Hazardous Waste Generator Workshop
In-Depth Topic Discussion 2015

Kansas Department of Health and Environment

WORKSHOP OVERVIEW

- Will discuss hazardous waste (HW) management topics in more detail, including:
  - Review Solvent-Contaminated Wipes Rule in KS
  - Changing Generator Status (routine and one-time events)
  - Notification Forms
  - Used Oil Requirements
  - Used Antifreeze
  - Aerosol Cans
  - E-waste
  - e-Manifesting Update
  - Universal Waste
  - K, U, and P-listings
  - F001-F005 listings
  - Solvent recycling and accounting
  - Navigate the KDHE website
  - Enforcement Case Overview
  - Outreach – Compliance Training Manual
- Opportunity for questions

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Became effective at the federal level January 2014.
- Kansas Policy BWM 2013-P2, "Solvent-Contaminated Wipes" allows generators to follow this federal rule in Kansas now (signed December 2013).
- Technical Guidance Document (TGD) HW-1995-G2, "Solvent-Contaminated Wipes" explains the rule and was revised May 2015.

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Applies to any wipe contaminated with one or more solvents on the F001 through F005 lists in 40 CFR 261.31 or the corresponding P- or U-listed solvents found in 40 CFR 261.33, or that exhibits the characteristic of ignitability.
- Applies to wipes being sent for disposal or being laundered (reusable wipes).
- If a wipe is listed for anything other than solvents, has trichloroethylene (disposable wipes only), or is characteristic for toxicity, corrosivity, or reactivity, it is **NOT** eligible for this rule.

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Reusable wipes managed under this rule:
  - Are excluded from the definition of solid waste (do not require a hazardous waste determination);
  - Do not count toward the generator status (counting of wastes).

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Disposable wipes managed under this rule:
  - Are excluded from the definition of hazardous waste (do require a hazardous waste determination);
  - Do not count toward the generator status (counting of wastes).

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Container management for wipes under this rule:
  - 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 RULE IN KS

- Recordkeeping
  - Documentation of the name and address of all handlers receiving the wipes, including laundries, dry cleaners, landfills, or combustors.
  - Records (or labeling) to document that wipes are on-site for 180 days or less.

SOLVENT-CONTAMINATED WIPES RULE IN KS

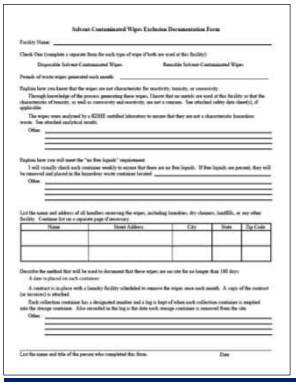
- Recordkeeping (continued)
  - Description of how the "no free liquids" condition is satisfied. This must include a description of all technologies, methods, sampling, or knowledge that the generator is using to ensure that wipes sent to handlers contain no free liquids.

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Free Liquids
  - If free liquids occur at the generating facility, they should be removed and properly managed, and would count toward the generator's hazardous waste status.
  - If free liquids occur at a handling facility, they should be removed and properly managed and would count toward the handler's hazardous waste status.

SOLVENT-CONTAMINATED WIPES RULE IN KS

- Important notes about the rule in Kansas:
  - KDHE acknowledges that zipping plastic bags will hold free liquids and can be used adequately to hold wipes.
  - If you are sending disposable wipes to a landfill, make sure that landfill has a synthetic liner. Acceptable Kansas landfills are listed in our TGD.



Solvent-Contaminated Wipes Exclusion Documentation Form

Facility Name: _____

Check One Complete a separate form for each type of wipes (both are used at this facility):

Disposable Solvent-Contaminated Wipes Reusable Solvent-Contaminated Wipes

Pounds of waste wipes generated each month: _____

Explain how you know that the wipes are not characteristic for reactivity, toxicity, or corrosivity.

Through knowledge of the process generating these wipes. I know that no metals are used at this facility so that the characteristic of toxicity, as well as corrosivity and reactivity, are not a concern. See attached safety data sheet(s), if applicable.

The wipes were analyzed by a KDHE certified laboratory to assess that they are not a characteristic hazardous waste. See attached analytical results.

