



Solvent-Contaminated Wipes Exclusion

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Wipes Used for Disinfecting/Cleaning



Frequent Questions

Question: When disposing of a disinfectant/cleaning chemical, how do I know if it is a hazardous waste?

Question: The cleaning chemical I am using is considered a pesticide, when disposed, is it a hazardous waste?

Question: The waste I generated from cleaning is contaminated (or suspected to be contaminated) with COVID-19, is it a hazardous waste?



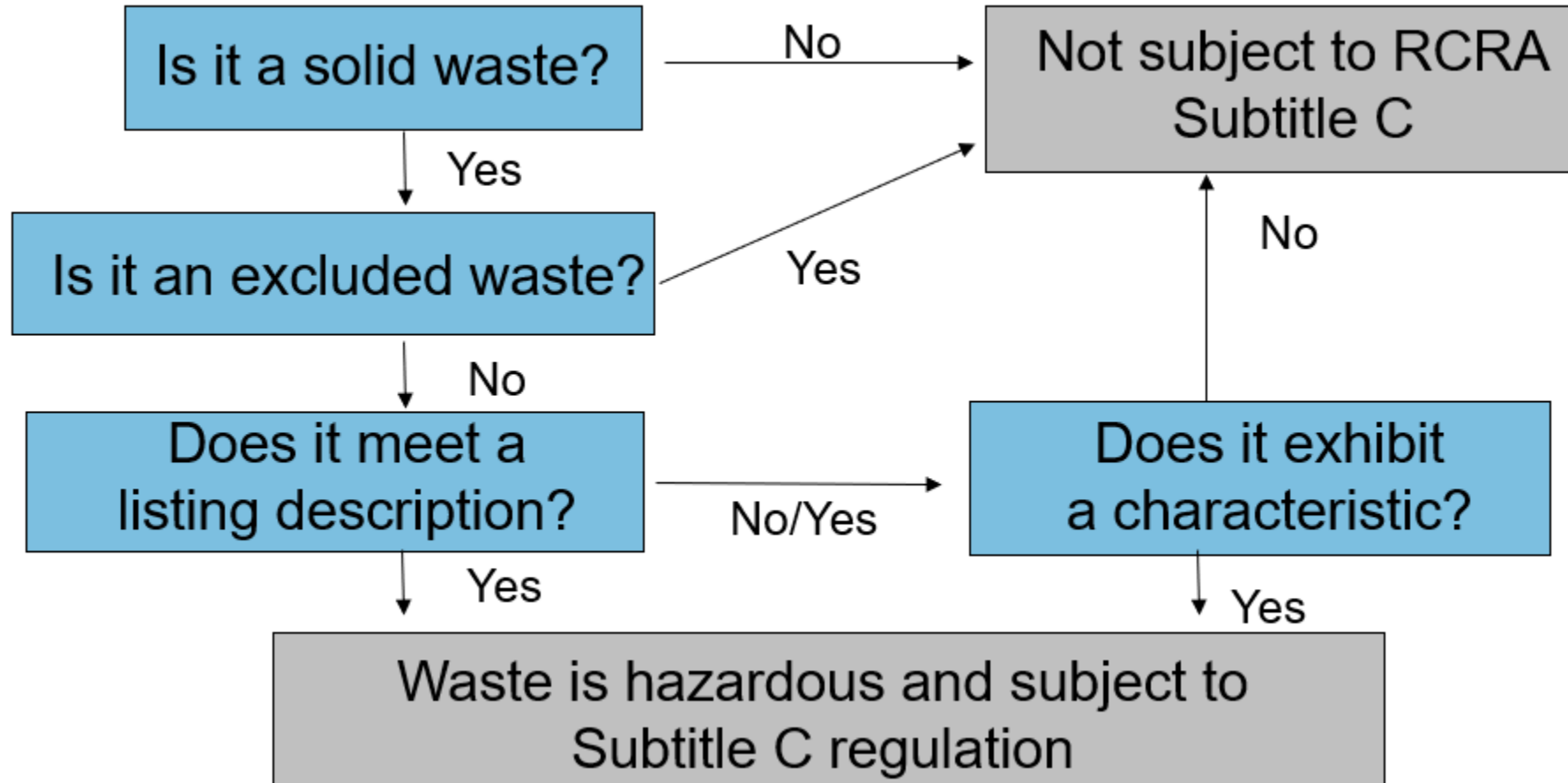
Frequent Questions - Answer

Answer:

