Disclaimer

This will not be a substitute for your training requirements.

Job specific training is required to meet the requirements under RCRA.
Topics For This Afternoon

- Regulatory Update
- Overview of Required Records
- Shipping/Manifesting Requirements
  - E-Manifest
  - Land Disposal Restrictions
- Breakdown of the Listed Hazardous Wastes
- Solvent-Contaminated Wipes Rule
Regulatory Updates

Kansas is currently reviewing all regulations from last adoption date (2006) through 2020.

Lots of pieces to evaluate and put together.
Hazardous Waste Regulations Update

• Adopt federal HW regulations
• Updating from 2006 to July 1, 2020
• Add Kansas-specific requirements
Hazardous Waste Generator Improvements Rule

e-Manifest

Pharmaceutical Rule
  • Sewer ban in effect
Hazardous Waste Generator Workshop

Hazardous Waste Regulations Update

- Definition of Solid Waste
- Academic Laboratory
- Solvent-Contaminated Wipes
Hazardous Waste Generator Workshop

Hazardous Waste Regulations Update

- Airbag Rule
- Aerosol Cans
Episodic Events

Generator can keep their existing category provided they comply with a set of
Episodic Events

Generator can keep their existing category provided they comply with a set of § 262 Subpart L:

• All containers must be:
  •
  •
  •
• Maintain records including the date the episodic event began.
Episodic Events

Generators must:

• Use HW manifest and transporter to send episodic waste to RCRA-
2019 Pharmaceutical Rule

40 CFR 266 Subpart P

Effective August 21, 2019 at the federal level.

Kansas has not yet adopted these regulations;

HOWEVER, Sewer ban is effective August 21, 2019 everywhere!
Sewer Ban

- Hazardous waste pharmaceuticals cannot be sewerred:
  - Cannot flush or disposal down drain
- Applies to:
  - All healthcare facilities and reverse distributors
  - Hazardous wastes that are DEA controlled substances

More information located on KDHE webpage:
Regulation Adoption and Program Delegation

- Prepare draft regulation
- Draft economic impact statement
- Draft environmental benefit statement
Regulation Adoption and Program Delegation

• Solicit input on economic impact
Regulation Adoption and Program Delegation

- Kansas Regulation Approval Process

1. Division of Budget
2. Dept of Admin
3. Attorney General

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Regulation Adoption and Program Delegation

- Public comment period
- Public hearing
- Response to comments
Regulation Adoption and Program Delegation

- Make changes, if needed
- Secretary adopts
- Publish in Kansas Register
- Effective 15 days later
Regulation Adoption and Program Delegation

- Prepare application
- Submit to EPA
- Make changes, as needed
Regulation Adoption and Program Delegation

- EPA approves application
- EPA publishes in Federal Register
- Kansas implements program in lieu of EPA
Records

Federal and state regulations require facilities to keep a record of certain documents.

Most require a three year retention period.

Some require retention until three years beyond a certain milestone, such as:

• Hazardous Waste Determinations
• Employee Training
• One-Time Written Notices (LDRs)
Waste Determinations

Required for each and every waste stream subject to solid waste regulations.

Intent:
• To record the determination made and the reason (supporting documentation) for that determination
• To communicate to others the hazardous associated with a waste.
Waste Determinations

Notes:

- Hazardous
  • Determining a waste stream is a solid waste is only the first step.

- Waste characterization from any source other than your own is unlikely to be accurate nor based on any site-specific information.
  • Regulations require the *generator* to make the determination for this reason.
Training Records

Required for each employee who has duties related to hazardous waste.

Intent:
• To document what training personnel have received.
Storage Area Inspections

Required to document inspections of every area hazardous waste is stored throughout the facility.

Intent:
• To document when inspections were conducted, what observations were made, and any corrective actions.
Annual Reports

Documentation which shows the facility’s activities from the last three years.
(Notifications or Site Verification Reports)

Intent:
• To provide relevant information on facility’s recent activities.
• May help inform emergency response or other off-site personnel of important information.
Biennial Report (LQGs Only)

Report that summarizes how much hazardous waste each facility has generated and management activities during applicable years.

