

**MANAGING
HAZARDOUS WASTE**
A HANDBOOK
FOR SMALL BUSINESSES



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

CONTENTS

INTRODUCTION	1
DECIDING WHETHER HAZARDOUS WASTE REGULATIONS APPLY TO YOU	2
Defining Hazardous Waste	2
Identifying Your Waste: Typical Hazardous Wastes Generated by Businesses	3
Finding Your Generator Category	4
How Many Drums Is That?	5
What Do You Measure to Determine Your Generator Category?	6
REQUIREMENTS FOR CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS	7
REQUIREMENTS FOR SMALL QUANTITY GENERATORS	8
Obtaining an EPA Identification Number	8
Sample RCRA Subtitle C Site Identification Form	9
MANAGING HAZARDOUS WASTE ON-SITE	11
Accumulating Your Waste	11
Treating Your Waste to Meet the Land Disposal Restrictions (LDRs)	12
Hazardous Waste Code Chart	13
Responding to Emergencies	17
Preventing Accidents	17
Waste Minimization: The Key to Better Waste Management	18
SHIPPING HAZARDOUS WASTE OFF-SITE	20
Selecting a TSDF	20
Labeling Waste Shipments	20
Selecting a Transporter or TSDF/Recycler	21
Preparing Hazardous Waste Manifests	21
Land Disposal Restrictions (LDR) Reporting Requirements	21
Export Notification	22
SUMMARY OF REQUIREMENTS FOR LARGE QUANTITY GENERATORS	23
FINAL TIPS	24
Are You Sure?	24
Can You Use the Universal Waste Rule?	24
WHERE TO GET MORE HELP	25
Appendix A: State Hazardous Waste Management Assistance	25
Appendix B: EPA and Other Federal Resource Centers	25
Appendix C: Forms/Invoices from the Hazardous Waste Section	26

INTRODUCTION

This handbook has been prepared by the Hazardous Waste Section of the Arizona Department of Environmental Quality (ADEQ) to help small business owners and operators understand how to best comply with federal hazardous waste management regulations, as well as Arizona hazardous waste rules and statutes. This handbook is intended as an overview and summary of the regulations and statutes to give you a basic understanding of your responsibilities in managing your hazardous waste activities. It is not to be used as a substitute for the actual regulations.

Much of the material in this handbook is reprinted from the Environmental Protection Agency's (EPA) handbook entitled, *Understanding the Hazardous Waste Rules—A Handbook for Small Business*. EPA's handbook is augmented by material pertaining to hazardous waste management requirements peculiar to Arizona rules and statutes. Arizona incorporates most of the federal hazardous waste regulations by reference; therefore, Arizona's hazardous waste rules are similar and consistent with the federal hazardous waste regulations.

All of the federal hazardous waste regulations are located in Title 40 of the Code of Federal Regulations (CFR), Parts 260 to 299 which are incorporated by Arizona Administrative Codes (AAC) R18-8-260 to 280. State regulations are located in Arizona Revised Statutes 49-901 through 49-944.

Federal and state rules define three categories of hazardous waste generators based upon the quantity of hazardous waste they generate in any calendar month:

1. Conditionally exempt small quantity generators (CESQGs) that generate less than 220 lb (100 kg) in any calendar month.
2. Small quantity generators (SQGs) that generate between 220 lb (100 kg) and 2,200 lb (1,000 kg) in any calendar month.
3. Large quantity generators (LQGs) that generate more than 2,200 lb (1,000 kg) or more than 2.2 lb (1 kg) of acutely hazardous waste in any calendar month or 220 lb (100 kg) acute spill residue.

Each category of generator must comply with the hazardous waste rules specific to that category. This handbook is intended primarily for businesses that generate small quantities of hazardous waste (SQGs and CESQGs) to help them learn about regulations that apply.



TIP

You can look up unfamiliar words or phrases on a list of definitions found at the end of this handbook.

FOR MORE INFORMATION

If you have questions about any part of this document or the federal hazardous waste regulations pertaining to Arizona, call the Hazardous Waste Inspections & Compliance Unit at (602) 771-4108 or (800) 234-5677.



TIP

Whenever you consult a federal hazardous waste regulation to determine the regulations that apply to the waste you are managing, you must also consult the Arizona hazardous waste statutes and rules to determine if any additional and/or different standards also apply.

Proper management of hazardous waste is important to safeguard human health and the environment.



DECIDING WHETHER HAZARDOUS WASTE REGULATIONS APPLY TO YOU

Federal and state hazardous waste management regulations apply to most businesses that generate hazardous waste. To determine if these regulations apply to your business, you must first determine if you even generate hazardous waste.

DEFINING HAZARDOUS WASTE

A *waste* is any solid, liquid, or contained gaseous material that is discarded by being disposed of,

✓ **First, determine if you generate hazardous waste.**

✓ **Measure the amount of hazardous waste that you produce per month.**

✓ **Determine your generator category to learn the management requirements that apply to you.**

burned or incinerated, or recycled. (There are some exceptions for recycled materials.) It can be the by-product of a manufacturing process or simply a commercial product that you use in your business—such as a cleaning fluid or battery acid—that is being disposed. Even materials that are recyclable or can be reused in some way—such as burning used oil for fuel—may be considered waste. Hazardous waste can be one of two types:

■ Listed waste

Your waste is considered hazardous if it appears on one of four lists published in 40 CFR Part 261 (as incorporated by AAC R18-8-261) and is not otherwise excluded. Currently, more than 400 wastes are listed. Wastes are listed as hazardous because they are known to be harmful to human health and the environment when not managed properly.

TIP



One way to help determine if your waste exhibits a characteristic is to check the Material Safety Data Sheet (MSDS) that comes with all products containing hazardous materials. In addition, your national trade association or its local chapter might be able to help you.

Acutely hazardous wastes are listed wastes that even when managed properly are extremely dangerous. Examples of acutely hazardous wastes include wastes generated from some pesticides that can be

fatal to humans even in low doses. P listed and F020, F021, F022, F023, F026, and F027 are examples of acutely hazardous wastes.

■ Characteristic waste

If your waste does not appear on one of the hazardous waste lists, it still might be considered hazardous if it demonstrates one or more of the following characteristics:

- ▲ It catches fire under certain conditions. This is known as an *ignitable* waste. Examples are paints and certain degreasers and solvents.
- ▲ It corrodes metals or has a very high or very low pH. This is known as a *corrosive* waste. Examples are rust removers, acid or alkaline cleaning fluids, and battery acid.
- ▲ It is unstable and explodes or produces toxic fumes, gases, and vapors when mixed with water or under other conditions, such as heat or pressure. This is known as a *reactive* waste. Examples are certain cyanides or sulfide-bearing wastes.
- ▲ It is harmful or fatal when ingested or absorbed, or it leaches toxic chemicals into the soil or ground water when disposed of on land. This is known as a *toxic* waste. Examples are wastes that contain high concentrations of heavy metals, such as cadmium, lead, or mercury.

Additionally, a mixture of hazardous waste with solid waste (e.g., motor oil, trash, debris) may become a hazardous waste.

You can determine if your waste is toxic by having it tested using the Toxicity Characteristic Leaching Procedure (TCLP), or by simply knowing that your waste is hazardous or that your processes generate hazardous waste (called *generator knowledge*). However, you must have written documentation if using generator knowledge for both hazardous and non-hazardous waste.

IDENTIFYING YOUR WASTE

To help you identify some of the waste streams common to your business, consult the table below to find a list of typical hazardous wastes generated by small businesses. Use the *EPA Hazardous Waste Codes for Waste Streams Commonly Generated by Small Quantity Generators* list located in the center of this handbook for a more detailed listing of the EPA waste codes associated with these waste streams to determine

if your waste is hazardous. Commercial chemical products that are discarded might also become hazardous waste. For a complete listing of hazardous waste codes, consult 40 CFR Part 261 (as incorporated by R-18-8-261).

If your waste is hazardous, you will need to manage it according to appropriate federal and state hazardous waste regulations.

