
Hazardous Waste Generator Handbook

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A Guide to Complying with Pima County
Hazardous Waste Generator Regulations

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This document is not meant to replace the regulations and is not a complete list of all regulatory requirements for generators. Its intended purpose is for use by the regulated community as a brief reference tool to assist generators with compliance.

Hazardous Waste Generator Handbook

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I. Background

The first effort to regulate hazardous waste management on a national level occurred in 1976 with the passage by Congress of the [Resource Conservation and Recovery Act \(RCRA\)](#). The primary goal of the Act was to encourage the conservation of natural resources through resource recovery. RCRA also provided the statutory basis for the federal hazardous waste regulations. The regulations that have evolved into the current regulatory program were first issued in May of 1980. A key section of the Act provided for states to operate the hazardous waste management program in lieu of the U.S. Environmental Protection Agency (EPA).

The State of Arizona first passed legislation regarding hazardous waste management in 1983. The Arizona Department of Environmental Quality (ADEQ) obtained authorization to administer the hazardous waste management program in 1986. The Pima County Department of Environmental Quality (PDEQ) is delegated the functions, powers and duties to administer the Arizona hazardous waste generator program in Pima County through a delegation agreement between the two agencies. As a result, hazardous waste generators in Pima County deal primarily with PDEQ. Pima County has incorporated [Arizona Revised Statutes \(ARS\) 49-921 – 49-932](#), the rules under [40 Code of Federal Regulations \(CFR\) 260 – 270](#) and the [Arizona Administrative Code \(AAC\) Title 18.8.260 – 280](#) by reference in [Title 7, Chapter 7.09 of the Pima County Code](#).

II. Purpose

The proper management of hazardous wastes can be a complex and challenging task. This publication was prepared to be used as a guide to help you determine whether your facility is subject to state and federal hazardous waste management statutes and regulations. By reviewing waste generation and disposal practices, and using this guide, a person should be able to do the following:

- Determine whether your facility generates hazardous wastes;
- Determine how those wastes are regulated under the ADEQ and PDEQ hazardous waste management programs;
- Learn what you must do to comply with the Arizona hazardous waste management statutes and applicable federal, state and local regulations;
- Learn what alternative hazardous waste management options are available to a hazardous waste generator; and
- Learn what resources are available to assist you in complying with the statutes, rules and regulations.

The hazardous waste statutes place the primary responsibility for ensuring that hazardous wastes are properly managed on the person/facility that generates those wastes. The generator must identify all hazardous wastes and be certain that they are transported and disposed in accordance with the law. While the generator can contract with hazardous waste contractors or consultants to perform these activities on their behalf, the ultimate cradle to grave responsibility for complying with the laws remains with the generator of the waste. For this reason, it is important for all generators of hazardous or potentially hazardous wastes to become familiar with the statutes and regulations that apply to them.

The Arizona statutes and rules generally mirror federal laws and regulations but differences do exist between the two. To comply with all the state laws and rules fully, you must reference the applicable ARS statutes, AAC rules and the CFR regulations directly.

Complying only with the federal regulations found in [Title 40 of the Code of Federal Regulations \(40 CFR\)](#) will not allow you to operate in full compliance with the ADEQ and PDEQ rules.

III. Who Generates Hazardous Waste and Who Does Not?

Any business can be a hazardous waste generator. A few examples of hazardous waste generators are businesses that use or handle large amounts of chemicals, manufacture items, perform maintenance activities, or conduct printing services.

Wastes from households and most farm activities are exempt from the definition of hazardous waste. Therefore households and most farmers are not generators of hazardous waste. However, some wastes generated by households and farmers are very hazardous and should be managed appropriately. Pima County citizens have access to a household hazardous waste (HHW) collection facility. The HHW facilities purpose is to collect wastes from households that may be hazardous and keep the collected HHW out of our landfills in an effort to protect our groundwater and surface water. PDEQ encourages all citizens to utilize HHW facilities whenever possible.

IV. What is a Hazardous Waste?

Hazardous waste is a special category or subset of regulated wastes that businesses and industries generate. For a material to be a hazardous waste, the material must first be classified as a solid waste. Generally speaking, a material is a waste when it can no longer be used for its intended purpose and will be disposed, reclaimed, or recycled. Hazardous wastes are wastes known to be harmful or potentially harmful to human health or the environment. The process used to determine if a waste is hazardous is referred to as the hazardous waste determination. The following sections will detail the process of making an adequate hazardous waste determination, and also explain the different ways a waste can be hazardous (characteristic and listed). These sections are in the form of Technical Guidance Documents.

V. Other Common Wastes

Lead-Acid Batteries ([40 CFR 266, Subpart G](#)) Universal Waste ([40 CFR 273](#))

Used lead-acid batteries are regulated as hazardous wastes only if they are NOT recycled ([40 CFR 266, subpart G](#)). Batteries that are recycled do not need to be counted in determining the quantity of hazardous waste generated per month, nor do they require a hazardous waste manifest when shipped off your premises. This exemption does not apply if you recycle batteries on your premises. Lead-acid batteries must be recycled through a retailer or wholesaler, a permitted secondary lead smelter, or a collection or recycling facility authorized by ADEQ. Lead-acid batteries may also be managed under the Universal Waste rule in [40 CFR 273](#).