Other: _____

Explain how you will meet the "no free liquids" requirement.

I will visually check each container weekly to ensure that there are no free liquids. If free liquids are present, they will be removed and placed in the hazardous waste container located _____

Other: _____

List the name and address of all handlers receiving the wipes, including laundries, dry cleaners, landfills, or any other facility. Continue list on a separate page if necessary.

Name	Street Address	City	State	Zip Code

Describe the method that will be used to document that these wipes are on site for no longer than 180 days.

A date is placed on each container.

A contract is in place with a laundry facility scheduled to remove the wipes once each month. A copy of the contract (or invoices) is attached.

Each collection container has a designated number and a log is kept of when each collection container is emptied into the storage container. Also recorded in the log is the date each storage container is removed from the site.

Other: _____

List the name and title of the person who completed this form. Date

SOLVENT-CONTAMINATED WIPES RULE – RECORDKEEPING Example form available with KDHE's TGD

CHANGING GENERATOR STATUS (ROUTINE AND ONE-TIME EVENTS)

- Permanent changes are made using the Notification of Regulated Waste Activity Form 8700-12.

CHANGING GENERATOR STATUS (ROUTINE AND ONE-TIME EVENTS)

- One-Time events can also trigger changes to generator status:
  - Clean out of a tank (not routine maintenance)
  - Clean up from spills or releases
  - Lab clean out
  - Process line shut down
- KDHE does track these to make sure they are truly one-time events.

CHANGING GENERATOR STATUS (ROUTINE AND ONE-TIME EVENTS)

- Notify KDHE (Rebecca Wenner specifically). Provide the following:
  - Facility information (name, ID, location)
  - Current Generator Status
  - Status caused by event
  - Describe the event and how it is being resolved
  - Date(s) of the event

CHANGING GENERATOR STATUS (ROUTINE AND ONE-TIME EVENTS)

- After shipment of the waste caused by the event, provide KDHE with a legible copy of the Uniform Hazardous Waste Manifest to change back to your routine generator status.
- Pay appropriate fee or difference in fees to KDHE.

NOTIFICATION OF REGULATED WASTE ACTIVITY FORM

- Detailed instructions are available on the KDHE website with the form.
- Page 1 – Site Information
  - EPA ID
  - Site Name
  - Site Location (street address)
  - NAIC Codes (look up on the internet for your industry - http://www.naics.com/search/

NOTIFICATION OF REGULATED WASTE ACTIVITY FORM

- Page 1 – Site Information
  - Site Mailing Address
  - Site Contact Person (Does not have to be local)
  - Legal Owner and Operator of the Site

NOTIFICATION OF REGULATED WASTE ACTIVITY FORM

- Page 2 – Regulated Waste Activity
  - Hazardous Waste Activities
    Including generator, transporter, TSDF, Importer, mixed waste, and more
  - Universal Waste Activities
    Only necessary for Larger Quantity Handlers (very few in Kansas)
  - Used Oil Activities
    Only necessary for transporters, processor/re-refiner, off-spec burner, and fuel marketers.

NOTIFICATION OF REGULATED WASTE ACTIVITY FORM

- Page 3 – Description of Hazardous Waste
  - Waste codes (look at your manifests and waste determination documentation).
  - Comments – can be left blank if there is nothing interesting about your notification.
  - Certification – must be a signature of authorized individual.

USED OIL REQUIREMENTS

- Used oil (UO) is not a hazardous waste as long as it is recycled. Therefore it does not count towards your HW generator classification.
- Containers and above-ground tanks of UO must be marked with the words "Used Oil" and maintained in good condition.
- Must use a transporter registered with KDHE unless you are transporting 55-gallons or less of your own used oil to an aggregation point or collection center.