Intent:
- Verifies all hazardous waste generated by the facility have been managed appropriately for disposal.
Contingency Plan (LQGs Only)

Details all emergency response actions for the facility and contains relevant location maps.

Intent:
- Provides facility staff and emergency response personnel with all applicable procedures and information during an emergency.
Posted Emergency Information

Details all emergency response actions for the facility and contains relevant location maps.

Intent:
• Provides facility staff with quick and easy access to emergency contact information and location maps.
Manifests

A Uniform Hazardous Waste Manifest is required for shipping hazardous waste to an appropriate receiving facility.

Required by both DOT and RCRA

Serves RCRA’s “cradle to grave” purpose by tracking:
- WHO is shipping waste (generator and transporter)
- WHAT is being shipped
- WHERE it is being shipped to, and
- WHEN it was shipped/received
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### Hazardous Waste Generator Workshop

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generator &amp; Number</td>
<td>KSDS00000123</td>
</tr>
<tr>
<td>2. Page 1 of</td>
<td>1</td>
</tr>
<tr>
<td>3. Emergency Response Phone</td>
<td>785-266-1660</td>
</tr>
<tr>
<td>4. Manifest Tracking Number</td>
<td>10032454 RELC</td>
</tr>
</tbody>
</table>

**Generator’s Name and Mailing Address**

**CMIY AND CO**

**789 WAVERLY DRN**

**TOPEKA KS 66612**

**Generator’s Phone**

295-295-2000

**Transporter 1 Company Name**

TEST TRANSPORTER 1 OF VA

**Transporter 1’s EPA ID Number**

VATEST000001

**Transporter 2 Company Name**

**Transporter 2’s EPA ID Number**

**Designated Recipient Name and Site Address**

TEST TRANSPORTER 1 OF VA

2777 SOUTH CRYSTAL DRIVE

ARLINGTON VA 22202

**Recipient’s Phone**

200-200-2003

**U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group, if any)**

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>UN/MF</th>
<th>LQ/MQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Flammable Liquids</td>
<td>1</td>
<td>DM</td>
<td>350</td>
</tr>
<tr>
<td>Field</td>
<td>Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Special Handling Instructions and Additional Information</td>
<td>Line 1:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Generator/Shipper's Certification</td>
<td>I hereby declare that the contents of this shipment are true and accurately described in the proper shipping name, and are classified, packaged, marked, and labeled (by type, class, and mode of transport) in proper condition for transportation, in accordance with the regulations of the Department of Transportation. I certify that the shipment is in accordance with the regulations of the Hazardous Material Transportation Regulations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. International Shipment</td>
<td>Export to U.S. [ ] Import from U.S. [ ] Port of departure: ______________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Transporter Identification Information</td>
<td>Transformer or Repair Shop Name: ______________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Emergency</td>
<td>Title: Emergency Indication Space: Quantity [ ] Type [ ] Nonhazardous [ ] Partially Hazardous [ ] Fully Hazardous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Manifest Issuing Facility (if Generator)</td>
<td>U.S. EPA ID Number: ______________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Designated Facility Owner or Operator</td>
<td>Designation of recipient owner or operator: ______________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Designated Facility to EPA's MANIFEST SYSTEM*
Manifests

Notes:
• Each line allows up to 6 waste codes
  • Doesn’t matter which are used
  • LDR should have all applicable waste codes
• Waste profiles from contractors may have additional waste codes which don’t apply.
  • Generic rather than site specific
  • Specific is better for appropriate management (and accuracy)
Manifests

Must retain the final signed copy of each manifest for at least three years.

- Initial copy can substitute until final copy is received
- If final copy is not received, generator must submit a report to KDHE.
Manifests

Manifest Exception Reporting:

• LQGs:
  • Must contact receiving facility after 35 days.
  • Must file manifest exception report to KDHE after 45 days.

• SQGs:
  • Must submit a legible copy of original (initial) manifest to KDHE with explanation of the situation after 60 days.
e-Manifest


System is accessed through EPA’s RCRAInfo database. https://rcrainfo.epa.gov/rcrainfoprod

June 30, 2021 – EPA ended paper submission option. All manifests must be submitted to EPA through one of the three digital options.

