2017 Hazardous Waste Generator Workshop Advanced Course

Our Mission: To protect and improve the health and environment of all Kansans.
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

• Used Oil
• Antifreeze
• Mud Trap Waste
• Delisting Saccharin (U202)
• Aerosol Cans
• E-Waste
• E-Manifests
• Biennial Reports

• Breakdown of the Listed Hazardous Wastes
• Solvent-Contaminated Wipes Rule
• Hazardous Waste Generator Improvements Rule
• Exemptions and Recycled Materials
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.

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If used oil is mixed with a hazardous waste, the entire mixture must be managed as a hazardous waste if:

**Hazardous waste was listed:**
- Always

**Hazardous waste was characteristic:**
- Only if the resulting mixture exhibits any characteristic.
Used Oil Requirements

Containers and Above-Ground Tanks must be:

• Marked with the words “Used Oil”
• Maintained in good condition

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# Used Oil Requirements

<table>
<thead>
<tr>
<th>Transporting:</th>
<th>55-gallons or less:</th>
<th>More than 55 gallons:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can self transport your own used oil to an aggregation point or collection center.</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

USED OIL FUEL SPECIFICATIONS
Constituent/Property Allowable Level
Arsenic ........................................... 5 ppm maximum
Cadmium ........................................ 2 ppm maximum
Chromium ..................................... 10 ppm maximum
Lead ............................................ 100 ppm maximum
Flash point ..................................... 100 °F minimum
Total Halogen .......................... 4,000 ppm maximum
(If > 1,000 ppm halogens, then only on-spec if rebuttable presumption is met)
Used Oil Requirements

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

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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.
Mud Trap Waste


Purpose was to address disposal of waste generated during cleanouts of these mud traps.

- **Commercial Car Wash Facilities**
  - Considered non-hazardous
- **Truck Wash/Industrial/Repair Facilities**
  - Potential for high concentrations of petroleum products and/or heavy metals.
  - Must perform a waste determination and manage accordingly

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Mud Trap Waste

Truck Wash / Industrial / Repair Facilities

- Non-hazardous
  - Dry
    - Dispose into an MSW landfill with a special waste disposal authorization
    - Seek approval for beneficial use
Mud Trap Waste

Truck Wash / Industrial / Repair Facilities

• Non-hazardous
  • Wet
    • Dewater and dispose as Dry
    • Transfer to a commercial processing facility
    • Transfer to a wastewater treatment plant
    • Dispose into an MSW permitted to take liquid waste (more information in guidance document)
Delisting Saccharin (U202)

EPA determined the analyses for listing Saccharin did not provide adequate information for making the determination due to biochemical interference in rats not present in other animals and removed saccharin from the list in 2011.

KDHE is currently in the process of adopting the federal amendment.

A new policy (2017-P1) has been approved that allows generators to eliminate the U202 waste code from their notification of regulated waste activity.
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
  - Waste determination and manage

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Aerosol Cans

In other words:
• If the aerosol can is RCRA empty, 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.
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. 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
Electronic Waste

KDHE has not adopted the federal e-waste rules.

Currently, there is not a landfill ban in Kansas for electronic waste. However, we do encourage recycling whenever possible.
E-Manifests

E-Manifesting is coming.

Hazardous Waste Electronic Manifest Establishment Act was signed October 05, 2012.

EPA signed the e-Manifest User Fee Proposed Rule June 27, 2016.

EPA plans to have the system in place by next year and require all reporting starting July 2018.
E-Manifests

What is the current vision?
• All paper manifests must be submitted to EPA on day one of implementation (June 2018).
• EPA will have a system to collect user fees for this new system.
• All individuals who handle manifests will need to create a separate account to access the e-manifest system.
• Online system will incorporate all state-only waste codes.
E-Manifests

Test Preview

• EPA is allowing users to test the system to provide feedback.
• Information is available on EPA’s website.
Biennial Reports (LQGs)

New requirements for any facility who was an LQG for any part of 2016.