USED OIL REQUIREMENTS

- Can burn any of the following in an on-site space heater:
  - UO generated on-site or by sister facility (as long as no more than 55 gallons is self-transported)
  - UO from do-it-yourselfers
  - On-spec UO from any source
- Space heater must meet the following:
  - Maximum capacity of 0.5 million Btu/hour;
  - Combustion gases vented to the ambient air;

USED OIL REQUIREMENTS

- Burning in a space heater (Continued):
  - On-specification UO can be accepted from off-site, but must have been tested to show that it meets these criteria before burning in a space heater:

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 minimum
Total Halogen	4,000 ppm maximum

(If > 1,000 ppm halogens, then only on-spec if rebuttable presumption is met)

USED ANTIFREEZE

- Recycling, either on-site or off-site is the preferred method for handling.
- Disposal is a last resort, and a waste determination is required prior to disposal.
  - If hazardous waste, then it must be managed accordingly.
  - If non-hazardous then it can be solidified and disposed at a landfill or if written permission is obtained by the local wastewater authority, it can be disposed through the sanitary sewer (never a septic system).

AEROSOL CANS

- KDHE considers empty aerosol cans to be non-hazardous (as long as they did not contain acutely hazardous waste).
- If the contents of an aerosol can cannot be used (the can breaks, nozzle clogs, etc.), attempts can be made to repair the can and put it back into service.
- If the can cannot be repaired, or if no attempt will be made to repair the can, a hazardous waste determination must be made on the contents (generally done by reviewing the Material Safety Data Sheet (MSDS).
- If the contents are HW, the following slides apply.

AEROSOL CANS

- The satellite accumulation area must be at or near the point of generation of the aerosol cans.
  - Must be where cans are generated originally if no attempts will be made to fix the cans and put them back into service.
  - Can be the maintenance area or other central location if attempts will be made to fix the cans in that area/location and put the cans back into service.

AEROSOL CAN PUNCTURING

- If done in a closed and self-contained unit (such as a drum top unit), KDHE considers this an exempt form of hazardous waste treatment.
- KDHE considers the waste drained from the aerosol cans to be a newly generated waste, and therefore the drum accumulating this liquid waste can be a satellite accumulation container.
- The emptied cans can be recycled or disposed (unless they contained P-listed waste).

AEROSOL CANS

ELECTRONIC WASTE

- ❖ There is no landfill ban in Kansas for electronic waste.
- ❖ KDHE has not adopted federal e-waste rules.
- ❖ KDHE has used grants to encourage the building of an e-waste recycling infrastructure in Kansas.

E-MANIFESTING UPDATE

- ❖ Hazardous Waste Electronic Manifest Establishment Act signed 10/5/2012.
- ❖ Congress initially failed to fund the e-manifesting system. That pushed back the implementation schedule.

E-MANIFESTING UPDATE

- EPA has started the Fee Rule work group and expects to have the proposed fee methodology and related policy proposals published in late 2015 (no new information).
- EPA hopes to have the Final Fee Rule schedule (amounts) published in late 2017 or early 2018.

E-MANIFESTING UPDATE

- Production of the e-manifest system is planned for late spring 2018.
- At this time, it is planned that at least one paper manifest will accompany the waste with the transporter and paper manifests will be used if the system goes down.

E-MANIFESTING UPDATE

- Generators will be able to view their own information at any time.
- The public will be able to access information on all shipments after 90 days have passed from the receipt of the shipments at designated facilities.

UNIVERSAL WASTE

- Universal waste (UW) is a subset of hazardous waste.
- Kansas follows EPA rules for UW.
- Lamps (fluorescent bulbs) cannot be deliberately crushed if they are going to be managed as UW.

UNIVERSAL WASTE

UNIVERSAL WASTE

- UW in Kansas includes:
  - Batteries
  - Certain pesticides
  - Mercury-containing equipment
  - Lamps (including fluorescent bulbs)

UNIVERSAL WASTE

- UW batteries, mercury-containing equipment, and lamps, must be labeled:
  - "Universal Waste - _____"; or
  - "Waste _____"; or
  - "Used _____".

  Fill in the blank with: Batteries, mercury-containing equipment (or mercury thermostats), or lamps.
- UW pesticides must be labeled either:
  - "Universal Waste – Pesticides"; or
  - "Waste Pesticides".