- There is no single list of disinfectants/cleaning chemicals that may be considered hazardous waste.
- Just because it is a pesticide waste or a waste contaminated with COVID-19 does not automatically make it a hazardous waste.
- A waste determination must be performed on any chemical waste.
- It is the generator's responsibility to make a hazardous waste determination.



Hazardous Waste Determination



Frequent Questions

Question: If I am using disinfecting wipes for cleaning at my facility, can I manage them under the solvent-contaminated wipe exclusion?

Answer:

- Maybe. More on next slides
- If the wipe is contaminated only with an ignitable solvent (e.g. isopropyl alcohol) that is not listed, consider performing a waste determination and managing as a non-hazardous waste.
- If the wipe is contaminated with a corrosive cleaner, the exclusion will not apply.



Do Not Flush Any Wipes

Regardless of whether the wipe is hazardous, non-hazardous, or otherwise

do not flush

any wipes down the toilet!





Solvent-Contaminated Wipes Exclusion



Solvent-Contaminated Wipes Exclusion Overview

- Provisions of this federal rule effective in North Carolina on January 31, 2014
- Modifies RCRA hazardous waste regulations for solvent-contaminated wipes
- Updates made to 40 CFR 261.4, adopted by reference at 15A NCAC 13A .0106(a)
 - 40 CFR 261.4(a)(26) reusable wipes: conditional exclusion from the definition of solid waste
 - 40 CFR 261.4(b)(18) disposable wipes: conditional exclusion from the definition of hazardous waste



Solvent-Contaminated Wipes Exclusion Scope

- This is a conditional exclusion that applies to specific wipes managed in a specific way.
- If the conditions are not met, the material returns to being a hazardous waste and all applicable hazardous waste requirements must be met for management/disposal of wipes.



Solvent-Contaminated Wipes Exclusion Scope

- Reusable industrial shop towels and rags that are contaminated with hazardous solvents and are sent for laundering are not solid waste
- Disposable industrial wipes that are contaminated with hazardous solvents and are going to disposal are not hazardous waste



Definitions

The rule provides a definition for "**wipe**" and "**solvent-contaminated wipe**" in 40 CFR 260.10

- **Wipe** means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material
- **Solvent-Contaminated Wipe** defined on next slide



Definitions

A **solvent-contaminated wipe** is a wipe that, after use or after cleaning up a spill, either:

- Contains one or more of the F001 through F005 solvents;
- Exhibits a hazardous characteristic when that characteristic results from a listed solvent; or
- Exhibits only the hazardous waste characteristic of ignitability due to the presence of solvents that are not listed



Solvent-Contaminated Wipes

Includes (for reusable and disposable wipes): Wipes containing one or more F001-F005 listed solvents or corresponding P- or U-listed solvents

Acetone

Benzene

N-Butanol

Chlorobenzene

Creosols

Cyclohexanone

1,2-Dichlorobenzene

Ethyl acetate

Ethyl benzene

2-Ethoxyethanol

Trichloroethylene (For reusable only)

Isobutyl alcohol

Methanol

Methyl ethyl ketone

Methyl isobutyl ketone

Methylene chloride

Tetrachloroethylene

Toluene

1,1,2-Trichloroethane

Xylenes



Wipes that Do Not Qualify Exclusion

- Wipes that contain listed hazardous waste other than solvents
- Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents
- Wipes do not qualify for exclusion if contaminated with:
 - Corrosives
 - Reactives
 - Non-solvent TCLP materials
 - Examples: Cr, Cd, Pb, Hg, Ag
- Disposable Wipes only: cannot contain TCE



You have an oil spill and clean it up with absorbent wipes. Can these wipes be managed under the solvent-contaminated wipe exclusion?