Instructions will be posted on the KDHE website later in 2017.
Biennial Reports (LQGs)

Reports will now be submitted by an approved facility representative through EPA’s Industry Application

- Register at the Central Data Exchange website (CDX) located at [https://cdx.epa.gov/](https://cdx.epa.gov/) (if not already registered).
- Select your site(s) and request permission to submit Biennial Reports (available this fall).
- Regulatory agency will approve request.
(Continued)

• Once approved, representative may begin preparing Biennial Report Forms through CDX.
• Facility representative must electronically certify Biennial Report(s) and submit it through CDX between January 1 and March 1.
• Regulating agency reviews the submission and approves or rejects.
Biennial Reports (LQGs)

If approved, the information is loaded into RCRAInfo.

If rejected, the facility representative must correct the information based on the comments provided by the regulating agency and re-submit the form.
Listed Hazardous Wastes

Listed hazardous wastes are selected based on the risk 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.
Listed Hazardous Wastes

Keep in mind!

• All wastes must be evaluated for characteristics regardless of their listing status.
F-Listed Hazardous Wastes

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)
F001 Listed Wastes

<table>
<thead>
<tr>
<th>Large Scale Degreasing Operations (T)</th>
<th>Tetrachloroethylene*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trichloroethylene*</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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# F002 Listed Wastes

<table>
<thead>
<tr>
<th>Degreasing Operations (T)</th>
<th>Tetrachloroethylene*</th>
<th>1,1,2-trichloro-1,2,2-trifluoroethane</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trichloroethylene*</td>
<td>Ortho-dichlorobenzene</td>
</tr>
<tr>
<td></td>
<td>Methylene chloride*</td>
<td>Trichlorofluoromethane</td>
</tr>
<tr>
<td></td>
<td>1,1,1-trichloroethane*</td>
<td>1,1,2-trichloroethane</td>
</tr>
<tr>
<td></td>
<td>Chlorobenzene</td>
<td></td>
</tr>
</tbody>
</table>

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F001 and F002 spent solvents marked with * appear on both lists. The size of the operation defines which listing applies.

- Trichloroethylene (TCE) used in a 1,000-gallon degreaser unit would carry the F001 listing.

- TCE used in a 5-gallon parts washer would carry the F002 listing.
F003 Listed Wastes

<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>
F-Listed Hazardous Wastes

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.
<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></td>
<td>Methyl ethyl ketone</td>
</tr>
<tr>
<td></td>
<td>Carbon disulfide</td>
</tr>
<tr>
<td></td>
<td>Isobutanol</td>
</tr>
</tbody>
</table>

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F-Listed Hazardous Wastes

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.
# F-Listed Hazardous Wastes

<table>
<thead>
<tr>
<th>Examples</th>
<th>F002</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% water 15% tetrachloroethylene (PCE) (F001/F002) Used for small scale degreasing</td>
<td></td>
</tr>
<tr>
<td>95% Water 5% PCE (F001/F002) Used for small scale degreasing</td>
<td>Not listed</td>
</tr>
<tr>
<td>75% xylene (F003) 15% toluene (F005) 10% water Ignitable (D001)</td>
<td>F003, F005 Also D001</td>
</tr>
</tbody>
</table>

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# F-Listed Hazardous Wastes

**Examples**

<table>
<thead>
<tr>
<th>85% isopropyl alcohol</th>
<th>F002, F005</th>
</tr>
</thead>
<tbody>
<tr>
<td>8% chlorobenzene (F002)</td>
<td>More than 10%</td>
</tr>
<tr>
<td>7% methyl ethyl ketone (F005)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>92% isopropyl alcohol</th>
<th>Not listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2% chlorobenzene (F002)</td>
<td>Less than 10%</td>
</tr>
<tr>
<td>6% methyl ethyl ketone (F005)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>75% xylene (F003)</th>
<th>F005</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% toluene (F005)</td>
<td></td>
</tr>
<tr>
<td>Still bottoms from recycling</td>
<td></td>
</tr>
<tr>
<td>Not ignitable</td>
<td></td>
</tr>
</tbody>
</table>

---

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# F-Listed Hazardous Wastes

## Examples

<table>
<thead>
<tr>
<th>Waste paint containing methyl ethyl ketone (MEK) used as a thinner during painting operations.</th>
<th>Not listed</th>
<th>May be characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEK used to clean paint equipment.</td>
<td>F005</td>
<td></td>
</tr>
<tr>
<td>Both of these waste streams are emptied into the same satellite accumulation container.</td>
<td>Entire mixture is F005</td>
<td></td>
</tr>
</tbody>
</table>

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### F-Listed Hazardous Wastes

#### 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
# K-Listed Hazardous Wastes

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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-Listed Hazardous Wastes

Commercial Chemical Products

• Discarded
• Off-Specification
• Residues (container, spill, etc.)