Asbestos ([40 CFR 763](#))

Asbestos is not a hazardous waste and is not subject to the hazardous waste regulations. Asbestos-containing material (ACM) is regulated under [40 CFR, Part 61, Subpart M](#). For more information about asbestos disposal in Pima County you can contact PDEQ at (520) 724-7400, or visit the PDEQ website at: <http://webcms.pima.gov/cms/one.aspx?portalId=169&pageId=54365>.

Used Oil ([40 CFR 279](#)) and ([A.R.S. §49-801 et. seq](#))

Used oil that is recycled for energy or material recovery is not subject to the hazardous waste regulations.

Used oil that is recycled by burning in a space heater or by a used oil collector does not need to be counted in determining the quantity of hazardous waste generated per month, nor does it require a hazardous waste manifest when shipped off your premises. Used oil can be burned in oil-fired space heaters provided that:

- The heater burns only used oil that you generate or used oil received from household do-it-yourselfers, not businesses, who generate used oil;
- The heater is designed to have a maximum capacity of not more than 0.5 million (500,000) Btus per hour; and
- The combustion gases from the heater are vented to the outside air.

If you burn only your own used oil in a space heater, you do not need to notify PDEQ

Used oil should never be used on the ground for any purpose including weed control.

Polychlorinated Biphenyls (PCBs) ([40 CFR 761](#))

PCBs are not a hazardous waste and are not subject to the hazardous waste regulations. The use, storage and disposal of PCBs are regulated under the federal Toxic Substances Control Act (TSCA). Additional information on the storage, transportation, and disposal of PCBs may be obtained by contacting the EPA Region IX at (415) 947-8000, or visiting the EPA PCB website at: <https://www.epa.gov/pcbs>.

Mixed Waste

Mixed waste is waste that contains a radioactive component and a hazardous component. The radioactive component, which may be high-level, low-level, transuranic, or other, is subject to the Atomic Energy Act (AEA). The radioactive component is regulated by the U.S. Department of Energy (DOE). The hazardous component may be either a listed hazardous waste or a characteristic hazardous waste and is regulated under RCRA.

Medical Waste

Medical facilities may generate three types of wastes: infectious, radiological, and chemical. Infectious wastes are not regulated as hazardous wastes, but are regulated as solid wastes in Arizona. Guidelines in the form of Technical Guidance Documents (TGDs) for managing such wastes can be obtained from the Arizona Department of Environmental Quality (ADEQ) at (602) 771-4110 or on the ADEQ website at: <http://www.azdeq.gov/environ/waste/solid/1c.html>. Radiological wastes that are not “mixed wastes” are regulated under RCRA. Medical facilities that generate characteristic or listed hazardous wastes must comply with the same requirements as other generators of hazardous wastes.

Empty Containers ([40 CFR 261.7](#))

Containers or container liners that have held hazardous materials are not regulated as hazardous wastes if the containers or liners are empty. A container is considered empty according to the requirements of 40 CFR 261.7 if:

- All wastes that can be removed have been removed by pouring, pumping, and aspirating, and
- No more than one inch of residue remains in the container or liner, or
- No more than 3.0 percent by weight of the total capacity of the container remains in the container or liner if the container is equal to or less than 110 gallons in size, or
- No more than 0.3 percent by weight of the total capacity of the container remains in the container or liner if the container is greater than 110 gallons in size.

Any containers that contained P-listed materials or wastes must be triple-rinsed using an appropriate solvent before they are considered RCRA empty. Unless exempt, rinsates (wash-out wastes) from P-listed containers must be managed as hazardous wastes.

Universal Waste (40 CFR 273 and A.A.C. R18-8-273)

Arizona has adopted no specific state requirements for universal wastes and has incorporated 40 CFR 273 by reference in AAC R18-8-273. The most common universal wastes are mercury-containing lamps such as fluorescent, mercury vapor, or high intensity discharge (HID) lamps. The provisions of 40 CFR 273 reduce many of the stringent hazardous waste regulations and allow universal wastes to be more easily collected, transported, and recycled or disposed. For more information about spent mercury-containing lamps and universal wastes, please refer to the ADEQ Fact Sheet Documents on the ADEQ website at: <http://legacy.azdeq.gov/environ/waste/hazwaste/download/lamp.pdf>.

VI. What Quantities of Hazardous Waste are Regulated?

After a generator determines which wastes are hazardous wastes, the next step is to determine the generation rate and maximum quantities that are accumulated. The generation rate is determined by adding together the total quantity of hazardous waste generated from all sources each calendar month. In determining the generation rate, the actual amount of waste generated each calendar month is used, not an average over a number of months.

