
IPC – The Association Connecting Electronics Industries - would like to thank the Environmental Protection Agency (EPA) for the opportunity to submit these comments on the agency’s proposed rule offering generators of contaminated industrial wipes conditional exclusions from hazardous and solid waste regulation.

IPC represents nearly 2,200 member companies involved in the manufacture and assembly of printed circuit boards (PCBs). PCB based electronic assemblies are used in a variety of electronic devices including computers, cell phones, pacemakers, and sophisticated missile defense systems. The industry is vital to the U.S. economy, employing more than 400,000 people in every U.S. state and territory, and exceeding $44 billion in sales. Although IPC members include electronic giants such as Intel, Hewlett Packard, and IBM, the vast majority of IPC members meet the Small Business Administration’s definition of “small business.”

Industrial shop towels and wipes are used throughout the electronics industry, particularly by electronics manufacturing services (EMS) facilities attaching electronic components to PCBs. EMS facilities typically use disposable industrial wipes to maintain a clean work surface during assembly. Contaminated wipes usually contain cleaning solvents and excess solder applied when attaching components to boards. Used contaminated wipes are usually sent for incineration or disposed of in landfills.

IPC supports EPA’s efforts to develop and propose a rule addressing the handling and disposal of both reusable and disposable solvent contaminated industrial wipes. The ambiguity of state policies as they apply to both disposable and reusable solvent-contaminated wipes is a concern for the industry. Many states have developed their own, often, conflicting policies. We are pleased EPA has taken this opportunity to
provide consistency for generators of used resusable and disposable wipes in this regulatory proposal.

IPC appreciates the opportunity to offer the following comments on the agency’s proposed rule.

**Disposal and Handling of Wipes and Other Materials with Co-Contaminants**

The proposed exclusion from either hazardous waste or solid waste regulations is limited to wipes contaminated with F-, P- and U- listed solvents. As the wipes are utilized for cleaning purposes, small amounts of co-contaminants are often present on used wipes. Therefore, a significant number of wipes, both reusable and disposable, would be ineligible for the exclusion, as currently proposed. A broader exclusion allowing for low levels of co-contaminants would more realistically reflect industrial use of wipes.

Current regulatory policies in a significant number of states do not distinguish between solvents and other contaminants the wipe may contain. Under state policies, reusable wipes are typically excluded from the definition of solid waste regardless of contamination type. Similarly, disposable wipes are excluded from the definition of hazardous waste if wipes are properly managed.

EPA clearly sets management protocols for reusable wipes in the proposed rule. If properly followed, all reusable wipes, regardless of contamination types, should be eligible for the exclusion.

Disposable wipes containing contaminants other than the solvents listed above should also be eligible for the proposed exclusion. The “dry” standard of 5 grams set by EPA for disposables destined for landfills is sufficiently protective, even if co-contaminants are present. Disposable wipes destined for incineration and managed according to the standards set by EPA should be covered by the exclusion.

If EPA fails to amend the scope of both the hazardous waste and solid waste exclusions, generators will likely be required to verify the presence of co-contaminants and determine whether the presence of co-contaminants void the exclusions. We encourage EPA to clearly state in the final rule that the proposed exclusion applies to all wipes, regardless of co-contamination.
Containers Used for Transporting Wipes

IPC supports the use of covered containers in lieu of closed containers. The use of covered containers compliments current manufacturing practices and provides the required level of environmental protection. The imposition of closed containers implies the use of a rigid container with a sealed lid. This would create an unnecessary compliance burden on facilities.

Intra-Company Transfers

IPC supports the inclusion of language allowing companies to self-transport used wipes and other materials to one central processing location. We propose that, similar to other EPA programs, the boundaries be set based on a contiguous property line. This demarcation policy is used by the Office of Air in their determinations regarding the air permitting of a facility. This practice should be allowed for both reusable as well as disposal wipes and other materials.

We do not support the inclusion of a one-time notification as it would not provide any environmental benefit. Nor do we support the need to maintain any types of records regarding the management of wipes. The recovered solvent, if a hazardous waste, is already covered under existing statute. No further reports or records should be required. Requiring training under this provision is also unnecessary. As the facility is often handling hazardous waste as well, this training requirement is already met.

Transport of these materials should not be limited to closed containers. As discussed above, the transfer of these materials is for the express purpose of consolidating the handling procedures. Because the movement is limited to a contiguous zone, the use of covered containers should be sufficient to minimize any environmental risk.

Speculative Accumulation and Time Limits

IPC opposes establishment of an accumulation time limit for either disposable or reusable wipes. In the proposed rule, EPA seeks comment on the applicability of 29 CFR 1910.106. This regulation, promulgated by the Occupational Safety and Health Administration (OSHA), applies to the storage of flammable and combustible liquids. Traditionally, used wipes are placed in safety cans or other containers that meet OSHA requirements while in the manufacturing area. We do not believe any further regulatory language need be included to address this issue.
Recordkeeping

IPC does not support the inclusion of any type of recordkeeping requirements. To the best of our knowledge, states that have adopted strict policies regarding the handling and disposal of used wipes, either reusable or disposable, do not require any type of recordkeeping or certification. Since current industry practices are based on state policies, EPA's proposed recordkeeping requirements would impose a new regulatory burden on facilities. EPA has clearly stated this proposal is a deregulatory action making the additional regulatory burden counter intuitive to the intent of the proposed rule. Further, EPA has not indicated an environmental benefit from the added recordkeeping responsibilities placed on the generator. Unless EPA can verify the environmental benefit derived from this additional regulatory burden, we cannot support any additional recordkeeping.

