

ADEQ Solid Waste Unit

Webinar: *Solid Waste Overview*
February 7, 2017



- This webinar will be muted to reduce or eliminate external auditory disturbances;
- The webinar will be available for download at <http://wsppn.org/webinars/>
- If you are experiencing technical difficulties, call 1-800-263-6317, or 1-805-617-7000. Press 2 when prompted.

Brought to you by:

- The Western Sustainability Pollution Prevention Network
- The Arizona Department of Environmental Quality



Webinar Agenda

10:00 AM	Webinar Overview
10:05	Presentation
10:50	Q&A
11:00 AM	Adjourn

Heather Blanchard
Enforcement Officer



An Overview of Solid Waste

Arizona Department of Environmental Quality
Solid Waste Unit

February 7, 2017

“ADEQ will take reasonable measures to provide access to department services to individuals with limited ability to speak, write, or understand English and/or to those with disabilities. Requests for language interpretation services or for disability accommodations must be made at least 48 hours in advance by contacting: Environmental Justice/Title VI Nondiscrimination Program Coordinator at 602-771-4322 or edb@azdeq.gov

“ADEQ tomará medidas razonables para proveer acceso a los servicios del departamento para personas con capacidad limitada para hablar, escribir o entender Inglés y / o para las personas con discapacidad. Las solicitudes de servicios de interpretación del lenguaje o de alojamiento de discapacidad deben hacerse por lo menos 48 horas de antelación poniéndose en contacto con: Environmental Justice/Title VI Nondiscrimination Program Coordinator at 602-771-4322 or [edb@azdeq.gov”](mailto:edb@azdeq.gov)

Who we are

Under the Environmental Quality Act of 1986, the Arizona State Legislature created ADEQ in 1987 as the state's cabinet-level environmental agency. ADEQ is composed of three environmental programs: Air Quality, Water Quality and Waste, with functional units responsible for technical operational and policy support.

Mission

To protect and enhance public health and the environment in Arizona.

Vision

To be the No. 1 state in the nation in:

- Balanced, leading-edge environmental protection
- Technical and operational excellence
- Radical simplicity for customers and staff



Solid Waste Inspections and Compliance Team (SWICT)

WHAT DO WE DO?

What do we do?

- Performing inspections
- Compliance
- Enforcement
- Providing compliance assistance and Outreach



- Complaints/Referrals
- Special Initiatives

Types of Inspections

- Routine
 - Landfill
 - Municipal
 - Non-Municipal
 - Biohazardous Medical Waste
 - Treatment Facility
 - Transporter Vehicle
 - Solid Waste
 - Transfer Station
 - Waste Tire
 - Used Oil
 - Burner
 - Transporter
 - Processor
 - Marketer
 - Special Waste
 - Transporter
 - Receiving Facility

- Pre-Inspection Research
 - File Review – previous inspections, compliance or enforcement actions
 - County Assessor, AZ Corporate Commission, Maps, Facility Website
 - Permits, notices, etc.
 - Other ADEQ Programs
- Inspection
 - Unannounced, but facilities can receive a 2-week window
 - We look every were!
- Inspection Report/Field-Issued Checklist
 - Includes a summary of the inspection, observations, and photo log
- Exit Debriefing
 - Notes deficiencies noted during inspection and date to come into compliance
 - Recommendation for improvements
 - Establishes a timeframe for written response from the facility (unless issued a Filed-Issued NOC)

NOC/Field-Issued NOC:

- Lists minor violations and compliance conditions.
- After *Compliance Condition* deadline, case goes to Community Liaisons for compliance assistance and closure.



NOV:

- Lists major and minor violations, and compliance conditions.
- Used for egregious violations
 - see WPD Notice of Violation Risk Assessment Matrix in the Compliance & Enforcement Handbook

Consent / Compliance Orders

Consent / Compliance Judgments



Arizona Revised Statues (A.R.S.) Titles 44 & 49 Arizona Administrative Code (A.A.C.) Title 18 Code of Federal Regulations Title 40

Parts 257 – Criteria for the Classification of Solid Waste Disposal Facilities and Practices

Part 258 – Criteria for Municipal Solid Waste Landfills

Part 279 – Standards for the Management of Used Oil

- Used Oil
- Special Waste
- Biohazardous Medical Waste
- Used/Waste Tires
- Refuse, garbage, trash



<http://www.azdeq.gov/environ/waste/solid/rules.html>



USED OIL

What is Used Oil?

40 C.F.R. §279.1 - Used Oil means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

A.R.S. §49-801 - Used Oil includes oil that has been contaminated as the result of handling, transportation, or storage.

- Motor oils – including synthetic
- Oils used as coolants
- Transmission, brake, and hydraulic fluids

A.R.S. Title 49, Chapter 4, Article 7 – Management of Used Oil
40 C.F.R. §279 – Standards for the Management of Used Oil

Under A.R.S. §49-803(A), it is illegal to dispose of oil:

- Into sewers or waters of the state
- By incineration*
- On land/bare soil**
- Dust suppressant

*Exemption: Burning for energy recovery

**Exemption : Normal minimal leakage from properly maintained vehicles and equipment



Who Manages Used Oil?

- **Generators** - any person whose act or process produces used oil or whose act causes used oil to become subject to regulation.
- **Collection Centers** - accepts/aggregates and stores used oil collected from used oil generators in shipments no more than 55 gallons
- **Transporters** - transports used oil, collects used oil from generators and transports the collected oil to another facility, or owns/operates a used oil transfer facility



- **Marketers** – directs off-spec used oil from their facility to an industrial boiler or claims used oil burned for energy recovery is on-spec.
- **Processors** – includes blending, filtration, chemical or physical separation, distillation, re-refining
- **Burners** – a facility that burns used oil for energy recovery (air quality permit) or used in asphalt production for roadways.

http://www.azdeq.gov/environ/waste/solid/used_oil.html#handles



40 C.F.R. §279.11

The maximum contaminant concentrations, including a limit on the minimum flashpoint (a safety consideration) that a used oil fuel may have, are referred to as the used oil specifications.