TYPICAL HAZARDOUS WASTES GENERATED BY BUSINESSES

Type of Business	How Generated	Types of Wastes	Waste Codes
Dry Cleaning and Laundry Plants	Commercial dry cleaning processes	Still residues from solvent distillation, spent filter cartridges, cooked powder residue	D001, D039, F002
Furniture/Wood Manufacturing and Refinishing	Wood cleaning and wax removal, refinishing/stripping, staining, painting, finishing, brush cleaning, and spray brush cleaning	Ignitable wastes, toxic wastes, solvent wastes, paint wastes	D001, F001-F005
Construction	Paint preparation and painting, carpentry and floor work, other specialty contracting activities, heavy construction, wrecking and demolition, vehicle and equipment maintenance for construction activities	Ignitable wastes, toxic wastes, solvent wastes, paint wastes, used oil, acids/bases	D001, D002, F001-F005
Laboratories	Diagnostic and other laboratory testing	Spent solvents, unused reagents, reaction products, testing samples, contaminated materials	D001, D002, D003, F001-F005, U211
Vehicle Maintenance	Degreasing, rust removal, paint preparation, spray booth, spray guns, brush cleaning, paint removal, tank cleanout, installing lead-acid batteries	Acids/bases, solvents, ignitable wastes, toxic wastes, paint wastes, batteries	D001, D002, D006, D008, F001-F005
Printing and Allied Industries	Plate preparation, stencil preparation for screen printing, photo processing, printing, cleanup	Acids/bases, heavy metal wastes, solvents, toxic wastes, ink	D002, D006, D008, F001-F005
Equipment Repair	Degreasing, equipment cleaning, rust removal, paint preparation, painting, paint removal, spray booth, spray guns, and brush cleaning	Acids/bases, toxic wastes, ignitable wastes, paint wastes, solvents	D001, D002, D006, D008, F001-F005
Pesticide End-Users/Application Services	Pesticide application and cleanup	Used/unused pesticides, solvent wastes, ignitable wastes, contaminated soil (from spills), contaminated rinsewater, empty containers	D001, F001-F005, U129, U136, P094, P123
Educational and Vocational Shops	Automobile engine and body repair, metalworking, graphic arts—plate preparation, woodworking	Ignitable wastes, solvent wastes, acids/bases, paint wastes	D001, D002, F001-F005

FINDING YOUR GENERATOR CATEGORY

Once you know that you generate hazardous waste, you need to measure the amount of waste you produce each calendar month. The amount of hazardous waste you generate in a calendar month determines your generator category.

Many hazardous wastes are liquids and are measured in gallons—not pounds. In order to measure your liquid wastes, you will need to convert from gallons to pounds. To do this, you must know the density of the liquid. A rough

WHAT IS YOUR GENERATOR CATEGORY?

For waste management purposes, depending on your type of business, you might be regulated under different rules at different times. If, for example, you generate less than 220 lb (100 kg) of hazardous waste during the month of June, you would be considered a CESQG for June and your June waste would be subject to the hazardous waste management requirements for CESQGs. If, in July, you generate between 220 and 2,200 lb (100 to 1,000 kg) of hazardous waste, your generator status would change, and you would be considered an SQG for July. Your July waste and facility would then be subject to the management requirements for SQGs.

For annual registration fee purposes, your fee is based on the maximum amount generated in any one month of the previous year. Use your monthly generation amounts to determine your registration status, not your annual generation total. You are an SQG if you have generated 220 lb (100 kg) or more but less than 2,200 lb (1,000 kg) of hazardous waste in any calendar month of the previous year. If this is the case, you are required to pay an annual registration fee of \$100. If you have generated less than 220 lb (100 kg) of hazardous waste in any calendar month of the previous year, you are a CESQG and do not have an annual registration fee. See Appendix C, Hazardous Waste Facility Annual Report for CESQGs.

GENERATION FEES

For generation fees, SQGs are invoiced annually. The fee is \$10 per ton unless the facility has a Certified Pollution Prevention Plan; then it is \$5 per ton.

guide is that 30 gallons (about half of a 55-gallon drum) of waste with a density similar to water weighs about 220 lb (100 kg); 300 gallons of a waste with a density similar to water weighs about 2,200 lb (1,000 kg).

EPA has established three generator categories, each of which is regulated differently:

CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS (CESQGs)

You are considered a CESQG if you generate no more than 220 lb (100 kg) of hazardous waste in any calendar month and do not accumulate over 2,200 lb (1,000 kg). You are exempt from hazardous waste management regulations provided that you comply with the basic requirements described on page 7.

SMALL QUANTITY GENERATORS (SQGs)

You are considered an SQG if you generate between 220 and 2,200 lb (100 and 1,000 kg) of hazardous waste in any calendar month and do not accumulate over 13,228 lb (6,000 kg). SQGs must comply with federal and state requirements for managing hazardous waste described in this handbook.

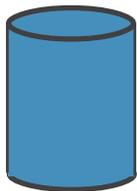
LARGE QUANTITY GENERATORS (LQGs)

You are considered an LQG if you generate more than 2,200 lb (1,000 kg) of hazardous waste in any calendar month. LQGs must comply with more extensive hazardous waste rules than those summarized in this handbook. See page 23 for an overview.

Note: If any generator generates or accumulates more than 2.2 lb (1 kg) of acutely hazardous waste in a calendar month or 220 lb (100 kg) acute spill residue, all of the acutely hazardous waste must be managed according to the regulations applicable to LQGs.

HOW MANY DRUMS IS THAT?

KEY:



= 55 gal drum
= 440 lb (water)
= 200 kg (water)

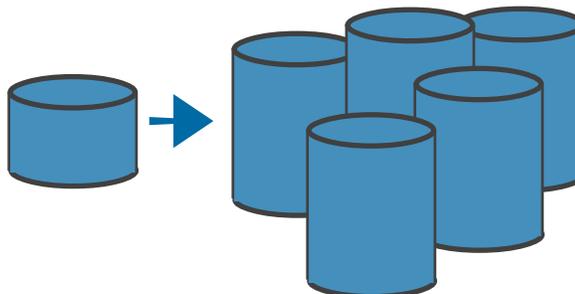
CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR (CESQG)



<1/2 drum or
<27 gal or
<220 lb or
<100 kg

Per calendar month

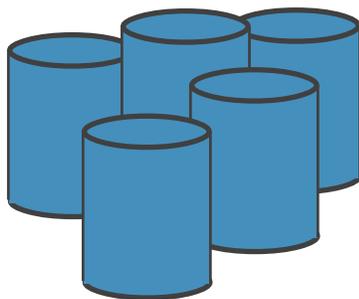
SMALL QUANTITY GENERATOR (SQG)



1/2 to 5 drums or
27 to 275 gal or
220 to 2,200 lb or
100 to 1,000 kg

Per calendar month

LARGE QUANTITY GENERATOR (LQG)



or more

>5 drums or
>275 gal or
>2,200 lb or
>1,000

Per calendar month



TIP

Note: This page is for guidance purposes only. Not all chemicals have the same density. This chart shows different weights per gallon and per drum.

SUBSTANCE	LB PER GAL	LB PER DRUM
Water	8.340	458.7
Lead	94.659	5,206.25
Methylene chloride	11.134	612.37
Acetone	6.605	363.275

WHAT DO YOU MEASURE TO DETERMINE YOUR GENERATOR CATEGORY?

DO MEASURE:

For your monthly total, all quantities of listed and characteristic hazardous wastes that are:

- ✓ Accumulated on the property for any period of time before disposal or recycling. (Dry cleaners, for example, must count any residue removed from machines, as well as spent cartridge filters.)
- ✓ Packaged and transported away from your business.
- ✓ Placed directly in a regulated treatment or disposal unit at your place of business.
- ✓ Generated as still bottoms or sludges and removed from product storage tanks.

DO NOT MEASURE:

Wastes that:

- ✓ Might be left in the bottom of containers that have been thoroughly emptied through conventional means such as pouring or pumping.
- ✓ Are left as residue in the bottom of tanks storing products, if the residue is not removed from the product tank.
- ✓ Are reclaimed continuously on-site without storing prior to reclamation, such as dry cleaning solvents.
- ✓ Are managed in an *elementary neutralization unit*, a *totally enclosed treatment unit*, or a *wastewater treatment facility* without being stored first. (See definitions at the end of this handbook for an explanation of these types of units.)

- ✓ Are discharged directly to publicly owned treatment works (POTWs) without being stored or accumulated first. This discharge to a POTW must comply with the Clean Water Act. POTWs are public utilities, usually owned by the city, county, or state that treat industrial and domestic sewage for disposal.
- ✓ Have already been counted once during the calendar month, and are treated on-site or reclaimed in some manner, and used again.
- ✓ Are regulated under the universal waste rule or have other special requirements. The federal regulations contain special, limited requirements for managing certain commonly generated wastes. These wastes can be managed following the less burdensome requirements listed below instead of the usual hazardous waste requirements.