P-List

• Acutely Hazardous
• Regulated at 2.2 pounds

U-List

• Toxic (non-acute)

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P- and U-Listed Hazardous Wastes

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-Listed Hazardous Wastes

<table>
<thead>
<tr>
<th>Examples</th>
<th>U220</th>
</tr>
</thead>
<tbody>
<tr>
<td>85% toluene (Active)</td>
<td>U220</td>
</tr>
<tr>
<td>15% water</td>
<td></td>
</tr>
<tr>
<td>75% toluene (Active)</td>
<td>U220</td>
</tr>
<tr>
<td>15% water</td>
<td></td>
</tr>
<tr>
<td>10% additives to improve the odor of the mixture</td>
<td></td>
</tr>
<tr>
<td>50% toluene (Active)</td>
<td>Not listed</td>
</tr>
<tr>
<td>35% xylene (Active)</td>
<td></td>
</tr>
<tr>
<td>15% water</td>
<td></td>
</tr>
</tbody>
</table>
P- and U-Listed Hazardous Wastes

Reminder!

• Even if a waste does not meet a listing definition, it may still carry a characteristic waste code.
P- and U-Listed Hazardous Wastes

Keep in Mind!

• The chemical names listed on these lists are common names and may have other industry specific names associated with them.
• The List of Lists can help confirm synonyms, CAS numbers, and in some cases, RCRA waste codes.
• 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 can be 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.
- Exhibits the characteristic of ignitability.
- Sent for disposal or to be laundered (reusable wipes).

**Does not apply to wipes:**
- Listed for anything other than solvents.
- Contaminated with trichloroethylene (disposable only).
- Exhibits the characteristic of corrosivity, reactivity, or toxicity from any other contaminant.
Solvent-Contaminated Wipes

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

Disposable wipes:
- Excluded from the definition of a hazardous waste (require a waste determination).
- Do not count toward your generator status (monthly counting).
- Must go to an MSW landfill with a synthetic liner.

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Solvent-Contaminated Wipes

Container Management:

• Non-leaking;
• Closed;
• Able to contain free liquids;
• Labeled with the words “Excluded Solvent-Contaminated Wipes”;
• Marked with the accumulation start date or alternative tracking method;
• Removed from the site within 180 days.
Solvent-Contaminated Wipes

Recordkeeping:

• Document name and address of all handlers (i.e., disposal, laundry, and dry cleaning facility) receiving wipes.

• Records or label to show wipes were on site 180 days or less.

• Description of how the “no free liquids” condition is met.
  • 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 generator’s facility are the responsibility of the generator.
  • This includes proper management and waste counting.

• Free liquids generated at the handler’s facility are the responsibility of the handler.
Hazardous Waste Generator Improvements Rule

Went into effect May 31, 2017 at the federal level.

Authorized states are going through adoption and authorization process.
- Must pick up more stringent provisions by July 1, 2018, or July 1, 2019 if state law (i.e., statute) change is needed.
- Less stringent or equally stringent provisions are optional.
Summary of Changes

• Reorganization of the Regulations
• CESQGs Renamed Very Small Quantity Generators (VSQGs)
• VSQGs Waste Consolidation at LQGs (Same Company)
• 50-foot Requirement Waiver
• Episodic Generation
• Emergency Preparedness and Planning
• SQG Re-Notification
Summary of Changes