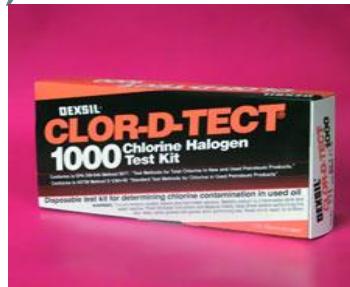
Used Oil Specifications	
Constituent/Property	Allowable Level
Arsenic*	5 ppm or less
Cadmium*	2 ppm or less
Chromium*	10 ppm or less
Lead*	100 ppm or less
Flashpoint	100° or more
PCBs	less than 2 ppm
Total Halogens**	1000 ppm or less

Note: This specification is for Total Metals, not Total Characteristic Leaching Procedure (TCLP).

** Note: Only for total halogen concentrations 1000 ppm or more for which the presumption of mixing has been successfully rebutted.

- **On-specification used oil** – used oil that meets all the specifications (see chart on previous slide)
- **Off-specification used oil** – used oil that does not meet all the specifications except when either of the following two conditions apply:
 - **PCBs are 50 ppm or more:** This used oil is regulated as a toxic waste under the Toxic Substance Control Act (TSCA), or 40 C.F.R. 761
 - **Total Halogens exceed 1000 ppm:** This used oil may be regulated as a hazardous waste under 40 C.F.R., Parts 260 through 266, 268, 270, and 124

*****Detection kits have an expiration date! Check the box before you test!*****



Managers of Used Oil

	Generator	Collection Centers	Transporter/ Transfer facility	Processor	Burner	Marketer
Storage	Good condition	Good condition	Good condition	Good condition	Good condition	N/A
Labels	Yes	Yes	Yes	Yes	Yes	N/A
Secondary Containment	No	No	Yes** for transfer facility N/A for transporter	Yes**	Yes**	N/A
EPA ID Number	No*	No*	Yes	Yes	Yes	Yes
ADEQ Registration	No	Yes	Yes	Yes	Yes	Yes
Tracking	No	No	Yes	Yes	Yes	Yes
Analysis	No	No	Yes (total halogen)	Yes (total halogen)	Yes (total halogen)	Yes (oil spec.)
ADEQ Reporting	No	No	Yes	Yes	Yes	Yes
Recordkeeping (3yrs)	No	No	Yes	Yes	Yes	Yes

* Must use a used oil transporter with an EPA identification number.

** Must be impermeable & hold 110% of the volume of the largest container



Used Oil Storage and Labeling Requirements

- Used oil must be stored in tanks or containers that are in good condition (i.e. not leaking)
- Used oil tanks, containers, and fill pipes from underground storage tanks must be labeled with the words “Used Oil.”



Managers of Used Oil must respond to releases

- Stop the release
- Contain the released used oil
- Repair/replace storage container prior to returning them to service
- Clean-up used oil and contaminated materials
 - Potentially a Petroleum Contaminated Soil



What's Wrong?



Used Oil Quarterly Reports - A.R.S. § 49-802(B)(2)

- Transporters, marketers, processors and re-refiners
- Submitted within 30 days of the end of the calendar quarter
- Submit via e-mail to UsedOil@azdeq.gov



Used Oil Annual Reports - A.R.S. § 49802(B)(3)

- Burners
- Submitted by Feb 1st for the previous calendar year.
- Submit via e-mail to UsedOil@azdeq.gov



Find information on used oil rules and regulation, manager registrations, reporting requirements, and more on the ADEQ website.

<http://www.azdeq.gov/environ/waste/solid/index.html#oil>

http://www.azdeq.gov/environ/waste/solid/used_oil.html#how

And on the Code of Federal Regulation website

40 C. F. R. 279 (7/1/97 Edition)

<http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>





SPECIAL WASTE

What is Special Waste?

A.A.C. Title 18, Chapter 13, Article 13

A.R.S. Title 49, Chapter 4, Article 9

- Excavated Petroleum Contaminated Soil (PCS)
- Waste from shredding motor vehicles – Automotive Shredder Residue (ASR)

<http://www.azdeq.gov/environ/waste/solid/special.html>



A.R.S. §49-851(A)(3)

- "Petroleum contaminated soils" means soils excavated for storage, treatment or disposal containing benzene, toluene, ethylbenzene, total xylenes, acenaphthylene, anthracene, benz(A)anthracene, benzo(A)pyrene, benzo(B)fluoranthene, benzo(K)fluoranthene, chrysene, dibenz(A, H)anthracene, fluoranthene, fluorene, indenopyrene, naphthalene or pyrene in concentrations in excess of levels determined by the director pursuant to section 49-152 to protect the public health and the environment.

40 C.F.R. §279.22(d)

Upon detection of a release of used oil to the environment, the handler must:

1. Stop the release;
2. Contain the released used oil;
3. Clean up and manage properly the released used oil and other materials; and
4. If necessary, repair or replace any leaking used oil storage containers or tanks prior to retuning them to service.

NOTE: Used oil spilled on concrete or asphalt, is not regulated by SWICIT staff. Normal minimal leakage from properly maintained vehicles and equipment is not be considered disposal to the land.

