SECTION 8 CONTENTS

8. How Do I Comply With the Hazardous Waste Regulations?

8.1 Introduction

As a food processor, you produce wastes that could be hazardous. Therefore, it is important that you identify and manage them properly to protect yourself, coworkers, and others in your community, as well as the environment. As the waste generator, you are responsible for all steps in hazardous waste management, from generation to storage to final disposal. **You can be held liable for any mismanagement of your wastes, even after they leave your facility. So, it is important for you to know the requirements.**

This section explains the hazardous waste law, known as the Resource Conservation and Recovery Act (RCRA), and its regulations which impose requirements on how you , store, must handle and dispose of the wastes you generate in your food processing facility. Sections 8.5 *Compliance Requirements for CESQGs and* Section 8.6 *Compliance Requirements for SQGs and LQGs* focus on the major federal requirements with which you must comply.

In some instances, the states impose additional and more stringent requirements on how you handle your wastes. It is critical, therefore, that you review you state's requirements and contact your state hazardous waste agency for any additional requirements.

If your facility has an underground storage tank (UST) system, you are subject to RCRA Subtitle I requirements. Section 8.7 *Underground Storage Tanks* provides an overview of these requirements, which pertain to USTs containing petroleum products or substances defined as hazardous under The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). If your facility has aboveground storage tanks (ASTs), see Section 4.6 *How Do I Comply with Oil Pollution Prevention Regulations* for more information?

Here are the steps you should follow to ensure compliance with this law:

- Determine whether you have hazardous waste at your food processing facility
- Determine your hazardous waste generator status
- Meet the major requirements based on your hazardous waste generator status.

Your ability to comply with RCRA regulations depends on your understanding of what constitutes a hazardous waste. This definition is fundamental because it determines how wastes must be managed. It is important to recognize that the definition of hazardous waste is not straightforward.

8.2 What is Hazardous Waste?

The answer to this question is complex and requires you to follow several steps. First you must determine what types of wastes your facility generates and how each waste will be managed. RCRA defines two categories of wastes, solid and hazardous. Hazardous waste is a subset of solid waste. Therefore, if your waste does not meet the definition of solid waste, it will not be hazardous waste by definition.

8.2.1 Solid Waste

The definition of solid waste is so broad that most materials you dispose of fall within it. Under the RCRA statute, a "solid waste" is defined as any solid, liquid, or contained gaseous material that is discarded by being disposed of, burned or incinerated, or recycled (and not excluded under the regulations). The first step to determine whether or not you are generating a solid waste is to identify which of the categories of "secondary materials" your waste fits. These are:

See Section 10.2 for information on managing nonhazardous, solid waste under RCRA Subtitle D.

- Spent material
- Scrap metal
- Listed or characteristic by-product
- Listed or characteristic sludge
- Commercial chemical product.

Specific definitions of each of these can be found in the *Code of Federal Regulations* (CFR) at 40 CFR 261.1. For additional guidance in classifying your wastes according to these categories, see the January 4, 1985 *Federal Register*.

The second step is to identify how you plan to manage the waste. The classification as a "solid waste" will depend on whether you plan to dispose of the waste, burn it for energy recovery, incinerate it, or recycle it, as well as how long you plan to store it prior to recycling it. The most complex questions regarding the definition of solid waste arises in the context of recycling activities. If you plan to recycle your waste, and you have any uncertainty concerning its classification, you should consult your state regulatory agency, EPA regional office, or the RCRA/UST, Superfund and EPCRA hotline at 1-800-424-9346 or 703-412-9810.

There are a number of disposable materials that are excluded from the definition (in RCRA) of solid waste (and thus hazardous waste) including:

- Domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly owned treatment works (POTW) for treatment. "Domestic sewage" means any untreated sanitary wastes that pass through a sewer system.

- Industrial wastewater discharges that are point source discharges (i.e., they are discharged from a single point or pipeline) and are regulated under Section 402 of the Clean Water Act (CWA). This exclusion only applies to the actual point source discharge. Industrial wastewaters that are being collected, stored, or treated before discharge are not excluded, nor are sludges that are generated by industrial

wastewater treatment. If you are treating your own wastewater, the sludges are considered solid waste, and could be hazardous waste.

8.2.2 Hazardous Waste

Once you have determined that your material to be disposed of is solid waste, you then must determine if it is hazardous. For a waste to be classified as hazardous, it either:

- Is on one of the four lists of hazardous wastes (see *Listed Wastes* below) published in the federal RCRA regulations (40 CFR 261),
- Demonstrates one or more of the four hazardous waste characteristics of ignitability, corrosivity, reactivity, or toxicity (see *Characteristic Wastes* below), **or**
- Is a **mixture** of a listed hazardous waste and other wastes. It is important to note that waste mixtures that include hazardous wastes are regulated as hazardous waste regardless of the proportions of the mixture.

Listed Hazardous Wastes

Your waste is considered a hazardous waste if it appears on one of four lists (see table below) published in the hazardous waste regulations (40 CFR 261 Subpart D). Currently, more than 400 wastes are on these lists. Wastes are listed as hazardous because they are known to be harmful to human health and the environment when not properly managed. Even when properly managed, some listed wastes are so dangerous that they are called **acutely hazardous wastes**. Examples of acutely hazardous wastes include wastes generated from some pesticides that can be fatal to humans or animals in low doses.

Each list represents a different category of hazardous wastes and has a different alphabetical letter (F, K, U, and P). The categories are defined by the source of the waste.

List:	**Listed hazardous wastes include:**	**Wastes generated in food processing:**
F	The F list (40 CFR 261.31) designates as hazardous particular wastes from certain common industrial or manu-facturing processes. Because the processes producing these wastes can occur in different sectors of industry, the F list wastes are known as wastes from nonspecific sources (e.g., degreasing)	Food processors will most likely generate spent solvent wastes, which are F-listed wastes F001-F005.
K	The K list (40 CFR 261.32) designates as hazardous particular wastestreams from certain specific sectors of industry. K list wastes are known as wastes from specific sources.	Food processors typically do not generate these types of wastes.

List:	Listed hazardous wastes include:	Wastes generated in food processing:
U and P	The U and P lists are similar in that both list as hazardous pure or commer-cial grade formulations of certain specific unused chemicals. P wastes are all acutely hazardous (40 CFR 261.33).	Food processors may generate these types of wastes (e.g., unused pesticide of pure heptachlor [P059]).

If a waste is not found in any of these four federal lists, it still may be on a state hazardous waste list. For example, many states list waste petroleum oil as a hazardous waste.

Characteristic Wastes

If a waste does not appear on one of the EPA lists discussed above, it may still be considered a hazardous waste if it has one or more of the following characteristics:

- It can readily catch fire and sustain combustion. This is called an **ignitable** waste (40 CFR 261.21). EPA selected a flashpoint test as the method for determining whether a liquid waste is combustible enough to deserve regulation as hazardous. A non-liquid waste is only ignitable if it can spontaneously catch fire under normal handling conditions and can burn so vigorously that it creates a hazard. Ignitable wastes carry the waste code D001. Examples are paint wastes, certain degreasers, or other solvents.