Used oil—40 CFR Part 279 (as incorporated by ARS 49-801-818).

Lead-acid batteries that are reclaimed—40 CFR Part 266, Subpart G (as incorporated by R-18-8-266).

Scrap metal that is recycled—40 CFR 261.6 (a)(3) (as incorporated by R-18-8-261).

Universal wastes (e.g., certain batteries, recalled and cancelled pesticides, mercury-containing thermostats, and mercury-containing waste lamps)—40 CFR Part 273 (as incorporated by R-18-8-273).

Don't mix incompatible wastes.



REQUIREMENTS FOR CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS

If you generate no more than 220 lb (100 kg) of hazardous waste in any month, you are a conditionally exempt small quantity generator (CESQG). You must comply with three basic waste management requirements to remain exempt from the full hazardous waste regulations that apply to generators of larger quantities (SQGs and LQGs). Note: There are different quantity limits for acutely hazardous waste.

First, you must identify all hazardous waste that you generate and keep documentation of your waste determination. Second, you may not store more than 2,200 lb (1,000 kg) of hazardous waste on-site at any time. Finally, you must ensure delivery of your hazardous waste to an off site treatment or disposal facility that is one of the following:

■ An Arizona- or federally-regulated hazardous waste management treatment, storage, or disposal facility (TSDF).

- A facility permitted, licensed, or registered by Arizona 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 of 40 CFR Part 273 (as incorporated by R18-8-273) *if* your waste is universal waste. Universal wastes are wastes such as certain batteries, recalled and banned pesticides, or mercury-containing thermostats. Note: In Arizona, mercury-containing waste lamps are considered universal waste and should be managed in accordance with R18-8-273.
- Or, if you treat or dispose of your hazardous waste on-site, your facility also must also meet the above definitions.

✓ Identify your hazardous waste.
 ✓ Comply with storage quantity limits.
 ✓ Ensure proper treatment and disposal of your waste.

Good housekeeping procedures can save money.



TIP 

CESQGs with EPA identification numbers must complete a Facility Annual Report yearly. See Appendix C.

REQUIREMENTS FOR SMALL QUANTITY GENERATORS

OBTAINING AN EPA IDENTIFICATION NUMBER

If your business generates between 220 lb (100 kg) and 2,200 lb (1,000 kg) of hazardous waste in any calendar month, you are a small quantity generator (SQG), and must obtain and use an EPA Identification (ID) Number. EPA and all states use these 12-character numbers to monitor and track hazardous waste activities. You will need to use your identification number when you send waste off-site to be managed.

To obtain an EPA ID number:

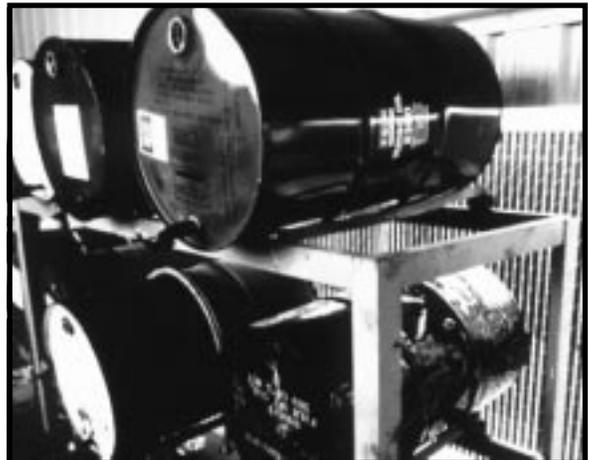
- Visit the EPA Web site <http://www.epa.gov/epaoswer/hazwaste/data/form8700/8700-12.pdf> or ADEQ's Web site at www.adeq.state.az.us, click on environmental programs>waste programs>haz waste>permits unit>permits documents download>EPA form 8700-12.
- Call ADEQ at (602) 771-4147 or write to ADEQ, Hazardous Waste Section, Facility Assistance Unit, 1110 W. Washington St., Phoenix, Arizona, 85007, and request a copy of EPA Form 8700-12, Rev 5/2002, *Notification of Regulated Waste Activity*. You will be sent a booklet that contains a form with instructions. A sample copy of a completed notification form is shown on pages 9 and 10.
- Fill in the form as shown in the example. To complete Item IX of the form, you will need to identify your hazardous waste by its EPA Hazardous Waste Code. A list of common hazardous wastes and their waste codes can be found in the center of this document; for a complete list of waste codes, you should consult 40 CFR Part 261 (as incorporated by R18-8-261). Complete one copy of the form for each business site where you generate or handle hazardous waste. Each site will receive its own EPA ID number. Make sure you sign the certification in Item X.
- Send the completed form to the ADEQ hazardous waste contact. This address is listed in the information booklet that you will receive with the form.

- ✓ Call ADEQ to determine if you need an EPA ID number.
- ✓ If you do, obtain a copy of EPA Form 8700-12.
- ✓ Fill in the form completely.
- ✓ Send the form to the ADEQ Notification Coordinator.

ADEQ records the information on the form and assigns an EPA ID number to the site identified on your form. The EPA ID number stays with the property when ownership changes. If you move your business, you must notify ADEQ of your new location and submit a new form. If another business previously handled hazardous waste at this location and obtained an EPA ID number, you will be assigned the same number after you have notified ADEQ that you have moved to this location. Otherwise, ADEQ will assign you a new identification number. You must also deactivate the old EPA ID number. To deactivate an EPA ID number, submit on company letterhead the facility name, ID number, reason for deactivation, and the date of deactivation, and mail to ADEQ at the above address.

A revised 8700-12 must be submitted to ADEQ if ownership changes, generator status changes, or the type of waste generated changes.

Treat your hazardous materials with care so they don't become hazardous waste.



<p>MAIL THE COMPLETED FORM TO: The Appropriate State or EPA Regional Office.</p>	<p>United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM</p>						
<p>1. Reason for Submittal (See instructions on page 23)</p> <p>MARK CORRECT BOX(ES)</p>	<p>Reason for Submittal:</p> <p><input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities).</p> <p><input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information).</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application.</p> <p><input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____).</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report.</p>						
<p>2. Site EPA ID Number (See instructions on page 24)</p>	<p>EPA ID Number: _____</p>						
<p>3. Site Name (See instructions on page 24)</p>	<p>Name: _____</p>						
<p>4. Site Location Information (See instructions on page 24)</p>	<p>Street Address: _____</p> <table border="1" data-bbox="418 716 1395 800"> <tr> <td data-bbox="418 716 954 758">City, Town, or Village: _____</td> <td data-bbox="954 716 1395 758">State: _____</td> </tr> <tr> <td data-bbox="418 758 954 800">County Name: _____</td> <td data-bbox="954 758 1395 800">Zip Code: _____</td> </tr> </table>			City, Town, or Village: _____	State: _____	County Name: _____	Zip Code: _____
City, Town, or Village: _____	State: _____						
County Name: _____	Zip Code: _____						
<p>5. Site Land Type (See instructions on page 24)</p>	<p>Site Land Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>						
<p>6. North American Industry Classification System (NAICS) Code(s) for the Site (See instructions on page 24)</p>	<p>A. _____</p>	<p>B. _____</p>	<p>C. _____</p>	<p>D. _____</p>			
<p>7. Site Mailing Address (See instructions on page 25)</p>	<p>Street or P. O. Box: _____</p> <p>City, Town, or Village: _____</p> <p>State: _____</p> <table border="1" data-bbox="418 1119 1395 1161"> <tr> <td data-bbox="418 1119 954 1161">Country: _____</td> <td data-bbox="954 1119 1395 1161">Zip Code: _____</td> </tr> </table>			Country: _____	Zip Code: _____		
Country: _____	Zip Code: _____						
<p>8. Site Contact Person (See instructions on page 25)</p>	<p>First Name: _____</p>	<p>MI: _____</p>	<p>Last Name: _____</p>				
<p></p>	<p>Phone Number: _____</p>		<p>Phone Number Extension: _____</p>				
<p>9. Legal Owner and Operator of the Site (See instructions on pages 25 to 26)</p>	<p>A. Name of Site's Legal Owner: _____</p>		<p>Date Became Owner (mm/dd/yyyy): _____</p>				
<p></p>	<p>Owner Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>						
<p></p>	<p>B. Name of Site's Operator: _____</p>		<p>Date Became Operator (mm/dd/yyyy): _____</p>				
<p></p>	<p>Operator Type: <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>						

MANAGING HAZARDOUS WASTE ON-SITE

Most small businesses accumulate some hazardous waste on-site for a short period of time and then ship it off-site to a treatment, storage, or disposal facility (TSDF).