A.A.C. R18-13-1604

A generator of excavated PCS must determine if the soil is special waste PCS, solid waste PCS, or non-regulated soil through laboratory analysis

- “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846),” Third Edition, Chapter Nine, Sampling Plan
- ADEQ approved sampling plan
- Soil testing must be conducted by an Arizona Licensed Laboratory - Can be found through the Arizona Department of Health Services

<https://app.azdhs.gov/BFS/LABS/ELBIS/ArizonaCertifiedLabs/LabSearchContentPage.aspx>

Non-residential (non-DIY)

A generator of excavated PCS determines (through sampling or generator knowledge) whether the soil is:

- Special Waste PCS
- Solid Waste PCS
- Non-regulated soil

“Do-It-Yourselfers”(DIY’ers) A.A.C. R18-13-1603.0

If a DIY’er spills oil on the soil, the DIY’er is allowed to scrape the soil, place it in a plastic trash bag, and dispose of it in their regular trash.



- **Special Waste PCS:** regulated contaminants detected above non-residential soil remediation levels (SRLs)
- **Solid Waste PCS:** regulated contaminants detected above residential SRLs but below non-residential SRLs.
- **Non-regulated Soil:** regulated contaminates fall below residential SRLs



Soil Remediation Levels

SPECIAL WASTE CONSTITUENTS (A.R.S. § 49-851A.3)	REGULATED CONTAMINANTS	SOLID WASTE PCS	SPECIAL WASTE PCS
		>RESIDENTIAL SRLs (IN PPM, MG/KG)	>NON-RESIDENTIAL SRLs (IN PPM, MG/KG)
BTEX EPA Method 8260 or 8021	Benzene	0.65	1.4
	Toluene	650	650
	Ethylbenzene	400	400
	Total Xylenes	270	420
	Acenaphthylene	3,700	29,000
	Anthracene	22,000	240,000
PAHS Polynuclear aromatic hydrocarbons Commonly found in diesel and lubricant oil	Benz[A]anthracene	6.9	21
	Benzo[A]pyrene	0.69	2.1
	Benzo[B]fluoranthene	6.9	21
	Benzo[K]fluoranthene	69	210
	Chrysene	680	2,000
	Dibenz[A,H]anthracene	0.69	2.1
	Fluoranthene	2,300	22,000
	Fluorene	2,700	26,000
	Indenopyrene	6.9	21
	Naphthalene	56	190
	Pyrene	2,300	29,000

I've generated Special Waste PCS....now what?

All special waste generators shall: (A.A.C. R18-13-1302)

- Obtain a special waste ID number from ADEQ prior to shipping
- Ship special waste on a completed special waste manifest
- Must use a special waste shipper that is registered with ADEQ
- Ship the special waste to a facility that has received plan approval from ADEQ to accept special waste



- Special Waste PCS Generators may accumulate PCS from multiple locations for up to 90 days.
- Must control public access, wind dispersion, and storm water run-on/run-off
- Tanks and containers must:
 - Be labeled with **CAUTION: CONTAINS PETROLEUM CONTAMINATED SOIL**; Generator name and ID number; and accumulation start date.
 - Be leak-proof and kept closed
 - Not be opened, handled, or stored in a manner that may cause them to rupture or leak
 - Inspected monthly (documented).

The following shall annually submit a Special Waste Annual Report Form by March 1 of each year for all special waste handled the preceding year: (A.R.S. § 49-860)

- Any special waste transporter
- Any treatment, storage, receiving facilities
- Any generator



What are the issues you see in the picture?



Fact Sheets

Petroleum Contaminated Soil Sampling Plan

April 2007

Excavated soils must be characterized prior to treatment or disposal in order to demonstrate that the selected treatment or disposal method is both necessary and appropriate. The following guidelines should be employed for determining the appropriate number of samples to characterize the excavated soils. If the soils are being taken to a fixed disposal or fixed treatment facility, the additional sampling requirements, if any, for that facility should be followed.

Soil volume (cubic yards)	Number of discreet samples*
1 – 10	2, one from each half
11 -20	3, one from each third
21-100	4, one from each quarter
101 -500	one sample for each 25 cubic yards, not to exceed 10 samples
> 500	one sample for each 50 yards

*Discrete samples, in intervals of two, may be combined into a composite sample in the laboratory from the sample extract to save on the cost of analyses. For example, four (4) discreet samples can be combined in the laboratory to create two composite samples. VOC samples should be composited after the extraction process has been performed using an aliquot of the extract.

Discrete samples should be collected from the excavated soil by pushing or driving a clean split-spoon type sampler lined with clean sleeves composed of an inert material such as Teflon, stainless steel, or brass. Sample collection should be conducted in accordance with industry standards.

Completely filled sleeves should be immediately sealed by completely covering the ends with a Teflon patch, covering the Teflon patch with a foil patch, covering the patches with tight-fitting plastic caps, and sealing the caps by wrapping custody seals or non-contaminating tape around the sleeve, overlapping the lower edge of the cap. The sample should be immediately labeled, placed in a sealable plastic bag, and stored at 4 degrees Celsius.

Alternative sampling methods may be used if approved by the Arizona Department of Environmental Quality. The sample should be submitted to a fixed-based or mobile analytical laboratory certified by the Arizona Department of Health Services to perform the appropriate analyses. A properly completed chain-of-custody document should accompany all samples.

The soil sample preservation and extraction for volatile organic contaminants should be conducted in accordance with ADEQ Policy 0170.00 Implementation of EPA Method 5035 – Soil Preparation for EPA Methods 8015B, 8021B and 8260B. Petroleum contaminated soil sampling can be considered “UST/tank sampling” with regards to Policy 170, allowing the collection of bulk samples. Samples should be analyzed for the constituents and laboratory methods as indicated in Table 1.

Publication Number: C 0

<https://www.azdeq.gov/environ/waste/solid/special.html>

FACT SHEET

Petroleum Contaminated Soil (PCS) - July 2008

WHAT IS PCS?