• Generators can still use paper, but receiving facilities must submit them digitally.

General Info – www.epa.gov/e-manifest
e-Manifest

E-Manifest will meet manifest recordkeeping requirements in place of hard copies, however:

• Generator must be registered in the system with at least viewer (basic) permission, and
• Generator must demonstrate ability to log into system and view manifests during an inspection.

Inspectors can review manifests off-site through this system, but may request additional information during an inspection.
e-Manifest

If using this system, EPA recommends at least two Site Managers.
• Approve additional users for your facility
• Backup

Biennial Reporting is not yet linked to e-Manifest, and there is not yet a place for LDRs
• May be part of future update
Land Disposal Restrictions

The Hazardous and Solid Waste Amendments (HSWA) under RCRA prohibits the land disposal of untreated hazardous waste.

Requires EPA to specify concentration levels or methods of treatment for each type of hazardous waste and, if applicable, any underlying hazardous constituents.

- Concentration-based
- Technology-based

See 40 CFR 268
Land Disposal Restrictions

A one-time written notice to the receiving facility is required to be sent for each waste stream. It informs the receiving facility:

- What type of waste they are receiving
- Whether the waste requires treatment to meet the LDRs.

These accompany the first shipment of each waste.
Land Disposal Restrictions

Three prohibitions:

| Disposal          | Requires waste-specific treatment standards  
|                  | Prevents pollution and other adverse environmental and health effects |
| Dilution          | Prohibits “impermissible dilution”  
|                  | Ensures waste meet applicable treatment standards rather than avoid them |
| Storage           | Prevents indefinite storage to ensure wastes are properly treated and disposed |
Land Disposal Restrictions

One-time written notice:
• If the generator treats their waste to meet LDR standards
  • Must provide a certification statement (sent with initial shipment)
  • Must have a written waste analysis plan describing procedures used to meet treatment standards
• If the generator did not treat their waste to meet LDR standards
  • Must include waste code(s)
  • Manifest tracking number (for first shipment)
  • Statement – “This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination.”
Land Disposal Restrictions

Generators must retain a record of all:
• Notices
• Certifications
• Waste Analysis Data
• Other Related Documents
as applicable, for at least three years from the date of the last shipment of that waste.
Listed hazardous wastes are selected based on one or more risks posed to human health as follows:

- It exhibits a characteristic hazard;

- It is found to be fatal to humans in low doses, or meets an LD 50 criteria in rats based on route of exposure in the absence of human data; or,

- The waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise managed.
Keep in mind!

• All wastes must be evaluated for characteristics in addition to listed waste codes.
• All applicable waste codes must be on the manifest (up to six) as well as the Land Disposal Restrictions.
F-

Spent Solvents

• F001 Halogenated Degreasing Solvents (T)
• F002 Halogenated Solvents (T)
• F003 Non-Halogenated Solvents (I)
• F004 Non-Halogenated Solvents (T)
• F005 Non-Halogenated Solvents (I,T)
<table>
<thead>
<tr>
<th>Large Scale Degreasing Operations (T)</th>
<th>Tetrachloroethylene (PCE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trichloroethylene (TCE)</td>
</tr>
<tr>
<td></td>
<td>Methylene chloride</td>
</tr>
<tr>
<td></td>
<td>1,1,1-trichloroethane</td>
</tr>
<tr>
<td></td>
<td>Carbon tetrachloride</td>
</tr>
<tr>
<td></td>
<td>Chlorinated fluorocarbons</td>
</tr>
</tbody>
</table>

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Degreasing Operations (T)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrachloroethylene</td>
<td>1,1,2-trichloro-1,2,2-trifluoroethane</td>
</tr>
<tr>
<td>Trichloroethylene</td>
<td>Ortho-dichlorobenzene</td>
</tr>
<tr>
<td>Methylene chloride</td>
<td>Trichlorofluoromethane</td>
</tr>
<tr>
<td>1,1,1-trichloroethane</td>
<td>1,1,2-trichloroethane</td>
</tr>
<tr>
<td>Chlorobenzene</td>
<td></td>
</tr>
</tbody>
</table>
F001 and F002 spent solvents shown in blue appear on both lists. The type of operation defines which listing applies.

