

Environmental Regulations Guide Section 9 Special & Universal Wastes

9.0 Special & Universal Waste Overview

Under federal & state regulations for solid & hazardous wastes, there are a number of special types of wastes that do not fit neatly into those regulations. Therefore special regulations apply to these three specific types of waste.

1. In Arizona, "special wastes" are a special category of solid wastes. These are not hazardous wastes. The two special wastes in Arizona statutes are: Petroleum Contaminated Soil & Shredded Motor Vehicles.
2. Universal wastes are a special category of hazardous wastes in federal & state regulations. The four federal universal wastes are: batteries, agricultural pesticides, thermostats & lamps. The Arizona universal waste is mercury-containing lamps. Universal wastes have fewer restrictions than hazardous wastes, therefore it is easier to recycle, treat or dispose of them.
3. In Arizona the ADEQ Director can establish "Best Management Practices " (BMP's) for wastes that are not strictly subject to federal hazardous waste regulation. PCB's are specifically listed in ARS 49-855 E, as a waste that has BMP's in Arizona. Other solid & hazardous waste we have included in this subsection include: asbestos, used oil, used batteries, medical waste & sharps, non -hazardous liquid waste (NHLW), & waste tires.

9.1 Special Wastes: ARS 49-851ff; AAC Title 18, chapter 13, Article 13

Purpose

To apply Best Management Practices to the treatment, storage and disposal of a special waste in order to achieve the maximum practical cost effective protection of public health or the environment

Helpful Details

Arizona has a special category of solid wastes called special wastes. Special wastes are solid wastes, not hazardous wastes, that require handling and management to protect public health or the environment. There are two special wastes listed for Arizona, Petroleum contaminated soil and shredded motor vehicles.

Special wastes have fewer regulatory requirements to fulfill compared to hazardous wastes.

The two landfills closest to the City of Scottsdale that accept special wastes are Butterfield landfill and Pen – Rob landfill.

Agency Contacts

Arizona Department of Environmental Quality Solid Waste Division 3033 N. Central Avenue Phoenix, AZ 85012 (602) 207-2338	City of Scottsdale Environmental Planning & Design 7447 E. Indian School Road, Suite 300 Scottsdale, AZ 85251 (480) 312-7990
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Actions Required

REMINDERS: This Guide focuses on permits as the starting point for regulatory compliance with each program. If your department's facilities and/or activities require a permit under these programs, you may also need to comply with related requirements to:

- 1) pay fees;
- 2) write and submit plans and applications;
- 3) file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

Special wastes include waste from shredding motor vehicles and petroleum contaminated soils that contain any of the following contaminants:

- TPH, which exceeds concentrations of 5,000 mg/kg
- Benzene, which exceeds concentrations of 0.13 milligrams/kilogram (mg/kg)
- Toluene, which exceeds concentrations of 200 mg/kg
- Ethylbenzene, which exceeds concentrations of 68 mg/kg
- Total xylene, which exceeds concentrations of 44mg/kg

Special facilities are designed to handle special waste disposal. These facilities are required to submit facility plans that are subject to the same review process as all other solid waste facilities. Generators of special wastes must obtain a state identification, must fulfill manifesting requirements, must keep records for a period of three years and must properly dispose of waste in a permitted special waste facility.

Fees

Fees for disposal of special wastes vary from landfill to landfill

Best Numbers to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

ADEQ, Solid Waste Division: (602) 207-2338

9.1.1 Petroleum - Contaminated Soil (PCS): ARS 49-852; AAC Title 18, chapter 8, Article 16

The Best Management Practices options for disposing of or using petroleum-contaminated soil (PCS) from various types of sources are delineated in AAC Title 18, chapter 8, Articles 16. Soil can be contaminated by petroleum in three subcategories - PCS, Solid Waste PCS, or non-regulated soil.

PCS is soil containing any of the following contaminants:

- TPH, which exceeds concentrations of 5,000 mg/kg
- Benzene, which exceeds concentrations of 0.13 milligrams/kilogram (mg/kg)
- Toluene, which exceeds concentrations of 200 mg/kg
- Ethylbenzene, which exceeds concentrations of 68 mg/kg
- Total xylene, which exceeds concentrations of 44mg/kg

Soil Waste PCS is soil containing:

- TPH between 100-4,999 mg/kg
- Non-fuel, non solvent petroleum products with a TPH>100 mg/kg

non-regulated soil is:

- <100mg/kg TPH contamination
- Not PCS, solid waste PCS, nor hazardous waste
- Not an environmental nuisance (ARS 49-141-144)

Only PCS is regulated as special waste. The following four Best Management Practices are required for PCS:

1. PCS cannot be diluted to avoid these requirements.
2. PCS can be used in a treatability study
3. PCS from an underground storage tank may be treated on site under the requirements for a temporary treatment facility (AAC Title 18, chapter 8, section 1610)
4. PCS can be incorporated into asphalt for paving.