Generally speaking, petroleum-contaminated soils (PCS) are generated when gasoline, diesel and used oil are released into the environment. PCS is defined in the Arizona Revised Statutes (A.R.S.) § 49-851.A.3 as soils excavated for storage, treatment or disposal containing benzene, toluene, ethylbenzene, total xylenes, acenaphthylene, anthracene, benzene (A) anthracene, benzo (B) fluoranthene, benzo (K) fluoranthene, chrysene, dibenz (A, H) anthracene, fluoranthene, fluorene, indenoperylene, naphthalene or pyrene in concentrations in excess of levels determined by the Arizona Department of Environmental Quality (ADEQ) director pursuant to A.R.S. § 49-152 to protect public health and the environment.

Special Waste PCS

PCS is considered Special Waste PCS when soil that is excavated for storage, treatment or disposal contains regulated contaminants listed in A.R.S. § 49-851.A.3 at levels above non-residential soil remediation levels (SRLs). It is designated a special waste above the non-residential level because its treatment, storage, transportation or disposal has the potential to cause adverse effects on public health and the environment.

As of February 1998, the Department determined that the non-residential SRLs are to be followed by PCS handlers for the protection of human health and the environment as set forth in A.R.S. § 49-152 for the 17 constituents listed in the statute.

Solid Waste PCS

PCS excavated for storage, treatment or disposal containing the regulated contaminants (listed in the attached table) is considered a Solid Waste only when the contaminants are above the residential SRLs, but below or at the non-residential SRLs. These soils are exempt from PCS rules except for the waste determination requirements and are subject to solid waste regulations found in Arizona Administrative Code (A.A.C.) Title 18, Ch. 8, Art. 16.

Soil exempt from PCS rules

When the levels of regulated contaminants (listed in the attached table) are below or at the residential SRLs in excavated soil, they are EXEMPT from PCS rules except for the waste determination requirements. These soils are exempt from regulation as a solid waste provided that the applicable requirements under A.R.S. § 49-701.02 are met.

I'VE GENERATED PCS – NOW WHAT DO I DO?

Pursuant to A.A.C. R18-13-1604, a generator of excavated PCS must determine if the soil is special waste PCS, solid waste PCS, or non-regulated soil through laboratory analysis by an Arizona certified laboratory or by using generator knowledge. It is recommended that the generator manages the PCS as special waste until a proper waste determination has been conducted.

If laboratory analysis is used, the waste determination shall be performed in accordance with a site-specific written sampling plan using:

- a. "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)," Third Edition, Chapter Nine, Sampling Plan.
- b. ADEQ's Petroleum Contaminated Soil sampling plan. The sampling plan is available on our Web site: www.azdeq.gov/environ/waste/solid/special.html

I HAVE SPECIAL WASTE PCS – NOW WHAT DO I DO?

- * Obtain a Special Waste Generator ID Number (A.A.C. R18-13-1302)
- * Complete the "Generator" section of a Special Waste Manifest prior to off-site consignment (A.A.C. R18-13-1302)
- * Only use a registered Special Waste Shipper (A.A.C. R18-13-1303)
- * Dispose of the Special Waste at a registered storage, disposal, or treatment facility permitted by ADEQ (A.A.C. R18-13-1613)



Find information on special waste rules and regulations, approved special waste transporters, identification number requirements, reporting requirements, and more the ADEQ website.

<http://www.azdeq.gov/environ/waste/solid/special.html>





BIOHAZARDOUS MEDICAL WASTE

A.R.S. §49-701(19) and R18-13-1401(22)

“Medical Waste” means any solid waste which is generated in the diagnosis, treatment or immunization of a human being or animal or in any research relating to that diagnosis, treatment or immunization, or in the production or testing of biologicals, and includes discarded drugs but does not include hazardous waste as defined in A.R.S. § 49-921 other than conditionally exempt small quantity generator waste.

Biohazardous Medical Waste ≠ Medical Waste
Medical Waste = Solid Waste

A.A.C. Title 18, Chapter 13, Article 14

R18-13-1401(5)(a-e)

“Biohazardous medical waste” is composed of one or more of the following:

- a) CULTURES AND STOCKS:** Discarded cultures and stocks generated in the diagnosis, treatment or immunization of a human being or animal or in any research relating to that diagnosis, treatment or immunization, or in the production or testing of biologicals.
- b) HUMAN BLOOD AND BLOOD PRODUCTS:** Discarded products and materials containing **free-flowing blood** or **free-flowing blood components**.
- c) HUMAN PATHOLOGIC WASTES:** Discarded organs and body parts removed during surgery. Human pathologic wastes do not include the head or spinal column.



- d) MEDICAL SHARPS:** Discarded sharps used in animal or human patient care, medical research, or clinical laboratories. This includes hypodermic needles; syringes; pipettes; scalpel blades; blood vials; needles attached to tubing; broken and unbroken glassware; and slides and coverslips.
- e) RESEARCH ANIMAL WASTES:** Animal carcasses, body parts, and bedding of animals that have been infected with agents that produce, or may produce, human infection.



Biohazardous Medical Waste Regulations

Who do the regulations apply to?

Biohazardous Medical Waste:

- Generators
- Transporters
- Treatment facilities
- Disposal facilities

ADEQ
Arizona Department of Environmental Quality

Arizona's Biohazardous Medical Waste Rules

Definitions (R10-13-1401)

biohazardous medical waste is composed of, but not limited to, one or more of the following:

- Cultures and stocks:** Discarded cultures and stocks generated in the diagnosis, treatment or immunization of a human being or animal or in any research relating to the diagnosis, treatment or immunization, or in the production or testing of biologicals.
- Human blood and blood products:** Discarded products and materials containing live blood or live living blood components.
- Human pathologic waste:** Discarded organs and body parts removed during surgery. Human pathologic waste does not include the following general categories:

 - Medical waste:** Discarded materials generated or used in medical research, or in medical activities. This includes hypodermic needles, hypodermic syringes, scalpel blades, blood vials, needles intended in taking blood, and needles, glassware, and slides and coverslips.
 - Residual animal waste:** Leftover animal, body parts, and other materials that have been treated with agents that, prior to any further, human infection.