- F001 applies to large-scale industrial degreasing operations.
- F002 applies to equipment cleaning or small scale degreasing operations involving repair work.
<table>
<thead>
<tr>
<th>Non-Halogenated (I)</th>
<th>Xylene</th>
<th>Methyl isobutyl ketone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acetone</td>
<td>N-butyl alcohol</td>
</tr>
<tr>
<td></td>
<td>Ethyl acetate</td>
<td>Cyclohexanone</td>
</tr>
<tr>
<td></td>
<td>Ethyl benzene</td>
<td>Methanol</td>
</tr>
<tr>
<td></td>
<td>Ethyl ether</td>
<td></td>
</tr>
</tbody>
</table>

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The F003 waste code only applies if the waste is ignitable at the point of generation.

- If the spent solvent on this list carries the D001 characteristic waste code at the point of generation, it would also carry the F003 waste code.

- If the spent solvent on this list does not carry the D001 characteristic waste code, the F003 waste code does not apply.

- If F003, both waste codes must be on the manifest!
  - Different treatment standards for both.
<table>
<thead>
<tr>
<th>Non-Halogenated (T)</th>
<th>Cresols and cresylic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nitrobenzene</td>
</tr>
<tr>
<td>Non-Halogenated (I, T)</td>
<td>Toluene</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>Benzene</td>
</tr>
<tr>
<td>Carbon disulfide</td>
<td>2-ethoxyethanol</td>
</tr>
<tr>
<td>Isobutanol</td>
<td>2-nitropropane</td>
</tr>
</tbody>
</table>
Where do they apply?

- All spent solvent mixtures/blends containing, before use, a total of 10% or more by volume of any of the F001, F002, F004, and/or F005 spent solvents.

- Still bottoms from the recovery of these spent solvents.
## Hazardous Waste Generator Workshop

### F-

| Examples |  
| --- | --- |
| 85% water |  
| 15% tetrachloroethylene (PCE) | F002  
| (F001/F002) |  
| Used for small scale degreasing |  
| 95% Water |  
| 5% PCE (F001/F002) | Not listed  
| Used for small scale degreasing |  

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### F-

<table>
<thead>
<tr>
<th>Examples</th>
<th>F003, F005</th>
</tr>
</thead>
<tbody>
<tr>
<td>75% xylene (F003)</td>
<td></td>
</tr>
<tr>
<td>15% toluene (F005)</td>
<td></td>
</tr>
<tr>
<td>10% water</td>
<td></td>
</tr>
<tr>
<td>Ignitable (D001)</td>
<td>Also D001</td>
</tr>
<tr>
<td>85% isopropyl alcohol</td>
<td>F002, F005</td>
</tr>
<tr>
<td>8% chlorobenzene (F002)</td>
<td></td>
</tr>
<tr>
<td>7% methyl ethyl ketone (F005)</td>
<td>More than 10%</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Examples</th>
<th>Not listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>92% isopropyl alcohol</td>
<td>Less than 10%</td>
</tr>
<tr>
<td>2% chlorobenzene (F002)</td>
<td></td>
</tr>
<tr>
<td>6% methyl ethyl ketone (F005)</td>
<td></td>
</tr>
<tr>
<td>75% xylene (F003)</td>
<td></td>
</tr>
<tr>
<td>25% toluene (F005)</td>
<td>F005</td>
</tr>
<tr>
<td>Still bottoms from recycling</td>
<td></td>
</tr>
<tr>
<td>Not ignitable</td>
<td></td>
</tr>
</tbody>
</table>
### Examples

| Waste Paint Containing Methyl Ethyl Ketone (MEK) Used as a Thinner during Painting Operations. | Not Listed |
| MEK Used to Clean Paint Equipment. | May Be Characteristic |

Both of these waste streams are emptied into the same satellite accumulation container. Entire mixture is F005

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F-

**Heavy Metals**
- F006-F019

**Dioxin Wastes**
- F020-F023
- F026-F027

**Chlorinated Aliphatic Hydrocarbons**
- F024 and F025

**Wood Preservation**
- F032-F035

**Petroleum Refining**
- F037-F038

**Multi-Source Leachates**
- F039

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Manufacturing process wastes from specific sources

