health and Safety Administration (OSHA) and many fire departments require a minimum aisle space of 28 inches. *6 CCR 1007-3, section 265.35*
6. You must attempt to make arrangements with local authorities such as police, fire, local health departments, emergency response teams and local hospitals to familiarize them with waste handling activities at your facility.

The information given to the authorities should include a layout of the facility, the properties of the hazardous waste handled at the facility and associated hazards with that waste, the

types of injuries or illnesses that could result from fires, explosions or releases at the facility, where personnel would be working, entrances to roads inside the facility and possible evacuation routes.

The arrangements agreed to by state and local authorities must be documented in your contingency plan. If state and local authorities decline to enter into an arrangement, you must document this refusal in your facility operating record.

6 CCR 1007-3, section 265.37

7. If your facility is not provided with fire protection services by a fire protection district, you must operate the facility in accordance with your own plan for fire protection and prevention. The plan must be prepared by a professional engineer registered in Colorado that is knowledgeable in fire protection, and be approved by us. *6 CCR 1007-3, section 265.31(b)*
8. Employees must successfully complete classroom instruction and on-the-job training that teaches them to perform their duties in a way that ensures your facility's compliance with the hazardous waste regulations. *6 CCR 1007-3, section 265.16*

Review of the contingency plan and contingency plan implementation should be included in both initial and annual refresher training.

9. If you are managing and treating hazardous waste in tanks, containers or containment buildings, you must develop and follow a written waste analysis plan that describes the procedures you will carry out to comply with the land disposal treatment standards. The plan must be kept in your facility operating record and be made available to inspectors. *6 CCR 1007-3, section 268.7(a)(5)*

The guidance document "Preparedness and Prevention, Contingency Plan and Emergency Procedures – Large Quantity Generators," available on our website (see page *iii* of this guidance), provides more detailed information on emergency planning and preparedness. A contingency plan template and guidance are also available on our website to assist with plan development and maintenance.

RCRA Air Emission Standards for Large Quantity Generators

The Colorado Hazardous Waste Commission has adopted the federal EPA regulations that apply to air standards for large quantity generator containers and tanks. These rules give us the authority to control organic air emissions at these facilities.

6 CCR 1007-3, Part 265, Subparts AA, BB and CC

Subpart AA – Air Emission Standards for Process Vents

6 CCR 1007-3, Part 265, Subpart AA applies to hazardous waste management units that are subject to RCRA permitting. Subpart AA does not usually apply to large quantity generators of hazardous waste.

Subpart BB - Air Emission Standards for Equipment Leaks

Large quantity generators with equipment that contains or contacts hazardous waste that contains at least 10 percent organics by weight are subject to the air emission control requirements of 6 CCR 1007-3, Part 265, Subpart BB.

1. Exemptions from the requirements of Subpart BB include:
 - a. Equipment that contains or contacts hazardous waste less than 300 hours per year are subject to Subpart BB identification and recordkeeping requirements.
 - b. Equipment that is in vacuum service.
2. Types of equipment regulated by Subpart BB include pumps, compressors, pressure relief devices, sampling connection systems, valves, open-ended lines, flanges and other connectors.

Equipment Marking and Documentation

All equipment subject to the organic air emission requirements must be labeled or tagged and numbered to readily distinguish it from other equipment. This can be done with weatherproof tags or by painting the equipment.

The following information must be kept in your operating record:

- a. Equipment identification number and hazardous waste management unit identification.
- b. Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).
- c. Type of equipment (e.g., pump, valve, etc.).
- d. Percent by weight organics in the hazardous waste stream at the equipment.
- e. Hazardous waste state at the equipment (e.g., gas/vapor or liquid).
- f. Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipment with dual mechanical seals").

You must also maintain specific information for any equipment for which an exemption is claimed.

Determining the Level of Monitoring Required

In order to determine the level of required monitoring, you must determine if the waste in question is in light liquid, heavy liquid or gas/vapor service.

A waste is in gas/vapor service if it is in the gaseous state at operating conditions. A waste is in light liquid service if one or more of the organic constituents contacting the equipment has a vapor pressure of greater than 0.3 kilopascals at 20 degrees Celsius (C), the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals at 20 degrees C is equal to or greater than 20% by weight, and the fluid is a liquid at operating conditions. All other wastes are in heavy liquid service.