In determining the quantity of hazardous waste generated each calendar month, a generator does not need to include the following:

- Hazardous waste when it is removed from on-site storage;
- Hazardous waste that is recycled on-site and has already been counted once in that calendar month (See Technical Guidance Document, Determining the Hazardous Waste Generation Rate for On-Site Solvent Recycling)
- Lead-acid batteries that are recycled;
- Universal wastes managed according to [40 CFR 273](#).
- Used oil regulated under: [40 CFR 279](#)

VII. Generator Classifications and Fees

The three federal hazardous waste generator classifications of Conditionally Exempt Small Quantity Generator (CESQG), Small Quantity Generator (SQG) and Large Quantity Generator (LQG) requirements are described in detail below. A generator must determine which classification their facility is, in order to determine which regulations must be followed. A generator must also determine what permit fee category they fall into under [PCC Title 7.09.090](#). It should be noted that a generator may change status from one classification and or category to another depending upon generation rates and accumulated quantities. The classifications of generators in Pima County are:

Conditionally Exempt Small Quantity Generator (CESQG)
Small Quantity Generator (SQG)
Large Quantity Generator (LQG)

The permit fee categories of hazardous waste generators in Pima County are:

Small Quantity Generator 1 (SQG1)
Small Quantity Generator 2 (SQG2)
Small Quantity Generator 3 (SQG3)
Large Quantity Generator (LQG)

VIII. Summary of Generator Requirements

This summary is not meant to replace the regulations and is not a complete list of all regulatory requirements for generators. This summary is meant as a brief reference tool to assist generators with compliance.

A. **Conditionally Exempt Small Quantity Generator (CESQG) Requirements**

To be classified as a CESQG, a generator must meet the following general requirements:

- Generate less than 100 kilograms (220 pounds) of hazardous waste and less than 1 kilogram (2.2 lbs.) of acute hazardous waste in a single calendar month.
- Accumulate/store less than 1 kilogram (2.2 pounds) of acute hazardous waste or 1000 kilograms (2200 pounds) of other wastes listed in [40 CFR 261.5\(e\)](#).
- Must make a hazardous waste determination using one of the methods described in [40 CFR 262.11](#).
- If analytical testing will be conducted, the generator must use a laboratory certified by ADHS.

CESQG DISPOSAL OPTIONS

PDEQ recommends that a CESQG dispose of its hazardous waste on a regular basis to avoid accumulating more than 1,000 kilograms (2,200 pounds) of hazardous waste at any time. CESQGs may send their accumulated hazardous waste to an off-site disposal facility meeting the following requirements:

- The City of Tucson Household Hazardous Waste (HHW) facility has a Small Business Waste Assistance Program (SBWAP) to assist CESQGs with affordable hazardous waste disposal at a reduced price and follows all associated regulations (see information in the Section XI); or
- An off-site treatment, storage or disposal facility (TSDF), if located in the U.S., that is:
 - Permitted by ADEQ, another authorized state, or EPA as a hazardous waste TSDF; or
 - Permitted, licensed, or registered by a state to manage municipal solid waste (MSW) in a landfill (subject to [40 CFR Part 258](#)); or
 - A facility which:
 - Beneficially uses or reuses, or legitimately recycles or reclaims the waste; or
 - Treats the waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or
 - For universal waste managed in conformance with [40 CFR Part 273](#), a universal waste handler or destination facility subject to the requirements of [40 CFR Part 273](#) and [AAC R18-8-273](#).

CESQG RECORD KEEPING RECOMENDATION

- PDEQ recommends that all CESQG facilities maintain all monthly inspection logs for a minimum of 3 years.

CESQG CONTAINER MANAGEMENT RECOMMENDATIONS

If a CESQG accumulates hazardous waste on-site, PDEQ recommends they meet the following container management requirements:

- Conduct monthly inspections of hazardous waste storage areas. At a minimum, the inspections should be documented in a log and should include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
- Clearly mark the date upon which each period of accumulation begins and ensure that the date is

visible for inspection on each container.

- Clearly label or mark each container with the words “Hazardous Waste”.
- Each container must be in good condition.
- Each container must be compatible with its contents.
- Each container must be kept closed except when adding or removing waste.
- Hazardous waste must not be stored near other hazardous wastes or materials with which it is incompatible.
- Pre-transport requirements of [40 CFR 262 Subpart C except 262.34](#) (Accumulation time) as follows:
 - All waste transported or offered for transport off-site must be packaged in accordance with the applicable U.S. Department of Transportation (DOT) regulations on packaging under [49 CFR Parts \(173\), \(178\), and \(179\)](#).
 - All waste transported or offered for transport off-site must be labeled in accordance with the applicable DOT regulations on hazardous materials under [49 CFR Part 172](#).
 - All waste transported or offered for transport off-site must be marked in accordance with the applicable DOT regulations under [49 CFR Part 172](#).
 - Before transporting hazardous waste or offering hazardous waste for transportation offsite, the generator must placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under [49 CFR Part 172 Subpart F](#).

CESQG TANK RECOMENDATIONS

If a CESQG accumulates hazardous waste on-site in a tank, PDEQ recommends they meet the following tank management requirements:

- Clearly mark the date upon which each period of accumulation begins and ensure that the date is visible for inspection on each tank.
- Clearly label or mark each tank with the words “Hazardous Waste”.
- If 25 kilograms (55 pounds) or more of hazardous waste is accumulated in one or more tanks then the CESQG must also comply with [40 CFR 265.201](#).

CESQG HAZARDOUS WASTE GENERATOR PERMITTING - PDEQ

- CESQG facilities operating in Pima County are not required to register with PDEQ nor obtain a hazardous waste generator permit from the department.
- PDEQ has the statutory authority to inspect CESQG facilities and request documentation to verify CESQG status.