• HW Determinations
• Marking and Labeling
• Reporting and Recordkeeping
• Satellite Accumulations Areas
• Closure
• Drip Pads and Containment Buildings
<table>
<thead>
<tr>
<th>New Provision</th>
<th>VSQG</th>
<th>SQG</th>
<th>LQG</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQG Consolidation of VSQG wastes</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Episodic Generation</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>50-foot Waiver</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Marking &amp; Labeling</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Marking RCRA Waste Codes</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SQG Re-notification</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency Plan Quick Reference Guide</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Closure Notification</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Closure as Landfill if Can’t Clean Close</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>BR Reporting by Recyclers Who Don’t Store*</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

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Federal Effects

More stringent:

• SQG re-notification
• Identifying hazards of wastes being accumulated & labeling
• Notification of closure
• Closure as a landfill for LQGs accumulating hazardous wastes in containers that cannot meet closure performance standards
• Biennial reporting for whole year, not just months the generator was an LQG
• Biennial reporting for recyclers who don’t store prior to recycling
• Quick reference guide for contingency plans

Less stringent:

• VSQG waste consolidation
• Episodic generation
• Waiver from 50-foot rule

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More stringent:

- Identifying hazards of wastes being accumulated & labeling
- Notification of closure
- Closure as a landfill for LQGs accumulating hazardous wastes in containers that cannot meet closure performance standards
- Biennial reporting for recyclers who don’t store prior to recycling
- Quick reference guide for contingency plans

Less stringent:

- VSQG waste consolidation
- Episodic generation
- Waiver from 50-foot rule
- SQG re-notification

Equally stringent:

- Biennial reporting for whole year, not just months the generator was an LQG

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Important Note:

• KDHE will continue to use the term Conditionally Exempt Small Quantity Generator until adoption of the new regulations.
Regulations

• **Reorganization of the 40 CFRs to become more user-friendly**

<table>
<thead>
<tr>
<th>Provision</th>
<th>Existing Citation</th>
<th>Proposed Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generator Category Determination</td>
<td>§ 261.5(c)–(e)</td>
<td>§ 262.13</td>
</tr>
<tr>
<td>VSQG Provisions</td>
<td>§ 261.5(a), (b), (f)–(g)</td>
<td>§ 262.14</td>
</tr>
<tr>
<td>Satellite Accumulation Area Provisions</td>
<td>§ 262.34(c)</td>
<td>§ 262.15</td>
</tr>
<tr>
<td>SQG Provisions</td>
<td>§ 262.34(d)–(f)</td>
<td>§ 262.16</td>
</tr>
<tr>
<td>LQG Provisions</td>
<td>§ 262.34(a), (b), (g)–(i), (m)</td>
<td>§ 262.17</td>
</tr>
</tbody>
</table>
Regulations

Defined new terms in § 260.10, including:

- Acute and non-acute hazardous wastes
- VSQG, SQG (previously defined incorrectly), and LQG

Clarified the regulations in a new section § 262.13, including:

- Procedures for counting hazardous waste
- How to determine generator category when generating acute and non-acute hazardous waste in the same month
- How to determine generator category when mixing solid and hazardous waste

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HW Determinations

Clarifications

• HW determinations must be accurate, not just conducted and recorded.
• Must be made at the POG and at any time during the course of management for waste potentially exhibiting a hazardous characteristic.

Improvements

• Explain more fully in § 262.11 how to evaluate wastes.
• Explain more fully how generators can use generator knowledge and tests.
Satellite Accumulation Areas

- Requires that hazardous wastes not be mixed or placed in a container with other hazardous wastes that are incompatible
- Allows containers to remain open temporarily under limited circumstances, when necessary for safe operations
- Provides maximum weight in addition to volume for acute hazardous waste limit
- Clarifies that “three days” means three consecutive calendar days
- Makes marking and labeling requirements consistent with central accumulation areas
## Labeling of Containers

<table>
<thead>
<tr>
<th>Current</th>
<th>New</th>
</tr>
</thead>
</table>
| • “Hazardous Waste”  
• Accumulation start date (storage only) | • “Hazardous Waste”  
• Accumulation start date (storage only)  
• Identify hazards (not identity)  
• Applicable RCRA waste codes prior to shipping |
Emergency Preparedness/Planning