Monitoring Equipment in Light Liquid Service

A leak is detected if a visual leak is observed or an instrument reading of greater than 10,000 parts per million is measured.

Pumps. Pumps contacting hazardous waste in light liquid service must be visually inspected weekly and monitored monthly using a portable volatile organic compound (VOC) analyzer.

Valves. Valves contacting hazardous waste in light liquid service or gas/vapor service must be monitored monthly using a portable VOC analyzer. Quarterly monitor is allowed if a leak is not detected for two successive months.

Compressors. Compressors must have a barrier fluid seal system to prevent emissions. The seal must have a sensor that is checked daily or is attached to an audible alarm that is checked monthly.

Pressure Relief Devices, Flanges, and Other Connectors. These types of equipment must be operated with no detectable emissions, except during pressure release. Readings should return to no detectable emissions within five days after pressure release.

Monitoring Equipment in Heavy Liquid Service

Pumps, valves, pressure relief devices, flanges and other connectors contacting waste in heavy liquid service must be checked with a VOC analyzer within 5 days if a potential leak is found by visual, audible, olfactory, or any other detection method. After observation of a leak, monitoring is required. A leak is confirmed if instrument measurements of greater than 10,000 ppm are detected.

Response to a Leak

Pumps. First attempts at repairing a leaking pump (such as re-lapping the seal) must be made within 5 days of detecting a leak. Final repair must be made within 15 days.

Valves. First attempts at repairing a leaking valve must be made within 5 days of detecting a leak. The first attempt at repair include: tightening of bonnet bolts, replacement of bonnet bolts, tightening of packing gland nuts, or injection of lubricant into lubricated packing. Final repair must be made within 15 days.

Compressors. First attempts at repairing a leaking compressor (such as tightening the packing gland) must be made within 5 days of detecting a leak. Final repair must be made within 15 days.

Pressure Relief Devices, Flanges and Other Connectors. First attempts at repairing these types of equipment must be made within 5 days of detecting a leak. The first attempt at repair the same practices as for valves. Final repair must be made within 15 days.

When an equipment leak is detected, a weatherproof tag identifying the equipment and the date must be attached to the equipment. The tag can be removed after two months if no additional leaks are detected.

Subpart CC - Air Emission Standards for Tanks and Containers

Air emission controls apply to tanks and containers if Subpart AA does not apply and if the operator does not demonstrate that the hazardous waste stored in the unit contains average volatile organic concentrations below 500 parts per million by weight at the point of waste generation.

1. Exemptions from the requirements of Subpart CC include:
 - a. Units used solely to accumulate or treat remediation hazardous waste generated onsite from RCRA or CERCLA remediation.
 - b. Containers with a capacity less or equal to 26 gallons.
 - c. Units equipped with air emission controls in compliance with certain Clean Air Act standards under 40 CFR Parts 60, 61 or 63.
 - d. Wastewater treatment tanks exempted from RCRA permitting.
 - e. 180/270 day waste accumulation units and satellite accumulation units.
 - f. Units in the closure process with an approved closure plan.
2. Waste determination requirements:
 - a. Are only required when a unit holding volatile organic compounds is NOT using required air emission controls.
 - b. Initial waste determination is needed and must be updated at least annually. Refer to Section 265.1084 of the Colorado Hazardous Waste Regulations for specific details on waste determination procedures.
3. Subpart CC standards for 90-day accumulation tanks:
 - a. Waste that is transferred to a tank subject to Subpart CC controls must be in hard-piping or in another closed system.
 - b. Safety devices that vent directly to the atmosphere may be used on all tank air emission controls required under Subpart CC.
 - c. Level 1 Standards (for tanks accumulating waste whose maximum organic vapor pressure is less than the cutoff for the tank design capacity, the waste in the tank is not heated to a temperature that is greater than the temperature at which the maximum organic vapor pressure was determined and the waste is not treated using a waste stabilization process):
 - Use a fixed roof tank designed with no visible gaps or other open spaces in the roof seams and mountings.
 - Fixed roof openings can be equipped with:
 - A closure device designed with no gaps when closed.
 - An opening vented to an organic emission control device.
 - A pressure relief device vented to the atmosphere.
 - Tanks must be kept closed.
 - d. Level 2 Standards (for tanks not covered under Level 1 Standards):
 - Use one of the following:
 - Fixed roof tank with an internal floating roof.