ACCUMULATING YOUR WASTE

Accumulating hazardous waste on-site can pose a threat to human health and the environment, so you may only keep it for a short time without a permit. Before shipping the waste for disposal or recycling, you are responsible for its safe management, which includes safe storage, safe treatment, preventing accidents, and responding to emergencies in accordance with federal and Arizona regulations.

SQGs can accumulate no more than 13,228 lb (6,000 kg) of hazardous waste on-site for up to 180 days without a permit. You can accumulate this amount of waste for up to 270 days if you must transport it more than 200 miles away for recovery, treatment, or disposal. Limited extensions may be granted by the ADEQ director. If you exceed these limits, you may be considered a TSDF and may be required to obtain an operating permit. Special storage requirements apply to liquid hazardous wastes containing polychlorinated biphenyls (PCBs).

SQGs must accumulate waste in tanks or containers, such as 55-gallon drums. Your storage tanks and containers must be managed according to the following summarized requirements.

For containers, you must:

- ✓ Accumulate wastes according to limits established for SQGs.
- ✓ Follow the storage and handling procedures required by federal and Arizona rules for SQGs.
- ✓ Follow requirements for equipment testing and maintenance, access to communications or alarms, aisle space, and emergency arrangements with local authorities as required by federal and Arizona rules.

- Label each container with the words *HAZARDOUS WASTE*, and mark each container with the date waste was first added.
- Use a container made of, or lined with, a material that is compatible with the hazardous waste to be stored. (This will prevent the waste from reacting with or corroding the container.)
- Keep all containers holding hazardous waste closed during storage, except when adding or removing waste. Do not open, handle, or store (stack) containers in a way that might rupture them, cause them to leak, or otherwise fail.
- Inspect areas where containers are stored at least weekly. Look for leaks and for deterioration caused by corrosion or other factors.
- Maintain the containers in good condition. If a container leaks, put the hazardous waste in another container, or contain it in some other way that complies with EPA and state regulations.
- Do not mix incompatible wastes or materials unless precautions are taken to prevent certain hazards.

Properly store hazardous materials.



For tanks, you must:

- Label each tank with the words *HAZARDOUS WASTE*.
- Store only waste that will not cause the tank or the inner liner of the tank to rupture, leak, corrode, or fail.
- Equip tanks that have an automatic waste feed with a waste feed cutoff system or a bypass system for use in the event of a leak or overflow.
- Inspect discharge control and monitoring equipment and the level of waste in uncovered tanks at least once each operating day. Inspect the tanks and surrounding areas for leaks or other problems (such as corrosion) once each operating day.
- Use the National Fire Protection Association (NFPA) buffer zone requirements for covered tanks containing ignitable or reactive wastes. These requirements specify distances considered to be safe buffer zones for various ignitable or reactive wastes. You can reach the NFPA at (617) 770-3000.
- Do not mix incompatible wastes or materials unless precautions are taken to prevent certain hazards.
- Do not place ignitable or reactive wastes in tanks unless certain precautions are taken.
- Provide at least two feet (60 centimeters) of freeboard (space at the top of each tank) in uncovered tanks, unless the tank is equipped with a containment structure, a drainage control system, or a standby tank with adequate capacity.

Safely store hazardous wastes in suitable containers.

TREATING YOUR WASTE TO MEET THE LAND DISPOSAL RESTRICTIONS (LDRs)

Most hazardous wastes may not be land disposed unless they meet *treatment standards*. The Land Disposal Restrictions (LDR) program requires that the waste is treated to reduce the hazardous constituents to levels set by EPA, or that the waste is treated using a specific technology. It is your responsibility to ensure that your waste is treated to meet LDR treatment standards before it is land disposed. (See page 22 for a description of required LDR notices.) Most SQGs probably will have their designated TSDF do this treatment. If you choose to treat your waste yourself to meet LDR treatment standards, there are additional requirements, including waste analysis plans, notifications, and certifications. To learn about these requirements call the EPA RCRA Hotline (800) 424-9346, the ADEQ Inspections & Compliance Unit (602) 771-4108, or consult 40 CFR Part 268 (as incorporated by R18-8-268).

TIPS



- ✓ **It is good practice never to mix wastes. Mixing wastes can create an unsafe work environment and lead to complex and expensive cleanups and disposal.**
- ✓ **Clean up spills and leaks quickly to avoid larger problems.**



HAZARDOUS WASTE CODE CHART

**PULL OUT AND POST
FOR QUICK REFERENCE**

SOLVENTS

Solvents, spent solvents, solvent mixtures, or solvent still bottoms are often hazardous. The following are some commonly used hazardous solvents (also see ignitable wastes for other hazardous solvents, and 40 CFR 261.31 for most listed hazardous waste solvents):

Benzene	F005	Petroleum Solvents (Flashpoint less than 140°F)	D001
Carbon Disulfide	F005	Pyridine	F005
Carbon Tetrachloride	F001	1,1,1-Trichloroethane	F001, F002
Chlorobenzene	F002	1,1,2-Trichloroethane	F002
Cresols	F004	Tetrachloroethylene (Perchloroethylene)	F001, F002
Cresylic Acid	F004	Toluene	F005
O-Dichlorobenzene	F002	Trichloroethylene	F001, F002
Ethanol	D001	Trichlorofluoromethane	F002
2-Ethoxyethanol	F005	Trichlorotrifluoroethane (Valclene)	F002
Ethylene Dichloride	D001	White Spirits	D001
Isobutanol	F005		
Isopropanol	D001		
Kerosene	D001		
Methyl Ethyl Ketone	F005		
Methylene Chloride	F001, F002		
Naphtha	D001		
Nitrobenzene	F004		
2-Nitrobenzene	F004		

ACIDS

Acids, bases, or mixtures having a pH less than or equal to 2 or greater than or equal to 12.5 are considered corrosive (for a complete description of corrosive wastes, see 40 CFR 261.22). All corrosive materials and solutions have the waste code *D002*. The following are some of the more commonly used corrosives:

Acetic Acid
 Ammonium Hydroxide Oleum
 Chromic Acid
 Hydrobromic Acid
 Hydrochloric Acid
 Hydrofluoric Acid
 Nitric Acid

IGNITABLE WASTES



Ignitable wastes are any liquids that have a flashpoint less than 140°F, any non-liquids that are capable of causing a fire through friction, absorption of moisture, or spontaneous chemical change, or any ignitable compressed gas as described in 49 CFR 173.300 (for a complete description of ignitable wastes, see 40 CFR 261.21).

Examples are spent solvents, solvent still bottoms, epoxy resins and adhesives, and waste inks containing flammable solvents. Unless otherwise specified, all ignitable wastes have the waste code *D0*

Acetone	F003	Ethyl Benzene	F003
Benzene	F005	Ethyl Ether	003
n-Butyl Alcohol	F003	Ethylene Dichloride	D001
Chlorobenzene	F002	Methanol	F003
Cyclohexanone	F003	Methyl Isobutyl Ketone	F003
Ethyl Acetate	F003	Petroleum Distillates	D001
		Xylene	F003

LEAD-ACID BATTERIES

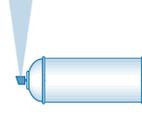


Used lead-acid batteries should be reported on the notification form only if they are not recycled. Used lead-acid batteries that are recycled do not need to be counted in

determining the quantity of waste that you generate in any month. Special requirements do apply if you recycle your batteries on your own premises (see 40 CFR 266).

Lead Dross D008
 Spent Acids D002
 Lead-Acid Batteries D008

PESTICIDES



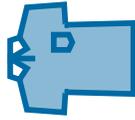
The pesticides listed below are hazardous. Wastes marked with an asterisk (*) have been designated acutely hazardous. For a more complete listing, see 40 CFR 261.32 for specific listed pesticides, and other wastes, wastewaters, sludges, and by-products from pesticide formulators.

EPA HAZARDOUS WASTE CODES FOR WASTE STREAMS COMMONLY GENERATED BY SMALL QUANTITY GENERATORS

Perchloric Acid
 Phosphoric Acid
 Potassium Hydroxide
 Sodium Hydroxide
 Sulfuric Acid

DRY CLEANING FILTRATION RESIDUES

Cooked powder residue (perchloroethylene plants only), still residues, and spent cartridge filters containing perchloroethylene or valclore are hazardous and have the waste code *F002*. Still residues containing petroleum solvents with a flashpoint less than 140°F are considered hazardous and have the waste code *D001*.