  The flashpoint test determines the lowest temperature at which a chemical ignites when exposed to flame.

- It is an acidic or alkaline (basic) waste which can readily corrode or dissolve flesh, metal, or other materials. This is called a **corrosive** waste (40 CFR 261.22). EPA uses two criteria to identify corrosive hazardous wastes. The first is a pH test. Wastes with a pH $ 12.5 or # 2 are corrosive under RCRA rules. A waste may also be corrosive if it has the ability to corrode steel in a specific EPA-approved test protocol. Corrosive wastes carry the waste code D002. Examples are waste rust removers, waste acid or alkaline cleaning fluids, and waste battery acid.

- It readily explodes or undergoes violent reactions. This is known as a **reactive** waste (40 CFR 261.23). Reactive hazardous wastes are relatively uncommon, and, in many cases, there is no reliable test method to evaluate a waste's potential to explode or react violently. Therefore, EPA uses a narrative criteria to define most reactive wastes.

  Under RCRA, a waste is reactive if it meets any of the following criteria:
  – It can explode or violently react when exposed to water or under normal handling conditions;
  – It can create toxic fumes or gases when exposed to water or under other conditions (e.g., heat or pressure); or
  – It meets the criteria for classification as an explosive under U.S. Department of Transportation (DOT) rules.

Wastes exhibiting the characteristic of reactivity are assigned the waste code D003. Examples are waste bleaches and other waste oxidizers.

- It is harmful or fatal when ingested or absorbed, or it leaches toxic chemicals into the soil or groundwater when disposed of on land. This is called a **toxic** waste (40 CFR 261.24). You can determine if your waste is toxic by having it tested using the Toxicity Characteristic Leaching Procedure (TCLP). If the waste contains any of the regulated contaminants at concentrations equal to or greater than the regulatory levels, then the waste exhibits the toxicity characteristic. The toxic waste carries the waste code associated with the constituent which exceeded the regulatory level.

The Toxicity Characteristic Leaching Procedure (TCLP) replicates the leaching process and other effects that occur when wastes are buried in a typical municipal landfill.

Mixture Rule and Derived From Rule

The mixture and derived from rules operate differently for listed wastes and characteristic wastes. The mixture rule for listed wastes states that a mixture made up of any amount of a nonhazardous solid waste and any amount of a listed hazardous waste is considered a hazardous waste. In contrast, a mixture involving a characteristic waste is hazardous only if the mixture itself exhibits a characteristic.

The derived from rule governs the regulatory status of materials that are created by treating or changing a hazardous waste in some way. For example, ash created by burning a hazardous waste is considered **derived from** that hazardous waste. The derived from rule for listed wastes states that any material derived from a listed hazardous waste is also a listed hazardous waste. A treatment residue and materials derived from characteristic hazardous wastes are hazardous only if they themselves exhibit a characteristic.

Hazardous Waste Codes

Specific hazardous waste types have designated waste codes. A waste code is a four-digit classification system used by EPA to identify hazardous wastes on labels, shipping papers, and other records. All federal hazardous waste codes begin with a letter and are followed by numbers. All federal **listed** wastes begin with either "F", "K", "U", or "P"; **characteristic** wastes begin with the letter "D." For a complete listing of hazardous waste codes, consult 40 CFR 261. Many states have listed waste numbers that begin with the two-letter state abbreviation followed by two specific numbers that identify the state-listed waste. In order to determine what the waste code is for your hazardous waste, you need to look at the regulations. You should call your state environmental agency to determine where you can obtain a copy of your state's regulations.

8.2.3 Universal Waste

EPA issued the Universal Waste Rule in 1995 as an amendment to RCRA. It provides an alternative and less stringent set of management standards to those in the hazardous waste regulations (40 CFR 260-272) for three specific, but widely generated, types of waste that potentially would be regulated as hazardous. These wastes are:

- Batteries that are spent and will not be reclaimed or regenerated either at your facility or at a battery recycling/reclamation facility (under 40 CFR 266 Subpart G). Types of batteries that your facility may generate that would be universal wastes include those in electronic equipment, mobile telephones, portable computers, and emergency backup lighting.

- Pesticides that have been suspended or canceled including those that are part of a voluntary or mandatory recall under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or by the pesticide registrant; are unused but managed as part of a waste pesticide collection program; or are obsolete or damaged.

- Mercury thermostats including temperature control devices containing metallic mercury.

The Universal Waste rule establishes requirements applicable to four types of universal waste generators or collectors: small quantity handlers, large quantity handlers, transporters, and destination facilities. Specific requirements of the universal waste rule can be found at 40 CFR 273.

8.3 Are My Wastes Hazardous?

Do you generate hazardous wastes at your facility? Since you are a food processor, the answer will probably be "yes." For your facility, the hazardous waste identification process involves the following steps, in this order:

Under RCRA, it is your responsibility to determine if a waste produced or generated at your facility is hazardous (40 CFR 262.11).

- **U** Complete an inventory of all wastes that are generated by your facility (see Section 3.0).

- **U** For each waste, determine whether the material in question is a "solid waste" (see Section 8.2.1).

- **U** Determine whether the solid waste in question is excluded from regulation.

- **U** Determine whether the solid waste in question is a hazardous waste. You may need to send a sample of your waste to a laboratory for them to determine if the waste is hazardous (see Section 8.2.2).

- **U** Make a list of all the hazardous waste you have at your facility and determine the waste code for each (see 40 CFR 261).

U If you are unsure, get help. For assistance, call EPA or your state environmental agency, a consultant, a licensed transporter, or the RCRA/UST, Superfund and EPCRA hotline at 703-412-9810 or 1-800-424-9346.

As discussed in Section 3.0, hazardous wastes are generated during many food processing operations. Table 3-2 *Waste Analysis for SIC Code 203 Facility* (see Section 3.0) presents some of the typical hazardous wastes generated by food processing facilities. While this list is not all inclusive, it gives you a general idea of the kinds of wastes generated for each operation that are considered to be hazardous.

With your inventory list, you may be able to determine which wastes are hazardous based on knowledge alone. For example, you may use a cleaning solvent that you know is a listed hazardous waste. For wastes whose regulatory status cannot be determined by knowledge alone, the appropriate analysis should be performed in order to determine if any suspected characteristics meet the federal criteria for definition of hazardous wastes.

An important *first* source of information about the chemicals you use is the material safety data sheet (MSDS). The MSDS will identify specific chemical properties of a material, such as whether a material is highly acidic or basic, whether solvents are present, and other chemical properties, such as ignitability (flashpoint). MSDSs will not provide you with all of the answers to your environmental questions, but they can help you identify specific characteristics of your hazardous waste. The MSDS is provided by your chemical supplier and gives general health and safety information about handling these chemicals. To ensure that your MSDSs are current, require your vendors to automatically supply you with an MSDS for new products and to have anyone approving purchases in your business ask for them from the supplier.

If MSDSs do not provide you with enough information to make your determination, consult the RCRA regulations in 40 CFR 261 or call the RCRA/UST, Superfund and EPCRA hotline for assistance at 703-412-9810 or 1-800-424-9346.