- Wood Preservation
- Inorganic Pigments
- Organic/Inorganic Chemicals
- Pesticides
- Explosives
- Veterinary Pharmaceuticals
- Iron and Steel
- Primary Aluminum
- Secondary Lead
- Petroleum Refining
- Ink Formulation
- Coking
P- and U-

Commercial Chemical Products that are:

• Discarded
• Off-Specification
• Product Residues (container, spill, etc.)
P- and U-

**P-List**
- Acutely Hazardous
- Regulated at 2.2 pounds

**U-List**
- Toxic (non-acute)
P- and U-

Must be the sole active ingredient

- Two or more active ingredients (P- and/or U-Listed) prevents the listings from applying.

- NOTE - Additives or other ingredients that do not serve the primary function of the product do not count as an active ingredient.
### P- and U-

<table>
<thead>
<tr>
<th>Examples</th>
<th>85% toluene (Active)</th>
<th>75% toluene (Active)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15% water</td>
<td>15% water</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10% additives to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>improve the odor of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the mixture</td>
</tr>
</tbody>
</table>

**U220**
P- and U-

Examples

- 50% toluene (Active)
- 35% xylene (Active)
- 15% water

Not listed
Reminder!

• Whether or not a listed waste code applies, you still need to look for characteristic waste codes.
Also:

- The chemical names listed on these lists are common names and may have other industry specific names associated with them.
- The Consolidated List of Lists can help confirm synonyms, CAS numbers, and in some cases, RCRA waste codes.
- [https://www.epa.gov/epcra/consolidated-list-lists](https://www.epa.gov/epcra/consolidated-list-lists)
Solvent-Contaminated Wipes

Kansas has not yet adopted the federal rule.

KDHE Policy BWM 2013-P2 allows generators to follow this rule.


**Wipe:** a shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.
Solvent-Contaminated Wipes

Applies to any wipe:

- Listed on the F001 through F005 lists or corresponding P- or U- Lists, or
- Exhibits only the characteristic of ignitability.
- Sent for disposal or to be laundered (reusable wipes).

Does not apply to wipes:

- For which any other listed waste code applies.
- Contaminated with trichloroethylene ( ).
- Exhibits the characteristic of corrosivity, reactivity, or toxicity from any other contaminant (e.g., metals).
Solvent-Contaminated Wipes

Reusable wipes:

- Excluded from the definition of (do not require a waste determination).
- Do not count toward your generator status (monthly counting).

Disposable wipes:

- Excluded from the definition of (do not require a waste determination).
- Do not count toward your generator status (monthly counting).
- Must go to an municipal solid waste landfill with a synthetic liner (Subtitle-D).
Solvent-Contaminated Wipes

Container Management:

• Non-

• Labeled with the words “Excluded Solvent-

• Marked with the accumulation start date or alternative
Solvent-Contaminated Wipes

Recordkeeping:

- Document name and address of all handlers receiving wipes (i.e., disposal, laundry, and dry cleaning facility).
- Records or label to show wipes were on site 180 days or less.
- Includes all technologies, methods, sampling or knowledge used to ensure wipes sent to handlers do not contain free liquids.
Solvent Contaminated Wipes

A note on free liquids:

• Free liquids generated at the facility are the responsibility of the generator.
• This includes proper management and waste counting.

• Free liquids generated at the facility are the responsibility of the handler.
Used Oil Requirements

Used oil is refined or synthetic oil that has been used and as a result, is contaminated with physical or chemical impurities.