Packaging (R10-13-1401)

A generator who uses biohazardous medical waste for collection for all the treatment or disposal shall package the biohazardous medical waste in either of the following:

1. A leak resistant plastic bag or liner;
2. Impenetrable containers;
3. An airtight enough to prevent leaking or bursting under normal conditions of use and handling;
4. Sealed to prevent leakage during transport;
5. Plastic resistant for sharp, and
6. Plastic in a secondary container. This container shall be leak resistant and prevent leakage of the bag in storage and handling via the collection and transportation and finally the universal biohazard symbol. The secondary container may be leak susceptible or reusable.

A. A regular container that has the universal biohazard symbol and that is:

1. leak proof at all sides and bottom, closed with a tight lid, and constructed of smooth, easily cleanable materials that are impervious to liquids and

In Spanish: DEFINICIÓN – ZONA DE RIESGO: NORMAMENTE DE DIFERENCIAS DEDICADAS PELIGROSOS – PROHIBIDA LA ENTRADA A PERSONAS NO AUTORIZADAS.

C. Displaying at the time the waste is set out for collection: A generator who stores biohazardous medical waste shall comply with one of the following requirements:

1. Store, package, and label the biohazardous medical waste in hot water at a temperature of at least 10 degrees Fahrenheit for a minimum of 15 seconds. A. Upon the 10 to 15 second thermal treatment, the waste shall be cooled to a temperature of 50 degrees Fahrenheit or less, and in a container under refrigeration at 40 degrees F. or less.
2. Store biohazardous medical waste for 30 days or until the generator has obtained a sanitary permit or certificate of registration (COR) and is in compliance with the ADEQ minimum acceptable method. ADEQ determines it acceptable if the determination of acceptability is made in advance of the closing.
3. A generator shall handle any container and for the storage or transport of biohazardous medical waste shall use a leak resistant, leak proof, and airtight plastic or metal, or that is airtight packaging, as biohazard medical waste.
4. A generator shall use one waste container described in section (B) for any purpose other than the storage of biohazardous medical waste.
5. A generator shall handle any discarded packaging and items that manage such items as biohazard medical waste.

Storage (R10-13-1401)

A. A generator who places a container of biohazardous medical waste in a receptacle or container shall not allow it to come in contact with the solid waste. The storage shall not be used to store substances for human consumption or for medical supplies.

B. Once biohazardous medical waste has been packaged for shipment of use, a generator shall provide a sturdy box or container for the transport of medical waste. The sturdy box or container shall be leak proof and the waste shall comply with one of the following requirements:

1. Secure the storage area in a manner that makes access to, or removal of, the biohazardous medical waste to authorized persons.
2. Use a single external instant sealant and post labels that are marked as follows for medical waste storage areas:

In English: CAUTION – BIOHAZARDOUS MEDICAL WASTE STORED AREA – LEAK-PROOFED PUSHERS KEEP OUT and

4. A copy of either the certificate of disclosure required in A.R.S. 1-493 or a written acknowledgement that this disclosure is not required.

5. Photocopies or other evidence of the issuance of a local, state, or federal license or permit required by a local health department, environmental agency, or other governmental agency with jurisdiction.

6. A copy of the transportation management plan required by subsection (C).

C. A generator who stores biohazardous medical waste shall use a high temperature which is at least a transportation management plan approved by ADEQ.

1. A transporter who transports biohazardous medical waste in a vehicle shall ensure that the cargo compartment can be secured in full length to either persons or animals during loading, storage, and transport. A transporter shall use a leak resistant, leak proof, and airtight packaging, as biohazard medical waste.

2. Store biohazardous medical waste for 30 days or until the generator has obtained a sanitary permit or certificate of registration (COR) and is in compliance with the ADEQ minimum acceptable method. A. Upon the 30 day period, the generator shall use a leak resistant, leak proof, and airtight plastic or metal, or that is airtight packaging, as biohazard medical waste.

3. Keep the storage area free of clutter contamination.

4. Protect biohazardous medical waste from contact with water precipitation, wind, or animals. A generator shall ensure that biohazardous medical waste is placed in a secure place or a leak source (R10-13-1401) of the generator.

5. Have a fully enclosed, leak proof cargo compartment containing a base liner, and that are made of a non-porous material impervious to biohazard medical waste and physically separated from the driver's compartment.

6. Hold fully enclosed, leak proof cargo box made of a non-porous material impervious to biohazard medical waste.

7. Store biohazardous substances (COR), if 100 degrees becomes a problem, a generator shall immediately contact the ADEQ office of environmental quality and ADEQ determines that a generator has not sent or adequately addressed the problem, ADEQ shall require the waste to be removed or segregated at 40 degrees F. or less.

Transportation (R10-13-1401)

A. A transporter shall register with ADEQ in addition to possessing a permit, license, or approved if required by a local health department, environmental agency, or other governmental agency with jurisdiction.

B. Use a copy of either the information from section (B) that was the registration, after registering a registration number to the transporter:

1. The name, address, and telephone number of the transportation company or entity.
2. All offices' name, address, and telephone numbers.
3. All offices' address, and telephone numbers of any agents authorized in actual detail of the entity.

1. Accept only biohazardous medical waste packaged as provided in R10-13-1401.

2. Accept biohazardous medical waste only after providing the generator with a signed tracking form as provided in R10-13-1401, and keep copy of the tracking document for one year.

3. Deliver biohazardous medical waste to a medical waste generator, medical waste treatment, or disposal facility within 24 hours of collection or refrigerate the waste for no more than 90 days at 40 degrees F or less and deliver.