No, they do not qualify for the exclusion because they are not solely contaminated with a listed or ignitable solvent. Site must determine they are non-hazardous or may be able to be manage as off-spec fuel and burn for energy recovery (if they are contaminated with a fuel).



Wipes with acetone are used to clean products before a finish is applied. Can these wipes be managed under the solvent-contaminated wipes exclusion?

Maybe.

If the wipe is only contaminated with acetone (and does not pick up a contaminate like metals from the cleaning process) it qualifies for the exclusion as long as all conditions are met.



Disposal/Laundry Requirements

Disposable Wipes

As long as no TCE; and all conditions are met can go to:

- Regulated municipal solid waste landfill or
- Hazardous waste combustor, boiler, or industrial furnace or combustor regulated under section 129 CAA

Reusable Wipes

As long as all conditions are met can go to:

- Laundry or dry-cleaning facility
 - Any wastewater discharge must be CWA-regulated
- Rule is more stringent than DEQs previous laundered wipe policy
 - Reusable wipes not covered by exclusion must be non-hazardous if laundered/dry-cleaned

Accumulation Requirements for Exclusion

Solvent-contaminated wipes must be:

- Accumulated for no more than 180 days prior to being sent for cleaning or disposal
- Placed in a non-leaking closed container, that can contain free liquids, should they occur
- Marked "Excluded Solvent-Contaminated Wipes"



REQUIRED

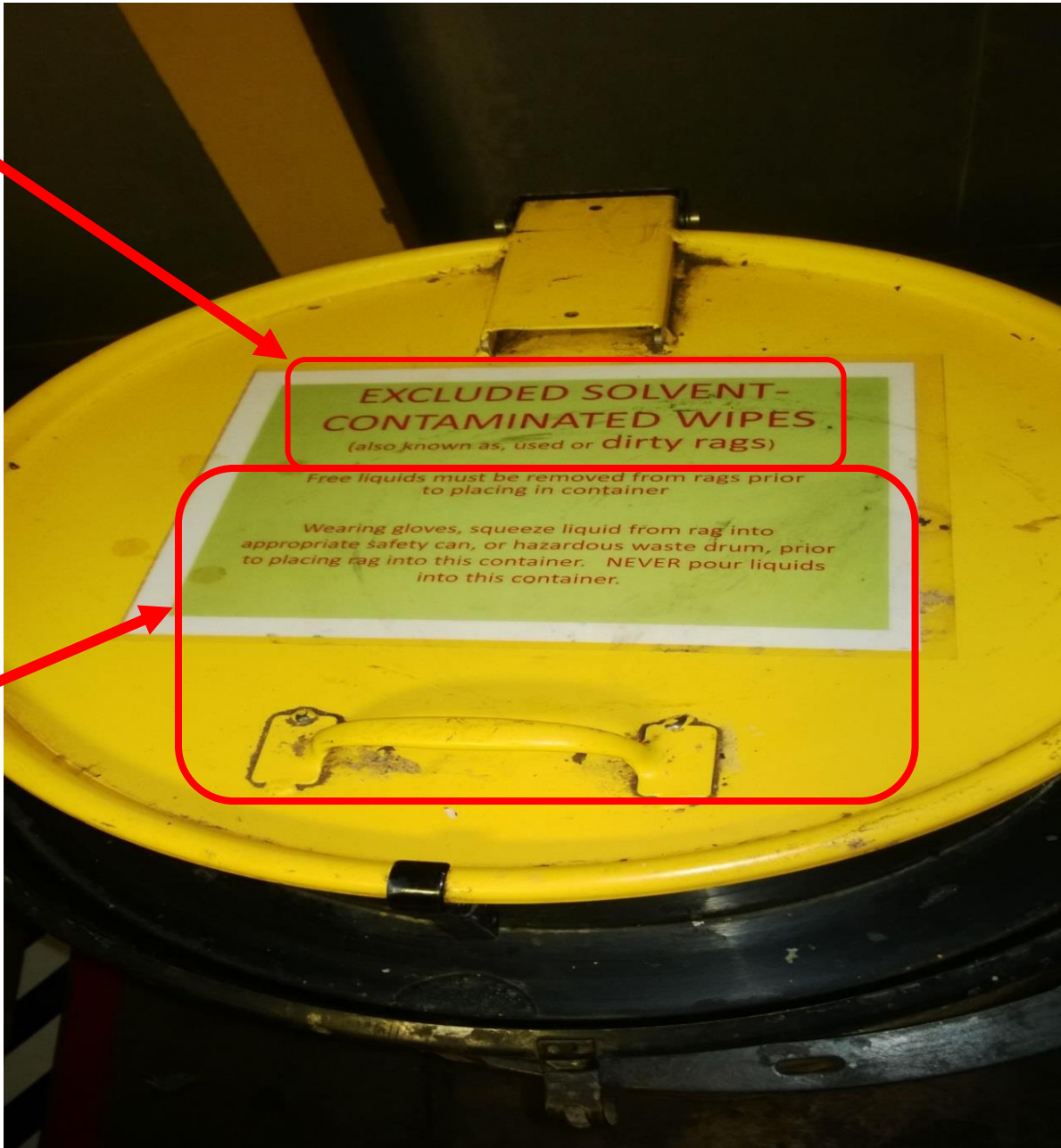
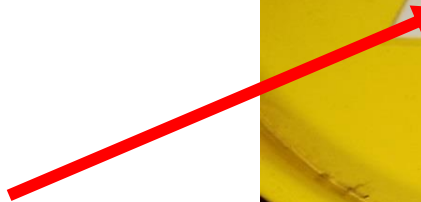