- External floating roof tank.
 - Tank with a cover vented to a control device.
 - Pressure tank designed not to vent due to headspace compression during filling of the tank and to operate with no detectable organic emissions.
 - Tank placed inside an enclosure vented to a combustion control device.
- Initial and annual inspection of covers, with special requirements for floating roofs are required.
 - Records are required for vapor pressure determination, floating roof and enclosure design, and inspections.
 - Refer to Section 265.1085 of the Colorado Hazardous Waste Regulations for specific details on standards for tanks.
4. Subpart CC standards for 90-day accumulation containers:
- a. Level 1 Standards (for containers between about 26 gallons and 119 gallons and containers greater than about 119 gallons that are not in light material service).
- Use one of the following:
 - Container meeting DOT regulations.
 - Covered container.
 - Organic suppression barrier.
 - Containers must be kept closed.
 - Containers and their covers or closure devices must be inspected.
- b. Level 2 Standards (for containers greater than about 119 gallons that are in light material service).
- Use one of the following:
 - Container meeting DOT regulations.
 - Container that operates with no detectable organic emissions.
 - Container that has been demonstrated to be vapor-tight within the preceding twelve months.
 - Containers must be kept closed.
 - Transfer of hazardous waste in or out of the container must be conducted in a manner to minimize exposure of hazardous waste to the atmosphere.
 - Containers and their covers or closure devices must be inspected.
- c. Level 3 Standards (for containers greater than about 26 gallons that are used for treatment of hazardous waste using a waste stabilization process)
- Use one of the following:
 - Container vented directly to a control device through a closed-vent system.
 - Container vented inside an enclosure that is exhausted through a closed-vent system to a control device.
 - Closed-vent system and control devices must be inspected and monitored.

Refer to Section 265.1087 of the Colorado Hazardous Waste Regulations for specific details on standards for Level 1, 2 and 3 requirements for containers.

Self-Certification Program

We have initiated a self-certification program in Colorado that requires businesses in certain industries or generator categories to conduct a self assessment of their compliance with the state hazardous waste regulations pursuant to 6 CCR 1007-3, section 262.43.

Self-certification allows a facility to evaluate their compliance with the environmental regulations by answering a series of questions on a checklist. The checklist is intended to be a user-friendly summary of the regulations that apply to most businesses in that sector. The checklist also references guidance materials which provide a more detailed explanation of the regulatory requirement associated with each question.

Businesses identified by us for mandatory participation in the Self-Certification Program will be notified when they must complete a self-certification form. This notification will include a website address to access and complete the forms on the Internet. If you do not have access to the Internet, you may request a paper copy of the self-certification form to complete and send back to us. By submitting the self-certification survey, you are certifying that the information you are providing is true, accurate and complete. If you discover during the self assessment that you are out of compliance with any of the regulations, you must correct the violations immediately or if there is a reason they can't be corrected immediately, tell us by what date the violations will be corrected.

Failure to complete and submit the self-certification checklist when required may result in you receiving a formal enforcement action with an administrative penalty of \$2000 or more. We conduct follow-up inspections at facilities that fail to submit the checklist in a timely manner and at randomly selected facilities.

For questions regarding this program please call 303-692-3461.

Generator Assistance Program

The Generator Assistance Program (GAP) provides businesses with free, onsite technical assistance and information on Colorado's hazardous waste regulations. The program's primary objectives are:

1. To provide assistance in understanding and implementing the hazardous waste regulations through onsite compliance assistance at facilities.
2. To provide referrals to specialists within the state health department in areas such as pollution prevention and waste minimization alternatives.

What can I expect during a GAP visit?

During an onsite GAP visit, we will walk through your facility with you, touring your production processes and waste generation areas while observing your hazardous waste management and accumulation practices. At the conclusion of the walk-through, we'll sit down with you to explain our findings and discuss your options.

How can I participate?

If you think you could benefit from this program, call the GAP coordinator at 303-692-3415 to discuss the options of setting up a site visit.