- Is not considered a hazardous waste as long as it is recycled.
- Some management requirements apply.
- Does not count toward your monthly HW generation.
- See 40 CFR 279 for more information.
Used Oil Requirements

Used oil mixed with:

A listed hazardous waste

Resulting mixture is a listed hazardous waste

A characteristic hazardous waste

Resulting mixture is a characteristic hazardous waste if it exhibits the characteristic
Containers and Above-Ground Tanks must be:

- Marked with the words “Used Oil”
- Maintained in good condition
<table>
<thead>
<tr>
<th>Transporting:</th>
<th>55-gallons or less:</th>
<th>Can self-transport your own used oil to an aggregation point or collection center.</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 55 gallons:</td>
<td>Must use a registered transporter.</td>
<td></td>
</tr>
</tbody>
</table>

A list of registered used oil transporters can be found at [http://www.kdheks.gov/waste/hw/UO_list.pdf](http://www.kdheks.gov/waste/hw/UO_list.pdf)
Used Oil Requirements

Burning Used Oil in an on-site space heater:

- UO was generated on site or by a sister facility
- Received from do-it-yourselfers
- On-spec from any source:

<table>
<thead>
<tr>
<th>Constituent/Property</th>
<th>Allowable Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>5 ppm maximum</td>
</tr>
<tr>
<td>Cadmium</td>
<td>2 ppm maximum</td>
</tr>
<tr>
<td>Chromium</td>
<td>10 ppm maximum</td>
</tr>
<tr>
<td>Lead</td>
<td>100 ppm maximum</td>
</tr>
<tr>
<td>Flash point</td>
<td>100 °F minimum</td>
</tr>
<tr>
<td>Total Halogen</td>
<td>4,000 ppm maximum</td>
</tr>
</tbody>
</table>

(If > 1,000 ppm halogens, then only on-spec if rebuttable presumption is met)
Burning Used Oil in an on-site space heater:

- Space heater must:
  - Have a maximum capacity of 0.5 million Btu/hour
  - Allow combustion gases to vent to the ambient air
Used Antifreeze

Recycling is the preferred method of handling; disposal is a last resort.

Disposal:

• Must conduct a waste determination
• If hazardous, it must be managed accordingly
• If non-hazardous, it can be:
  • Solidified and disposed of in a permitted municipal solid waste landfill.
  • Disposed through sanitary sewer with written permission from local wastewater authority.
Aerosol Cans

KDHE considers empty aerosol cans (RCRA empty) to be non-hazardous waste unless they contained an acutely hazardous waste.

If the contents were acutely hazardous (P-listed), the can must be managed appropriately.

If the aerosol can is not empty, but the contents cannot be used due to a broken nozzle, a clog, etc., attempts can be made to repair the can.
Aerosol Cans

Disposal

Not Empty

Puncture and manage contents; or

Waste determination and manage

RCRA Empty

Recycle or dispose of

Broken

Repair and put back in service; or

Disposal – Not Empty

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Aerosol Cans

In other words:

- If the aerosol can is RCRA empty and not P-Listed, it can be recycled or disposed of in the trash.
- If the can is not empty, but broken, it can be repaired and reused. If it can’t be repaired, it must be managed in one of the two ways below.
- If the aerosol can is not empty:
  - a waste determination is made and it is managed appropriately, or
  - it can be punctured in a puncturing device, the contents appropriately managed, and the can recycled or disposed of in the trash (unless P-Listed).
Aerosol Cans

Satellite accumulation must be at or near the point of generation of the aerosol can.
- Must be where the can was originally generated.
  - E.g., paint booth
- If an attempt at repair will be made, the point of generation is where that attempt is conducted.
  - E.g., maintenance area
  - Can is still considered a product up until then.
Puncturing Aerosol Cans

This is an exempt form of hazardous waste treatment as long as the activity is conducted in a closed, self-contained unit.

• Must have a filter attached to the unit.

When punctured, the waste drained from the can is considered a new point of generation. Because of this, the container the waste drains into can be managed as a satellite accumulation container.

The empty containers can be recycled or disposed of unless the contents were P-listed.
Puncturing Aerosol Cans
Available Resources

• We want to help all generators achieve compliance. Please call us with any questions at 785-296-

• Small Business Environmental Assistance Program (SBEAP) operated by the Pollution Prevention Institute (PPI) at KSU 1-800-578-
SBEAP

Webpage located here: https://www.sbeap.org/services-programs/hazwaste

• Contains information and helpful links:
• Hazardous Waste Compliance Calendars
• YouTube Compliance Video – Container Management
• Training Module
Contact Information

http://www.kdheks.gov/waste

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Thank you/Questions