B. Small Quantity Generator (SQG) Requirements

To be classified as a SQG, a generator must meet the following criteria:

- Generate more than 100 kilograms (220 pounds) but less than 1,000 kilograms (2,200 pounds) of hazardous waste in a single calendar month; and
- Generate and accumulate less than 1 kilogram (2.2 pounds) of acute hazardous waste in a calendar month.

SQG GENERAL REQUIREMENTS

- Never exceed 6,000 kilograms (13,200 pounds) of hazardous waste on-site.
- Never exceed 1 kilogram (2.2 pounds) of acute hazardous waste on-site.
- Must make a hazardous waste determination using one of the methods described in [40 CFR 262.11](#).
 - If analytical testing will be conducted, the generator must use a laboratory certified by the Arizona Department of Health Services (ADHS).
- Must obtain an EPA identification Number from the Arizona Department of Environmental Quality (ADEQ) by submitting a *RCRA Subtitle C Site Identification Form* to ADEQ.
- Store hazardous waste on-site for 180 days or less (and not exceed 6,000 kilograms) or 270 days or

less if the generator must transport hazardous waste more than 200 miles for off-site treatment, storage or disposal (If the generator exceeds the 180- or 270-day requirement, then they become subject to all permitting requirements of a Treatment, Storage and Disposal Facility (TSDF)).

- Must update information on the *RCRA Subtitle C Site Identification Form* as it changes and submit to ADEQ.
- Must use a transporter and TSDF who has an EPA Identification Number.
- Must use a hazardous waste manifest pursuant to [40 CFR Part 262 Subpart B](#).
- Generators exporting or importing hazardous waste must follow the requirements of [40 CFR Part 262 Subpart E](#) and [Subpart F](#).
- Meet all of the Land Disposal Restriction requirements as referenced in [40 CFR Part 268](#).
- Can use a tolling agreement if the requirements of [40 CFR 262.20\(e\)](#) are met.

SQG RECORDKEEPING, REPORTING, REQUIREMENTS

- Maintain a signed copy of each hazardous waste manifest and LDR on-site for a minimum of three (3) years.
- Maintain records of any test results, waste analyses, or other waste determinations made in accordance with [40 CFR 262.11](#) for a minimum of three years from the date that the waste was last treated and/or disposed.
- Follow the exception reporting requirements of [40 CFR 262.42\(b\)](#) if a manifest is not received from the designated facility (TSDF) within 60 days of the date the waste was accepted by the first transporter.
- PDEQ recommends maintaining copies of all inspection logs for a minimum of three (3) years.
- PDEQ recommends maintaining copies of all training records for a minimum of three (3) years.

SQG CONTAINER MANAGEMENT REQUIREMENTS

- Each container must be in good condition.
- Each container must be compatible with its contents.
- Each container must be kept closed except when adding or removing waste.
- Hazardous wastes must not be stored near other hazardous wastes or materials with which it is incompatible.
- Weekly inspections must be conducted for all areas where hazardous waste is stored.
 - At a minimum, the inspections should be documented in a log and should include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
- Clearly mark the date upon which each period of accumulation begins and ensure that the date is visible for inspection on each container.
- Clearly label or mark each container with the words “Hazardous Waste”.
- Meet the pre-transport requirements as follows:
 - All waste transported or offered for transport off-site must be packaged in accordance with the applicable U.S. Department of Transportation (DOT) regulations on packaging under [49 CFR Parts \(173\), \(178\), and \(179\)](#).
 - All waste transported or offered for transport off-site must be labeled in accordance with the applicable DOT regulations on hazardous materials under [49 CFR Part 172](#).
 - All waste transported or offered for transport off-site must be marked in accordance with the applicable DOT regulations under [49 CFR Part 172](#).
 - Before transporting hazardous waste or offering hazardous waste for transportation offsite, the generator must placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under [49 CFR Part 172 Subpart F](#).

SQG Satellite Accumulation

- A SQG may accumulate 55 gallons or less, in no more than one container, of each type of hazardous waste (or one quart or less, in no more than one container, of each type of acute hazardous waste listed in [40 CFR 261.5\(e\)](#)) at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without this waste becoming subject to accumulation time limits provided the following conditions are met:
 - Containers are in good condition;
 - Containers are compatible with the waste they are holding;
 - Containers are always closed except when adding or removing waste;
 - Containers are clearly marked with the words “Hazardous Waste”;
 - Mark the accumulation start date on the container when the 55-gallon limit is exceeded (or the container otherwise no longer meets the definition of a satellite container); and
 - Move the container to storage (or manage it as a storage container at that location) within 3 days of the container no longer meeting the definition of a satellite container.

SQG Tanks

- Clearly mark the date upon which each period of accumulation begins and ensure that the date is visible for inspection on each tank.
- Clearly label or mark each tank with the words “Hazardous Waste”.
- Treatment or storage of hazardous waste in tanks must comply with [40 CFR 265 Subpart J](#).
- Contents of the tank should not cause it to corrode or otherwise fail before the end of its intended life.
- Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
- Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this in-flow.
- Generators who accumulate between 100 and 1,000 kilograms (220 and 2,200 pounds) per month of hazardous waste in tanks, must:
 - Conduct daily and/or weekly inspections of the tank and its systems as required in [40 CFR 265.201\(c\) and/or \(d\)](#).
 - Upon closure, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures.
 - Follow the special requirements found in [40 CFR 265.201\(g\)](#) for ignitable or reactive waste.
 - Follow the special requirements found in [40 CFR 265.201\(h\)](#) for incompatible waste.

