

# Overview of the 2013 Solvent-Contaminated Wipes Final Rule



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- The purpose of the final rule is to provide a consistent regulatory framework that is appropriate to the level of risk posed by solvent-contaminated wipes in a way that maintains protection of human health and the environment, while reducing overall compliance costs for industry.
- Specifically, the rule includes:
  - A conditional exclusion from the definition of solid waste for solvent-contaminated wipes sent for cleaning (“reusable wipes”) – *40 CFR 261.4(a)(26)*
  - A conditional exclusion from the definition of hazardous waste for solvent-contaminated wipes sent for disposal (“disposable wipes”) – *40 CFR 261.4(b)(18)*

- 1980s – EPA received petitions from industry who stated that the hazardous waste regulations were too stringent for solvent-contaminated wipes based on the risks they pose.
- 1994 – EPA developed a policy that deferred determinations to authorized states and EPA regions. (*RO 11813*)
- 2003 – EPA published a proposed rule to conditionally exclude reusable wipes and disposable wipes from hazardous waste regulation. (*68 FR 65586*)
- 2009 – EPA published a NODA requesting comment on a revised risk analysis for the rule. (*74 FR 55163*)
- 2013 – EPA publishes final rule (*78 FR 46448*). The final rule supersedes the 1994 policy.

- The final rule was published on July 31, 2013, and became effective federally on January 31, 2014.
- Because the rule excludes solvent-contaminated wipes from RCRA hazardous waste regulation, the rule is considered less stringent than the base federal program.
- Thus, authorized states have the option of whether or not to adopt the exclusions into their regulations. (States operating under policies that are less stringent than the federal exclusions will need to incorporate the federal rule into their regulations.)
- The rule went into effect on January 31 in states and territories that are not authorized for the RCRA program (Alaska, Iowa, U.S. Virgin Islands, American Samoa, Northern Mariana Islands, and tribal lands). Additionally, five states have adopted the exclusions.



- Along with the final rule, EPA published its final risk analysis, which incorporates public comments from the 2009 NODA as well as the latest health benchmarks for trichloroethylene and tetrachloroethylene.
- The final risk analysis demonstrates that 19 of the 20 listed solvents evaluated do not pose significant risk when disposed in a landfill with a composite liner.
- Only one solvent, trichloroethylene, was found to exceed target risk criteria for disposal in a landfill with a composite liner. Therefore, solvent-contaminated wipes that are hazardous due to the presence of trichloroethylene are not eligible for the disposable wipes exclusion.

The final rule provides a definition for “wipe” and “solvent-contaminated wipe” in § 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 means
  - 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 that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions.



	Solvent-Contaminated Reusable Wipes	Solvent-Contaminated Disposable Wipes		
<b>Includes</b>	<ul style="list-style-type: none"> <li>➤ 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:                             <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>- Acetone</li> <li>- Benzene</li> <li>- n-Butanol</li> <li>- Chlorobenzene</li> <li>- Creosols</li> <li>- Cyclohexanone</li> <li>- 1,2-Dichlorobenzene</li> <li>- Ethyl acetate</li> <li>- Ethyl benzene</li> <li>- 2-Ethoxyethanol</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> <li>- Isobutyl alcohol</li> <li>- Methanol</li> <li>- Methyl ethyl ketone</li> <li>- Methyl isobutyl ketone</li> <li>- Methylene chloride</li> <li>- Tetrachloroethylene</li> <li>- Toluene</li> <li>- 1,1,2- Trichloroethane</li> <li>- Trichloroethylene (<i>*For reusable wipes only.</i>)</li> <li>- Xylenes</li> </ul> </td> </tr> </table> </li> <li>➤ Wipes that exhibit a hazardous characteristic resulting from a solvent listed in part 261.</li> <li>➤ Wipes that exhibit only the hazardous characteristic of ignitability when containing one or more non-listed solvents.</li> </ul>		<ul style="list-style-type: none"> <li>- Acetone</li> <li>- Benzene</li> <li>- n-Butanol</li> <li>- Chlorobenzene</li> <li>- Creosols</li> <li>- Cyclohexanone</li> <li>- 1,2-Dichlorobenzene</li> <li>- Ethyl acetate</li> <li>- Ethyl benzene</li> <li>- 2-Ethoxyethanol</li> </ul>	<ul style="list-style-type: none"> <li>- Isobutyl alcohol</li> <li>- Methanol</li> <li>- Methyl ethyl ketone</li> <li>- Methyl isobutyl ketone</li> <li>- Methylene chloride</li> <li>- Tetrachloroethylene</li> <li>- Toluene</li> <li>- 1,1,2- Trichloroethane</li> <li>- Trichloroethylene (<i>*For reusable wipes only.</i>)</li> <li>- Xylenes</li> </ul>
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<b>Does not include</b>	<ul style="list-style-type: none"> <li>➤ Wipes that contain listed hazardous waste other than solvents.</li> <li>➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Wipes that contain listed hazardous waste other than solvents.</li> <li>➤ Wipes that exhibit the characteristic of toxicity, corrosivity, or reactivity due to non-listed solvents or contaminants other than solvents.</li> <li>➤ Wipes that are hazardous waste due to the presence of trichloroethylene.</li> </ul>		



- The final rule includes two *conditional* exclusions, meaning that if one or more of the conditions are violated, the solvent-contaminated wipes could lose their excluded status and become subject to hazardous waste regulation from the point of generation.
- The conditions for both the reusable wipes exclusion and disposable wipes exclusion are practically the same, which should ease implementation and compliance.



