

meet the toxicity characteristic, not because of the results of EPA's risk screening analysis. EPA's analysis finds that even when they have been through an advanced solvent-extraction process and contain less than five grams of solvent, the levels of these solvents in contaminated industrial wipes are likely to be higher than the regulatory levels indicated in 40 CFR 261.24. Therefore, these TC solvents are ineligible for disposal in municipal and other non-hazardous waste landfills because of their potential risk, as determined when

they were originally identified by EPA as TC wastes.

We are proposing that the remaining five solvents in Table 4 also be restricted from disposal in municipal or other non-hazardous waste landfills because EPA's risk screening analysis indicates that they may pose an unacceptable risk to human health and the environment when disposed of at levels lower than the 5-gram condition described in detail below.<sup>12</sup> Included in these five are three solvents that both meet the toxicity characteristic and that

were indicated in the risk screening assessment to pose an unacceptable risk (methyl ethyl ketone, nitrobenzene, and pyridine).

Table 5 contains the 19 listed solvents that were evaluated in the risk screening analysis and that would be allowed, under this proposal, to be disposed of in a municipal or non-hazardous waste landfill if they meet the "dry" condition. *Also see* Section VII for additional details on the results of our risk screening analysis.

TABLE 5.—LISTED SOLVENTS THAT MAY BE DISPOSED OF IN A MUNICIPAL LANDFILL UNDER TODAY'S PROPOSAL

Ethyl Ether	Carbon Disulfide	Isobutyl Alcohol	1,2-Dichlorobenzene
Acetone	Xylenes	Ethyl Acetate	1,1,2-Trichlorotrifluoroethane
Methanol	Cyclohexanone	Trichlorofluoromethane	1,1,1-Trichloroethane
Butanol	2-Ethoxyethanol	Methyl Isobutyl Ketone	1,1,2-Trichloroethane
Toluene	Ethyl benzene	Dichlorodifluoromethane	

Generators transporting their disposable industrial wipes to a municipal or other non-hazardous waste landfill must ensure that the wipes are "dry." For purposes of this proposed rule, an industrial wipe is considered "dry" when it contains less than 5 grams of solvent. EPA chose 5 grams to be the standard for this condition because it falls within the range found in our risk screening analysis to not pose a substantial hazard to human health and the environment. This is also within the range of what is achievable through use of advanced solvent-extraction processes. Generators can meet this condition either by using less than five grams of solvent per wipe or by putting used industrial wipes through an advanced solvent-extraction process capable of removing sufficient solvent to meet the 5-gram condition. Generators can do the following to meet the "dry" condition:

- Remove excess solvents by centrifuging or other high-performance solvent-extraction or -removal technology, for example, microwave solvent recovery processes or the Petro-Miser or Fierro processes;<sup>13</sup>
- Use normal business records, such as the amount of solvent used per month for wiping operations divided by the number of wipes used per month for solvent wiping operations, to show they are under the threshold;
- Conduct sampling to measure the amount of solvent applied per wipe before use; or

- Sample to measure the amount of solvent remaining on wipes when use is completed.

EPA is proposing that generators using advanced solvent-extraction technologies will be considered to have met the "dry" condition because EPA believes that when properly operated these technologies will remove sufficient solvent to meet the 5-gram condition. For example, with respect to centrifuge effectiveness, our evaluation of existing centrifuges from site visits and data provided by industry shows that well-operated centrifuges result in wipes that contain less than 5 grams of solvent per wipe. We have found that the other high-performance processes have the same or greater rate of success at removing solvents. Therefore, if a generator uses one of these advanced solvent-extraction technologies on industrial wipes, they would qualify for the hazardous waste exclusion. Using business records to calculate the average amount of solvent on each wipe would also be an acceptable way of assuring that each wipe would have less than 5 grams of solvent on it. Finally, EPA considers sampling, when done properly using representative samples, to be an appropriate way of demonstrating that a standard is being met.

#### b. Request for Comment

EPA is requesting comment on its proposed "dry" condition. Comments are requested particularly on our preliminary decision that certain

solvents contained in industrial wipes cannot be disposed of in municipal or other non-hazardous waste landfills. For example, should solvents which exhibit the characteristic of toxicity, but which were not found to pose a significant risk in our risk screening analysis for today's proposal, be prohibited from being sent to municipal or other non-hazardous waste landfills?

EPA is also requesting comment on what other high-extraction technologies not mentioned in this preamble could be used to meet the "dry" condition. Although we do not intend to promulgate a list of the only acceptable technologies, information on those that are appropriate for meeting the standard may be useful for future guidance.

In addition, as discussed in Section VII, our risk screening analysis identifies industrial wipes that pose an insignificant risk when disposed of in municipal or other non-hazardous waste landfills even though they contain solvents that meet the "no free liquid" condition, rather than the more stringent 5 gram condition (or "dry" condition). Nevertheless, to simplify the rule, we chose to propose that all industrial wipes containing solvents that can be landfilled under this proposal would be required to meet the "dry" condition prior to being allowed to be shipped to municipal or other non-hazardous landfills. The Agency requests comment as to whether we should allow industrial wipes containing solvents that pose insignificant risk when meeting the "no

<sup>12</sup> Methyl Isobutyl Ketone (MIBK) was also found to be ineligible by the risk screening analysis, but because MIBK is listed for its characteristic of ignitability and, therefore, when mixed with solid waste, is no longer hazardous waste unless it

continues to display its characteristic, a wipe containing it can be disposed of in a municipal or other non-hazardous waste landfill if it meets the other requirements.

<sup>13</sup> Descriptions of these technologies are found in the Technical Background Document. Mention of these processes is for descriptive purposes only and is not an endorsement of the products themselves.