EXCLUDED SOLVENT-CONTAMINATED WIPES
(also known as, used or dirty rags)

Free liquids must be removed from rags prior to placing in container

Wearing gloves, squeeze liquid from rag into appropriate safety can, or hazardous waste drum, prior to placing rag into this container. NEVER pour liquids into this container.

Bonus Information









Solvent-Contaminated Wipes – Free Liquids

- There must be no free liquids in container prior to being sent for cleaning or disposal
- Free liquids removed from the wipes or from the wipes container must be managed according to applicable hazardous waste regulations in 40 CFR parts 260 through 273



Records Required for Exclusion

Must maintain documentation that includes:

- Name and address of the laundry, dry cleaner, landfill, or combustor
- Documentation that the 180-day accumulation time limit is being met
- Description of the process the generator is using to meet the "no free liquids" condition
- Documentation of claims that materials are not a solid waste or are conditionally exempt per 40 CFR 261.2(f)



Solvent-Contaminated Wipes

- Does my facility use wipes?
- Does my facility generate solvent-contaminated wipes?
- Do the solvent-contaminated wipes meet the definition for the exclusion?
 - How are the wipes used?
 - What is the source of the contamination?
 - Is the solvent characteristic for ignitability only?
(consider a waste determination instead of exclusion)

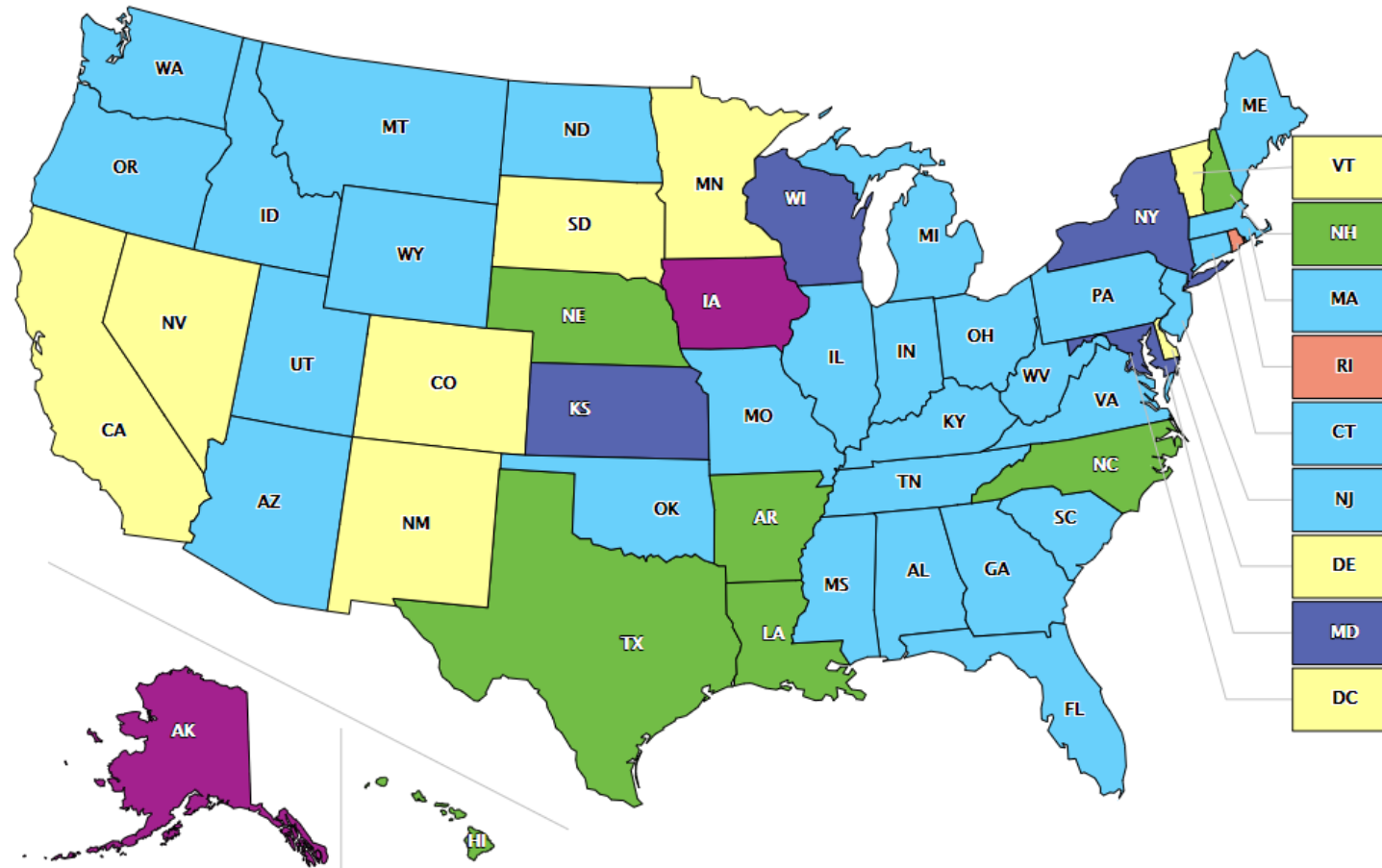


Solvent-Contaminated Wipes

- Does my facility launder any items on site?
- Does my facility send any items to a laundry?
 - Items laundered on site or sent to be laundered/dry cleaned must be non-hazardous or meet the conditional exclusion
 - Hazardous waste must not be laundered on-site or off site unless laundry is permitted as a hazardous waste treatment, storage, disposal facility
 - Excluded solvent-contaminated wipes may be laundered/dry-cleaned on site or off-site but there must be an appropriate and valid CWA permit associated with the operation/activity



Where is the Solvent-Contaminated Wipe Rule in Effect?