SQG PREPAREDNESS AND PREVENTION

- The facility must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
- The facility must be equipped with the following unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:
 - An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility 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 departments, fire departments, or State or local emergency response teams;
 - Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and

- decontamination equipment; and;
 - Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.
- The facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.
- Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee (unless such a device is not required under [40 CFR 265.32](#)).
- Aisle space must be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.
- The generator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations. If state or local authorities refuse to enter into such an agreement, then the generator must document the refusal in the operating record:
 - Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
 - Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority; Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
 - Agreements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.
- Must have an emergency coordinator on-site or on call (able to be on-site within 30 minutes) at all times. This emergency coordinator must be able to coordinate all emergency response measures specified below.
- The following information must be posted next to at least one telephone:
 - The name and telephone number of the emergency coordinator;
 - Location of fire extinguishers and spill control material, and, if present, fire alarm; and
 - The telephone number of the fire department, unless the facility has a direct alarm.
 - If the generator relies solely on cell phones:
 - ✓ The information listed above must be posted on walls so that they can be readily seen by employees;
 - ✓ Employees shall be trained on the locations of these postings; and
 - ✓ Management personnel shall have these numbers programmed into their cell phones.
- The emergency coordinator must respond to any emergencies that arise and meet the response requirements of [40 CFR 262.34\(d\)\(5\)\(iv\)](#).

SQG TRAINING

Each SQG shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

PDEQ recommends that the training should be:

- Provided within 6 months of hire (or transfer to a new position);
- Be repeated at least annually; and
- Documented by recording all of the following:
 - The name of the employee;

- Date of the training;
- A list of the topics covered in the training.

Training records should be maintained for a minimum of 3 years.

SQG HAZARDOUS WASTE GENERATOR PERMITTING FEES

PDEQ’s authority to implement a portion of the ADEQ Hazardous Waste Generator Program has been delegated by ADEQ. A Delegation Agreement was entered into with ADEQ granting PDEQ regulatory authority to perform the hazardous waste generator inspection functions and duties related to SQGs within Pima County. This is why fees must be paid to both agencies to support the regulatory programs.

ADEQ FEE REQUIREMENTS – [Contact ADEQ for more information](#)

SQG annual hazardous waste registration fee is: \$100.00

The hazardous waste generation fee is determined by the following:

1. For activities described in [A.R.S. § 49-931\(A\)\(1\)](#) \$60.00 per ton;
2. For activities described in [A.R.S. § 49-931\(A\)\(2\)](#) \$240.00 per ton;
3. For activities described in [A.R.S. § 49-931\(A\)\(3\)](#) \$24.00 per ton.

PDEQ REGISTRATION FEE REQUIREMENTS – [PCC 7.09.090 Fees](#)

	Generator Category	Annual Fee
SQG 1	101-300 kgs./221-660 lbs. of hazardous waste	\$1,010.00
SQG 2	301-500 kgs./661-1100 lbs. of hazardous waste	\$1,760.00
SQG 3	501-1000 kgs./1101-2200 lbs. of hazardous waste	\$3,790.00

PDEQ has implemented a 3-tier SQG fee schedule to encourage waste minimization and to assist smaller generators with the cost of regulatory compliance.

C. Large Quantity Generator (LQG) Requirements

To be classified as a LQG, a generator must meet the following criteria:

- Generate 1,000 kilograms (2,200 pounds) or more of hazardous waste in a calendar month; or
- Generate or accumulate 1 kilogram (2.2 pounds) or more of acute hazardous waste or 100 kilograms (220 pounds) or more of other spill residue wastes listed in [40 CFR 261.5\(e\)](#) in a single calendar month.

LQG GENERAL REQUIREMENTS

- Must make a hazardous waste determination using one of the methods described in [40 CFR 262.11](#).
 - If analytical testing will be conducted, the generator must use a laboratory certified by ADHS.
- Must obtain an EPA identification Number from the Arizona Department of Environmental Quality (ADEQ) by submitting a *RCRA Subtitle C Site Identification Form* to ADEQ.
- Store hazardous waste on-site for 90 days or less.
 - One 30-day extension can be granted at the discretion of PDEQ.
 - If the generator exceeds the 90 day requirement without being granted an extension by PDEQ, then they become subject to all permitting requirements of a TSDF.
- Must update information on the *RCRA Subtitle C Site Identification Form* as it changes.

- Must use a transporter and TSDf who has an EPA Identification Number.
- Must use a hazardous waste manifest pursuant to [40 CFR 262 Subpart B](#).
- Meet all of the Land Disposal Restriction requirements as referenced in [40 CFR Part 268](#).
- Generators exporting or importing hazardous waste must follow the requirements of [40 CFR 262 Subpart E](#).