UNIVERSAL WASTE

- Must document the accumulation time of the UW by:
  - Dating each container or the group of containers (such as on a pallet); or
  - Date the accumulation area; or
  - Maintain a written inventory or log

UNIVERSAL WASTE

- UW can be shipped under a bill of lading or other shipping papers. A Uniform Hazardous Waste Manifest is not required.
- Employees who handle or have responsibility for managing UW must be given information describing the proper handling and emergency procedures appropriate to the type(s) of UW handled.

K, U, AND P-LISTINGS

❖ K-List (40 CFR 261.32) – Hazardous Waste from Specific Sources
- Wood Preservation
- Inorganic Pigment (oven residue and/or Wastewater treatment sludges)
- Wastes from production of Organic Chemicals, Inorganic Chemicals, Explosives
- Petroleum Refining Wastes
- Iron and Steel and other metals production wastes
- Veterinary Pharmaceutical wastes
- Ink formulation waste
- Coking Waste

K, U, AND P-LISTINGS

❖ U-List and P-List (40 CFR 261.33) – Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.
- P-List – Acutely toxic
  - Regulated at 2.2 lbs (generated or accumulated on-site) in Kansas
- U-List – Not as toxic

K, U, AND P-LISTINGS

❖ U-List and P-List (40 CFR 261.33) –
- Both lists – The chemical of concern must be the sole active ingredient.
  - Example – An off-specification mixture of 85% Toluene and 15% water would carry the U220 waste code upon disposal.
  - Example – An off-specification mixture of 50% Toluene and 35% Xylene and 15% water would not be a listed hazardous waste (It would probably be characteristic for Ignitability (D001)). The U-listings would not apply because neither xylene nor toluene are the sole active ingredient. The F-listings would not apply because the waste was not "spent".

F001-F005 LISTINGS

- F001 - (T) - The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
- F002 - (T) - The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
- F003 - (I)* - The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
- F004 - (T) - The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
- F005 - (I,T) - The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures

F001 LISTING

F001 - (T) - The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures

F001 LISTING

- Only for large-scale degreasing operations.
- Example – 95% Trichloroethylene (TCE) used in a 1,000 gallon vapor degreasing unit would carry the F001 waste code.
- Example – 95% Trichloroethylene (TCE) used in a 5-gallon parts washer would not carry the F001 waste code (but would carry the F002 waste code).

F002 LISTING

- F002 - (T) - The following spent halogenated solvents:
  - Tetrachloroethylene
  - methylene chloride
  - Trichloroethylene
  - 1,1,1-trichloroethane
  - Chlorobenzene
  - 1,1,2-trichloro-1,2,2-trifluoroethane
  - ortho-dichlorobenzene
  - Trichlorofluoromethane
  - 1,1,2-trichloroethane
  - all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005;
  - still bottoms from the recovery of these spent solvents and spent solvent mixtures

F002 LISTING EXAMPLES

- Spent 95% TCE in a 5-gallon parts washer would be an F002 listed hazardous waste.
- Spent 85% Tetrachloroethylene (PCE) used for cleaning would be an F002 listed hazardous waste.
- A spent mixture of 15% PCE and 85% water would be an F002 listed hazardous waste.
- A spent mixture of 5% PCE and 95% water would not be hazardous unless the flashpoint was less than 140°Fahrenheit.

F003 LISTING

- F003 - (I) - The following spent non-halogenated solvents:
  - Xylene
  - Acetone
  - Ethyl acetate
  - Ethyl benzene
  - Ethyl ether
  - Methyl isobutly ketone
  - N-butyl alcohol
  - Cyclohexanone
  - methanol
  - all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents;
  - All spent solvent mixture/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvent listed in F001, F002, F004, and F005;
  - still bottoms from the recovery of these spent solvents and spent solvent mixtures

F003 LISTING EXAMPLES

- A spent 95% xylene blend used for cleaning would carry the F003 listing.
- A spent mixture of xylene and ethyl benzene used for cleaning would also carry the F003 listing because both are on the F003 list.
- A spent mixture of 75% xylene (F003) and 15% Toluene (F005) would carry both the F003 and F005 listings because it has more than 10% toluene.