HEAVY METALS/INORGANICS

Heavy metals and other inorganic waste materials are considered hazardous if the extract from a representative sample of the waste has any of the specific constituent concentrations as shown in 40 CFR 262.24, Table 1. Materials may include dusts, solutions, wastewater treatment sludges, paint wastes, and waste inks. The following are common heavy metals/inorganics:

Arsenic	D004	Lead	D008
Barium	D005	Mercury	D009
Cadmium	D006	Selenium	D010
Chromium	D007	Silver	D011

INK SLUDGES CONTAINING CHROMIUM AND LEAD

This category includes solvent washes and sludges, caustic washes and sludges, and water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead. All ink sludges have the waste code *K086*.



This list can be used as a guide for small quantity generators to determine which of their wastes, if any, are hazardous, and to determine the EPA waste codes associated with each waste. It is not intended to provide a comprehensive list of all waste codes and waste streams that small businesses could generate.

Except for the pesticide and wood preserving categories, this list does not include waste codes for commercial chemical products that are hazardous when discarded unused. These wastes, as well as all others not listed here, can be found in Title 40 of 40 CFR Part 261. If you have any questions, contact ADEQ at (602) 771-4108 or (800) 234-5677, the RCRA Hotline at (800) 424-9346 or TDD (800) 533-7672 from other locations.

Aldicarb* P070
 Amitrole U011
 1,2-Dichloropropene U084
 Heptachlor* P059
 Lindane U129
 Methyl Parathion* P071
 Parathion* P089
 Phorate* P094

REACTIVES



Reactive wastes include materials or mixtures that are unstable, react violently with or form explosive mixtures with water, generate toxic gases or vapors when mixed with water (or when exposed to pH conditions between 2 and 12.5 in the case of cyanide or sulfide-bearing wastes), or are capable of detonation or explosive reaction when heated or subject to shock (for a complete description of reactive wastes, see 40 CFR 261.23). Unless otherwise specified, all reactive wastes have the waste code *D003*. The following materials are commonly considered to be reactive:

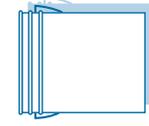
Acetyl Chloride | Cyanides | Organic Peroxides | Permanganates
 Chromic Acid | Hypochlorites | Perchlorates | Sulfides

SPENT PLATING AND CYANIDE WASTES



Spent plating wastes contain cleaning solutions and plating solutions with caustics, solvents, heavy metals, and cyanides. Cyanide wastes may also be generated from heat treatment operations, pigment production, and manufacturing of anti-caking agents. Plating wastes generally have the waste codes *F006-F009*, with *F007* and *F009* containing cyanide. Cyanide heat treating wastes generally have the waste codes *F010-F012* (see 40 CFR 261.31 for a more complete description of plating wastes).

WOOD PRESERVING AGENTS



The wastewater treatment sludges from wastewater treatment operations are considered hazardous. Bottom sediment sludges from the treatment of wastewater processes that use creosote and pentachlorophenol have the waste code *K001*. In addition, unless otherwise indicated, specific wood preserving compounds are:

Chromated Copper Arsenate D004 | Pentachlorophenol F027
 Creosote U051

RESPONDING TO EMERGENCIES

You must be prepared for an emergency at your facility. One way is to develop a *contingency plan*. A contingency plan usually answers a set of “what if” questions. For example: “What if there is a fire in the area where hazardous waste is stored?” or “What if I spill hazardous waste, or one of my hazardous waste containers leaks?” Although EPA does not require SQGs to develop a written contingency plan, in case of a fire, explosion, or toxic release, having such a plan would provide an organized and coordinated course of action. EPA does require SQGs to establish basic safety guidelines and response procedures to follow in the event of an emergency.

Worksheets 1 and 2 (see page 19) can help you set up these procedures. The information on Worksheet 1 must be posted near your phone. You must ensure that employees are familiar with these procedures. Keep information current.

IF YOU THINK YOU HAVE AN EMERGENCY, IMMEDIATELY CALL THE NATIONAL RESPONSE CENTER AT (800) 424-8802 AND ADEQ AT (602) 771-2330 OR (800) 234-5677.

In the event of a fire, explosion, or other release of hazardous waste that could threaten human health outside the facility, or if you think that a spill has reached surface water, call the National Response Center to report the emergency. The Response Center will evaluate the situation and help you make appropriate emergency decisions. In many cases, you will find that the problem you faced was not a true emergency, but *it is better to call if you are not sure*. Stiff penalties exist for failing to report emergencies.

PREVENTING ACCIDENTS

Whenever you store hazardous waste on-site, you must minimize the potential risks from fires, explosions, or other accidents.

All SQGs that store hazardous waste on-site must be equipped with:

- An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to all personnel.
- A device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio, capable of summoning emergency assistance from local police and fire departments or emergency response teams.
- Portable fire extinguishers, fire control devices (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control materials, and decontamination supplies.
- Water at adequate volume and pressure to supply water hose streams, foam-producing equipment, automatic sprinklers, or water spray systems.

You must test and maintain all equipment to ensure proper operation. Allow sufficient aisle space to permit the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation. Attempt to secure arrangements with fire departments, police, emergency response teams, equipment suppliers, and local hospitals, as appropriate, to provide services in the event of an emergency. Ensure that personnel handling hazardous waste have immediate access to an alarm or emergency communications device.



WASTE MINIMIZATION: THE KEY TO BETTER WASTE MANAGEMENT

The easiest and most cost-effective way of managing any waste is not to generate it in the first place. You can decrease the amount of hazardous waste your business produces by developing a few good housekeeping habits. Good housekeeping procedures generally save businesses money, and they prevent accidents and waste. To help reduce the amount of waste you generate, try the following practices at your business.

■ *Do not mix wastes.* Do not mix nonhazardous waste with hazardous waste. Once you mix nonhazardous waste with hazardous waste, you may increase the amount of hazardous waste created, as the whole batch may become hazardous. Mixing waste can also make recycling very difficult, if not impossible. A typical example of mixing wastes would be putting nonhazardous cleaning agents in a container of used hazardous solvents.

■ *Recycle and reuse manufacturing materials.* Many companies routinely put useful components back into productive use rather than disposing of them. Items such as oil, solvents, acids, and metals are commonly recycled and used again. In addition, some companies have taken waste minimization actions, such as using fewer solvents to do the same job, using solvents that are less toxic, or switching to a detergent solution.

■ *Change materials, processes, or both.* Businesses can save money and increase efficiency by replacing a material or a process with another that produces less waste. For example, you could use plastic blast media for paint stripping of metal parts rather than conventional solvent stripping.

■ *Safely store hazardous products and containers.* You can avoid creating more hazardous waste by preventing spills or leaks. Store hazardous product and waste containers in secure areas, and inspect them frequently for leaks. When leaks or spills occur, materials used to clean them up also become hazardous waste.



Recycle and reuse manufacturing materials.



Employee training helps prevent waste.

WORKSHEET 1 *Fill in and post this information next to your telephone. REQUIRED.*

EMERGENCY RESPONSE INFORMATION

EMERGENCY COORDINATOR

Name: _____

Telephone: _____

FIRE EXTINGUISHER

Location(s): _____

SPILL CONTROL MATERIALS

Location(s): _____

FIRE ALARM (IF PRESENT)

Location(s): _____

FIRE DEPARTMENT

Telephone: _____



WORKSHEET 2 *Fill in shaded area and post this information next to your telephone. Make sure all employees read and are familiar with its contents.*

EMERGENCY RESPONSE PROCEDURES

In the event of a spill:

Contain the flow of hazardous waste to the extent possible, and as soon as is possible, clean up the hazardous waste and any contaminated materials or soil.

In the event of a fire:

Call the fire department and, if safe, attempt to put out the fire using a fire extinguisher.

In the event of a fire, explosion, or other release that could threaten human health outside the facility, or if you know that the spill has reached surface water: Call the National Response Center at its 24-hour number (800) 424-8802 and ADEQ at its 24-hour number (800) 234-5677 or (602) 771-2330.

Provide the following information:

Our company name: _____

Our address: _____

Our U.S. EPA ID number: _____

Date of accident: _____

Time of accident: _____

Type of accident (e.g., spill or fire): _____

Quantity of hazardous waste involved: _____

Extent of injuries, if any: _____

Estimated quantity and disposition of recovered materials, if any: _____



SHIPPING HAZARDOUS WASTE OFF-SITE

When shipping waste off-site, SQGs must follow certain procedures that are designed to ensure safe transport and proper management of the waste.