For More Information

For more information about the above rules please contact:

Arizona Department of Environmental Quality
www.azdeq.gov/az-deq/Environmental-Health-Arizona-Medical-Waste-Code
www.azdeq.gov/az-deq/Environmental-Health-Arizona-Medical-Waste-Code

Please note that only the power over the ADEQ 400-460-001 is a substitute for the Arizona Administrative Rules, which is the official source for all administrative actions and substantive policy decisions.

Printed on: 10/10/2013

R18-13-1407

For Non- Residential disposal of Biohazardous Medical Waste

- Red disposable plastic bag
 - Medical sharps should be placed in a medical sharps container
- Red disposable plastic bag should be Leak/puncture resistant
- Red disposable plastic bag should be Impervious to moisture



- Under normal handling conditions the bag will not
 - Tear
 - Burst open
- Place the bag in a secondary container
- Reusable containers shall not be used for any purpose other than the storage of biohazardous medical waste.



R18-13-1408(A)

- A generator may place a container of biohazardous medical waste solid waste alongside a container of solid waste if the biohazardous medical waste is identified and not allowed to co-mingle with solid waste.
- The storage area shall not be used to store substances for human consumption or medical supplies.



R18-13-1408(B)

- Once biohazardous medical waste has been packaged for shipment off site, a generator shall provide a storage area for biohazardous medical waste until the waste is collected and shall comply with both of the following requirements:
 - In a secure storage area that restricts access to or contact with the biohazardous medical waste
 - Display the universal biohazard symbol and post the following warning signs:

(in English)

**"CAUTION -- BIOHAZARDOUS MEDICAL WASTE STORAGE AREA
-- UNAUTHORIZED PERSONS KEEP OUT"**

and (in Spanish)

**"PRECAUCION -- ZONA DE ALMACENAMIENTO
DE DESPERDICIOS BIOLOGICOS PELIGROSOS
PROHIBIDA LA ENTRADA A PERSONAS NO AUTORIZADAS."**

R18-13-1408(C)

Beginning at the time the waste is set out for collection, a

**generator who stores biohazardous medical waste shall
comply with all of the following requirements:**

1. **Keep putrescible biohazardous medical waste unrefrigerated if it does not create a nuisance. However, refrigerate at 40° F or less putrescible biohazardous medical waste kept more than seven days.**
2. **Store biohazardous medical waste for 90 days or less unless generator has obtained facility plan approval under A.R.S. § 49-762.04 and is in compliance with the design and operation requirements prescribed in R18-13-1412.**

3. Keep the storage area free of visible contamination.
4. Protect biohazardous medical waste from contact with water, precipitation, wind, or animals. A generator shall ensure that the waste does not provide a breeding place or a food source for insects or rodents.



5. Handle spills by re-packaging the biohazardous medical waste, re-labeling the containers and cleaning any soiled surface as prescribed in R18-13-1407(A)(2)(b).
6. Notwithstanding subsection (C)(1), if odors become a problem, a generator shall minimize objectionable odors and the off-site migration of odors. If the Department determines that a generator has not acted or adequately addressed the problem, the Department shall require the waste to be removed or refrigerated at 40° F or less.



What's wrong in this picture?



- Generators must use an ADEQ-registered transporter.
- Transporters must register and submit an application and Transportation Management Plan to ADEQ for approval.
- Transporters must deliver BMW to an ADEQ-approved biohazardous medical waste storage, transfer, treatment or disposal facility within 24 hours of collection or refrigerate the waste for not more than 90 days
- Biohazardous medical waste facilities must apply for Solid Waste Facility Plan approval

Directory of ADEQ-approved, Arizona Biohazardous Medical Waste Handlers

http://www.azdeq.gov/environ/waste/solid/biohaz_waste.html

Biohazardous Medical Waste Transporter



Discarded Drugs

R18-13-1401(12)

Prescription medicine, over-the-counter medicine, or controlled substance used in the diagnosis, treatment or immunization of a human or animal that the generator intends to abandon.

Discarded Drug Disposal

R18-13-1418

A generator of discarded drugs not returned to the manufacturer shall destroy the drugs on site prior to placing the waste out for collection. A generator shall destroy the discarded drugs by any method that prevents the drug's use. If federal or state law prescribes a specific method for destruction of discarded drugs, the generator shall comply with that law.



RESIDENTS - Discarded Drugs

www.azcjc.gov/ACJC.Web/Rx/Drop%20Box%20Locations.pdf

Location	Address	County
Douglas Fire Department	1400 East 10 th St.	Cochise
Flagstaff Police Department	911 East Sawmill Rd	Coconino
Phoenix Police Department	620 West Washington Street	Maricopa
Tucson Police East Substation	9670 East Golf Links Road	Pima
Pinal County Sheriff's Office	5750 South Kings Ranch Rd	Pinal
Prescott Police Department	222 South Marina	Yavapai
Yuma County Sheriff's Office	141 South 3 rd Street	Yuma

...and many more city Departments.

<http://www.azcjc.gov/ACJC.Web/>

http://www.acpa.net/arizona_drug_disposal_locations.aspx



Medical Sharps

R18-13-1419

Medical sharps shall be handled as follows:

- 1. A generator who treats biohazardous medical waste on site shall place medical sharps in a sharps container after rendering them incapable of creating a stick hazard by using an encapsulation agent or any other process that prevents a stick hazard. Medical sharps encapsulated or processed in this manner are considered to be solid waste.



- 2. A generator who ships biohazardous medical waste off site for treatment shall either:
 - a. Place medical sharps in a medical sharps container and follow the requirements of R18-13-1406, or
 - b. Package and send medical sharps to a treatment facility via a mail-back system as prescribed by the instructions provided by the mail-back system operator. An Arizona treatment facility shall render medical sharps incapable of creating a stick hazard by using an encapsulation agent or any other process that prevents a stick hazard.