Proposed Conditions for Reusable Wipes

In our comments above, we addressed issues pertaining to the handling and disposal of both reusables and disposable wipes. Based on the requirements contained in the proposed rule, IPC supports the direction taken by EPA to codify existing state policy as the regulatory standard.

IPC does not support any additional labeling requirement for containers of reusable wipes sent off site for cleaning. We also do not believe it is necessary to place a numerical limit on the number of wipes sent off site on an annual basis for cleaning. Placing a limit on the number of towels that can be sent off site would adversely impact the manufacturing process.

Proposed Conditions for Disposable Wipes

Disposable Wipes Destined for Offsite Incineration
IPC is opposed to EPA's proposed labeling standard. The Department of Transportation's (DOT) Hazardous Materials Transportation Program requires all hazardous materials shipped to be properly labeled and placarded. IPC encourages EPA to defer to DOT shipping requirements for proper labeling of these containers.

Disposable Wipes Destined for Municipal Landfills
IPC believes that wipes destined for disposal in municipal landfill should, for future liability purposes, be held to a stricter standard. We also maintain that any program put in place must be simple and inexpensive to implement.

We do not agree with the provision requiring the disposal of wipes in separately labeled containers if the “dry” standard of 5 grams is met. A stated goal of this proposal is to encourage pollution prevention and waste minimization. The inclusion of a separate container and labeling standard for disposable wipes destined to be land filled will inhibit
waste minimization. The 5 gram standard was chosen because it falls within the range indicating no substantial hazard to human health and the environment. This is confirmed by EPA’s risk screening analysis. To meet this 5 gram standard, EPA is requiring that facilities either utilize high-performance solvent extraction technologies; maintain records showing the amount of solvent used per wipe is less than 5 grams; or conduct sampling to ensure the dry standard is met. All are rigorous tests designed to ensure that facilities meet the dry standard.

With the inclusion of these specific generator requirements, disposable wipes that meet the dry standard should be allowed direct disposal into the landfill. There are precedents set based on other EPA regulatory actions. For example, the empty container standard allows for the direct disposal of containers containing no more than one inch of product. 40 CFR 261.7(b) (1) provides specific instructions as to how a container is to be emptied. This regulation clearly states that if the container meets these criteria, it is not subject to the requirements contained in 40 CFR 261 – 265, including the standards set out for hazardous waste generators.

Similarly, the regulation of non-terne plated used oil filters allows direct disposal if certain management standards are met. Under 40 CFR 261.4(b) (13), oil filters meeting the specific performance standard to remove used oil can be disposed of as a solid waste. There are no labeling or special container requirements.

IPC believes the disposal of the one-time use shop towel is similar in nature to both the empty container or the non-terne plated used oil filter. Similar to the requirements established to determine an “empty” container and an “empty” oil filter, we believe the 5 gram limit constitutes a similar standard denoting that a shop towel is “empty.” The additional labeling and container requirements imposed for disposable wipes represents an additional regulatory burden that we believe is not justified based on previous EPA rulemakings and EPA’s risk analysis. Imposition of the dry standard meets the requirement to minimize environmental releases.

We also believe that requiring labeling and separate containers for disposable wipes destined for municipal landfills will create unnecessary burden on regulated entities. Facilities using a non-hazardous solvent can simply dispose of their wipes directly into the landfill, while at the same time they must label and accumulate in separate containers exempted contaminated wipes having met the dry standard. This will create additional regulatory burdens on facilities, especially small entities with limited space and resources, attempting to comply with the proposed rule.

**Excluded Solvents**
EPA has identified eleven solvents that cannot be placed into a municipal landfill. This exclusion is based upon an extensive risk analysis undertaken by EPA for this proposal. As a result of the analysis, these eleven solvents have been identified by EPA as posing a substantial hazard to human health and the environment if wipes containing even a
trace amount of the solvent were placed in a landfill. Since it is extremely difficult achieve zero concentrations, IPC recommends that EPA clearly state in the final rule language that the toxic characteristic, if available, for each of the solvents listed in this table be considered at the de minimis level. For those solvents without a toxicity characteristic, EPA should develop a de minimis concentration.

**Alternative Options**
EPA seeks comment on two alternative regulatory approaches to the proposal. The first would exclude both reusable and disposable solvent contaminated wipes from the definition of hazardous waste. Under this proposal, all other components of the proposed rule remain the same. IPC supports this alternative approach if the conditions for the handling and disposal of reusable towels are the same as specified in the current proposal.

The other option proposed would establish a single set of conditions for both reusable and disposable wipes. IPC believes this option is inappropriate given the differences in issues, risks, and environmental impacts associated with reuse, incineration, and landfill disposal.

**Conclusion**
IPC supports EPA’s efforts to develop a regulation establishing a level of consistency among state regulations. We also believe the proposed rule both addresses and resolves the issue concerning the definition of treatment as it is applied to the removal of solvents from wipes. The proposed rule states that removal of solvent from the towel does not constitute treatment. We fully understand that it remains the responsibility of the facility to correctly handle and dispose of the extracted solvent.

Another aspect to be fully considered when adopting a regulation is the economic and regulatory burden on the affected facility. As we discussed in our comments, there are several aspects that need to be clarified and/or changed in order to ensure that any new program does not cause an undue burden on facilities, especially small entities, generating used wipes.

We appreciate the opportunity to comment on this proposed regulation. If you have any questions, please do not hesitate to contact me.

Sincerely,

Fern Abrams
Director of Environmental Policy