8.4 What is My Hazardous Waste Generator Category?

If you are a food processor and your operations cause hazardous waste to be generated, you must now determine your generator category (40 CFR 261). Your generator category is determined by the amount of hazardous waste that you generate each month. There are three federal categories of hazardous waste generators:

- Conditionally exempt small quantity generator (CESQG)
  (# 220 pounds (100 kg) of hazardous waste; or # 2.2 pounds (1 kg) acutely hazardous waste per month).

- Small quantity generator (SQG)
  (> 220 pounds (100 kg) and < 2,200 pounds (1,000 kg)of hazardous waste per month.

- Large quantity generator (LQG)

($ 2,200 pounds (1,000 kg) of hazardous waste; or > 2.2 pounds (1 kg) acutely hazardous waste; or > 220 pounds spill residue from acutely hazardous waste).

Hazardous waste generators are divided into these three categories, depending on the quantity of hazardous waste generated each month and on the cumulative amount of hazardous waste stored at your food processing facility at any time. The measured amount (by weight) of hazardous waste generated at your facility per calendar month determines which hazardous wastes requirements and standards apply to you.

Determining Your Generator Category

To determine which category applies to your facility, you must count all quantities of listed and characteristic hazardous wastes. These include wastes that are: (1) generated and collected at your facility prior to treatment or disposal; and (2) packaged and transported offsite.

Many hazardous wastes are liquids and are measured in gallons, not pounds. To approximate the number of pounds of liquid you have, multiply the number of gallons by 8.3 (because a gallon of water weighs 8.3 pounds, and many liquids have a density similar to water). Most MSDSs list the density or specific gravity of the product.

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- *27 gallons (about half of a 55-gallon drum) of waste with a density similar to water weighs about 220 pounds (100 kg).*
- *270 gallons of waste with a density similar to water weighs about 2,200 lbs (1,000 kg).*

Keep in mind that you do NOT have to count the following:

- Wastes that are left on the bottom of containers that have been emptied by conventional means (i.e., pouring or pumping) and where no more than 2.5 cm (1 inch) of residue remains in the bottom of the container or no more than 3 percent by weight of the total capacity of the container remains in the container if the container is less than or equal to 110 gallons in size.
- Residues in the bottom of storage tanks, if the residue is not removed (i.e., residues left in the bottom of the storage container are not counted as long as they are not removed when the tank is refilled).
- Wastes that are reclaimed continuously onsite without storing the waste prior to reclamation.
- Wastes that you have already counted once during the calendar month, and treated onsite or reclaimed in some manner and used again.
- Wastes that are directly discharged to a municipal treatment plant or POTW without being stored or accumulated first. **This discharge to a POTW must comply with the CWA and any local POTW regulations (see Section 4.4 *Am I An Indirect Discharger?*).**

- Batteries, pesticides, and mercury thermostats which are regulated under the Universal Waste Rule (40 CFR 273), or lead-acid batteries to be reclaimed (40 CFR 266).

C Waste oil that meets the criteria for used oil and is to be managed and handled as used oil (40 CFR 279).

C Scrap metal that is recycled (40 CFR 261.6(a)(3)).

Table 8-1 illustrates the federal generation rates and storage time limits applicable to the generator categories. It is important to note that states may specify different categories than those specified in the federal regulations and you must meet the requirements specified in your state. For example, a state may only have two categories of generators; small and large, and have specific requirements for each of these generator categories.

From Table 8-1, you can see it pays to be in one of the SQG categories. There is more leeway for storage time, which will allow you to more cost-effectively manage your smaller quantities of hazardous waste. In addition, pollution prevention (P2) can help you change your generator status (see Section 11.0 *Pollution Prevention Techniques*).

Table 8-1. Federal Categories of Hazardous Waste Generators and Storage Time Limits Allowed

Generator Category	Monthly Hazardous Waste Generation Rate	Storage Time Limits
Conditionally Exempt Small Quantity Generator (CESQG)	# 220 pounds (100 kg); or # 2.2 pounds (1 kg) acute	No Limit
Small Quantity Generator (SQG)	> 220 pounds (100 kg) and < 2,200 pounds (1,000 kg); or #2.2 lb (1 kg) acute	#180 days or #270 days if waste treatment/disposal facility is >200 miles away
Large Quantity Generator (LQG)	$ 2,200 pounds (1,000 kg); or > 2.2 pounds (1 kg) acute; or # 220 pounds spill residue from acute	#90 days

8.5 Compliance Requirements for CESQGs

Your food processing facility is considered a CESGQ if it consistently generates less than 220 lbs (100 kg) of hazardous wastes per month, and less than 2.2 lbs. (1 kg) of acutely hazardous wastes per month. As a CESQG, your compliance requirements are quite simple. There are three basic hazardous waste management requirements that apply to CESQGs:

- Identify your hazardous and acutely hazardous wastes and know which wastes you generate that are hazardous. As explained in Section 8.3, there are several steps you should follow in your hazardous waste identification process. Please refer back to Section 8.3 for more information. If you are not sure of what you should do,

get help. This may mean calling EPA or your state environmental agency, a consultant, a licensed transporter, or the RCRA/UST, Superfund and EPCRA hotline at 703-412-9810 or 1-800-424-9346.

- Do not generate more than 220 lbs (or 100 kg) per month of hazardous waste or more than 2.2 lbs (1 kg) per month of acutely hazardous waste (this includes any wastes you shipped offsite for disposal during that month); and never store more than 2,200 lbs (1,000 kg) of hazardous waste or 2.2 lbs of acutely hazardous waste for any period of time.

- Ensure proper treatment and disposal of your waste. For CESQGs, proper treatment and disposal of hazardous wastes are fairly simple. It involves ensuring the waste is shipped to one of the following facilities, or if you treat (e.g., solvent distillation) or disposed of your hazardous waste at your facility, ensure that your disposal facility is:

  – A state or federally regulated hazardous waste management treatment, storage, or disposal facility (if your waste is hazardous).

  – A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste.

  – A facility that uses, reuses or legitimately recycles the waste (or treats the waste prior to use, reuse, or recycling).

  – A universal waste handler or destination facility subject to the universal waste requirements (if you choose to follow the universal waste requirements, which you are not required to do as a CESQG, see below).

  CESQG Self-Transporting of Hazardous Wastes. CESQGs are allowed to transport their own wastes to the treatment or storage facility, unlike SQGs and LQGs who are required to use a licensed, certified transporter. While there are no specific RCRA requirements for CESQGs who transport their own wastes, DOT requires all transporters of hazardous waste to comply with all applicable DOT regulations. Specifically, DOT regulations require all transporters, including CESQGs, transporting hazardous waste that qualifies as DOT hazardous material to comply with EPA hazardous waste transporter requirements found in 40 CFR 263.

