

# Spring 2005 Pollution Prevention Workshop For Healthcare

## **Regulated Medical Waste Compliance Issues**

Daniel Salzler

ADEQ Solid Waste

Inspection & Compliance Unit

# **Arizona Solid Waste Rules**

**Arizona Administrative Code**

**R-18-13-1400 et al**

**BIOHAZARDOUS MEDICAL WASTE**



**AND**

**DISCARDED DRUGS**



**[www.azsos.gov/public\\_services/Title\\_18/18-13.htm](http://www.azsos.gov/public_services/Title_18/18-13.htm)**

# Definitions

## **Biohazardous Medical Waste: R18-13-1401(5)**

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.

# Definitions

Biohazardous Medical Waste, continued:

**R18-13-1401(5)**

**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.

# Definitions

**Blood and Blood Products:**

**R18-13-1401(8)**

**Discarded human blood and any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived products.**

**Free Flowing:**

**R18-13-1401(15)**

**Liquid that separates readily from any portion of a biohazardous medical waste under ambient temperature and pressure.**



# Definitions

## Medical Waste:

**R18-13-1401(22)**

Defined in A.R.S. § 49-701, 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."

**Example:** clothes/bandages with nonfree-flowing/dried blood, sharps properly rendered a non-stick hazard, discarded drugs that have been properly destroyed so incapable of future use, animal wastes that Are NOT from research activities



**MEDICAL WASTE = SOLID WASTE**

# Definitions

**Transporter :** **R18-13-1401(35)**

**Defined as a person engaged in the hauling of biohazardous medical waste from the point of generation to a Department-approved storage facility or to a Department-approved treatment or disposal facility.**

**Discarded Drug:** **R18-13-1401(12)**

**Any prescription medicine, over-the-counter medicine, or controlled substance, used in the diagnosis, treatment, or immunization of a human being or animal, that the generator intends to abandon. The term does not include hazardous waste or controlled substances regulated by the United States Drug Enforcement Agency.**

# Definitions

**Generator :** **R18-13-1401(16)**

**A person whose act or process produces biohazardous medical waste, or a discarded drug, or whose act first causes medical waste or a discarded drug to become subject to regulation.**

**Improper Disposal Of  
Biohazardous Medical Waste:** **R18-13-1401(19)**

**The disposal by a person of untreated or inadequately treated biohazardous medical waste at any place that is not approved to accept untreated biohazardous medical waste.**



# **WHO DOES THIS APPLY TO?**

**When you treat on-site, there are requirements for meeting the treatment standards which when complete will render it a solid waste.**

**Otherwise, your waste will remain a biohazardous waste. When you place your waste out for collection and you are claiming that treated waste is now solid waste, need to make sure it meets these standards.**

**R18-13-1402**

# WHO DOES THIS APPLY TO?

R18-13-1402

The people who are handling your waste:

- Transporters must be registered as a biohazardous hauler or they can not take your waste!
- Treatment facilities you send your waste to must have obtained facility plan approval from ADEQ or they can not accept your waste.
- Disposal facilities you send your waste to must have obtained facility plan approval from ADEQ or they can not accept your waste.

Exception : facilities located on tribal land do not require ADEQ facility plan approval and can receive medical waste without such approval. Be sure to check in compliance with local or tribal regulations before sending.

# **WHO DOES THIS APPLY TO?**

- 7. An operator of a Department-approved disposal facility who accepts untreated biohazardous medical waste.**
- 8. A person who generates medical sharps in the preparation of human remains.**
- 9. A person who generates medical sharps in the treatment of animals.**
- 10. A generator of discarded drugs not returned to the manufacturer.**

**R18-13-1402(A)**

# Exemptions

## R18-13-1403

- **Law enforcement personnel handling biohazardous medical waste for law enforcement purposes.**
- **A person who returns unused medical sharps to the manufacturer.**
- **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 the medical care. This exemption does not apply to the facility in which the person resides if that facility is licensed by the Arizona Department of Health Services.**



# Exemptions

R18-13-1403

- A generator that separates medical devices from the medical waste stream that are sent out for re-processing and returned to the generator.
- A person who sends used medical sharps via the United States Postal Service or private shipping agent to a treatment facility.