9.1.2 Shredded Motor Vehicles: AAC Title 18, chapter 13, Section 1307

The city does not shred motor vehicles. In the event the city should send vehicles to a shredder, the staff person making such arrangements should consult the Best Management Practices for shredding motor vehicles in AAC Title 18, chapter 13, section 1307, & audit the shredder to ensure these BMP's are implemented

9.2 Universal Wastes: 40 CFR part 273; AAC Title 18, Chapter 8, section 273

The federal universal waste program promotes proper recycling or disposal of hazardous waste batteries, pesticides, thermostats, & lamps which will reduce the amount of hazardous waste items in the municipal solid waste stream. The Arizona universal waste Best Management Practices list only mercury-containing lamps. Therefore, this section only details thermostat & lamp BMP's. The following section "Best Management Practices" details used battery BMP's. Pesticides BMP's are detailed in this Guide in section 5.4 FIFRA.

9.2.1 Mercury-Containing Lamps: AAC Title 18, chapter 8, section 273

Purpose

To promote proper recycling or disposal of mercury-containing lamps & thermostats to reduce the amount of hazardous waste in solid waste landfills.

Helpful Details During the re-lamping of city buildings under the federal Green Lights Program, the city followed the universal waste rules in AAC Title 18, chapter 8, section 273 to recycle mercury-containing lamps & ballasts. The lamp & ballast recycling facility also recycles mercury-containing thermostats from city facilities.

Agency Contacts

ADEQ Hazardous Waste Division- Technical Programs Unit 3033 N. Central Ave. Phoenix, AZ 85012 (602) 207-4211	City of Scottsdale Environmental Planning & Design 7447 E. Indian School Rd. suite 300 Scottsdale, AZ 85251
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Actions Required

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- 1) pay fees;
- 2) write and submit plans and applications;
- 3) file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

After mercury-containing lamps are removed from lighting fixtures, they must be carefully stored in the cardboard boxes the replacement bulbs came in or other suitable container. Lamps cannot be broken during handling or storage. The storage area & each container must be properly labeled. Accidentally broken lamps must be immediately sealed in heavy plastic bags & placed in a rigid container for disposal as hazardous waste.

The Environmental Planning & Design Office coordinates periodic shipments of unbroken lamps, ballasts & thermostats to a mercury lamp recycler.

A small quantity handler of universal waste lamps (i.e. less than 100 Kg. of hazardous waste per month) may dispose of the lamps either according to these BMP's or under the CESQG exemption in 40 CFR 261.5 (AAC Title 18, chapter 8, section 261)

A large quantity handler of universal waste must follow these BMP's.

Fees

none

Best Numbers to Call

City of Scottsdale Environmental Office (480) 312-7990

ADEQ (602) 207-4213

9.3 Best Management Practices: ARS 49-855 D.

In Arizona, the ADEQ Director can establish "Best Management Practices" (BMP's) for wastes that are not strictly subject to federal hazardous waste regulations under RCRA.

This section details other wastes that have special BMP requirements. Some of these waste BMPs are in solid waste section of Arizona statutes & regulations, others are found in the hazardous waste sections. Although these may not be technically termed "special wastes", they are included here for convenience because of their special BMP requirements.

9.3.1 Asbestos: 40 CFR parts 61 & 763; 29 CFR parts 1910, 1915 & 1926; ARS 23 chapter 2, Article 13; AAC Title 18 chapter 2; Maricopa County APCR Rule 370

Purpose

To protect the health of workers and citizens from exposure to asbestos.

Helpful Details

To regulate the demolition and renovation of buildings containing friable asbestos-containing material greater than or equal to : 160 square feet or 260 linear feet. This is determined by an Asbestos Hazard Emergency Response Act (AHERA) certified consultant prior to demolition or renovation. This rule applies to public, commercial, industrial buildings and apartment complexes of greater than 4 units. Private residences, apartment complexes of 4 units or less are exempt. All City owned buildings and City operations are subject to this rule.

Agency Contacts

Maricopa County Environmental Services Department
Air Quality Division
Asbestos Coordinator
1001 N. Central Avenue, Suite 201
Phoenix, AZ 85004
(602) 506-6708
(602) 506-6179 (fax)

Actions Required

REMINDERS: This Guide focuses on permits as the starting point for regulatory compliance with each program. If your department's facilities and/or activities require a permit under these programs, you may also need to comply with related requirements to:

- 1) pay fees;
- 2) write and submit plans and applications;
- 3) file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

Demolition and Renovation Projects:

Determine if an AHERA-certified asbestos building inspector has inspected the building during the past year. If so, obtain a copy of the building report to determine if asbestos is present. If not, conduct an asbestos survey by a certified inspector. Keep a copy of the asbestos survey on file and determine if asbestos is present. Determine the amount of friable asbestos containing material. If the amount is 160 square feet, or 260 linear feet, or more, the project requires a permit. The City typically hires an asbestos abatement contractor AND an asbestos-consulting firm to oversee the project. A NESHAP 10-Day notification form must be filed 10 days prior to work on the project. This notification must be postmarked or hand-delivered.