- CESQGs are not required by federal hazardous waste laws to train their employees on waste handling or emergency preparedness, but it is strongly advised. **Keep in mind that employees who are responding to releases of hazardous substances and hazardous waste are required to be trained under Occupational Safety and Health Administration's (OSHA's) Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements (see 29 CFR 1910.120).**

You must comply with these requirements to retain your CESQG status, and remain exempt from the more stringent hazardous waste regulations that apply to SQGs and LQGs. However,

it is recommended that you follow the waste storage and handling requirements for SQGs to minimize the possibility of any leaks, spills, or other releases that potentially could cause economic hardship to your facility. Table 8-2 provides a summary of the federal CESQG requirements. Please remember the requirements in Table 8-2 are the **minimum federal** requirements. States may have more stringent and/or different requirements. Contact your state hazardous waste agency for these requirements.

8.6 Compliance Requirements for SQGs and LQGs

If you determine, based on the amount of waste you generate, that you are an SQG or LQG, you must comply with the following requirements:

- Waste identification
- EPA identification number
- Accumulation and storage limits
- Container management
- Personnel training
- Hazardous waste shipment labeling and placarding
- Reporting and recordkeeping requirements
- Contingency planning, emergency procedures, and accident prevention.

Requirements for hazardous waste generators cover the storage and handling, treatment, and disposal of the waste, from generation to final disposal. Table 8-2 provides a summary of the federal SGQ and LQG requirements. Please remember the requirements in Table 8-2 are the **minimum federal** requirements. State governments may have more stringent and/or different requirements. Contact your state environmental agency for state requirements.

Waste Identification

As a generator, you must determine whether your waste is hazardous. As explained in Section 8.3, there are several steps you should follow in your hazardous waste identification process (40 CFR 261). Please refer back to Section 8.3 for more information. If you are not sure of what you should do, get help. This may mean calling EPA or your state environmental agency, a consultant, a licensed transporter, or the RCRA/UST, Superfund and EPCRA hotline at 703-412-9810 or 1-800-424-9346.

EPA Identification Number

Each SQG and LQG is required to obtain an EPA identification number. These 12-character identification numbers are part of a national database on hazardous waste activities. Some states also require conditionally exempt small quantity generators to have identification numbers. Furthermore, companies that transport hazardous waste and facilities that store, treat, or dispose of regulated quantities of hazardous waste generated by food processing facilities must also have EPA identification numbers.

Table 8-2. Summary of Federal Hazardous Waste Generator Requirements

	CESQG	SQG	LQG
EPA/state ID Number	Not federally required	Federally required	Federally required
Monthly Generation Limits (Weight)	#220 lb (100 kg) or #2.2 lb (1 kg) acute	>220 lb (100 kg) and <2,200 lb (1,000 kg) or #2.2 lb (1 kg) acute	$2,200 lb (1,000 kg) or >2.2 lb (1 kg) acute or #220 lb spill residue from acute
Maximum Onsite Accumulation Limits (Weight)	#2,200 lb (1,000 kg) or #2.2 lb (1 kg) acute or #220 lb spill residue from acute	#13,200 lb (6,000 kg)	No limit
Maximum Onsite Time Limits for Storage	No limit	#180 days or #270 days if waste treatment/disposal facility is >200 miles	#90 days
Container Management	Not federally required	Federally required	Federally required
Reporting and Recordkeeping			
Uniform Hazardous Waste Manifest	Not federally required	Federally required	Federally required
Exception Reports	Not federally required	Federally required	Federally required
Biennial Reports	Not federally required	Not federally required	Federally required
Land Disposal Restriction Notifications	Not federally required	Federally required	Federally required
Contingency Planning and Notification (including personnel training)	Not federally required	Basic procedures required; employees must know proper waste handling and emergency procedures	Written plan required; hazardous waste handling training program required for employees
Used/Waste Oil Management Standards	Federally required	Federally required	Federally required

ow to obtain a hazardous waste generator number:

- **T** Call or write your state hazardous waste management agency or EPA regional office and ask for a copy of EPA Form 8700-12 "Notification of Regulated Waste Activity." You will be sent a booklet containing the two-page form and instructions for filling it out. Note that a few states use a form that is different from the EPA form. If you contact your state first, you will be sent the appropriate form to complete.

- **T** Complete one copy of the form for each of your food processing facilities where you generate or handle hazardous waste. There is no fee associated with filling out this form. Each site or location will receive its own unique EPA identification number. **You must use this identification number on all hazardous waste shipping forms.**

- **T** Make sure you fill the form out completely and correctly and sign the certification. Send the form to the address listed in the booklet you received with the form.

An EPA identification number is a unique number that applies to a particular food processing facility site or location. **If you move your food processing facility to another location, you must notify EPA or the state of the new location, submit a new form, and obtain a new EPA identification number.** If hazardous waste was previously handled at the new location, and it already has an EPA identification number, you will be assigned that number for your relocated food processing facility.

Onsite Accumulation and Storage Limits

Onsite accumulation (storage) limits are based on the total **weight** of hazardous waste that can be accumulated at any time at your food processing facility before it must be shipped offsite (40 CFR 262.34). Exceedance of the accumulation limits can cause a change in your generator status and, therefore, a change in the applicable regulatory requirements. Onsite accumulation weight limits and storage time limits for each generator status are presented in Table 8-2. Storage time is allowed so that you can accumulate enough hazardous waste onsite in order to make shipping it offsite for treatment or disposal economical.

Container Management

Your food processing facility can store hazardous waste in 55-gallon drums, tanks, or other suitable containers, but it must comply with rules intended to protect human health and the environment and reduce the likelihood of damages or injuries caused by leaks or spills (40 CFR 265). The following list summarizes the most significant requirements for managing containers of hazardous waste, regardless of their size:

- **T** Establish and clearly mark an accumulation (storage) area for your hazardous waste. This is your designated onsite hazardous waste storage area and is a collection area for your entire facility. The length of time you can store hazardous waste in this area depends on your generator status. The type of area and marking requirements are set by your state. For storage tanks constructed after September

30, 1986, this area must have a containment system sufficient to hold spills and leaks. The amount of hazardous waste which can be stored onsite is shown in Table 8-2.

T Properly label and mark all containers of hazardous waste in your hazardous waste storage area. Clearly mark each container with the words "HAZARDOUS WASTE," and with the date the waste was first collected in that container. (Labels for this purpose may be available from the waste hauler or a trade association.) When your waste is shipped offsite, it is important that your transporter is aware of and complies with DOT placarding requirements for the truck used to haul your waste. Further, many states require additional labeling, such as a description of the contents of the container.

T You can accumulate up to 55 gallons of hazardous waste in properly labeled containers or drums at or near the various parts of your facility where the waste is generated. This is called *satellite accumulation*. Once 55 gallons have accumulated, satellite waste must be moved to your designated onsite hazardous waste storage area prior to shipment offsite.

T Containers in satellite accumulation areas must be clearly marked with the words "HAZARDOUS WASTE" or with other wording that identifies the contents of the container. Once the amount of waste in the container or drum reaches 55 gallons, it must be marked with the date it reaches that amount, and it must be moved to the designated onsite hazardous waste storage area within 72 hours (3 days). The operator of the process is responsible for this container or drum as long as it is kept separate from the designated storage area.