If you only have one or two questions, or if you do not want or need an onsite visit, please call our Customer Technical Assistance Line at 303-692-3320 (1-888-569-1831 ext. 3320 toll-free) or send us an email at comments.hmwmd@state.co.us.

Regulations that are More Stringent than Federal Regulations

This list is intended to identify key areas of the Colorado Hazardous Waste Regulations that are more stringent than the federal hazardous waste regulations. The list is not intended to be all-inclusive. Since these regulations undergo periodic revisions, check our website to see if you have the most current version.

GENERATOR REQUIREMENTS

1. Colorado regulations specify that a conditionally exempt small quantity generator of hazardous waste may not dispose of his/her hazardous waste onsite. In addition, there are no solid waste landfills in Colorado that have been approved by the Department to accept hazardous waste from a conditionally exempt small quantity generator for disposal. *[6 CCR 1007-3, section 261.5(f)(3)(iv) and (g)(3)(iv)]*
2. Colorado regulations require conditionally exempt small quantity generators that generate three (3) gallons or more per calendar year of hazardous waste codes F001, F002, F004 and/or F005 to notify the department of their hazardous waste activities and obtain an EPA identification number. *[6 CCR 1007-3, section 261.5(b)(2)]*
3. Colorado regulations require any generator, including conditionally-exempt small quantity generators, that receives a Self-Certification Checklist from the department to complete and return the checklist within the time specified in the instructions. *[6 CCR 1007-3, section 261.5(b)(4) and 262.43(b)]*
4. Colorado regulations require documentation of training for small quantity generators (SQGs) of hazardous waste and make training performance-based. *[6 CCR 1007-3, section 262.34(d)(5)(iii)]*
5. Colorado regulations require large quantity generators (LQGs) of hazardous waste to identify the fire protection district responsible for providing fire protection services in their contingency plan. If they are not within a fire protection district, they must state that in their contingency plan and operate under their own fire protection plan that has been approved by this department. The regulations also require identification of the local emergency planning committee (LEPC) for the area where their facility is located. *[6 CCR 1007-3, section 265.52(g)]*
6. Colorado regulations require large quantity generators (LQGs) to include the location of all hazardous waste accumulation areas (90 day and satellite) in their contingency plan. *[6 CCR 1007-3, section 265.52(h)]*
7. Colorado regulations require a generator that manages hazardous waste in satellite accumulation containers to move that container to the 180/270 or 90-day accumulation area immediately (i.e., within 24-hours) from when the 55-gallon limit is reached. *[6 CCR 1007-3, section 262.34(c)(2) and 262.34(g)(2)]*
8. Colorado regulations are more stringent concerning application of P and U listed waste codes to unused commercial chemical products. A comment following the Federal regulation at 40 CFR Part 261.33(d) indicates that the intent of the EPA regulation was

to regulate unused materials formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. Colorado regulations do not include the comment. Therefore, all applicable P or U list waste codes apply to a formulation containing more than one active ingredient when those ingredients appear on the P or U list and the material will be discarded. [6 CCR 1007-3, section 261.33(d)]

9. Colorado regulations do not include the comparable fuels exclusion listed in 40 CFR 261.4(a)(16). [6 CCR 1007-3, section 261.4(a)(16)]
10. Colorado regulations require that the accumulation start date be clearly marked on or attached to each hazardous waste accumulation tank, or on a tank log sheet that is maintained at the facility. [6 CCR 1007-3, section 262.34(a)(2)]
11. Colorado regulations prohibit a large quantity generator from storing hazardous waste in open top tanks. [6 CCR 1007-3, section 265.192(h)]
12. Colorado regulations require all generators, including conditionally exempt generators, to maintain and operate their facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents. [6 CCR 1007-3, sections 261.5(b)(5) and 265.31(a)]