LQG RECORDKEEPING, REPORTING REQUIREMENTS

- Maintain a signed copy of each hazardous waste manifest and LDR on-site for a minimum of three (3) years.
- Maintain records of any test results, waste analyses, or other waste determinations made in accordance with [40 CFR 262.11](#) for a minimum of three years from the date that the waste was last treated and/or disposed.
- Follow the exception reporting requirements of [40 CFR 262.42\(a\)](#) if a manifest is not received within 35 days of the date the waste was accepted by the first transporter. These requirements include contacting the transporter and designated facility to locate the waste and obtaining a copy of the manifest with the signature from the designated facility. It may also include filing an exception report with ADEQ if the signed copy of the manifest is not received within 45 days of the date the waste was accepted by the initial transporter.
- Follow the biennial reporting requirements of [40 CFR 262.41](#).
- PDEQ recommends maintaining copies of all inspection logs for a minimum of three (3) years.
- Maintain all of the following records for all employees whose job responsibilities include managing hazardous waste as required by [40 CFR 265.16](#):
 - The job title for each position;
 - A written job description for each position, which must include the requisite skill, education, or other qualifications, and hazardous waste duties of facility personnel assigned to each position;
 - A written description of the type and amount of both introductory and continuing training that will be given to each person;
 - Records that document the training or job experience required;
 - Training records must be maintained for current employees until closure of the facility, and on former employees for 3 years from the date employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

LQG CONTAINER MANAGEMENT REQUIREMENTS

- Each container must be in good condition.
- Each container must be compatible with its contents.
- Each container must be kept closed except when adding or removing waste.
- Hazardous wastes must not be stored near other hazardous wastes or materials with which it is incompatible.
- Weekly inspections must be conducted for all areas where hazardous waste is stored.
 - At a minimum, the inspections should be documented in a log and should include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
- Clearly mark the date upon which each period of accumulation begins and ensure that the date is visible for inspection on each container.
- Clearly label or mark each container with the words “Hazardous Waste”.
- Meet the pre-transport requirements as follows:
 - All waste transported or offered for transport off-site must be packaged in accordance with the applicable U.S. Department of Transportation (DOT) regulations on packaging under [49 CFR Parts \(173\), \(178\), and \(179\)](#).
 - All waste transported or offered for transport off-site must be labeled in accordance with the

- applicable DOT regulations on hazardous materials under [49 CFR Part 172](#).
 - All waste transported or offered for transport off-site must be marked in accordance with the applicable DOT regulations under [49 CFR Part 172](#).
 - Before transporting hazardous waste or offering hazardous waste for transportation offsite, the generator must placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under [49 CFR Part 172 Subpart F](#).
- Comply with the requirements of [40 CFR 265 Subparts \(AA\)](#), [\(BB\)](#), and [\(CC\)](#).

LQG Satellite Accumulation

- Any generator may accumulate 55 gallons or less, in no more than one container, of each type of hazardous waste (or one quart or less, in no more than one container, of each type of acute hazardous waste listed in [40 CFR 261.5\(e\)](#)) at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without this waste becoming subject to accumulation time limits provided the following conditions are met:
 - Containers are in good condition;
 - Containers are compatible with the waste they are holding;
 - Containers are always closed except when adding or removing waste;
 - Containers are clearly marked with the words “Hazardous Waste”;
 - Mark the accumulation start date on the container when the 55-gallon limit is exceeded (or the container otherwise no longer meets the definition of a satellite container); and
 - Move the container to storage (or manage it as a storage container at that location) within 3 days of the container no longer meeting the definition of a satellite container.

LQG Tanks

- Clearly mark the date upon which each period of accumulation begins and ensure that the date is visible for inspection on each tank.
- Clearly label or mark each tank with the words “Hazardous Waste”.
- LQGs storing hazardous waste in tanks must comply with the applicable requirements of [40 CFR 265 subparts \(J\)](#), [\(AA\)](#), [\(BB\)](#), and [\(CC\)](#) of 40 CFR, except Sections 265.197(c) and 265.200.
 - Daily inspections must be conducted for all tank systems holding hazardous waste.
 - At a minimum, the inspections should be documented in a log and should include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

LQG PREPAREDNESS AND PREVENTION

- The facility must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten human health or the environment.
- The facility must be equipped with the following unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:
 - An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility 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 departments, fire departments, or State or local emergency response teams;
 - Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and;
 - Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

- The facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.
- Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee (unless such a device is not required under [40 CFR 265.32](#)).
- Aisle space must be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency.
- The generator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations. If state or local authorities refuse to enter into such an agreement, then the generator must document the refusal in the operating record:
 - Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;
 - Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority; Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
 - Agreements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.
- The LQG must comply with the requirements of [40 CFR 265 Subpart D](#), Contingency Plan and Emergency Procedures.

LQG TRAINING

The LQG must comply with the personnel training requirements of [40 CFR 265.16](#) as required by [40 CFR 262.34\(a\)\(4\)](#) and [AAC R18-8-262](#), including all of the following:

- Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their hazardous waste management duties.
- This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:
 - Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - Key parameters for automatic waste feed cut-off systems;
 - Communications or alarm systems;
 - Response to fires or explosions;
 - Response to ground-water contamination incidents; and
 - Shutdown of operations.
- For facility employees that receive emergency response training pursuant to OSHA regulation [29 CFR 1910.120\(p\)\(8\) and 1910.120\(q\)](#), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the requirements of this section.
- Personnel must complete the training program within six months of hire (or transferring to a new

- position managing hazardous waste) and cannot work unsupervised until the training is completed.
- Personnel must receive annual training after the initial training is completed.