T Mark the EPA waste code on the drum. Although marking the EPA waste code on the drum is not required by federal regulations, it is required by most states and is highly recommended.

T Keep containers in good condition, handle them carefully, and replace any leaking ones. If a container is in poor condition, the waste must be transferred to a container in good condition.

T Use containers made of or lined with materials that will not react with the waste. Do not store hazardous waste in a container if it may cause ruptures, leaks, corrosion, or other failure.

T Do not throw away containers with product in them. If you have a container that has less than one inch of product or less than three percent of the total amount of product remaining, the container can be crushed, recycled, or thrown away. Otherwise, you must scrape out the product on the inside and properly manage it as hazardous waste. There is a federal requirement to triple rinse containers that have held acutely hazardous waste prior to considering the containers to be empty. Your state may also mandate this; please contact your state regulatory agency for more information.

T Keep containers closed except when adding or removing wastes. Remember, if a funnel remains in a drum, the drum is considered open. Do not handle or store a container in such a way that may rupture it or cause it to leak.

T Inspect the containers for leaks or corrosion every week. During your inspection, it is recommended that you make sure that:

- All drums are labeled/marked appropriately
- There is sufficient space to walk in the storage area and there is required space (36 inches) between rows of drums
- All drums are stacked properly
- All drum lids are closed tightly
- There are appropriate signs warning other employees that this is a hazardous waste storage area
- Drums are not stored onsite longer than you are allowed:
  - LQGs – 90 days
  - SQGs – 180 days or 270 days if the treatment, storage, and disposal facility is more than 200 miles away
- There is no more waste onsite than is allowed for your generator status
- Drums containing incompatible hazardous waste are stored separately or protected by a structure, such as a dike or berm.

Some states may require that you keep a written record of these inspections. Any problems should be corrected immediately. If any corrections are made, they should be noted in a permanent record and kept on file for at least three years.

T If your facility has outdoor accumulation areas, and if you are storing ignitable or reactive wastes, make sure that containers of these wastes are stored at least 50 feet from the your facility's property line as this creates a protective buffer zone.

T NEVER store two or more wastes in the same container that could react to cause fires, leaks, or other releases.

Personnel Training

Proper waste handling can save your facility money in waste treatment and disposal and in lost time due to employee illness or accidents. You must train your employees on the procedures for properly handling hazardous waste, as well as on

Keep in mind that employees who are responding to releases of hazardous substances and hazardous waste are required to be trained under OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements (see 29 CFR 1910.120).

emergency procedures (40 CFR 262.34(a)). For LQGs, the training must be formalized and be completed by employees within six months of accepting a job involving the handling of hazardous waste, and you are required to provide annual review of the initial training.

It is important to note that training you may be required to conduct by OSHA differs from hazardous waste management training. Make sure you provide both types of training to your employees.

Hazardous Waste Shipment Labeling and Placarding

When you prepare hazardous wastes for shipment, you must put the wastes in properly labeled containers that are appropriate for transportation according to the DOT regulations (40 CFR 262). Your transporter should be able to assist you. You must:

- **T** Write the manifest document number on the drum label. A blank space intended for this purpose is provided on hazardous waste labels available from label distributors.

- **T** Label all drums using the four-inch DOT warning labels (available from the waste hauler or a label distributor), which are marked with the proper DOT shipping name and number according to DOT requirements. Usually your hauler will do this for you.

- **T** Make sure that (if required) the hauler displays the proper 10-3/4" DOT placard on all four sides of the truck that hauls your hazardous waste. Although the hauler usually provides these, you are responsible for making sure your hauler displays the appropriate placard.

If you need additional information, you may wish to consult the requirements for packaging and labeling hazardous wastes found in the DOT regulations. To find out what the requirements are for your specific waste, you should contact your state transportation agency, your hauler, or your waste disposal/treatment facility who can help you understand the DOT requirements. It may be helpful for you to create a shipping manual with guidance for packing, shipping, and disposal/recycling of all wastes leaving your facility.

REMEMBER: Just because you have shipped the hazardous waste off your site and it is no longer in your possession, your liability has not ended. You are potentially liable for cleanup costs under Superfund for any mismanagement of your hazardous waste. The manifest will help you track your waste during shipment and make sure it arrives at its proper final destination.

Reporting/Recordkeeping for Hazardous Waste Management Practices

Your food processing facility is required to meet various reporting and recordkeeping requirements as part of your hazardous waste management obligations. These requirements are summarized below:

Uniform Hazardous Waste Manifest. The Uniform Hazardous Waste Manifest Form (EPA Form 8700-22) is a multi-copy shipping document that reports the contents of your shipment, the transport company used, and the treatment/disposal facility receiving the wastes (40 CFR 262.20).

The manifest form is designed so that shipments of hazardous waste can be tracked from their site of generation to their final destination, or from "cradle-to-grave." The hazardous waste generator, the transporter, and the treatment/disposal facility must each sign this document and keep a copy. The waste disposal/treatment facility also must send a copy back to you, so that you can be sure that your shipment was received.

Tolling Agreements

Note: Small Quantity Generators (SQGs) are not required to prepare a hazardous waste manifest if: (1) the waste is reclaimed under a contractual (tolling) agreement which specifies the type of waste and frequency of shipments, and the vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and (2) the generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement (40 CFR 262.20(e)).

A copy of the manifest is required to be kept on file at your facility for three years, or until a signed copy of the manifest is received from the waste disposal/treatment facility. The signed copy of the manifest is required to be kept on file for three years. If you do not receive a signed copy from the waste treatment/disposal facility within 30 days, it is a good idea for you to find out why and, if necessary, let the state or EPA know (see Exception Reports).

You can obtain blank copies of the manifest form from several sources. To determine the best source for you, use this system:

- If the state to which you are shipping your waste has its own manifest, use that manifest form (your waste transporter will know which manifest form is required). Contact the hazardous waste management agency of that state, your transporter, or the waste treatment/disposal facility to obtain manifest forms.
- If the state to which you are shipping your waste does not have its own manifest, use the manifest of the state in which your waste was generated. Contact your transporter or your state hazardous waste agency for blank forms.
- If neither state requires a state-specific manifest, you may use the "general" Uniform Hazardous Waste Manifest (EPA Form 8700-22). Copies are available from some haulers and waste treatment/disposal facilities.

When you sign the certification on ITEM 16 of the manifest form, you are personally confirming that:

- The manifest is complete and accurately describes the shipment.
- The shipment is ready for transport.
- You have reduced the amount and hazardous nature of your wastes to the greatest extent possible (within your budget constraints).

Transporters, recyclers, and waste treatment/disposal facilities may require additional information. Check with them before you prepare a hazardous waste shipment. States may also have additional requirements that must be followed. Your hazardous waste hauler often will be the best source for packaging and shipping information and will help in completing the manifest. If you have any trouble obtaining, filling out, or using the manifest, ask your hauler or your waste treatment/disposal facility operator.