- Arrangements may be made with Local Emergency Planning Committees (LEPCs), if appropriate
- Scope of the contingency planning and emergency procedures applies only to areas where hazardous wastes are being accumulated (including points of generation and SAAs)
- LQGs have flexibility to eliminate unnecessary employee personal information in the contingency plan
- SQGs and LQGs may determine the most appropriate locations for emergency equipment
- SQGs have the option to use contractors to address releases (containment/cleanup)
- Large facilities with internal response capabilities may seek a waiver from entering into arrangements with local authorities (final rule specifies waiver procedure)

Our Mission: To protect and improve the health and environment of all Kansans.
## Contingency Plans

<table>
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<tr>
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<tr>
<td>• Attempt to make arrangements with Emergency Responders</td>
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</tr>
<tr>
<td>• Document if responders decline to enter into arrangements</td>
<td>• Document all attempts in facility operating record</td>
</tr>
<tr>
<td></td>
<td>• Quick Reference Guide</td>
</tr>
<tr>
<td></td>
<td>• Information most critical for emergency responders</td>
</tr>
<tr>
<td></td>
<td>• To be included when a new or updated plan is submitted</td>
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</table>

**Our Mission:** To protect and improve the health and environment of all Kansans.
Quick Reference Guide

• Types/names of hazardous wastes and associated hazards
• Estimated maximum amounts of hazardous wastes
• Hazardous wastes requiring unique/special treatment
• Map showing where hazardous wastes are generated, accumulated and treated at the facility
• Map of facility and surroundings to identify routes of access and evacuation
• Location of water supply
• Identification of on-site notification systems
• Name of emergency coordinator(s) or listed staffed position(s) and 7-day/24-hour emergency telephone number(s)
## 50-Foot Rule Waiver

<table>
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<td>• All containers holding ignitable and/or reactive waste must be located at least 50-feet from the property line.</td>
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<tr>
<td></td>
<td>• A waiver may be obtained from the fire marshal if the fire marshal believes sufficient precautions are in place.</td>
</tr>
</tbody>
</table>

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Our Mission: To protect and improve the health and environment of all Kansans.
Waste Consolidation

Consolidate waste at an LQG under the control of the same person

- Person – as defined under RCRA
- Control – means the power to direct policies at the facility

CESQGs and KSQGs

- Mark and label waste containers with “Hazardous Waste” and the hazards

LQG

- Notifies state on Notification of Regulated Waste Activity form and addendum that it is participating in this activity and identifies which CESQGs and KSQGs are participating.
- Maintain records for each shipment.
- Manages consolidated waste as LQG hazardous waste including ensuring final treatment or disposal is at a RCRA-designated facility (TSDF or recycler).
- Reports in Biennial Report

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Episodic Events

Current

- Notify state
- Temporarily bump up to appropriate class
- Comply with certain container management requirements and submit documentation
- Pay annual fee related to temporary class
Episodic Events

New

- Generator can keep their existing category provided they comply with a set of requirements in 40 CFR § 262 Subpart L:
  - One calendar event per year (planned or unplanned) with ability to petition for a second event.
  - If first event is planned, the petition must be for an unplanned event or vice versa.
  - Notify KDHE at least 30 days prior to planned event.
  - Notify within 72 hours after an unplanned event.
  - Conclude the event within 60 days, including removing waste.
Episodic Events

New

• Generator can keep their existing category provided they comply with a set of requirements in 40 CFR §262 Subpart L:
  • All containers must be:
    • Labeled “Episodic Hazardous Waste”
    • Identify hazards of contents
    • Date episodic event began (and ended for tanks)
  • Maintain records including the date the episodic event began.
Episodic Events

Generators must:

- Obtain EPA ID number (VSQG)
- Use HW manifest and transporter to send episodic waste to RCRA-designated facility
- Manage waste such that possibility of accident or release is minimized
- Label containers
- Identify an emergency coordinator
- Maintain records associated with event for three years
§261.2 defines a solid waste

- Abandoned (disposed, burned, accumulated, or stored)
- Recycled (recovered, regenerated, etc.)
- Inherently waste-like
### Table 1