## 1. Storage

- The rule uses a performance-based standard, rather than specifying types of containers.
- Solvent-contaminated wipes must be accumulated, stored, and transported in non-leaking, closed containers.
- The containers must be able to contain free liquids, if they occur (for example, from compression of the wipes).
- Containers do not need to be sealed during accumulation (must be closed except when adding or removing wipes).
- A container must be sealed when the container is full, when the wipes are no longer being accumulated, and during transportation.

Standard is performance-based; facilities have flexibility in determining how to meet the standard.

- Wipes accumulated in an open-head drum or container would be considered closed when the cover makes complete contact between the fitted lid and the rim.
- After accumulation and during transport, this same container must be sealed to meet this standard; thus, the rings must be clamped or bolted to the container.



*Note, these examples are consistent with EPA's closed container guidance (RCRA online 14826, 12/3/09 and 11/3/11).*

## Other examples that may meet the standard:

- Containers with covers opened by a foot pedal (e.g., flip-top or spring-loaded lid) or with a self-closing swinging door;
- Bags can be used, provided they meet the standard (i.e., the neck of the bag is tightly bound and sealed, the bag is able to contain liquids, and is non-leaking).



## • Examples that do not meet the standard:

- Bags leaving a trail of liquid on the ground;
- Cardboard boxes.

## 2. Labeling

- Containers of solvent-contaminated wipes must be labeled “Excluded Solvent-Contaminated Wipes.”
- Containers must be labeled during accumulation, storage, and transportation.



## 3. Accumulation Time Limit

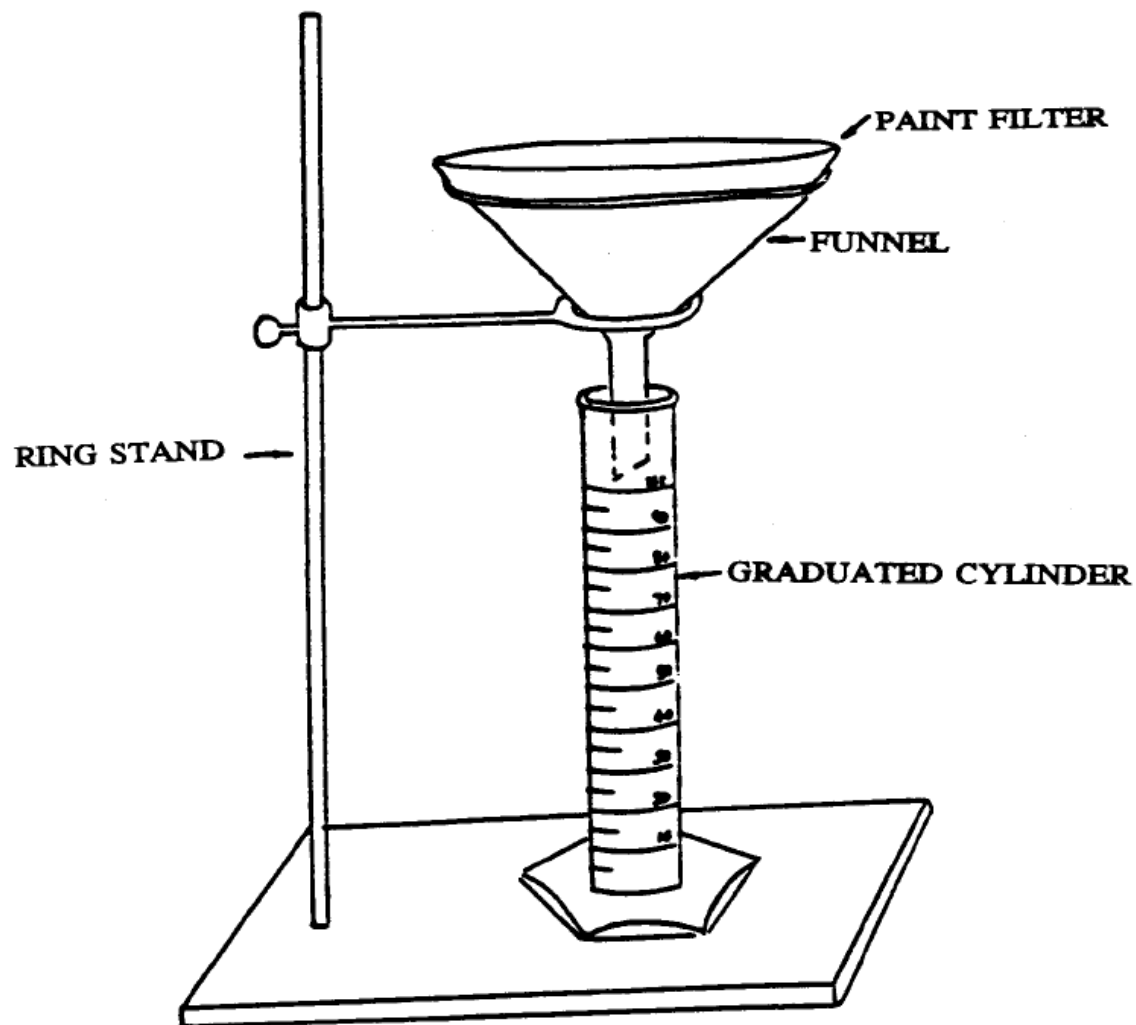
- Solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container.
  - Generators must keep documentation that the 180-day accumulation time limit is being met.
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- Note: Since wipes may not be accumulated for more than 180 days from the start date, including a start date on the accumulation container would add a degree of certainty to that process. However, that is not required. There are other methods to document that the 180-day accumulation is being met, such as an established schedule for pickups, a log of container dates, etc.