- **Package, label and mark your shipment, and placard the vehicle in which your waste is shipped as specified in Department of Transportation (DOT) regulations.**
- **Prepare a hazardous waste manifest to accompany your shipment.**
- **Include a notice and certification with each waste shipment.**
- **Ensure the proper management of any hazardous waste you ship (even when it is no longer in your possession).**

SELECTING A TSDF

SQGs may send their waste only to a regulated TSDF or recycler. Most regulated TSDFs and recyclers will have a permit from the state or EPA. Some, however, may operate under other regulations that do not require a permit. Check with the appropriate state authorities to be sure the facility you select has any necessary permits. All TSDFs and recyclers must have EPA ID numbers.

LABELING WASTE SHIPMENTS

SQGs must properly package, label and mark all hazardous waste shipments, and placard the vehicles in which these wastes are shipped following DOT regulations. Most small businesses use a commercial transporter to ship hazardous waste. These transporters can advise you on specific requirements for placarding, labeling, marking, and packaging; however, you remain responsible for compliance. For additional information, consult DOT regulations (49 CFR Parts 172 and 173), or call the DOT hazardous materials information line at (202) 366-4488. In Arizona, you can also contact ADOT, Hazardous Materials, at (602) 712-4407.

Federal and Arizona regulations allow you to transport your own hazardous waste to a designated TSDF provided that you comply with DOT rules and register with ADEQ as a hazardous waste transporter. Some states, however, do not allow this practice. Call DOT and the state hazardous waste management agency to which you are shipping the waste regarding applicable regulations.

Placard and label shipments properly.



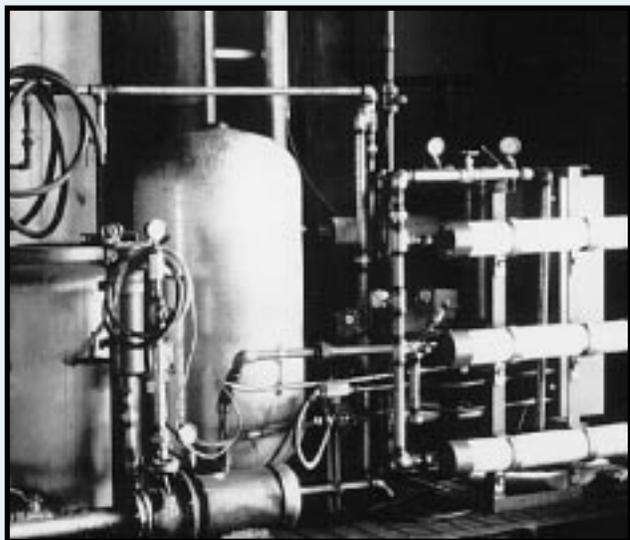
SELECTING A TRANSPORTER OR TSDF/RECYCLER

It is important to choose your transporter and your TSDF carefully since you remain responsible for the proper management of your hazardous waste even after it has left your site and has been processed by your TSDF.

For help in choosing a transporter or TSDF, check with the following sources:

- **References from business colleagues who have used a specific hazardous waste transporter or TSDF.**
- **Trade associations for your industry that might keep a file on companies that handle hazardous waste.**
- **The Better Business Bureau or Chamber of Commerce in the TSDF's area, which might have a record of any complaints registered against a transporter or a facility.**
- **ADEQ can tell you whether the transporter or TSDF has a U.S. EPA ID number and a permit, if required.**

Technological advances can help reduce waste.



PREPARING HAZARDOUS WASTE MANIFESTS

A hazardous waste manifest must accompany all hazardous waste that is shipped off-site. A hazardous waste manifest is a multipart form designed to track hazardous waste from generation to disposal. It will help you track your waste during shipment and ensure it arrives at the proper destination. If you send waste to a recycling facility, you may be able to use a tolling agreement instead of a manifest. A tolling agreement is a *closed-loop* arrangement whereby a generator contracts with a recycling company to reclaim its hazardous waste and return it as a recycled product, thereby avoiding disposal. A copy of the contract must be kept on file for three years after the contract has ended.

Various versions of hazardous waste manifest forms are available.

- **Some states require their own manifest form. Arizona uses the federal form (Uniform Hazardous Waste Manifest, EPA form 8700-22). If the state to which you are shipping your waste requires its own manifest, use that state's form. To obtain manifest forms, contact the hazardous waste management agency of the recipient state, your transporter, or the TSDF that you intend to use.**
- **If the state to which you are shipping does not require its own manifest, you can use the federal form. Copies are available from some transporters, TSDFs, and some commercial printers.**
- ***Arizona requires a hazardous waste generation fee of \$10 for each ton generated and shipped off site, beginning at 1 ton and prorated per additional ton. Companies having approved Arizona Pollution Prevention Plans receive a \$5 per ton discount. See Appendix C.***

You must fill in all parts of a manifest and sign it. Information requested includes: name of transporter, name of the designated facility, your EPA ID number, quantity of waste, and a description of the waste based on DOT requirements, such as proper shipping name and hazard class. Call the DOT information line for more information on DOT waste description requirements. Arizona requires the EPA Waste Codes to be listed in Column I.

The transporter is required to sign the completed manifest when the shipment is accepted for transport. The facility operator at the designated TSDf also signs the form when the shipment is received and sends a copy of it back to you. You must keep this copy on file for three years. (It might be a good practice, however, to keep it for as long as you are in business.) *Arizona also requires the generator and transporter to send a copy of the manifest to ADEQ, Hazardous Waste Section, Facility Assistance Unit, 1110 W. Washington St., 4415A-1, Phoenix, AZ, 85007. All TSDfs located in Arizona are also required to send copies to ADEQ.*

Arizona requires generators to submit manifests for hazardous waste shipments only. The generator copy submitted to ADEQ must have three signatures: the generator, the transporter, and the TSDf.

Any SQG that does not receive a signed copy of the manifest from the designated TSDf must submit a legible copy of the manifest together with a written notice indicating that a signed copy was not received from the facility operator. This is known as an *exception report* and must be submitted to ADEQ within 60 days following the end of the month of shipment of the waste. If errors are found in your manifest, you must correct the manifest and pay a \$20 per manifest resubmittal fee. See Appendix C for example.

LAND DISPOSAL RESTRICTIONS (LDR) REPORTING REQUIREMENTS

Regardless of where the waste is being sent, for each shipment of waste subject to LDRs you must send the receiving TSDf or recycler an LDR notice. This notice must provide information about your waste, such as the EPA hazardous waste code and the LDR treatment standard. The purpose of this notice is to let the TSDf know that the waste must meet treatment standards before it is land disposed. There is no required form for this notice, but your TSDf may provide a form for you to use. A certification may also be required in specific situations. Call the EPA RCRA Hotline at (800) 424-9346, the ADEQ Inspections and Compliance Unit at (602) 771-4108, and consult 40 CFR Part 268 for help with LDR notification and certification requirements.

EXPORT NOTIFICATION

If you choose to export your hazardous waste, you must notify EPA 60 days before the intended date of shipment to obtain written consent. EPA's *Acknowledgment of Consent* document must accompany the shipment at all times. For more information on how to obtain the consent to export hazardous waste, contact the EPA RCRA Hotline at (800) 424-9346.

Plating processes must be managed properly.



SUMMARY OF REQUIREMENTS FOR LQGs

If you are a large quantity generator (LQG) [generating more than 2,200 lb (1,000 kg) in any calendar month or 220 lb (100 kg) of acute spill residue], you must comply with the full set of hazardous waste regulations. If you generate or accumulate more than 2.2 lb (1 kg) acutely hazardous waste or 220 lb (100 kg) of acute spill residue in a calendar month, the acutely hazardous waste must be managed according to LQG regulations. This table summarizes the federal and state LQG requirements. This is only a summary and does not include all of the LQG requirements. For more details, call the EPA RCRA Hotline, ADEQ Inspections & Compliance Unit, or see 40 CFR Part 262.