TRANSPORTER REQUIREMENTS

1. Colorado regulations require a transporter of hazardous waste to provide information to the department, as part of the notification filed under Part 99, of the location and general description of the activities at the transfer facility. [6 CCR 1007-3, section 263.12(a)]
2. Colorado regulations require a transporter of hazardous waste who operates a 10-day transfer facility to maintain documentation to verify that the 10-day storage limit has been met. Information used to make this demonstration may include hazardous waste manifests, log sheets, or other documentation showing the date of waste arrival and shipment from the transfer facility. [6 CCR 1007-3, section 263.12(c)(1)]
3. Colorado regulations require owners or operators of hazardous waste transfer facilities to conduct weekly inspections of all sites where containers are stored and to maintain written inspection records. These records must be maintained for at least three years from the date of the inspection. [6 CCR 1007-3, Section 263.12(c)(2)]
4. Colorado regulations require loading docks, temporary container storage areas, and all areas where hazardous waste transfers occur to have a base or floor that is smooth, free of cracks or gaps, and sufficiently impervious to contain leaks or spills until the spilled material is detected and removed. [6 CCR 1007-3, section 263.12(c)(3)]
5. Colorado regulations require that trucks or trailers used to store hazardous waste be stored on manmade surfaces capable of containing spills or releases. Spills or leaks must be promptly cleaned up by the facility operator. [6 CCR 1007-3, section 263.12(c)(4)]
6. Colorado regulations require owners or operators of hazardous waste transfer stations to make arrangements to familiarize local police, fire, health departments, and local

emergency planning committees with the layout of the transfer facility, the NFPA hazard class of wastes handled at the facility and associated hazards, locations where employees would normally be working, entrances to road inside the facility, and evacuation routes. The transporter must document attempts to make arrangements and document any case where State or local authorities decline to enter into such arrangements. [6 CCR 1007-3, section 263.12(c)(5)]

7. Colorado regulations require transfer facilities to be adequately fenced or secured to control public access and prevent unauthorized access to areas of hazardous waste storage. [6 CCR 1007-3, section 263.12(c)(6)]
8. Colorado regulations require signage with the legend, "Danger – Unauthorized Personnel Keep Out" be posted at each entrance of the active portion of the transfer facility. The signs must be written in English and in any other language predominant in the area surrounding the facility and must be legible from a distance of 25 feet. [6 CCR 1007-3, section 263.12(c)(7)]
9. Colorado regulations specify emergency planning and response requirements for owners and operators of hazardous waste transfer stations, including the presence of emergency coordinators, communications systems, and firefighting and spill response equipment. [6 CCR 1007-3, section 263.12(c)(8)]
10. Colorado regulations specify that the transporter must take immediate action to contain and cleanup a spill of hazardous waste at a transfer facility and to provide notification to the Department of any spill exceeding 55 gallons, a fire or an explosion at a transfer facility. [6 CCR 1007-3, section 263.40]
11. Colorado regulations require the transporter to clean up discharges of hazardous waste occurring during transportation in a timely manner and to notify the Department of the ultimate disposition of any discharged hazardous waste. [6 CCR 1007-3, sections 263.30(c)(3) and 263.31]

TREATMENT, STORAGE AND DISPOSAL FACILITIES REQUIREMENTS

1. Colorado regulations require a thorough inspection of hazardous waste containers to ensure that all of the Part 265 Subpart I requirements regarding use and management of containers and the applicable container labeling requirements of section 262.34 are being met. These regulations also require that problems identified during the inspection be remedied. [6 CCR 1007-3, section 265.174]
2. Colorado regulations require treatment, storage and disposal (TSD) facilities and generators to provide both classroom and on the job hazardous waste training to their employees that handle hazardous waste. [6 CCR 1007-3, section 264.16(a) and 265.16(a)]
3. Colorado regulations require TSD facilities and generators to make hazardous waste preparedness and prevention arrangements with local health departments. [6 CCR 1007-3, section 264.37(a) and 265.37(a)]
4. Colorado regulations require additional information related to treatability studies including: (a) more detailed notification requirements, (b) minimum waste storage requirements, (c) a statement from the testing facility indicating that it has been clean-

closed and (d) minimum personnel training and safety guidelines. [6 CCR 1007-3, section 261.4(e) and (f)]