American Samoa
Guam
Northern Mariana Islands
Puerto Rico
Virgin Islands

- Authorized
- Adopted
- State Interim Policy on Solvent Contaminated Wipes
- Administered by EPA Region
- Only Reusable Wipes Exclusion in Effect
- Neither Adopted nor Authorized

Solvent-Contaminated Wipes – Frequent Questions

Your facility uses MEK on wipes to clean parts. In the process of using the wipe, it becomes contaminated with chrome (high enough to exceed the TCLP concentrations).

Question: If the facility wanted to launder the wipes, can the wipes be managed under the solvent-contaminated wipe exclusion?

Answer: If the solvent-contaminated wipe is also characteristic for toxicity, it cannot be managed under the solvent-contaminated wipe exclusion.

Additionally, unless the laundry facility is a permitted TSD, only non-hazardous or excluded solvent-contaminated wipes may be sent to a laundry facility.



Solvent-Contaminated Wipes – Frequent Questions

A facility uses isopropyl alcohol (IPA) on wipes. When personnel are done using the wipe, it has no free liquids on the wipe.

Question: If these wipes are laundered or incinerated, can the facility manage the wipes by the solvent-contaminated wipe exclusion?

Answer: The wipes could be managed by the exclusion.

However, since the solvent is not F-listed, the facility may just want to make a waste determination on the wipes. If the wipes are not listed and are not characteristic, they could be managed as non-hazardous waste.



Solvent-Contaminated Wipes

For More Information (Federal Rule, FAQ, History):

<https://www.epa.gov/hwgenerators/final-rule-2013-conditional-exclusions-solid-waste-and-hazardous-waste-solvent>

EPA Summary Chart for Solvent-Contaminated Wipes:

https://www.epa.gov/sites/production/files/2015-11/documents/sumry_chrt_wipes_fnl_rul_070913.pdf



	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Regulation Citation	40 CFR 261.4(a)(26) (Solid Waste Exclusion)	40 CFR 261.4(b)(18) (Hazardous Waste Exclusion)
Description	Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes, provided the conditions of the exclusion are met.	Solvent-contaminated wipes that are sent for disposal are not hazardous wastes, provided the conditions of the exclusion are met.
Includes	<p>➤ Wipes containing one or more F001-F005 listed solvents listed in § 261.31 or the corresponding P- or U- listed solvents found in § 261.33, including:</p> <ul style="list-style-type: none"> - Acetone - Benzene - n-Butanol - Chlorobenzene - Creosols - Cyclohexanone - 1,2-Dichlorobenzene - Ethyl acetate - Ethyl benzene - 2-Ethoxyethanol - Isobutyl alcohol - Methanol - Methyl ethyl ketone - Methyl isobutyl ketone - Methylene chloride - Tetrachloroethylene - Toluene - 1,1,2- Trichloroethane - Trichloroethylene (<i>*For reusable wipes only.</i>) - Xylenes <p>➤ Wipes that exhibit a hazardous characteristic resulting from a solvent listed in part 261.</p> <p>➤ Wipes that exhibit only the hazardous characteristic of ignitability when containing one or more non-listed solvents.</p>	

	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Does not include	<ul style="list-style-type: none"> ➤ Wipes that contain listed hazardous waste other than solvents. ➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents. 	<ul style="list-style-type: none"> ➤ Wipes that contain listed hazardous waste other than solvents. ➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents. ➤ Wipes that are hazardous waste due to the presence of trichloroethylene.
Storage Requirements	Wipes must be accumulated, stored, and transported in non-leaking, closed containers that can contain free liquids, should they occur.	
Labeling	Containers must be labeled “Excluded Solvent-Contaminated Wipes.”	
Accumulation Time Limits	Generators may accumulate wipes up to 180 days from the start date of accumulation prior to being sent for cleaning or disposal.	
Recordkeeping	<p>Generators must maintain documentation that includes:</p> <ul style="list-style-type: none"> ➤ name and address of the laundry, dry cleaner, landfill, or combustor ➤ documentation that the 180-day accumulation time limit is being met ➤ description of the process the generator is using to meet the “no free liquids” condition. 	