Smaller Projects : The city provides asbestos training to a limited number of employees to perform work involving small amounts of asbestos containing material. All worker safety and human exposure requirements for working with asbestos must be observed.

Asbestos Notices: Posters in all city buildings alert employees and citizens regarding any asbestos containing materials that may be present in that building.

Asbestos Surveys: The Environmental Planning & Design Office and Risk Management has conducted full asbestos surveys of all major city buildings. The surveys are on file in the EMO.

Fees

Quantity of Asbestos Containing Material:

Sq. Feet	Linear Feet	Fee
160-499	260-499	\$175.00
500-999	500-999	\$275.00
1,000-2,499	1,000-2,499	\$375.00
2,500-4,999	2,500-4,999	\$450.00
5,000-9,999	5,000-9,999	\$550.00
10,000 or more	10,000 or more	\$750.00

Best Numbers to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

Maricopa County Environmental Services Department: (602) 506-6010

9.3.2 Used Oil: 40 CFR part 279; 42 USC chapter 82, section 6935; ARS 49-801

Arizona adopted the federal used oil recycling standards as of July 21, 1997 and added several state requirements which make its used oil management rule more stringent than the federal rules. The additional state requirements are in connection with the definition of used oil, registration of collection centers, household "do-it-yourselfer" used oil generators, quarterly reports, annual reports, certification of used oil burned for energy recovery, labeling tanks holding on specification used oil, inspections and used oil testing by ADEQ, and prohibited used oil activities. ADEQ administers and enforces the rules for used oil management in Arizona.

Most used oil in Arizona is burned as a substitute fuel for energy recovery. Arizona regulations list five specific prohibited practices for used oil disposal:

1. used oil cannot be discharged into sewers or waters of the state
2. used oil cannot be incinerated (burning for energy recovery is not considered incineration.)
3. used oil cannot be used as a dust suppressant or contact herbicide
4. used oil cannot be disposed on land, except as approved on a landfill
5. used oil cannot be stored in surface impoundment.

Used oil can be on-specification, off-specification or hazardous waste.

- On-specification used oil does not exceed allowable levels of arsenic, cadmium, chromium, lead, PCB's or total halogens, & has a flashpoint higher than 100° F
- Off-specifications used oils exceeds any one or more of these allowable levels, but still is not classified as a hazardous waste. Used oil contaminated with PCB's between 2-50 PPM can be burned as long as all PCBs are completely destroyed.
- Used oil becomes a hazardous waste if it has too high a concentration of either PCB's or halogens. The PCB level is \geq to 50 ppm. The automatic halogen level is \geq 4,000 ppm is presumed hazardous waste but can be classified off-specification by a process called "refutable presumption".

All City of Scottsdale generated used oil is recycled as on-specification used oil, unless it accidentally becomes contaminated. Used oil recycling transporters test each load & alert the city if the oil does not meet specifications. Contact the Environmental Office if this occurs.

9.3.3 Used Batteries: ARS 44-132; 40 CFR Part 273

Lead-acid batteries (car batteries) must be disposed of or recycled in accordance with ARS 44-1322. The City of Scottsdale returns/exchanges spent batteries to the contractor supplying batteries to the city. Nickel Cadmium batteries that have been recalled, banned, damaged or are obsolete may be managed under the universal waste rule. Certain categories of hazardous wastes may be recycled without a permit when using an appropriate recycling method because EPA does not consider the material a solid waste. RCRA's hazardous waste rules allow other recycling methods, but require a hazardous waste permit. Nickel-cadmium (Ni-Cd) & small sealed lead-acid batteries can be disposed or recycled under federal Universal Waste rules, 40 CFR Part 273.

The city encourages recycling all types of batteries including household batteries (AAA, AA, A, B, C, D etc.). For city operations only, the city collects & recycles all alkaline (AAA, AA, A, B, C, D, etc.), nickel-cadmium, lithium, cell phone, button & miscellaneous small, sealed batteries. Contact the Environmental Office or the City's warehouse staff for recycling information.