5. Colorado regulations require TSD facilities and large and small quantity generators that are located outside of a fire protection district to have a plan providing for their own fire protection. The plan must be certified by registered professional engineer experienced in fire protection and approved by the Department. [6 CCR 1007-3, section 264.31(b), 265.31(b) and 265.52(g)]
6. Colorado regulations require interim status TSD facilities and large quantity generators to develop a contingency plan that specifies the fire protection district responsible for providing fire protection services or a statement that the facility is not located within a fire protection district but is operating under its own fire protection plan that has been approved by the Department. The plan must also identify the Local Emergency Planning Committee. [6 CCR 1007-3, section 265.52(g)]
7. Colorado regulations require interim status TSD facilities and large quantity generators to submit a copy of the contingency plan to the Local Emergency Planning Committee. [6 CCR 1007-3, section 265.53(b)]
8. Colorado regulations applicable to the treatment of hazardous waste by a generator require a generator to develop a waste analysis plan describing the treatment activity that must be maintained on-site. The Colorado regulations also preclude the thermal treatment of hazardous waste and the treatment of reactive hazardous waste. [6 CCR 1007-3, section 100.21(d)]
9. Colorado regulations prohibit disposal of any free liquid in a hazardous waste landfill. [6 CCR 1007-3, section 264.314(e) and 265.314(f)]
10. Colorado regulations specify that a copy of the certification by an engineer for freeboard less than 2 feet (60 centimeters) in interim status surface impoundments must be submitted to the Hazardous Materials and Waste Management Division. [6 CCR 1007-3, section 265.221(g)]
11. Colorado regulations specify that a copy of the certification by an engineer or chemist that design features will prevent ignitable or reactive wastes from igniting or reacting in surface impoundments must be submitted to the Hazardous Materials and Waste Management Division. [6 CCR 1007-3, section 265.229(b)]
12. Colorado regulations prohibit the location of new TSD facilities within 1,000 feet of a fault that has had a displacement in the Holocene time. [6 CCR 1007-3, section 264.18(a)]
13. Colorado regulations require treatment and storage facilities and existing disposal facilities to be designed, operated, and closed to prevent washout by a 100-year flood event. New disposal facilities are prohibited in 100-year floodplains and there are no provisions for an exemption from the requirement. [6 CCR 1007-3, section 264.18(b)]
14. Colorado regulations require TSD facilities and generators to take steps to minimize unplanned releases to groundwater. [6 CCR 1007-3, section 264.31 and 265.31]

15. Colorado regulations require TSD facilities and generators to design contingency plans to minimize releases to groundwater. [6 CCR 1007-3, section 264.51(a), 264.52(a), 265.51(a), and 265.52(a)]
16. Colorado regulations require land disposal TSD facilities to record in their operating record the location and quantity of hazardous waste on a map or diagram of each cell or disposal area using a three dimensional grid system. [6 CCR 1007-3, section 264.73(b)(2) and 265.73(b)(2)]
17. Colorado regulations require waste piles, land treatment units, and new landfills to design, operate, and maintain a run-on control system capable of handling a 100-year storm event. [6 CCR 1007-3, section 264.251(g), 265.253(a)(2), 264.273(c), 265.272(b), 264.301(g) and 265.301(g)]
18. Colorado regulations require waste piles, land treatment units, and new landfills to design, operate, and maintain a run-off control system capable of handling a 24-hour, 100-year storm event. [6 CCR 1007-3, section 264.251(h), 265.253(a)(3), 264.273(d), 265.272(c), 264.301(h), and 265.301(g)]
19. Colorado regulations do not include language in the federal regulations at 40 CFR 265.90 (c) allowing the waiver of part or all of the groundwater monitoring requirements at interim status TSD facilities. [6 CCR 1007-3, section 265.90]
20. Colorado regulations specify that in order to meet the financial test to guarantee closure and/or post-closure for TSD facilities in Colorado the facility must receive an A rating rather than a B rating. [6 CCR 1007-3, section 266.14]
21. With respect to the financial assurance requirement of Part 266, Colorado regulations removed the trust fund pay-in period for permitted or existing interim status facilities and require the trust fund to be fully funded up front. [6 CCR 1007-3, section 266.14(a)(3)]
22. Colorado regulations have more stringent minimum design requirements for Corrective Action Management Units (CAMUs). [6 CCR 1007-3, section 264.552(e)(3)]
23. Colorado regulations specify that an environmental covenant be added to the deed of a property that had a CAMU where remediation wastes will remain in place indicating that the land has been used to manage remediation wastes, which may or may not contain hazardous wastes. [6 CCR 1007-3, section 264.552(e)(6)(v)]
24. Colorado regulations have more stringent requirements regarding public participation in the hazardous waste facility permitting process. [6 CCR 1007-3, section 100.11(f)]