Exception Reports. Exception reports document a missing return copy of the hazardous waste manifest. Reports must include a copy of the manifest and a cover letter signed by the generator or authorized representative explaining the efforts taken to locate the waste and the results of those efforts. If you are an SQG, you must submit a copy of the manifest with some indication that you have not received confirmation of delivery within 60 days of the date your waste was accepted for transport. If you are an LQG, you must contact the transporter and/or waste treatment/disposal facility within 35 days of the transporter accepting your waste for shipment to determine its status and submit a report within 45 days. Copies of exception reports must be maintained for three years.

Biennial Reports. If you are an LQG of hazardous waste, you must submit a biennial report (EPA 8700-13A) on March 1 of each even-numbered year to the appropriate state regulatory office (40 CFR 262.41). Some states impose this requirement on SQGs. Biennial report applications and instructions can be obtained from your state office. This report must contain the following information:

- **T** Your EPA ID number, name, and address.
- **T** The EPA ID number, name, and address of each offsite waste treatment/disposal facility where waste was sent during the year.
- **T** A record of your hazardous waste activities for the previous calendar year, including the quantity of waste you generated or accumulated onsite and the quantity you sent offsite.
- **T** A description of your efforts that year to reduce the toxicity and volume of hazardous wastes generated (i.e., waste minimization efforts).
- **T** A description of the changes in volume and toxicity of waste actually achieved.
- **T** The certification signed by you, the generator, or authorized representative.

Copies of biennial reports must be maintained onsite for three years.

Land Disposal Restriction Notification. Land disposal restrictions (LDRs) are regulations prohibiting the disposal of hazardous waste on land without prior treatment of the waste (40 CFR 268). The LDR notification ensures proper treatment of the waste prior to disposal. Recent changes in this regulation have decreased the reporting and recordkeeping burden for you (Federal Register, Volume 62, Number 91; May 12, 1997). Under this amended rule, you are required to provide a **one-time notification** about your waste to the treatment or disposal facility with the first shipment of waste offsite, and keep a copy in your files. The one-time notification applies to shipments of all restricted hazardous waste. No new notification is required unless there is a change in the waste, process, or receiving facility. A change in the waste is a change that affects the determination of which treatment standard applies. If this occurs or there is a change in the receiving facility, you must send a new notice to the receiving facility and place a copy of the new notice in your files (40 CFR 268.7).

The LDR notification must include:

- **T** EPA hazardous waste code for the wastes (e.g., F002).
- **T** Corresponding treatment standard(s) as identified in the federal RCRA regulations.
- **T** Manifest number for that shipment.
- **T** Certification statement.

As presented in Table 8-2, a LDR notification is required for SQGs and LQGs, unless a tolling agreement (see box titled *Tolling Agreements* on p. 8-16). Copies of the land disposal restriction notification form(s)and the waste analysis reports must be kept for three years (40 CFR 268.7(a)(8)). All records kept in connection with the LDR program may be stored electronically.

Summary of Recordkeeping Requirements. You are required by EPA to keep certain records on file to show that good housekeeping practices and monitoring are being performed at your food processing facility. EPA requires that records be kept on file at your facility for three years (40 CFR 262.40). These records include:

- **T** Laboratory analyses and waste profile sheets for determining whether wastes generated by your facility are hazardous.
- **T** Copies of all hazardous waste manifests, LDR notification(s), and exception reports.
- **T** Copies of all Notification of Hazardous Activity forms submitted to and received from the state or EPA.
- **T** Copies of all personnel training plans and documentation that indicate employees have completed the required training (LQGs only).
- **T** Copies of your facility's contingency plan (LQGs only).
- **T** Copies of your facility's biennial report (LQGs only).

It is a good idea to have these documents filed neatly in one place at your facility. State or federal inspectors will likely ask for copies of these documents while inspecting your facility.

Contingency Planning and Notification

A contingency plan will help you look ahead and prepare for accidents that could possibly occur at your food processing facility (40 CFR 262). If you are an LQG, you are required to have a **written contingency plan**. If you are an SQG, you must have **basic contingency procedures** in place. Although a **written** contingency plan is not federally required for SQGs or CESQGs, it is strongly recommended. It is also important to check with your state and local authorities for any additional contingency plan or emergency preparedness requirements. Table 8-3 presents the contingency plan requirements for LQGs and SQGs.

A contingency plan can be thought of as a set of answers to a series of "what if" questions. For example, "What if there is a fire in the area where solvents are stored?" or "What if I have a spill of hazardous waste or one of my containers leaks?" Emergency procedures are the steps that you should follow if you have an emergency. It is a good idea to make a list of these "what if" questions and to write down specific steps that you would take if the emergency occurred. Review these with your employees so they are also informed about their responsibilities in the event of an emergency.

Emergency Procedures and Accident Prevention

Emergency Planning. Your contingency plan, discussed above, must contain facility-specific details on what you have to do if you have an emergency. Specifically:

- **T** In the event of a **fire, explosion, or accidental release** of hazardous waste, you must immediately notify the National Response Center if the fire, explosion, or other release could threaten human health outside your food processing facility or when the release has reached surface water.

If you store oil onsite, you may be subject to specific prevention and response planning requirements. See Section 4.6 How Do I Comply With Oil Pollution Prevention Regulations? for more information.

Table 8-3. Contingency Plan Requirements for LQGs and SQGs

LQG Contingency Plan Contents	SQG Contingency Procedures
Written plan required. he contingency plan must contain: • Instructions on what to do immediately whenever there is a fire, explosion, or release. • The arrangements agreed to by local police and fire departments, hospitals, and state and local emergency response teams to provide emergency services. • The names, addresses, and phone numbers of all persons qualified to act as emergency coordinator. • All emergency equipment at the facility. • An evacuation plan. Copies of the contingency plan must be submitted to the local police and fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. You should maintain documentation showing that local authorities have been notified.	Basic plan required (not required to be written). The contingency procedures include the following: • You must have an emergency coordinator (employee) either at the facility or on call who is responsible for coordinating all emergency response measures. • You must post next to the telephone: (1) the name and number of the emergency coordinator; (2) the locations of the fire extinguishers and spill control material; and (3) the telephone number of the fire department. • You must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures.

The Center operates a 24-hour toll free number: **1-800-424-8802**, *or in Washington, DC:* **1-202-426-2675**. As soon as possible, you should have the hazardous waste and any contaminated materials or soils cleaned up by an appropriately trained person. Reporting any release and threat of release is required of SQGs and LQGs.

IMMEDIATELY CALL
THE NATIONAL RESPONSE CENTER (1-800-424-8802) if:

- If you have a serious emergency,
- You have placed a call to your local fire department, or
- You have a spill that extends outside of your facility boundaries or a spill that could reach surface water.

GIVE THEM THE INFORMATION THEY ASK FOR.
If you did not need to call, they will tell you.

ANYONE WHO IS REQUIRED TO CALL AND DOES NOT IS SUBJECT TO A $10,000 FINE, A YEAR IN JAIL, OR BOTH. If you are an owner or manager of a food processing facility and you fail to report a hazardous waste release, you may have to pay for the entire cost of repairing any damage, even if your facility was not the single or main cause of the damage.