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**Note:** The terms “spent materials,” “sludges,” “by-products,” and “scrap metal” and “processed scrap metal” are defined in §261.1.
RCRA Regulated Recycled Materials

Waste Materials

- Spent Material
- Sludge
- By-Products
- Commercial Chemical Products
- Scrap Metal

Processes

- Use Constituting Disposal
- Energy Recovery/Fuel
- Reclamation
- Speculative Accumulation

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RCRA Regulated Recycled Materials

How to use:

- Find the intersection for the waste and the process
- Asterisk – May be a solid waste
- Dash – May be excluded from the definition of a solid waste

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RCRA Regulated Recycled Materials

Spent Material
- Any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.
- Includes spent solvents, burned-out lamps, etc.

Sludge
- Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.
- Includes spent carbon, oil from an oil/water separator.
RCRA Regulated Recycled Materials

By-Product

• A material that is not one of the primary products of a production process and is not solely or separately produced by the production process.
• Includes slags or distillation-column bottoms.
• Does not include co-products such as kerosene from petroleum refining.

Commercial Chemical Products (CCPs)

• Unused or virgin products (§261.33)
• Can also include other commodities such as batteries and paint.

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RCRA Regulated Recycled Materials

Scrap Metal

- Bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.
RCRA Regulated Recycled Materials

Use Constituting Disposal §261.2(c)(1)

- Applied to or placed on the land in a manner constituting disposal.
- Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land.
- Excludes CCPs if that is their ordinary manner of use.

Burning for Energy Recovery §261.2(c)(2)

- Burned to recover energy.
- Used to produce a fuel or are otherwise contained in fuels.
- Excludes CCPs that are themselves fuels.
RCRA Regulated Recycled Materials

Reclamation §261.2(c)(3)

- Secondary material is process to recover something of value, or regenerated.
- Processes such as regeneration of spent carbon.

Speculative Accumulation §261.2(c)(4)

- Secondary materials accumulated prior to recycling.
- Must show value, and must be able to demonstrate at least 75% of material has been recycled in the last calendar year.

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40 CFR §261.2
Available Resources

• KDHE wants to help all generators achieve compliance. Please call us with any questions at 785-296-1600.
• Small Business Environmental Assistance Program (SBEAP) operated by the Pollution Prevention Institute (PPI) at KSU 1-800-578-8898 (free anonymous assistance).
Waste Determination

“Kansas Waste Determination” App

Developed through a partnership between KDHE, BWM and SBEAP

Available on both Android and Apple app stores.

Will generate a sufficient waste determination document; however,

• Only as accurate as the information you provide.
• Will need to attach all supporting documentation.
Facility name
EPA I.D. #
Generator category

Hazardous Waste
The Governor, Commissioner and Deputy Commissioner are required to conduct monthly inspections of hazardous waste storage areas. Inspections are required to be conducted monthly by licensed staff.

Inspection Logs and Tips

2018 Hazardous Waste Compliance Calendar

Tip: If a waste needs to be tested to confirm or deny whether the waste is KDHE certified, a list of certified labs may be found at k锏cfe.org or call the KDHE.

Note: The “Kansas Waste Determination” app offers an electronic system for managing determinations. It is free, and available for both Apple and Android products.

Weekly/Monthly Inspection Log

Data from data weekly or monthly inspections was conducted.

Tip: KDHE requires that all Hazardous Waste be properly labeled and stored.

Facility name
EPA I.D. #
Generator category

FEBRUARY 2018

Tip: Hazardous waste determinations should be made based on each waste generated at your facility.

Description of training topics covered

Date:
Time:
List of employees attending:

Mark the calendar —
- A weekly hazardous waste inspection was conducted.
- The hazardous waste was disposed in EPA-approved containers.
- The hazardous waste was generated this month?
- How much hazardous waste was currently in storage?
- What is the time the hazardous waste was disposed?
Contact Information

• BWM web site: http://www.kdheks.gov/waste

• Ken Powell
  785-296-1121
  ken.powell@ks.gov

• Brian Burbeck
  785-296-1613
  brian.burbeck@ks.gov
Questions