LQG REQUIREMENTS	SUMMARY
Hazardous waste determination (40 CFR 262.10) Generator category determination [40 CFR 262.10 (b) and 261.5 (b) and (c)]	Identify and document all hazardous wastes you generate. Measure the amount of hazardous waste you generate per calendar month to determine your generator category (e.g., LQG).
EPA ID numbers (40 CFR 262.12)	Obtain a copy of EPA Form 8700-12, fill out the form, and send it to the contact listed with the form. An EPA ID number will be returned to you for your location.
Prepare hazardous waste for shipment off-site (40 CFR 262.30–262.33)	Package, label, mark, and placard wastes following DOT requirements. Ship waste using hazardous waste transporter.
The manifest (40 CFR 262.20–262.23, 262.42)	Ship waste to hazardous waste treatment, storage, disposal, or recycling facility. Ship hazardous waste off-site using the manifest system (EPA Form 8700-22) or state equivalent. Send copy to ADEQ.
Managing hazardous waste on-site (40 CFR 262.34)	Accumulate waste for no more than 90 days without a permit. Accumulate waste in: Containers / drip pads / tanks / containment buildings, and comply with specified technical standards for each unit type. Comply with preparedness and prevention requirements. Prepare written contingency plan. Train employees in hazardous waste management and emergency response.
Recordkeeping, registration, fees, and annual report (40 CFR 262.40–262.41) Arizona requires an annual report.	Retain specified records for three years. Register with ADEQ and pay annual fee of \$300. Arizona requires a hazardous waste generation fee of \$10 for each ton generated and shipped off site, beginning at 1 ton and prorated per additional ton. Companies having approved Arizona Pollution Prevention Plans receive a \$5 per ton discount. Submit annual reports by March 1 of each year covering generator activities for the previous year.
Comply with land disposal restrictions (40 CFR 268)	Ensure that wastes meet treatment standards prior to land disposal. Send notifications and certifications to TSDF as required. Maintain waste analysis plan if treating on-site.
Export/import requirements (40 CFR 262 Subparts E and F)	Follow requirements for exports and imports, including notification of intent to export and acknowledgment of consent from receiving country.

ARE YOU SURE?

- Have you marked your containers of hazardous waste with the words **HAZARDOUS WASTE**? Have you included the accumulation start date?
- Do you keep your containers closed at all times, except when adding or removing waste?
- Have you done a hazardous waste determination? Have you kept the records of test results, waste analysis, or other determination?
- Are you operating and maintaining your facility in a manner to minimize the possibility of hazards through abatement of potential fire, explosions, safety hazards, and potential releases? Are you providing adequate maintenance and repair of your equipment and structures so you are in compliance with state and local fire, electrical and building codes, and safety codes?
- Are you controlling, containing, cleaning up, and properly disposing of any and all releases of hazardous waste?
- Have you developed and are you maintaining and posting the required emergency contact information next to your telephone?
- Are you filing your Annual Report and paying your registration and generation fees?

The above are things that inspectors typically find facilities not doing when they go on inspections—don't be caught in violation.

CAN YOU USE THE UNIVERSAL WASTE RULE?

Do you have hazardous wastes that can be managed under the hazardous waste universal waste rule? Items such as hazardous waste batteries, certain hazardous waste pesticides, mercury-containing thermostats, and mercury-containing waste lamps fall under the universal waste regulations.

Small and large businesses that generate hazardous wastes that are in the universal waste categories listed above can use the more streamlined requirements under the universal waste rule. It eases the regulatory burden on businesses that generate these wastes. Specifically, it has streamlined requirements for: notification, labeling, marking, prohibitions, accumulation time limits, employee training, response to releases, off-site shipments, tracking, exports, and transportation.

For example, the rule extends the amount of time that businesses can accumulate these materials on site. It also allows companies to transport them with a common carrier, instead of a hazardous waste transporter, and no longer requires companies to obtain a manifest.

For additional assistance, contact the Facility Assistance Unit, Compliance Assistance Program, at (602) 771-4235.



WHERE TO GET MORE HELP

Your business may also be regulated by other sections of the Code of Federal Regulations (CFR). You may want to investigate the following CFRs:

- Handling PCBs (40 CFR Part 761)
- Toxic Release Inventory (TRI) Reporting (40 CFR Part 372)
- Domestic Sewage Waste Disposal Reporting (40 CFR Part 403)
- Shipping Hazardous Materials (49 CFR Parts 171-180)

APPENDIX A—STATE HAZARDOUS WASTE MANAGEMENT ASSISTANCE

For further assistance in understanding the hazardous waste rules applicable to you, or your compliance with them, contact:

Arizona Hazardous Waste
Inspections & Compliance Unit
Arizona Dept. of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007
(602) 771-4108 or (800) 234-5677

Or call the Facility Assistance Unit, Compliance Assistance Program. The ADEQ Compliance Assistance program is a free, non-regulatory assistance program created to help small businesses understand and follow hazardous waste regulations, and identify pollution prevention opportunities that may save money and reduce liability. Businesses can receive non-regulatory assistance ranging from answering questions over the phone to individual facility visits. The Compliance Assistance Program can be contacted at (602) 771-4235; toll free (800) 234-5677.

To obtain the regulations, statutes, and rules referred to in this publication, contact the following or check out the Web site listed.

Code of Federal Regulations: Contact the Government Printing Office, (202) 512-1800; <http://www.epa.gov/epacfr40/chapt-I.info/>

Arizona Revised Statutes: Contact the Arizona State Bar Association, (602) 252-4804; <http://www.azleg.state.az.us/ars/49/title49.htm>

Arizona Administrative Code (AAC): Contact the Secretary of State, (602) 542-4086, http://www.sos.state.az.us/public_services/Table_of_contents.htm

APPENDIX B—EPA AND OTHER FEDERAL RESOURCE CENTERS

EPA Region 9 / Hazardous Waste Management Div.
75 Hawthorne Street
San Francisco, CA 94105
Phone: (415) 947-8708
Library: (415) 744-1510
www.epa.gov/region09/

RCRA/Superfund/LUST Hotline
1725 Jefferson Davis Highway
Arlington, VA 22202
Phone: (800) 424-9346 or TDD (800) 553-7672
Fax: (703) 486-3333
Answers questions on matters related to solid waste, hazardous waste, and underground storage tanks. Also can be used to find and order EPA publications.

Small Business Ombudsman Clearinghouse/
Hotline
U.S. EPA / Small Business Ombudsman (1230C)
401 M Street SW
Washington, DC 20460
Phone: (800) 368-5888
Fax: (703) 305-6462
Helps private citizens, small businesses, and smaller communities with questions on all program aspects within EPA.

Pollution Prevention Information Clearinghouse (PPIC)
PPIC-EPA
401 M Street SW (3404)
Washington, DC 20460
Phone: (202) 566-0799
Fax: (202) 566-0794
E-mail: PPIC@epamail.epa.gov
Provides a library and an electronic bulletin board (accessible by any PC equipped with a modem) dedicated to information on pollution prevention.

APPENDIX C: FORMS/INVOICES FROM THE HAZARDOUS WASTE SECTION

HAZARDOUS WASTE REGISTRATION FEE INVOICE AND FACILITY ANNUAL REPORT FOR SQGs

This form is mailed in January to SQGs, LQGs, TSDFs, resource recovery facilities, and transporters. It covers your registration fees for the current year and is based on the highest amount of hazardous waste you generated in any one month of the previous year.



Arizona Department of Environmental Quality
FACILITY REGISTRATION FEE INVOICE
 Hazardous Waste
 (and Facility Annual Report for SQGs)

*** Instructions:** A.R.S. § 49-112, amended with changes if full payment is not received by the specified due date. If you dispute the amount listed, please contact ADEQ as soon as possible. To reduce interest costs on any amount due, you may remit an amount that you believe is correct in dispute. However, if compliance requires full payment, you may suffer a civil penalty, interest penalty or up to seventy-five percent of the amount due for each month or fraction of a month the amount is past due.

Pursuant to A.R.S. § 49-929 and 930, all hazardous waste transporters, hazardous waste generators, hazardous waste resource recovery facilities and hazardous waste treatment, storage and disposal facilities shall register annually with the Arizona Department of Environmental Quality and pay an annual registration fee. Maximum annual payments of fees and taxes by mines are specified in A.R.S. § 49-282.G. Maximum annual payments of fees and taxes by resource recovery facilities are specified A.R.S. § 49-950.B.

Account Number:	Invoice Number:
To:	EPA #:
	Period Covered: 2002
	Due Date:
	Total Amount Due: \$
	Amount Paid: \$

↑ Keep the top portion for your records ↑ ADEQ Federal Tax #866004791

↓ This entire bottom portion must be returned to ADEQ. ↓
 ADEQ Federal Tax #866004791

Hazardous Waste Annual Facility Registration Fee		Invoice #
Account Number:	HWR	
Period Covered:	2002	
Due Date:		

HAZARDOUS WASTE FACILITY ANNUAL REPORT FOR CESQGs

This form is the annual report for CESQGs. Your status is based on the highest amount of hazardous waste you generated during any one month in the previous year. It is also mailed in January. CESQGs have no registration fees.