F004 LISTING

- F004 - (T) - The following spent non-halogenated solvents:
  - Cresols and cresylic acid
  - nitrobenzene
- all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005
- still bottoms from the recovery of these spent solvents and spent solvent mixtures

F005 LISTING

- F005 - (I, T) - The following spent non-halogenated solvents:
  - Toluene
  - Methyl ethyl ketone (MEK)
  - Carbon disulfide
  - Isobutanol
  - Pryidine
  - Benzene
  - 2-ethoxyethanol
  - 2-nitropropane
- All spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004;
- still bottoms from the recover of these spent solvents and spent solvent mixtures;

F005 LISTING EXAMPLES

- Spent MEK that was used to strip paint and to clean painting equipment carries the F005 listing.
- A spent mixture of 85% MEK and 25% Toluene would carry the F005 listing.
- A spent mixture of 85% Isopropyl Alcohol (not listed), 7% MEK (F005), and 8% chlorobenzene (F002) would carry the F002 and F005 listings.
  - This is because it contains 10% or more of the F001, F002, F004 and/or F005 solvent constituents so the F-code for each constituent (F002 and F005) apply.

Note: If any of the above mixtures has a flashpoint below 140° F, it will also carry the D001 waste code.

OTHER F-LISTING EXAMPLES

- Spent mixture of 92% isopropyl alcohol and 6% MEK and 2% toluene and a flashpoint of 125° F would only carry the D001 waste code.
- Still bottoms from the recycling of F003, F005 spent solvent would carry the F003 and F005 waste codes.

OTHER F-LISTING EXAMPLES

- Still bottoms from the recycling of spent solvent that is only characteristic for Ignitability (D001), would only be hazardous waste if the still bottoms had a flashpoint below 140° F.
- Still bottoms from the recycling of spent solvent that is only characteristic for F003 would be a hazardous waste and would carry the F003 waste code.

OTHER F-LISTING EXAMPLES

- MEK is used to thin paint prior to painting a piece of metal. Then MEK is used to clean the paint gun lines and tips. Waste paint is poured into a 55-gallon drum outside the paint booth and the spent solvent from cleaning the lines and tips is poured into a 5-gallon bucket outside the same paint booth.
  - The waste paint (55-gallon drum) is a characteristic hazardous waste (flash is <140°F)
  - The spent solvent (5-gallon bucket) is a listed hazardous waste with waste codes D001 and F005.

OTHER F-LISTING EXAMPLES

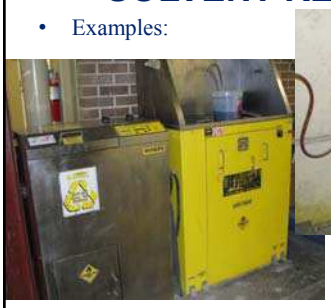
- Same example, but the spent solvent is poured into the 55-gallan drum instead of being managed separately:
  - The waste paint and spent solvent carries waste codes D001 and F005.
- Paint filters from the process above would not be a listed hazardous waste (and are probably not characteristic hazardous waste) as long as the paint guns are not sprayed into the filters deliberately during the cleaning process (considered unlawful disposal of the spent solvent).

SOLVENT DISTILLATION (ON-SITE)

- Waste accumulated prior to distillation:
  - Counts towards generator status
  - Is subject to all container management requirements
- Waste placed directly in a distillation unit without prior accumulation:
  - Does not count towards generator status
  - Is not subject to container management requirements

SOLVENT RECYCLERS

- Examples:



SOLVENT DISTILLATION

- Counting waste solvent being distilled on-site
  - Starts over each calendar month
  - Count all solvent the first time it is recycled each month
  - Count still bottoms only if the solvent was not counted.

SOLVENT DISTILLATION

Example (assume solvent is 7 lbs/gallon and F005)

May 1 – recycle 10 gallons of waste solvent

- Recover 8 gallons of recycled solvent
- Generate 1 pound of still bottoms (F005)
- A total of 70 lbs of HW counts towards generator status
- 2 gallons of new solvent are added to the distilled solvent so that a total of 10 gallons of solvent can be used in the process.