9.3.4 Medical Wastes and Sharps: ARS 44-1314; AAC Title 18 chapter 13 Articles 14-15

Medical waste is a special category of solid waste which is generated in the diagnosis, treatment or immunization of a human being or animal or in research, and includes discarded drugs but does not include hazardous waste as defined in Sec. 49-921 other than conditionally exempt small quantity generator waste.

A medical sharp which is sold only by prescription or which is otherwise restricted in its distribution to the general public but which is sold for personal use shall bear a label which describes a safe method for the disposal of the medical sharp.

Under ADEQ's current approach, the types of medical waste that would be regulated are biohazardous medical waste and discarded drugs. Biohazardous medical waste is defined as cultures and stocks, waste human blood and blood products, pathological wastes, isolation waste, medical sharps and research animal waste.

Regulated medical waste is treated to a high level of disinfection. Some additional processing, packaging or treatment would be required for medical waste. For example, medical sharps must be rendered incapable of puncturing.

In city operation, medical waste & sharps are not routinely generated. However, when staff occasionally "finds" medical waste & sharps, care should be taken with handling the "found" material. Contact the Environmental Office for assistance with legal disposal of these "found" medical wastes.

City Requirements

Alkaline batteries	Send to Warehouse individually through interoffice mail	Collect a box full in your work area and e-mail John Williams at the Warehouse for pick up
Button batteries (some cameras, calculators)	Send interoffice mail to Environmental Management Office who will recycle them with national professional association	No options at this time

9.3.5 Non-Hazardous Liquid Waste: Maricopa County EHC chapter II section 7; SRC chapter 49 Article 4. Division 6, sections 49-196-210

The city's NHLW site is currently used for municipally generated NHLW.

The city shall have the authority to regulate all discharges of NHLW to the POWT. This authority shall allow the city to:

1. Require all NHLW dischargers to have a NHLW discharge permit to discharge NHLW to the POTW
2. Establish NHLW effluent limitations
3. Require NHLW discharger to have valid state and county permits and be in compliance with all county and state regulations
4. Revoke NHLW discharge permits for violations
5. Refuse permission to dump any load that is suspected or is determined through sampling and analysis to be incompatible with the POTW or exceeds discharge limits established for NHLW discharges; and
6. Establish and collect fees from NHLW dischargers for discharging NHLW.

9.3.6 PCB's (polychlorinated biphenyls): ARS 49-855 E.; 40 CFR part 761

New production & uses of PCB's were banned in 1979. However, old electric transformers & fluorescent light ballasts may still have PCB's. Arizona requires Best Management Practice handling, storage & disposal of PCB's. There are three categories of PCB ori:

1. Oil with less than 2 ppm PCB is classified as on-specification used oil & may be burned for energy recovery.
2. Oil with 2-50 ppm PCB is classified as off-specification used oil & may also be burned for energy recovery, provided that all PCB's are destroyed completely.
3. Oil with \geq ppm PCB is regulated as a TSCA waste (40 CFR part 761)

The city recycles all used light fixture ballasts, but separates known or suspected PCB containing ballasts for special handling, storage & disposal procedures. Contact the Environmental Office for assistance with legal disposal of PCB containing ballasts or electrical transformers "found" on city property. Transformers are typically the property of & disposed by local electric utility companies (APS or SRP).

9.3.7 Waste Tires: ARS 44-1301-1307

Purpose

To collect and recycle used tires. Also to inform the public of the potential benefits of collecting and recycling potentially hazardous material including used tires.

Helpful Details

Disposal of waste tires is forbidden at: landfills, the incinerators of municipal waste disposal sites. All waste tires in Arizona must be disposed by one of the following means:

- At a state tire collection site
- Retreaded or recapped
- Used as a collision barrier
- Chopped up or shredded
- Ground up to be used as asphalt or in another product
- Used for sludge composting
- Used as playground equipment
- Incinerated or used as a fuel or pyrolysis
- Hauled out of state to outside facilities
- Other ADEQ permitted methods of disposal

Agency Contacts:

Arizona Department of Environmental Quality Solid Waste Division 3033 N. Central Avenue Phoenix, AZ 85012 (602) 207-2338	City of Scottsdale Environmental Planning & Design 7447 E. Indian School Road, Suite 300 Scottsdale, AZ 85251 (480) 312-7990
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Actions Required

Retail and wholesale tire sellers are required by state law to accept, within 30 days of a new tire purchase, waste tires from consumers in the amount equaling the total sales of new tires for the year. The tire seller is authorized to collect 2 percent of the new tire's selling price as a "surcharge for environmental protection." The surcharge must be clearly marked on any bill of sale or sales receipt given to the customer. Any waste tire facility that has more than 500 used/waste tires on-site must register its operation with ADEQ.

Fees

Surcharge incorporated in the price of new tires.

Best Numbers to Call

Arizona Department of Environmental Quality: (602) 207-2338