During your telephone call to the National Response Center, you must give the following information:

- **T** Your facility name, address, and EPA identification number
- **T** The date, time, and type of incident (e.g., spill, fire)
- **T** The quantity and type of hazardous waste involved in the incident
- **T** The extent of injuries
- **T** An estimate of the quantity and location of any recovered materials, if any.

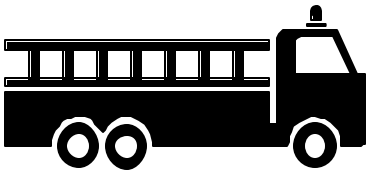
In addition, reports from LQGs must include an assessment of actual or potential hazards to human health or the environment (where this is applicable).

As stated above, the RCRA regulations require that emergency phone numbers and locations of emergency equipment must be posted near telephones. This means that **next to the phone** you must post:

- **T** The name, office phone number, home phone number, and address of your emergency coordinator.

- **T** A site plan or list of nearby:
  – Portable fire extinguishers
  – Special extinguishing equipment (e.g., foam, dry chemicals)
  – Fire alarms (only if not directly connected to fire department)
  – Spill control equipment (e.g., absorbent cotton rags)
  – Decontamination equipment (e.g., safety shower, eye wash fountain)
  – Water at adequate volume and pressure (e.g., water hoses, automatic sprinklers, water spray systems).

- **T** The telephone numbers of the fire and police departments.



- **T** Although not required, it is strongly recommended that you also post the following phone numbers by the telephone:
  – State or local emergency response teams
  – Hospital
  – Local ambulance service
  – National Response Center
  – State Department of Public Safety.

All employees who deal with hazardous waste must know proper waste handling and emergency procedures. An employee must be appointed to act as the emergency coordinator to ensure that emergency procedures are carried out in the event of an emergency.

Keep in mind that employees who are responding to releases of hazardous substances and hazardous waste are required to be trained under OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements (see 29 CFR 1910.120).

The emergency coordinator (or someone designated by that person) must:

- **T** Be available 24 hours a day either at the facility or by phone
- **T** Know whom to call and what steps to follow in an emergency
- **T** Commit company resources as necessary to respond to an emergency.

Because most food processors are small businesses, the owner or operator probably already performs these functions. Therefore, it is not intended (nor is it likely) that you will need to hire a new employee to fill this role.

Accident Prevention. In accordance with RCRA, your facility must have appropriate cleanup materials and emergency communication equipment for handling hazardous waste at your site. Some of the steps you may need to take to prepare for emergencies at your facility include the following:

- **T** Make sure that there are no floor drains near the area where solvents are used that lead to the sewer, septic tank, or storm water drain.

- **T** Store hazardous waste in areas away from doorways. The floor in your storage area should be leak-proof (e.g., concrete with an epoxy coating). If there is a doorway nearby, a concrete barrier is required to prevent the flow of material out of the door in case of a large spill.

- **T** Provide room for emergency equipment and response teams to get into any area in your facility in the event of an emergency.

- **T** If you are an LQG, you must write to local fire, police, and hospital officials or state or local emergency response teams explaining that you handle hazardous wastes and ask them for their cooperation and assistance in handling emergency situations.

- **T** Install and maintain emergency equipment (e.g., an alarm, a telephone, two-way portable radios, fire extinguishers, hoses, and automatic sprinklers) at your facility in hazardous waste storage areas so that it is immediately available to your employees if there is an emergency. This equipment should be inspected monthly.

8.7 Underground Storage Tanks (USTs)

According to EPA, an underground storage tank (UST) is "any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is ten percent or more beneath the surface of the ground."

For information on aboveground storage tank (AST) requirements, see Section 4.6 How Do I Comply With Oil Pollution Prevention Regulations?

USTs are subject to strict state and federal requirements. Federal regulations of USTs, contained in 40 CFR 280, require that all regulated UST systems be designed and constructed to retain their structural integrity throughout their operating life, and all USTs and attached piping be protected from corrosion. In addition, all systems must be equipped with spill and overfill protection and leak detection monitoring.

Subtitle I of RCRA governs activities and requirements related to UST systems. Subtitle I established a new and comprehensive regulatory program for UST systems containing petroleum products or substances defined as hazardous under CERCLA. Subtitle I includes the following provisions for UST systems:

- Design, construction, installation, operating, and notification requirements for new and existing systems;
- Release detection, reporting, investigation, confirmation, release response, and corrective action for systems containing petroleum or hazardous substances; and
- System closure requirements.

States generally have the same requirements as RCRA Subtitle I. However, some states (and municipalities) have more stringent UST regulations. You should contact your state UST office and your local municipality to determine if there are additional UST regulations with which you must comply.

The federal UST regulations do not apply to:

- Tanks with a capacity of 110 gallons or less;
- Farm or residential tanks holding 1,100 gallons or less of motor fuel used for noncommercial purposes;
- Tanks storing heating oil, where the oil is used on the property where it is stored;
- Tanks on or above the floor in underground areas (e.g., basements);
- Septic tanks and systems for collecting storm water and wastewater;
- Flow-through process tanks; and
- Emergency spill and overfill tanks.

Note: EPA defines "heating oil" to include fuel for boilers for process steam generation (40 CFR 280.12).

Requirements for notification, recordkeeping, leak detection, and spill, overfill, and corrosion protection are described below. Federal and state laws mandate strict penalties for failure to report or to respond properly to spills or leakage once detected. Penalties also apply to violations of the requirements for the installation, monitoring, testing, registration, and removal or closure of USTs.

Notification. A facility must report to the regulatory authority on the following occasions:

- **UST installation**. When an UST is installed, fill out a notification form. The form must be submitted to the responsible state UST program office for all onsite UST systems. The Notification Form includes certification of compliance with federal requirements for installation, cathodic protection, release detection, and financial responsibility for UST systems installed after December 22, 1988.

- **Suspected release**. Report suspected releases to the regulatory authority. If a release is confirmed, the facility must also report follow-up actions planned and take corrective actions to correct the damage caused by the UST.

- **UST closure**. Notify the regulatory authority 30 days before the facility permanently closes the UST.

Recordkeeping. Leak detection, corrosion protection, financial responsibility, closure, and corrective action records must be maintained onsite.

- Leak detection records include: the past year's monitoring results and most recent tightness test; copies of performance claims; and maintenance, repair, and calibration of leak detection equipment.

- Corrosion protection records include results of the last two tests proving the cathodic protection system is working and the last three inspections proving that impressed current systems are operating properly.

- If you are an owner and operator of a petroleum UST (e.g., vehicle fuel tank), you must have financial responsibility documentation showing you (1) have either insurance coverage; a guarantee from another firm; a surety bond; or a letter of credit; (2) have passed a financial test; (3) have a trust fund; (4) participate in a state financial assurance fund; or (5) use another financial method(s) of coverage approved by your state. (Note: if the owner and operator of a petroleum UST are separate persons, only one person is required to demonstrate financial responsibility; however, both parties are liable in event of noncompliance.) (See 40 CFR 280.090.)