SOLVENT DISTILLATION

Example (continued)

May 15 – recycle 10 gallons of waste solvent

- Recover 8 gallons of recycled solvent
- Generate 1 pound of still bottoms (F005)
- 2 gallons of solvent were not counted on 5/1/12, so they count now, for a total of 14 pounds of HW.
- Since 20% of the solvent was counted (2÷10), you subtract that amount from the still bottoms (1-0.2). So 0.8 lbs counts toward the generator status.
- Still bottoms (0.8 lbs) + solvent (14 lbs) = 14.8 lbs of HW that counts toward the generator status.

SOLVENT DISTILLATION

Example (continued)

- May 1 – 70 lbs of HW counted
- May 15 – 14.8 lbs of HW counted
- 70 + 14.8 = 84.8
- If no more solvent is recycled this month, then a total of 84.8 lbs of hazardous waste counts toward the monthly HW generation rate.

SOLVENT DISTILLATION BOTTOMS

- Are also called hockey pucks, pancakes, still bottoms, cake, etc.
- Are HW if:
  - They exhibit any characteristic
  - The solvent being recycled met the F-listing definition for F001-F005.

Finding things on KDHE's website

- KDHE homepage: http://kdheks.gov/

Finding things on KDHE's website

- BWM homepage: http://www.kdheks.gov/waste/index.html

Finding things on KDHE's website

- First bullet is a link to the KDHE certified lab database.
- Last bullet links to several useful documents (see next slide)

Finding things on KDHE's website

Finding things on KDHE's website

Hazardous Waste Program

- EPA's RCRAInfo Database
- Hazardous Waste Fees
- Hazardous Waste & Used Oil Forms
- Hazardous Waste Generator Handbook
- Hazardous Waste Transporter List
- Used Oil Transporter List

Regulations, Policies, & Technical Guidance

- Policies
- Proposed Regulations
- Statutes and Regulations
- Technical Guidance Documents

ENFORCEMENT CASE OVERVIEW

- ❖ Evaluate the violations to determine if enforcement is warranted:
  - Severity of violations
    - Unlawful acts?
    - Environmental or human health harm?
  - Number of violations
    - More than 8 to 10 for LQG
    - More than 10 to 12 for SQG
    - More than 12 to 15 for KSQG
  - Responsiveness

ENFORCEMENT CASE OVERVIEW

- ❖ Prepare a Penalty Assessment Worksheet
- ❖ Prepare a Penalty Justification
- ❖ Discuss at a Penalty Assessment Team (PAT) meeting
- ❖ Obtain approval of the Bureau Director
- ❖ Proceed with action
  - Administrative Order
  - Letter – notifying of impending administrative order (most common)

ENFORCEMENT CASE OVERVIEW

- ❖ Meet to try to settle the matter
  - Discuss the reasons for the penalty
  - Explain how we calculated the penalty
  - Explain the settlement options
  - Set deadline for submitting additional information (if applicable)
- ❖ Meet again internally to re-evaluate and then proceed as appropriate.
- ❖ Most cases are settled.

ENFORCEMENT CASE OVERVIEW

Violations:

1. Failure to determine if a waste is hazardous waste in violation of 40 CFR 262.11.
2. Failure to retain waste determination documents for three years in violation of 40 CFR 262.40 (c).
3. Failure to count waste paint and thinner prior to recycling in violation of 40 CFR 261.5(d)(2).
4. Failure to mark accumulation start date on 5 (55-gallon drums) hazardous waste storage containers in violation of 40 CFR 262.34(a)(2).
5. Failure to label 5 (55-gallon drums) containers of hazardous waste with the words "hazardous waste" in violation of 40 CFR 262.34(a)(3).
6. Failure to mark 5 (55-gallon drums) satellite containers of hazardous waste with the words "hazardous waste" in violation of 40 CFR 262.34(c)(1)(ii) as modified by K.A.R. 28-31-262(c)(7).
7. Failure to close 3 containers of hazardous waste in violation of 40 CFR 265.173(a).
8. Failure to adequately document weekly inspections of hazardous waste in violation of 40 CFR 265.15(d).
9. Failure to post location of spill control material in violation of 40 CFR 262.34(d)(5)(ii)(B).
10. Failure to conduct annual hazardous waste training in violation of K.A.R. 28-31-262a(d)(1)(B).
11. Failure to familiarize employees with the proper waste handling & emergency procedures, relevant to their responsibilities in violation of K.A.R. 28-31-262a(d)(1).
12. Failure to label to mark containers of used oil with the words "used oil" in violation of 40 CFR 279.22(d)(3).
13. Failure to clean up and properly manage a release of used oil in violation of 40 CFR 279.22 (d)(3).