## 4. “No free liquids” – the Heart of the Rule

- Solvent-contaminated wipes may not contain free liquids at the point of being sent for cleaning on site or sent off site for cleaning or disposal.
- “No free liquids” is defined in § 260.10 and is determined using the Paint Filter Liquids Test (Method 9095B in SW-846).
- Paint Filter Liquids Test consists of placing a portion of the solvent-contaminated wipe in a paint filter and if any of the material passes through and drops from the filter within five minutes, the material is deemed to contain free liquids.
- Generators must document the process they are using to meet the “no free liquids” condition.
- Free liquid spent solvent that is removed from the wipes is subject to hazardous waste regulation.



# Paint Filter Liquids Test



## 5. Recordkeeping

- Generators must maintain the following documentation at their site:
  - Name and address of the destination facility (laundry, combustor, or landfill) that is receiving the solvent-contaminated wipes.
  - Documentation that the 180-day accumulation time limit is being met.
    - Could include a service contract specifying frequency of pick-up, a log that lists the start date of each container, or container labels with the start date.
  - Description of the process the generator is using to meet the “no free liquids” condition.
    - Description of technologies, methods, sampling, or knowledge that a generator is using to ensure wipes contain no free liquids at the point of transport.

## 6. Handling Facilities

- Reusable wipes must be sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 (effluent discharge restrictions) and 402 (permitting requirements) or section 307 (indirect discharge to a POTW) of the Clean Water Act.
- Disposable wipes must go to either
  - a combustor regulated under section 129 of the Clean Air Act or a hazardous waste combustor, boiler, or industrial furnace regulated under 40 CFR parts 264, 265, or 266 subpart H; or
  - a municipal solid waste landfill regulated under 40 CFR part 258 or a hazardous waste landfill regulated under part 264 or 265.
- Storage/labeling requirements continue to apply if solvent-contaminated wipes are stored at handlers.
- Any free liquids found by handling facilities must be removed and managed as hazardous waste.

- The final rule is estimated to impact 90,549 generators as well as 3,730 solid waste management facilities (landfills and combustors) and 359 industrial laundries and dry cleaners.
- \$18 million in net annual savings from reduced RCRA regulation.
- \$3.7 – \$9.9 million in annual benefits from pollution prevention (recycling of free liquid spent solvent); fire prevention (closed containers, no free liquids, labeling); and removal of “waste” label for reusable wipes.

***Total annual benefits from rule estimated to be between \$21.7 - \$27.8 million per year.***

- Can reusable wipes be laundered on-site? **Yes, provided the on-site laundry discharge is regulated under sections 301 and 402 or section 307 of the CWA.**
- Can I manage uniforms, mats, PPE, mop heads, and comforters under the solvent-contaminated wipe rule? **No, because these items do not meet the definition of 'wipe' and because EPA did not consider these items under the scope of the rule.**
- Can I transport a labeled closed container of solvent-contaminated wipes along with other solid waste trash to a landfill or combustor? **Yes, provided the wipes are in a closed container that is labeled.**
- Can I add absorbents to the bag of solvent-contaminated wipes? **No.**
- Can wipes contaminated with oil be managed under the rule? **A wipe that is contaminated with solvent may also be co-contaminated with oil and be eligible for the final rule as long as: (1) the oil is not listed hazardous waste and (2) the wipe only exhibits the characteristic of ignitability (and thus does not exhibit the characteristic of corrosivity, toxicity, or reactivity).**

- For more information on this rulemaking, go to:  
<http://www.epa.gov/epawaste/hazard/wastetypes/wasteid/solvents/wipes.htm>
- Website includes a summary chart of the rule as well as FAQs.  
[http://www.epa.gov/wastes/hazard/wastetypes/wasteid/solvents/sumry\\_chrt\\_wipes\\_fnl\\_rul\\_070913.pdf](http://www.epa.gov/wastes/hazard/wastetypes/wasteid/solvents/sumry_chrt_wipes_fnl_rul_070913.pdf)
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