- 3. A person operating a treatment facility who accepts medical sharps for treatment shall either:
 - a. Encapsulate medical sharps to prevent stick hazard, or
 - b. Use any other process that prevents a stick hazard.



R18-13-1403



1. Law enforcement personnel handling biohazardous medical waste for law enforcement purposes
2. A person in possession of radioactive materials
3. A person who returns unused medical sharps to the manufacturer



4. A household generator residing in a private, public, or semi-public residence who generates biohazardous medical waste in the administration of self-care or the agent of the household generator who administers that medical care.
This exemption does not apply to the facility in which a person resides if that facility is licensed by the Arizona Department of Health Services.
5. A generator that separates medical devices from the medical waste stream that are sent out for re-processing and returned to the generator.
6. A person in possession of human bodies regulated by A.R.S. Title 36

SEE NEXT SLIDE FOR # 7

R18-13-1403



The following persons are exempt from the requirements of this Article:

7. R18-13-1403 (7)

A person who sends used medical sharps via the United States Postal Service or private shipping agent to a treatment facility.



A.R.S. 44-1342 Tattoo Needles and Waste; Disposal; Civil Penalty

- A. A tattoo needle and any waste exposed to human blood that is generated in the creation of a tattoo shall be disposed of in the same manner as biohazardous medical waste pursuant to section 49-761.
- B. A person who disposes of a tattoo needle or any waste generated in the creation of a tattoo in violation of this section is liable for a civil penalty of up to five hundred dollars for each violation.

Brochures and Fact Sheets

This image is a composite of several documents related to Arizona's biohazardous medical waste rules. At the top left is the ADEQ logo with the text 'Arizona Department of Environmental Quality'. Next to it is a section titled 'Arizona's Biohazardous Medical Waste Rules' with a red border. Below that is a 'Definitions' section with code numbers. The main document is a 'FACT SHEET' titled 'Guidelines for Management and Disposal of Waste Generated in the Tattoo Industry', featuring the ADEQ logo and a biohazard symbol. It includes sections on 'BACKGROUND', 'Reusable Container bearing the Universal Biohazardous Medical Waste Symbol', and 'HOW DO I PROPERLY DISPOSE OF MY TATTOO WASTE?'. To the right is a large red text box with the heading 'Safe Options for Home Needle Disposal' and a photo of a red sharps container. At the bottom right is the ADEQ logo again.

<https://www.azdeq.gov/environ/waste/solid/ic.html#sharps>

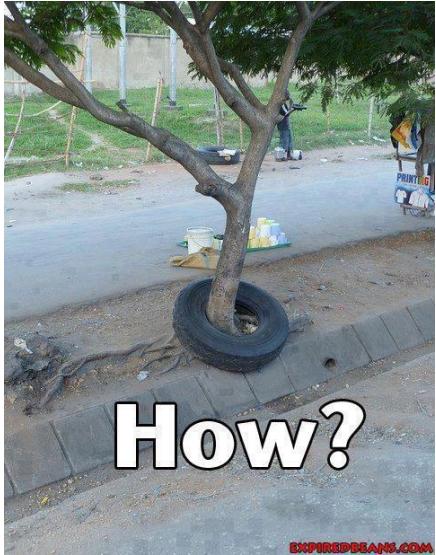
Biohazardous Medical Waste Information



Find information on biohazardous medical waste rules and regulations, transporter and facility registration and requirements, fee schedules, and more on the ADEQ website.

<http://www.azdeq.gov/environ/waste/solid/1c.html>





WASTE/USED TIRE MANAGEMENT

Waste/Used Tire Management



Waste/Used Tire Regulations

- A.R.S. §44-1301 to §44-1307 – Waste Tire Disposal
- A.R.S. §49-762 and §49-763 – Solid Waste
- A.A.C. R18-13-501, R18-13-1201 to -1210

Definitions

A.R.S. §44-1301(4)

“Waste Tire” means a motor vehicle tire that is no longer suitable for its original intended purpose because of wear, damage, or defect.

A.A.C. R18-13-1212(C)(1)

“Used Tire” means any tire which has been used for more than one day on a motor vehicle.





- 100 or more used tires outdoors
- Over 500 but less than 5,000 waste tires outdoors
- Over 5,000 waste tires requires self-certification as a solid waste facility
- Initial registration fee and subsequent annual registration



Facilities that store 100 or more used motor vehicle tires outdoors must:

- Restrict smoking within 50 feet of the tire storage area. “No Smoking” signs shall be posted in suitable and conspicuous locations.
- Place Class 2A-10BC type fire extinguishers 75 feet travel distance from any point of a tire pile at well-marked locations
- Store tires in piles that:
 - Do not exceed 20 feet in height
 - Are not within 3 feet of the property line
 - Have at least 20 feet wide access routes, free of debris and vegetation.
 - Have a maximum grid system of 50 feet by 150 feet
 - Do not exceed 6 feet in height if stored within 3 to 10 feet of the property line.

Waste/Used Tire Management



Find information on waste/used tire regulations, facility registration, fee schedules, and more on the ADEQ website.

<http://www.azdeq.gov/node/1219>

Waste Programs Division: Solid Waste Management: Waste Tires

Changes in Waste Tire Regulations Brochure (en español)

Waste Tire Collection Facilities and Sites

Waste tire facilities are categorized by the number of tires stored on the site.

A waste tire collection site is defined in A.R.S. § 44-1301 (5) as a site where waste tires are collected before being offered for recycling or reuse and where more than 500 tires are kept on site on any day.

Facility Subject to Best Management Practices (BMP)

A site at which more than 500 and less than 5,000 waste tires are stored on any day and no tire is stored for more than 12 months. Counties and municipalities are not subject to the time limit restrictions.