ENFORCEMENT CASE OVERVIEW

Justification #	Inspector Violation #:	Matrix Number	Violation Summary	Penalty Range/ Calculation	Penalty Assessed
1	1	2	Failure to determine if a waste is hazardous waste in violation of 40 CFR 262.11	Attachment E	$2,550
2	2	17	Failure to retain waste determination documents for three years in violation of 40 CFR 262.40 (c).	$100 - $5,000	$100
3	3	4	Failure to count hazardous waste paint and thinner prior to recycling in violation of 40 CFR 261.5(e)(2).	$500 - $2,000	$500
4	4 and 5, 6, 7, 8	Attachment F	Failure to comply with container management requirements in violation of 40 CFR 262.34(a)(2) and 40 CFR 262.34(a)(3), 40 CFR 262.34(c)(1)(ii) as modified by K.A.R. 28-31-262(c)(7), 40 CFR 265.173(a), and 40 CFR 265.15(d).	Attachment F	$1,600
5	9	34	Failure to post location of spill control material in violation of 40 CFR 262.34(d)(5)(ii)(B).	$100 - $10,000	$100
6	10 and 11	36	Failure to conduct annual hazardous waste training in violation of 40 CFR 262.34(d)(5)(iii) and K.A.R. 28-31-262a(d)(1)(B).	$1,000 - $10,000	$2,000
7	12	80	Failure to mark containers of used oil with the words "used oil" in violation of 40 CFR 279.22(c).	$100 - $5,000	$100
8	13	81	Failure to clean up and properly manage a release of used oil in violation of 40 CFR 279.22 (d)(3).	$100 - $5,000	$100
				TOTAL PENALTY:	$7,050

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ENFORCEMENT CASE OVERVIEW

ATTACHMENT E

FAILURE TO DETERMINE IF WASTE IS HAZARDOUS

POINTS FOR A WASTE STREAM, BASED ON AMOUNT OF WASTE	Routine Waste Stream	NA	NA	Less than 10 gallons per month	10 to 55 gallons per month	56 to 275 gallons per month	276 to 1,650 gallons per month	More than 1,650 gallons per month
	One-time or Non-routine Waste	0 to 1 gallon	Greater than 1 but less than 3 gallons	3 to less than 10 gallons	10 to 55 gallons	56 to 275* gallons	276 to 1,650** gallons	More than 1,650 gallons
	Points	0.1	0.3	0.5	1	2 - 4	5 - 7	8 - 10

Calculate Total Points:

Waste Stream	Amount of Waste (per month or on-site at the time of the inspection, depending on the circumstances)	Points
Waste Paint related material	About 85 pounds per month	2
Aerosol Can Contents	About 25 pounds per month	1
1 gallon amber jug in QA Lab	Non-routine (3/4 full)	0.1
Total Points		3.1

BASE AMOUNT	1st Offense	2nd Offense	3rd Offense
LQG	$2,000	$3,500	$6,000
SQG	$1,000	$2,500	$4,000
KSQG	$700	$1,500	$2,000
CESQG	$600	$1,000	$1,500