LQG HAZARDOUS WASTE GENERATOR PERMITTING FEES

PDEQ’s authority to implement a portion of the ADEQ Hazardous Waste Generator Program has been delegated by ADEQ. A Delegation Agreement was entered into with ADEQ granting PDEQ regulatory authority to perform the hazardous waste generator inspection functions and duties related to LQGs within Pima County. This is why fees must be paid to both agencies to support the regulatory programs.

ADEQ FEE REQUIREMENTS – [Contact ADEQ for more information](#)

LQG annual hazardous waste registration fee is: \$300.00

The hazardous waste generation fee is determined by the following:

1. For activities described in [A.R.S. § 49-931\(A\)\(1\)](#), \$60.00 per ton;
2. For activities described in [A.R.S. § 49-931\(A\)\(2\)](#), \$240.00 per ton;
3. For activities described in [A.R.S. § 49-931\(A\)\(3\)](#), \$24.00 per ton.

PDEQ REGISTRATION FEE REQUIREMENTS – PCC 7.09.090 Fees

	Generator Category	Annual Fee	Annual Fee
LQG	Greater than 1,000 kgs./2,200 pounds of hazardous waste; or greater than 1 kg./2.2 lbs. of acute hazardous waste	\$1,895.00	\$3,790.00

IX. Land Disposal Restrictions ([40 CFR 268](#)) and Hazardous Waste Manifesting ([40 CFR 262](#))

Arizona has adopted no specific state requirements for Land Disposal Restrictions (LDR). ADEQ does have a specific state requirement for hazardous waste manifests. Arizona requires that copies of manifests be submitted to ADEQ, no later than 45 days following the end of the month of shipment ([AAC R18-8-262.I](#)). In Pima County, most generators use a disposal contractor to transport and dispose of their hazardous waste. Most generators rely on these contractors to complete the necessary paperwork for shipping their hazardous waste to the disposal facility. The required paperwork generally includes the LDR and the manifest. It is in the best interest of the generator that they have someone signing the manifest that is familiar with the federal hazardous waste regulations and understands what they are signing and verifies that the information on the manifest and LDR are correct before signing either document. It is also important that generators retain their copies of these documents for a minimum of three (3) years.

The manifest is used to track the waste from the point of generation (facility where it was generated) to the point where it is finally treated to render it non-hazardous and/or disposed. This final point is generally a permitted treatment/storage/disposal facility (TSDF). This management system is commonly referred to as the cradle-to-grave system and the manifest ensures that the generator is able to track their waste to that final point. When the generator signs the manifest, a copy will be provided to them to be retained until they receive the final copy in the mail from the TSDF showing the final signature documenting that the waste was received at the final destination. It is this final copy that must be retained under the recordkeeping requirements. If a generator does not receive that final copy they must begin trying to locate their waste by contacting the

transporter and possibly the final destination facility. If the generator cannot locate their waste, then they should contact ADEQ and file an exception report. ADEQ will then assist in finding the waste. The 35/45/60-day regulatory time limits for exception reporting are explained in [40 CFR 262.42](#).

The LDR system was created by EPA to ensure that wastes are properly treated before being land disposed to prevent contaminants from leaving the site and/or contaminating the environment. Understanding the entire LDR system and all of its requirements can be difficult. As previously stated, PDEQ recognizes that most generators in Pima County utilize a contractor for this service. It is important that the generator understand the LDR requirements and the forms that their contractors are using to document that their waste is in compliance with the LDR requirements. The generator should ensure that they have a copy of their most recent LDR notification for each waste stream, for each TSDf used for that waste stream. The LDR should include all waste codes assigned to that hazardous waste and analytical data or other information about underlying constituents in the waste. EPA changed the LDR requirements a few years ago to say that each generator only needed to send one LDR notice to each TSDf for each waste stream. If the generator (or contractor) chooses to send an LDR notice with each shipment of waste, then each new LDR used will supersede the previous one.

X. Choosing a Hazardous Waste Management Facility and/or Hazardous Waste Transporter/Contractor

Choosing a hazardous waste management facility (TSDf) and/or a hazardous waste transporter (transporter) can be daunting. There are many choices and many factors should be considered. The hazardous waste regulations are cradle to grave, meaning that the generator can retain liability for the waste long after it has been disposed. It is therefore imperative that generators choose contractors that will help them be in compliance with the regulatory requirements and that will ensure that their waste is properly managed, treated, and disposed.

If possible, the generator should try to make a personal visit to the TSDf and meet with potential transporters. It is also a good idea to contact the regulatory agencies in the states where the facilities are located to ensure that the transporter and TSDf do not have major compliance problems in their home states. At a minimum, contact the Arizona Department of Environmental Quality (ADEQ) Hazardous Waste and Compliance Unit at (602) 771-4232 to ensure that a transporter is registered with ADEQ.

The following questions should be addressed to the facility representative.

- Are they acting as the final treatment/disposal facility or are they a broker? If they are a broker, how is the actual facility going to treat or dispose of the waste?
- Who are some of their other customers in your area with similar wastes? Check the company's reputation with their other customers.
- How will the waste be transported to the facility? Does the company use their own vehicles or a contract carrier? Who is the contract carrier?
- Obtain a copy of the company's EPA Notification of Regulated Waste Activity (Form 8700-12) and copies of portions of permits that cover the kinds of wastes handled at the facility.
- Does the facility have a minimum charge for their services for each shipment?
- Is a waste sample required? If so, what fee is assessed for analysis? If you have already had the waste analyzed by an outside laboratory, is that analysis acceptable? Can they use a lab certified by ADHS and assist with a hazardous waste determination?
- How long will it take to complete arrangements for shipment?