Facility Requiring Self Certification (A.R.S. § 49-762.05)



Brochures



http://legacy.azdep.az.gov/environ/waste/solid/download/tire_regs.pdf



LANDFILLS AND TRANSFER STATIONS



■ Facility Types:

- Waste Tire Collection Sites
- Biohazardous Medical Waste Treatment Facilities
- Special Waste Facilities
- **Solid Waste Transfer Stations**
- **Municipal/Non-Municipal Landfills**

Landfill Regulations

- **40 CFR §258**- Regulations for Municipal Landfills -"Criteria for Municipal Solid Waste Landfills".
- **40 CFR §257**- Regulations for Non-Municipal Landfills -"Criteria for Classification of Solid Waste Disposal Facilities and Practices".
- **A.R.S § 49-762**- Facilities requiring solid waste facility plans; exemptions
- These regulations are the basis for permits issued to individual facilities. The permit is an influential document for ADEQ inspections.
- **A.R.S § 49-762.03** – Solid Waste facility plan approval
- **A.R.S § 49-762-.04** – Solid Waste facility plan review
- **A.A.C. Title 18 Chapter 13 Article 2** – Solid Waste Definitions; Exemptions
- **A.A.C. Title 18 Chapter 13 Article 3** – Refuse and Other Objectionable Wastes
- **A.A.C. Title 18 Chapter 13 Article 7** – Solid Waste Facility Plan Review Fees

- Windblown Litter.
- Insufficient amount of Daily Cover.
- Erosion on Landfill Slopes.
- Water/Gas monitoring records not available on or near the Landfill site.
- Training records not available during inspection.
- Master Facility Plan Approval (MFPA) or Landfill Operation Manual not available during inspection.

Windblown Litter



Insufficient Daily Cover



Erosion of Landfill Slopes



- Inspections of landfills involves the review of documents derived from permit requirements and/or federal regulations. These include landfill gas monitoring results, water monitoring results, and random load inspection logs.
- ADEQ Inspectors will also ask to review documentation for any type of training for employees of the landfill.
- The Master Facility Plan Approval (MFPA) for municipal landfills, and the Aquifer Protection Permit(APP) for non-municipal landfills, which are issued by ADEQ, should be kept on or near the facility for review.
- All of these documents should be available to the ADEQ inspectors to avoid deficiencies and to help complete the inspection in a timely manner.

Transfer Station Regulations

- A.R.S. § 49-762.07 - Notices; exemptions; extensions; enforcement; operating standards
- A.R.S. § 49-762.01 - Solid Waste Facilities Requiring Self-Certification
- A.R.S. § 49-762.05 – Self-certification procedures; rules

Solid Waste Facilities Notice

- File a notice with ADEQ's Solid Waste Plan Review Unit no later than 30 days prior to operation
- A notice must provide:
 - Facility name and mailing address;
 - Legal description by township, range and section, and county assessor's book, map and parcel number;
 - Description of waste storage and treatment equipment and methods of waste management, including types and volumes of waste handled and time the waste remains on site;
 - Description of waste management practices used at the facility including measures taken to protect the environment and to protect the public health;
 - A diagram of the property showing the location of the solid waste facility or facilities.

On-Site and Off-Site Windblown Litter

On-Site
Windblown Litter



Off-Site
Windblown Litter



Effective use of Signs



Release of Used Oil to Soil



Storage of Waste Tires



Safety Concerns and Fire Hazards



Fences



Find information on Landfill and Transfer station regulations, facility registration, fee schedules, and more on the ADEQ website.

<http://www.azdeq.gov/programs/waste-programs/solid-waste-program>

<http://www.azdeq.gov/node/450>

<http://www.azdeq.gov/node/500>



Submit an online complaint to ADEQ:

<http://legacy.azdeq.gov/function/compliance/complaint.html>

Compliance: File a Complaint

File a formal complaint or report a possible violation of environmental law or rule. ADEQ compliance officers will use the information below to follow up on the complaint.

Complaint Information

Note: fields with a * are required. If you choose to use this online form you must accurately complete all the required fields marked by an asterisk. Without this essential information provided accurately, we may be unable to respond to your complaint.

Site/Operator/Source name:

Site address:

Site phone:

Type of operation:

Major cross streets:

*Nearest city:

*County:

Description of documents verifying occurrence (photos, video, etc.):

Date of occurrence: (i.e., 01/01/2013)

Time of occurrence:

Substance involved in occurrence:

Estimated quantity of substance involved:

Best time to witness occurrence (if ongoing):

*Environmental medium most affected:

*Description of complaint:

Characters Remaining: 2000

Your Information

Note: fields with *** are required.

*Your name (first, last):

*Address:

*City:

*State:

*Zip:

*E-mail:

- **ADEQ Home Page**
 - <http://www.azdeq.gov>
- **Waste Inspections and Compliance Line**
 - (602) 771-4673
- **Waste Programs Home Page**
 - <http://www.azdeq.gov/programs/learn-about-waste-programs-division>
- **Solid Waste Home Page**
 - <http://azdeq.gov/programs/waste-programs/solid-waste-program>
- **Solid Waste Permits**
 - (602) 771-4160
- **EPA ID Numbers**
 - David Janke - (602) 771-4173 - drj@azdeq.gov

Solid Waste Inspections and Compliance Team

Tracy Neal,
Solid Waste Unit Manager
(602) 771-1134
tkn@azdeq.gov

Lori Plato, Compliance Officer
(602) 771-4711
llp@azdeq.gov

Anthony Stone, Compliance
Officer
(602) 771-4698
AS7@azdeq.gov

Ray Rivera, Compliance Officer
(602) 771-4881
rgr@azdeq.gov

Heather Blanchard, Enforcement
Officer
(602) 771-2228
hb2@azdeq.gov