# COMPLIANCE ISSUES

R18-13-1407



## **Red Bag Packaging**

- 1. Leak resistant**
- 2. Impervious to moisture**
- 3. Of sufficient strength to prevent tearing or bursting**

# COMPLIANCE ISSUES

## Red Bag Packaging *continued...*

R18-13-1407

4. Sealed to prevent leakage during transport
5. Puncture resistant for sharps, and
6. Placed in a secondary container. This container shall be constructed of materials that will prevent breakage of the bag in storage and handling during collection and transportation and bear the universal biohazard symbol. The secondary container may be either disposable or reusable.



# COMPLIANCE ISSUES

## **R18-13-1408. Storage**

- A generator may place a container of biohazardous medical waste alongside a container of solid waste if the biohazardous medical waste is identified and not allowed to co-mingle with the solid waste. The storage area shall not be used to store substances for human consumption or for medical supplies.
- 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:
  1. Secured storage area that restricts access to, or contact with the biohazardous medical waste to authorized persons.



# COMPLIANCE ISSUES

2. Display the universal biohazard symbol and post warning signs worded as follows for medical waste storage areas:

(in English)

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

and (in Spanish)

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

# COMPLIANCE ISSUES

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 the generator has obtained facility plan approval under A.R.S. § 49-762.04 and is in compliance with the design and operational requirements prescribed in R18-13-1412.

3. Keep the storage area free of visible contamination.



# COMPLIANCE ISSUES

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).

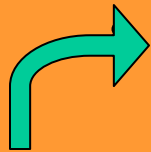
6. If odors become a problem, remove or refrigerated at 40° F or less.



# COMPLIANCE ISSUES

## R18-13-1409. Transportation

- A transporter shall register with the Department in addition to possessing all required permits, licenses, or approvals required by a local jurisdictions



Hospitals  
should  
Keep this  
information  
on file.

The Department shall issue the registration & registration number after obtaining the following info from the transporter:

1. The name, address, and telephone number of the transportation company or entity.
2. All owners' names, addresses, and telephone numbers.
3. All names, addresses, and telephone numbers of any agents authorized to act on behalf of the owner.

# COMPLIANCE ISSUES

## R18-13-1418. Discarded Drugs



- Discarded drugs not returned to the manufacturer shall destroy the drugs using 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.

- Discarded drugs may flush them down a sanitary sewer if allowed by the wastewater treatment authority or perhaps better yet, crush and placed in a sealed plastic bag to be tossed into your solid waste container for disposal in a landfill.

**Discarded Drugs = Medical Waste = Solid Waste**

# COMPLIANCE ISSUES

## R18-13-1419. Medical Sharps

- Used sharps should be **rendered 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**.



# COMPLIANCE ISSUES

- A generator who ships biohazardous medical waste off site for treatment has to :
  - Place the sharps in a medical sharps container and follow the requirements of R18-13-1406, or
  - 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.



# COMPLIANCE ISSUES

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.





# COMPLIANCE ISSUES

- **Create a waste management plan for your facility. Explain what waste goes in to which container. Stick to the plan!**
- **Train all appropriate personnel. Maintain sign-in sheets of trainees.**
- **Maintain records of each load (manifest).**
- **Secure a copy of your transporter's ADEQ registration information and keep on file.**

# COMPLIANCE ISSUES



- **Registrations**

Barbara M (Barb) Waterbury  
bmw@azdeq.gov  
(602) 771-4120

- **Questions/ Inspections**

Daniel Salzler  
ds2@azdeq.gov  
(602) 771 - 4119

**Mailing Address: Arizona Department of Environmental Quality**  
Mailcode: 4415A-1  
1110 W Washington St  
Phoenix, AZ 85007