Contact the regulatory agency that monitors the facility. Ask to speak with the person most familiar with the site. Most agencies will require a formal information request for open records. Some suggested questions

to ask are:

- Is the facility currently in compliance with all regulations? If not, what are their deficiencies?
- Is the facility currently under any consent orders for past deficiencies?
- Has the facility received any fines or penalties in the past?
- How often is the facility inspected?
- Is the facility listed on the EPA National Priorities List (NPL) (Superfund cleanup) list?
- Is the facility transporter or contract carrier transporter registered as a hazardous waste transporter in Arizona?
- Obtain a contract with the transporter and/or TSDF for their services. Know where your waste is going, how it is being managed, and the disposition of any residues, ash, and empty drums.

XI. How to Avoid Non-Compliance and Minimize Liability

The following recommendations are intended to help ensure compliance with the hazardous waste regulations and to minimize the liability associated with generating hazardous wastes.

- Minimize the amount of hazardous waste generated. This can be done in several ways including a formal Waste Management System or a simple review of what is used at the facility and a look at alternatives to see if less toxic substitutes can be found. Another waste minimization method is to change to different processes that utilize less product and/or produce less waste. Most waste minimization projects pay for themselves within a couple of years through reduced product purchases and reduced waste disposal costs.
- Good housekeeping, by removing old, unused products, empty containers, old parts, etc. to create space and reduce potential regulatory issues and complaints.
- Locate and deal with reputable transportation, treatment, and disposal firms (see Section IX). If a price quote is substantially less than the competition, there is probably a reason why.
- Have backup transporters and disposal sites selected in case your primary providers have problems.
- Recognize when you lack the expertise to handle a particular problem and seek help from a person with experience in hazardous waste management. These consultants can generally be found in the yellow pages or through a quick internet search. Check listings in the nearest metropolitan areas.
- Follow up on all hazardous waste shipments to ensure they reach their intended destination and are treated or disposed.
- Do not mix hazardous wastes with nonhazardous wastes unless you are familiar with all regulations that may apply. The resultant mixture will be a hazardous waste and may be more difficult or costly to dispose than the original waste.
- Maintain all records regarding the hazardous waste program (test results, contingency plan, manifests, exception reports, annual reports, training documents) in one location.
- Designate at least one employee with an appropriate background to be responsible for hazardous waste management. Give that employee the authority and resources to do the job, and then hold him or her accountable.
- Conduct inspections of your facility and its operations. Do so with an open mind and no preconceived notions of the way things ought to be.

XII. Resources Available to Assist in Properly Managing Hazardous Waste

Pima County Department of Environmental Quality (PDEQ)

The PDEQ Hazardous Waste Program Tucson is the primary source of regulatory information and

interpretations. PDEQ staff can be contacted by calling (520) 724-7400 or by writing to:

Pima County DEQ
Bank of America Building
33 N. Stone Ave., Suite 700
Tucson, AZ 85701-1429

The PDEQ website, located at http://webcms.pima.gov/government/environmental_quality/quality/ offers a wide range of information, including the location and phone number for our headquarters. Electronic copies of all regulations, policies, technical guidance documents, helpful handouts (including the Hazardous Waste Generator Handbook), and many other resources are available at our website. Also available on our website is air quality solid waste and water quality regulatory information.

U.S. Environmental Protection Agency (EPA)

EPA provides information on the federal hazardous waste regulations to interested parties. If you have questions, please visit one of EPA's websites. Also, EPA staffs a regional office in San Francisco, California (EPA Region IX) at <http://www.epa.gov/region09/>. The Region IX office maintains a library of current regulations, guidance documents, and training manuals. Many of these materials are available to the public at no cost through the internet. The telephone number for the Region IX headquarters is (415) 947-8000.

City of Tucson Small Business Waste Assistance Program (SBWAP)

The Small Business Waste Assistance Program (SBWAP) provides a safe and affordable disposal/recycling option for your business's CESQG waste. As part of the Household Hazardous Waste Program facility staff offer guidance in compliance and technical matters to facilities that otherwise would not have access to such help because of financial constraints. More information may be obtained by calling the City of Tucson HHW Facility at (520) 690-5749 or visiting their website at <https://www.tucsonaz.gov/es/sbwap>.

Other Institutions

Arizona colleges, universities, and community colleges offer environmental training. For information on any available training, contact the continuing education director at the institution of your choice.

Trade Associations and Environmental Organizations

Trade associations and environmental organizations exist on local, state, and national levels that represent the interests of individuals or companies who perform a common industrial activity. These associations are generally familiar with the regulations affecting the industry they represent and are able to offer advice and assistance in interpreting the regulations. Some associations and organizations also offer training courses, seminars, or conferences focusing on the interpretation and application of regulations. Two prominent organizations in Arizona are:

- Environmental Professionals of Arizona (EPAZ) <http://www.epaz.org/epazportal/resource.html>
- Southern Arizona Environmental Management Society (SAEMS) <http://www.saems.org/>