USED OIL

1. Colorado regulations require containers of used oil that are stored outdoors to be kept closed except for when it is necessary to add or remove used oil from the container. [6 CCR 1007-3, section 279.22(b)(3)]

UNIVERSAL WASTES

1. Colorado regulations require large quantity handlers of universal waste to notify of their universal waste activities even if they already have an EPA identification number for other hazardous waste activities. *[6 CCR 1007-3, section 273.32]*
2. Colorado regulations limit the size of mercury-containing devices managed as universal waste to 5 kg (~11 pounds) or less of elemental mercury per device and allow handlers to only manage up to 35 kg (~77 pounds) of elemental mercury removed from open-ended mercury-containing devices at one time. *[6 CCR 1007-3, sections 273.2(c)(2)(iii), 273.13(c)(5)(ix), and 273.33(c)(5)(ix)]*

Hazardous Waste Generator Requirements Summary Table

GENERATOR REQUIREMENT	GENERATOR CATEGORY		
	Conditionally Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)
Hazardous Waste Determination	Required through process knowledge or analysis (supporting documentation recommended)	Required through process knowledge or analysis (supporting documentation required)	Required through process knowledge or analysis (supporting documentation required)
Onsite Storage & Disposal	Part "B" Permit required	Part "B" Permit required	Part "B" Permit required
Onsite Treatment	Unrestricted (Knowledge of proper & safe treatment methods implied)	Part "B" Permit, Permit-by-Rule, Treat in WWTU or Treat to meet LDR	Part "B" Permit, Permit-by-Rule, Treat in WWTU or Treat to meet LDR
Monthly Generation Rate	< 1 kg of acutely HW < 100 kg of HW	< 1 kg of acutely HW > 100 kg but < 1,000 kg of HW	> 1 kg of acutely HW > 1,000 kg of HW
Maximum Accumulation	< 1 kg of acutely HW < 1,000 kg of HW	< 1 kg of acutely HW < 6,000 kg of HW	No limit
Accumulation Time Period	None	180 days or 270 days if TSD facility is > 200 miles away (30 day extension available)	90 days (30 day extension available)
EPA ID Number	Required if generate >3 gal/yr of waste codes F001, F002, F004, F005	Required	Required
Manifests & LDR	Not Required (recommended)	Required	Required
Exception Reports	Not Required (recommended)	Notify CDPHE within 60 days & include a copy of the Manifest	Contact handler within 35 days, Report to CDPHE within 45 days
Biennial Reports	Not Required	Not Required	Required (March 1 st of even numbered year)
Contingency Plan	Not Required (recommended)	Basic Plan Required	Written Plan Required
Container Management	Not Required (recommended)	Good Condition, Compatible with Waste, Labeled as Haz. Waste, Aisle Space, Lids, Weekly Inspections & Acc. Start Date <u>unless</u> at Satellite Accumulation Area	Good Condition, Compatible with Waste, Labeled as Haz. Waste, Aisle Space, Lids, Subparts AA, BB & CC apply, Weekly Inspections & Acc. Start Date <u>unless</u> at Satellite Accumulation Area
Tank Management	Not Required (recommended)	Good Condition, Compatible with Waste, Labeled as Haz. Waste, Acc. Start Date Tracked & Daily Inspections	Good Condition, Compatible with Waste, Labeled as Haz. Waste, Acc. Start Date Tracked, Daily Inspections, Subparts AA, BB & CC apply & Secondary Containment is Required
Personnel Training	Not Required (recommended)	Basic Training Required	Written Training Plan Required
Record Keeping	Disposal Receipts & Waste Analysis Records (recommended)	Manifests, LDR, Training Records & Waste Analysis Records	Manifests, LDR, Training Records, Biennial Reports, Exception Reports & Waste Analysis Records

Note: 1 kg ~ 1 qt, depending on material*
 100 kg ~ 27 gal (about ½ of a 55 gal drum) or 220 lbs, depending on material*
 1,000 kg ~ 270 gal (about five 55 gal drums) or 2,200 lbs, depending on material*
 6,000 kg ~ 1,620 gal (about thirty 55 gal drums) or 13,200 lbs, depending on material*
 (*see page 16 of this booklet)

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