



# Solid Waste Programs

Arizona Department of Environmental Quality  
Waste Programs Division

Tracy Neal

Manager, Hazardous & Solid Waste Section

March 22, 2018



- Solid Waste Facility Permitting and Operational Plan Review
- Inspections and Compliance
- Enforcement and Compliance
- Solid Waste Fee Billing and Reporting
- Solid Waste Reduction, Reuse, and Recycling



# Solid Waste Regulatory Value Stream



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

\*Exemptions: Burning for energy recovery

\*\*Exempt : 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](http://www.azdeq.gov/environ/waste/solid/used_oil.html#handles)



- 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?



# Arizona 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>



## “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.

## 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



# 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)
<b>BTEX</b> EPA Method 8260 or 8021	Benzene	0.65	1.4
	Toluene	650	650
	Ethylbenzene	400	400
	Total Xylenes	270	420
<b>PAHS</b> Polynuclear aromatic hydrocarbons Commonly found in diesel and lubricant oil EPA Method 8310	Acenaphthylene	3,700	29,000
	Anthracene	22,000	240,000
	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

**What are the issues you see in the picture?**



# Biohazardous Medical Waste



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

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

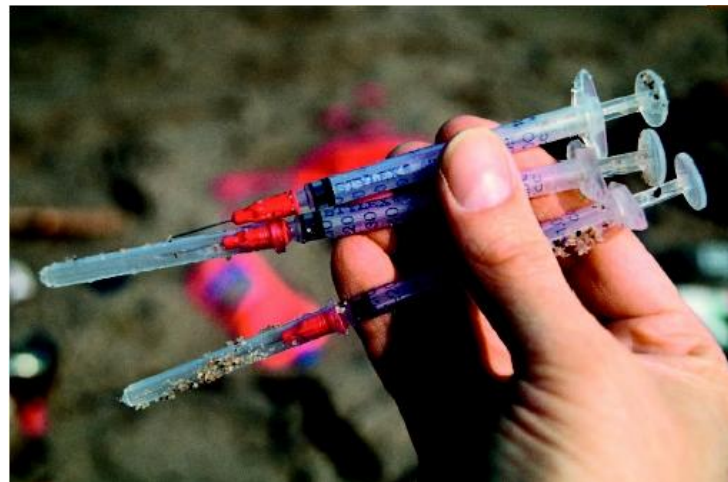
“Biohazardous medical waste” is composed of one or more of the following:

- 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.



## Who do the regulations apply to?

### Biohazardous Medical Waste:

- **Generators**
- **Transporters**
- **Treatment facilities**
- **Disposal facilities**



## 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.



# 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](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. ***DOES NOT include hazardous waste or DEA-regulated substances.***

<http://www.dea.gov/index.shtml>

[http://www.deadiversion.usdoj.gov/drug\\_disposal/takeback/index.html](http://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html)

## 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.





- 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.





## 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

## **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.

# Waste/Used Tire Management



- 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





## ■ **Facility Types:**

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

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

- Continuous control of on-site windblown litter may be the best way to avoid off-site windblown litter.



# Insufficient Daily Cover

- Insufficient Daily Cover usually leads to a permit violation, and can cause control of windblown litter to be more difficult.



- Erosion of landfill Slopes to the point where solid waste is exposed and the solid waste is moving away from the Landfill due to precipitation and wind usually leads to a violation.



- On site Windblown Litter
- Off-site Windblown Litter
- Effective use of Signs
- Release of Used Oil to Soil
- Storage of Waste Tires
- Fire Hazards



# On-Site Windblown Litter

Fences, nets and daily pickup of on-site litter will help to reduce off-site windblown litter.



# Off-site Windblown Litter

Off-site windblown litter should be picked up immediately to keep it from dispersing further out.





# Effective use of Signs

Conspicuously posted and clearly readable signs can be used to direct costumers about were to properly place solid waste and recyclable materials.



# Release of Used Oil to Soil

- Transfer Stations that collect used oil should have a storage system that will avoid a spill of used oil onto unpaved ground.



# Storage of Waste Tires

- Some Transfer Stations collect waste tires, and these Transfer Stations should be required to function as a dedicated Waste Tire Collection Site.



- Fire extinguishers should be readily available to a Transfer Station attendant and flammable solid waste should be stored in small quantities to reduce the chance of a fire becoming uncontrollable.



# Illegal Dumping (“Wildcat Dumping”)



## What is illegal or Wildcat Dumping?

Disposal of solid waste at any location that has not been approved by an authorized agency to accept waste

Illegal Dumping can pose a risk to public health, aquatic habitats, and wildlife

Illegal Dumping can hurt property values and erode the tax base and creates an economic burden on local government



## When reporting illegal dumping try to include the following information if possible:

- Date, time, Specific location of dumpsite, and directions, GPS Coordinates (cell phones)
- Approximate size of the dumpsite
- What items are being dumped
- Name and phone number of the property owner (if known)
- Description of vehicle and license plate number
- Description of person(s) dumping
- Your name & number (optional)



- **ADEQ Home Page**
  - <http://www.azdeq.gov/>
- **Waste Inspections and Compliance Line**
  - (602) 771-4673
- **Waste Programs Home Page**
  - <http://www.azdeq.gov/environ/waste/index.html>
- **Solid Waste Home Page**
  - <http://www.azdeq.gov/environ/waste/solid/index.html>
- **Waste Programs Permits and Plan Review Unit**
  - (602) 771-4123
- **EPA ID Numbers**
  - David Janke - (602) 771-4173 - [drj@azdeq.gov](mailto:drj@azdeq.gov)





# Questions?



**Tracy Neal**

Manager

Hazardous & Solid Waste Section

E-mail: [tkn@azdeq.gov](mailto:tkn@azdeq.gov)

Office: 602-771-1134

Mobile: 480-390-7524

## EPAZ Regulatory Roundup – 2018

### Brief Introduction:

Tracy Neal is the Solid Waste Manager for the Arizona Department of Environmental Quality. She will be speaking on statewide Solid Waste regulatory applicability, current trends and interpretations of regulated waste streams in generation, transportation and facilities that manage applicable types. Tracy has worked in the industry and has been with ADEQ for over 15 years working in both the Air Quality and Waste Divisions Programs.

### **Tracy Neal Bio**

Tracy Neal is the Arizona Department of Environmental Quality Waste Programs Division, Solid Waste Manager. Solid Waste Programs comprises of permitting, operational plan review, inspections, compliance, enforcement and reporting and regulatory fee fund management. Subject applicable types include all state landfills, transfer, storage, recycling, used oil, septage, waste tires, compositing and biohazardous waste facilities. Management of waste transporter and transportation licensing and manifesting and all Arizona Special Waste facilities. Tracy was formerly with the Air Quality Division and served as the state Asbestos NESHAP Coordinator for 10 years. Her experience has provided extensive knowledge of management and enforcement of generated regulatory waste streams from release into the air, water and land surface. She has consecutively serves as Board Member for the Arizona Chapter of the Environmental Information Association promoting a balanced understanding of environmental information between regulatory agencies and industry compliance.