Arizona Department of Environmental Quality
2002 FACILITY ANNUAL REPORT (FAR)
 for Conditionally Exempt Small Quantity Generators
 Hazardous Waste

Arizona Department of Environmental Quality
 Facility Assistance Unit - 4415A-1
 1110 W Washington St
 Phoenix, AZ 85007-2935

If you have any questions about this form, call the
 Facility Assistance Unit at (602) 771-4363
 or toll-free within Arizona at (800) 234-5677, extension 771-4363

Instructions for filling out this report are written below.
 Review the information below and correct any errors.

Account Number:	EPA #:
To:	Due Date:

Site Address: _____
 Standard Industrial Classification (SIC) code(s): _____

INSTRUCTIONS

All hazardous waste generators, transporters, treatment and disposal facilities and resource recovery facilities must file a Facility Annual Report. The reporting year is January 1 through December 31, 2002. Check all pre-printed information and make the necessary corrections. The site address should be pre-printed above. If it is not, enter the site address associated with the LPA ID number on this form. The EPA ID number is site-specific and cannot be transferred to a new facility.

Line 1: Print the name and phone number of the person we can contact if we have any questions about this report.

Line 2: If this facility was in business AT ANY TIME during 2002, check "Yes". If this facility was out of business PRIOR TO January 1, 2002, check "No" and provide the date the facility went out of business.

Line 3: If you want to deactivate your LPA ID number, check "Yes". Also, the date to deactivate.

Line 4: List the total number of pounds of RCRA hazardous waste MANIFESTED OFF SITE during 2002.

If your site generated more than 1,000 kg (2,200 lbs) of hazardous waste or 1 kg (2.2 lbs) of acute hazardous waste in any month in 2002, or if your site treated, stored or disposed of RCRA hazardous waste onsite in units subject to RCRA permitting requirements, list the location of the

HAZARDOUS WASTE GENERATION FEE INVOICE

This form is also mailed to SQGs in January of each year. It covers the amount of hazardous waste you generated in the preceding year.

 <p>Arizona Department of Environmental Quality GENERATION FEE INVOICE Hazardous Waste</p>													
<p>* Pursuant to A.R.S. § 49-113, a monetary charge of full payment is not required by the specified due date. If you dispute the amount listed, please contact ADEQ as soon as possible. To reduce interest charges on any unpaid amount, you may remit an amount that you believe is not in dispute. However, if compliance is due to you, the agency may suffer an additional five percent penalty of up to twenty five percent of the amount due for each month or fraction of a month the amount is past due.</p> <p>Pursuant to A.R.S. § 49-951, Subsection A, beginning January 1, 1992, the following fees apply: 1. A person who generates hazardous waste that is shipped out of state shall pay per ton for each ton of waste generated. 2. A person who generates hazardous waste that is retained on site for disposal shall pay four dollars for each ton of hazardous waste disposed on-site. 4. In lieu of the fees presented in paragraphs 1 and 2, a person who generates hazardous waste and who complies with the pollution prevention planning requirements established pursuant to the prescribed fee for each ton of waste, these reduced fees apply only to that person, subject to written certification of the compliance.</p>	<p>If you have any questions about this invoice, call the Department at (602) 771-4363 or toll-free within Arizona at (800) 234-5677, extension 771-4363</p>												
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Account Number: _____	IHWG												
Period Covered: _____													
Due Date: _____													
<p>Complete the computations that apply to your facility for this period and remit the required amount by check payable to State of Arizona</p>													

HAZARDOUS WASTE MANIFEST RESUBMITTAL FEE INVOICE

This form is only used when a facility has an error on the manifests submitted to ADEQ. A \$20 fee is charged on each incorrect manifest.

 <p>Arizona Department of Environmental Quality MANIFEST RESUBMITTAL FEE INVOICE Hazardous Waste</p>													
<p>* Pursuant to A.R.S. § 49-113, a monetary charge of full payment is not required by the specified due date. If you dispute the amount listed, please contact ADEQ as soon as possible. To reduce interest charges on any unpaid amount, you may remit an amount that you believe is not in dispute. However, if compliance is due to you, the agency may suffer an additional five percent penalty of up to twenty five percent of the amount due for each month or fraction of a month the amount is past due.</p> <p>Pursuant to A.R.S. Section 49-922-01, if a manifest for a shipment of hazardous waste, required to be submitted to ADEQ is improperly completed, the Department may return it to the person who prepared the manifest and require the person to properly complete and resubmit the manifest. The fee for resubmittal of a manifest is twenty (20) dollars.</p>	<p>If you have any questions about this invoice, call the Department at (602) 771-4232 or toll-free within Arizona at (800) 234-5677, extension 771-4232</p>												
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EPA ID: _____													

WORKSHEET 3

These questions are geared toward the federal requirements for SQGs but may be helpful for other hazardous waste generators. Use them to help prepare for a visit from a federal, state, or local agency.

YES

NO

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Do you have documentation on the amount and kinds of hazardous waste that you generate and how you determined that they are hazardous? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Do you have a U.S. EPA ID number? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Do you ship wastes off-site? |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. If so, do you know the names of the transporter and the designated TSDf that you use? |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Do you have copies of completed manifests used to ship your hazardous wastes over the past three years? Have you sent copies with all three signatures to ADEQ ? |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Are they filled out correctly? |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Have they been signed by the designated TSDf and transporter? |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. If you have not received your signed copy of the manifest from the TSDf, have you filed an exception report? |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Is your hazardous waste stored in proper containers or tanks? |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Are the containers or tanks properly dated and/or marked? |
| <input type="checkbox"/> | <input type="checkbox"/> | 11. Have you complied with the handling requirements described in this document? |
| <input type="checkbox"/> | <input type="checkbox"/> | 12. Have you designated an emergency coordinator? |
| <input type="checkbox"/> | <input type="checkbox"/> | 13. Have you posted emergency telephone numbers and the location of emergency equipment? Is your Emergency Coordinator's name correct? |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. Are your employees thoroughly familiar with proper waste handling and emergency procedures? |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Do you understand when you need to contact the National Response Center and ADEQ? |
| <input type="checkbox"/> | <input type="checkbox"/> | 16. Do you store your waste for no more than 180 days, or 270 days if you ship your waste more than 200 miles? |



DEFINITIONS

Acute Hazardous Waste

Waste that is listed and even when managed properly is extremely dangerous.

By-product

A material that is not one of the primary products of a production process. Examples of by-products are process residues, such as slags or distillation column bottoms.

Commercial Chemical Product

A chemical substance that is manufactured or formulated for commercial or manufacturing use.

Container

Any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

Elementary Neutralization Unit

A tank, tank system, container, transport vehicle, or vessel (including ships) that is designed to contain and neutralize corrosive waste.

Reclaimed Material

Material that is regenerated or processed to recover a usable product. Examples are the recovery of lead values from spent batteries and the regeneration of spent solvents.

Recovered Material

A material or by-product that has been recovered or diverted from solid waste. Does not include materials or by-products generated from, and commonly used within, an original manufacturing process.

Recycled Material

A material that is used, reused, or reclaimed.

Reused Material

A material that is employed as an ingredient in an industrial process to make a product, or as an effective substitute for a commercial product.

Spent Material

Any material that has been used and, as a result of contamination, can no longer serve the purpose for which it was produced without first processing it.

Sludge

Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Still Bottom

Residue or by-product of a distillation process, such as solvent recycling.

Tank

A stationary device designed to contain an accumulation of hazardous waste that is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic).

Totally Enclosed Treatment Facility

A facility for the treatment of hazardous waste that is directly connected to an industrial production process and that is constructed and operated so as to prevent the release of hazardous waste into the environment during treatment. An example is a pipe in which waste acid is neutralized.

Toxicity Characteristic Leaching Procedure (TCLP)

A testing procedure used to determine whether a waste is hazardous. The procedure identifies waste that might leach hazardous constituents into groundwater if improperly managed.

Wastewater Treatment Unit

A tank or tank system that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act, and that treats or stores an influent wastewater that is hazardous waste, or that treats or stores a wastewater treatment sludge that is hazardous.



ARIZONA DEPT. OF ENVIRONMENTAL QUALITY
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PHOENIX, AZ 85007



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