- Closure records document that the UST was removed from service in accordance with federal requirements for notification and correct, safe closure.

- Corrective action records document that any releases from USTs have been reported to the appropriate agency and have been responded to as required.

Leak Detection. Facilities must check their USTs at least once a month to see if they are leaking. The facility must conduct one of the three following methods of leak detection:

- All USTs can use **monthly monitoring** consisting of one of the following methods or other methods approved by the regulatory agency:

  – Automatic tank gauging
  – Vapor monitoring
  – Interstitial monitoring with secondary containment
  – Groundwater monitoring
  – Statistical inventory reconciliation.

  Check with the state UST program to determine which methods are acceptable.

- USTs installed before December 22, 1998 can temporarily use monthly inventory control and annual tank tightness testing. **This is not an acceptable method after December 22, 1998.**

- USTs installed or upgraded with spill, overfill, and corrosion protection can temporarily use monthly inventory control combined with tank tightness testing every five years. This combined method can be used only for ten years after the tank has been installed or retrofitted with corrosion protection or until December 22, 1998, whichever is later.

In addition, facilities must conduct leak detection on any pressurized piping by (1) monthly monitoring (as described above) or annual line testing, and (2) an automatic flow restrictor, an automatic shutoff device, or a continuous alarm system.

Spill, Overfill, and Corrosion Protection. USTs installed on or before December 22, 1988, must meet spill, overfill, and corrosion protection requirements no later than December 22, 1998. USTs installed after December 22, 1988 were required to be constructed with spill, overfill, and corrosion protection.

- Spill and overfill protection. USTs must have catchment basins to contain spills. In addition, the facility and the fuel deliverer must follow industry standards for correct filling practices. New USTs must have overfill protection devices when they are installed. The three main types of overfill protection devices are automatic shutoff devices, overfill alarms, and ball float valves.

- Corrosion protection. Corrosion is the dissolution or gradual wearing away of materials, especially by chemical action. Metal is especially susceptible to corrosion. If your UST or piping is made of metal or has metal components, you must have some form of corrosion protection for them. All corrosion protection systems must be operated and maintained to provide continuous corrosion protection to the metal components of the portion of the UST and piping that are in contact with the ground and routinely contain petroleum products or hazardous substances.

To find out more about federal UST requirements, you can receive free explanatory publications and assistance by calling EPA's RCRA/UST, Superfund and EPCRA hotline at 1-800-424-9346 or 703-412-9810, or by visiting EPA's Office of Underground Storage Tanks website at **http://www.epa.gov/OUST/**. State and local UST requirements can differ from federal requirements so be sure to check with appropriate state and local regulatory agencies.

8.8 Used Oil Management Standards

If you generate used oil at your food processing facility, you are responsible for ensuring that it is managed properly. A generator of used oil is defined by EPA as any business which produces used oil through commercial and industrial operations, or that collects it from

What is used oil? *EPA's defines used oil as "any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities."*

these operations. The definition of used oil (see box) includes oils that are used as hydraulic fluids as well as oils that are used to lubricate automobiles and other machinery, cool engines, or suspend materials in industrial processes.

As a generator of used oil, you must follow the used oil management standards found in 40 CFR 279. Some of these requirements include:

- **T** Keeping storage tanks and containers in good condition
- **T** Labeling storage tanks and containers "Used Oil"
- **T** Cleaning up any used oil spills or leaks to the environment (see Section 9.0)
- **T** Using a transporter with an EPA ID number when shipping used oil offsite.

State Requirements

Used oil is not categorized as hazardous waste under federal RCRA requirements, however, it may be under some state regulations. For example, California classifies used oil as hazardous waste. In addition, used oil may have strict disposal requirements in some states. **Be sure to contact your state regulatory agency for information on how to manage used oil.**

8.9 Good Environmental Management Practices

8.9.1 How to Select a Hazardous Waste Transporter and Waste Disposal/Treatment Facility

Carefully choosing a transporter and designating a waste treatment/disposal facility are important. Even when the waste leaves your control, **your facility remains legally responsible** for the proper disposal of your waste and any associated spills or accidents.

You should be aware that under RCRA, transporters are required to:

- Obtain an EPA/state identification number
- Comply with the manifest system
- Respond appropriately to hazardous waste discharges
- Comply with both the RCRA requirements (40 CFR 263) and the DOT regulations (49 CFR 171-179).

Before choosing a transporter or designating a facility, check with the following sources:

- Your state hazardous waste management agency or EPA regional office, which will be able to tell you whether or not a company has an EPA/state identification number and may know whether or not a company has had any problems. They may also have a list of licensed (approved) transporters.
- Your friends and colleagues in the food processing business who may have used a specific hazardous waste transporter or treatment/disposal facility in the past.
- Your trade association(s) which may keep a file on companies that handle hazardous waste.
- Your Better Business Bureau or Chamber of Commerce to find out if any complaints have been registered against a transporter or facility.

After checking with these sources, contact the transporter and hazardous waste treatment/ disposal facility directly to verify that they have an EPA/state identification number, and that they can and will handle your waste. In some states, the transporter and the designated facility may be required to have a special permit to operate. Make sure that the transporter and waste treatment/disposal facility have the necessary permits and insurance and that the transporter's vehicles are in good condition. You may also want to ask them:

- Where the waste is going
- To provide information on their track record
- If they have ever been cited for improper practice.

Checking sources and choosing a transporter and waste treatment/disposal facility may take some time. You should begin checking before you open your shop or well ahead of the time you will need to ship your waste.

8.9.2 Disposing of Hazardous Waste Onsite

You may **not** dispose of your hazardous waste on your property. Additionally, if you discharge more than 15 kg of a *hazardous substance* in a month to the POTW, you must meet certain reporting requirements (see Table 4.7 *Reporting Requirements for All Indirect Discharges*). Typically, discharging any hazardous substance to a sewer is not considered good management practice and in many states it may be illegal. For more information, contact the local wastewater or sewage treatment office or your state hazardous waste management agency.

8.9.3 Good Housekeeping

Good hazardous waste management can be thought of as simply "good housekeeping" practices which include:

- Using fewer hazardous materials
- Reusing materials as much as possible

- Recycling and reclaiming waste
- Reducing the amount of waste you generate.

To reduce the amount of waste you generate:

T Do not mix nonhazardous wastes with hazardous wastes (e.g., combining nonhazardous cleaning agents or rags in the same container as hazardous wastes). If you do, the nonhazardous wastes become subject to hazardous waste regulations and you will have more hazardous waste for disposal.

T Avoid mixing several different hazardous wastes. Doing so may make recycling very difficult, if not impossible. It may also make disposal more expensive.

T Avoid spills or leaks of hazardous products. The materials used to clean up such spills or leaks also become hazardous wastes.

T Make sure the original containers of hazardous products are completely empty before you throw them away. Use ALL of the product.

T Avoid using more of a hazardous product than you need. For example, use no more cleaning solvent than you need to do the job.

Reducing your hazardous waste means saving money on raw materials and reducing the costs to your business for managing and disposing of your hazardous wastes.