Total Points	3.1
Base Amount	$1,600.00

V1, SQG / 1st Offense

(Total Points x $500) + Base Amount = Total Penalty

Total Penalty = $2,550.00

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ENFORCEMENT CASE OVERVIEW

ATTACHMENT F

CONTAINER MANAGEMENT

CONTAINER MARKINGS	Labeled either "Hazardous Waste" or had accumulation start date				Labeled with correct contents of container, but no accumulation start date and vice versa				No identifying markings (or wrong contents) and no accumulation start date			
	1 container (up to 55 gallons)	2 to 3 containers (55 to 275 gallons)	4 to 10 containers, 275 gallons up to 550 gallons)	Greater than 10 containers (or 551 gallons)	1 container (up to 55 gallons)	2 to 3 containers (55 to 275 gallons)	4 to 10 containers, 275 gallons up to 550 gallons)	Greater than 10 containers (or 551 gallons)	1 container (up to 55 gallons)	2 to 3 containers (55 to 275 gallons)	4 to 10 containers, 275 gallons up to 550 gallons)	Greater than 10 containers (or 551 gallons)
	1	2	4	7	2	4	6	8	3	6	9	12
OPEN CONTAINERS (Satellite or 90-day)	1 container	2 to 5 containers			6 to 10 containers				Greater than 10 containers			
	1	3			6				10			
WEEKLY INSPECTIONS	Missing information only (dates, times, names, etc.)	Failure to document inspections and/or missing 1 to 3 weeks of inspections			Failure to conduct weekly inspections							
					1 to 12 weeks	13 to 24 weeks	25 to 52 weeks	Greater than 1 year		Greater than 2 years	5 years or more	
	1	2			3	4	6	8		10	12	
NOT MEETING THE DEFINITION OF SATELLITE (more than 1 container, more than 55 gallons, no) (For near the point of generation)	One satellite area in violation		2 to 5 satellite areas in violation			6 or more satellite areas in violation						
	1 container (up to 55 gallons)	Greater than 1 container (greater than 55 gallons)	1 container (up to 55 gallons) in each area		Greater than 1 container (greater than 55 gallons) in each area		1 container (up to 55 gallons) in each area		Greater than 1 container (greater than 55 gallons) in each area			
	1	2	2		3		3		4			

BASE AMOUNT	Multiplier		
	1st Offense	2nd Offense	3rd Offense
TSDF	$700	$950	$1,100
LQG	$500	$700	$1,000
SQG	$300	$450	$600
KSQG	$100	$200	$300
CESQG	$50	$100	$150

Note: Except for open containers, if waste was stored in 55-gallon containers, use the number of containers for the calculation. If waste was stored in containers either larger or smaller than 55-gallons, use the approximate capacity of the container for the calculation (in gallons).

POINTS:	
Container Markings	3
Open Containers	3
Weekly Inspections	8
Satellite	0
TOTAL POINTS	14

V4, V5, V6 (5, 55-gallon storage, 0, 55-gallon satellite)
V7 (3, 55-gallon drums)
V9 (10 weeks missing date and time of inspection)

Multiplier	$200.00	SQG

(Total Points x Base Amount) = Total Penalty

Total Penalty = $1,600.00

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ENFORCEMENT CASE OVERVIEW

- Settlement Options
  - Settlement policy available on-line
  - Will depend on size of facility, type of action, compliance history, etc.
- Penalties go up for repeat offenses, settlement options go down.
- All enforcement cases result in another inspection within 2-3 years. That is how we verify if our program is effective.

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OUTREACH – COMPLIANCE TRAINING MANUAL

- This document is aimed at KSQGs and SQGs that have few, if any, environmental staff.
- Explains the regulations and requirements, but also breaks compliance down into steps and provides tracking guides to aid in compliance.
- Once completed, it helps determine who at the facility needs to be trained, and provides a mechanism for that training.

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OUTREACH – COMPLIANCE TRAINING MANUAL

- Step 1 – Provides forms to list all waste streams generated at the facility, how much is generated, are they hazardous or not, where are they accumulated around the facility and who is responsible for each accumulation point.
- Step 2 – Figure out how much hazardous waste is generated at the facility.

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OUTREACH – COMPLIANCE TRAINING MANUAL

- Step 3 – Based on the information from Steps 1 and 2, determine the generator status.
- Step 4 – Discussion of regulatory requirements for each classification.
- Step 5 – Review facility operations to ensure compliance with requirements identified in Step 4.
- Step 6 – Provide training using the completed manual.

OUTREACH – WASTE DETERMINATION APP

- Got a smart phone, tablet, or other device that can use a mobile application (App)?

KDHE will soon have a free App available for you to use to assist with your waste determinations. The App will hopefully be available for download free from both Apple and Google Play.

CONTACT INFO

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Questions

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