	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Condition of Wipes Prior to Transport	<p>Wipes must contain no free liquids prior to being sent for cleaning or disposal and there may not be free liquid in the container holding the wipes.</p> <p>“No free liquids” condition is defined in 40 CFR 260.10 and is based on the EPA Methods Test 9095B (Paint Filter Liquids Test) or other authorized state standard.</p>	
Management of Free Liquids	<p>Free liquids removed from the wipes or from the wipes container must be managed according to applicable hazardous waste regulations in 40 CFR parts 260 through 273.</p>	
Eligible Handling Facilities	<p>Must go to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.</p>	<p>Must go to a combustor regulated under section 129 of the Clean Air Act or to a hazardous waste combustor, boiler, or industrial furnace regulated under 40 CFR parts 264, 265, or 266 subpart H.</p> <p>Must go to a municipal solid waste landfill regulated under 40 CFR part 258 (including § 258.40) or to a hazardous waste landfill regulated under 40 CFR parts 264 or 265.</p>

	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes
Storage at Handling Facilities	Must store wipes in non-leaking, closed containers that are labeled “Excluded Solvent-Contaminated Wipes.” Containers must be able to contain free liquids should they occur.	
Management of Free Liquids by Handling Facilities	Free liquids removed from the wipes or from the container holding the wipes must be managed according to applicable hazardous waste regulations in 40 CFR parts 260 through 273.	



Questions?





A Few More Slides About Wipes and Cleaning Products Used for Disinfecting/Cleaning



What is not considered Hazardous Waste?

These are not hazardous waste unless they have been mixed with hazardous waste:

- Medical Waste
- Biohazards
- Radioactive Material/Waste
- Household Hazardous Waste
- Asbestos
- PCBs



Frequent Question

Question: What do I do with empty containers that held cleaning products?

Answer: If it meets the standard for empty containers under 40 CFR 261.7 it can be placed in the trash.



Empty Containers

Very basic overview of 40 CFR 261.7:

- If container held an acute hazardous waste, the container must be triple rinsed to be considered empty.

Otherwise, for a container that is less than or equal to 119 gallons:

- All wastes have been removed that can be removed using common practices to remove materials, (e.g., pouring, pumping, and aspirating) and
- No more than 2.5 cm (1 inch) of residue remains on the bottom of the container or inner liner
- For a compressed gas: When the pressure in the container approaches atmospheric



North Carolina Landfill Prohibitions

Among other items, the following are prohibited from disposal in a North Carolina solid waste landfills:

- Hazardous Waste
- Liquids



Frequent Question

Question: If I have extra cleaning products or they are expired what do I do with them?

Answer:

- If you cannot use it for its intended purpose, try to find someone else who can use it as-is and legitimately for its intended purpose.
 - North Carolina Waste Trader (<http://www.ncwastetrader.org/>) may be a useful resource.
- If it is an unused commercial chemical product, there may be reclamation outlets that would keep the material from having to be managed as a hazardous waste.



Photo Credit

Slide 12:

- <https://www.sportsmansguide.com/product/index/cloth-shop-towels-white-60-pack?a=1157649>

Slide 17:

- <https://ituabsorbtech.com/how-to-manage-used-rags-and-absorbents-a-federal-and-state-guide/>

Slide 18:

- <https://www.belart.com/bel-art-f12432-0001-ghs-labeled-right-to-know-safety-vented-ldpe-wash-bottles-1000ml-pp-cap-acetone-pack-of-2.html>
- <https://bluerobotics.com/store/cables-connectors/tools/potting-acetone-wipes-qty10-r1-rp/>

Slide 24:

- http://www.ehs.ufl.edu/programs/chemrad_waste/maint_waste/maintenance-rags/
- <https://www.rbwilliamsindustrial.com/nid/6941?mid=667>

Slide 28:

- <https://www.curbly.com/8810-turn-an-old-washing-machine-into-a-backyard-fire-pit>
- <https://www.elliscorp.com/>

Slide 31:

- <https://www.cbccleaningproducts.com.au/products/ipa-surface-wipes>

