contaminated soil, or leachate that is derived from managing the waste. In these cases, the mixture is still deemed to be the listed waste, either because of the derived-from rule, the mixture rule (40 CFR 261.3(a)(2)(iv)), or because the listed waste is contained in the matrix (see, e.g., 40 CFR 261.33(d)). The prohibition for the particular listed waste consequently applies to this type of waste.

The Agency believes that the majority of these types of residues can meet the treatment standards for the underlying listed wastes (with the possible exception of contaminated soil and debris for which the Agency is currently investigating whether it is appropriate to establish a separate treatability subcategorization). For the most part, these residues will be less concentrated than the original listed waste. By assuming that the values used to establish the treatment standard exhibit a lognormal distribution, the Agency is allowing for a reasonable amount of process variability in the generation and treatment of the waste. The waste also might be amenable to a relatively nonvariable form of treatment technology such as incineration. Finally, and perhaps most important, the rules contain a treatment variance procedure that allows a petitioner to demonstrate that its waste cannot be treated to the level specified in the rule (40 CFR 268.44(a). This provision provides a safety valve that allows persons with unusual waste matrices to demonstrate the appropriateness of a different standard. The Agency notes that to date it has not received any petitions under this provision (for example, for residues contaminated with a prohibited solvent waste), indicating, in the Agency's view, that the existing standards are generally achievable.

c. Residues from Managing Listed Wastes, or that Contain Listed Wastes, are Covered by the Prohibitions for the Listed Waste. In response to inquiries, EPA confirms its long-standing interpretation that residues (leachate, for example) that derive from treatment, storage, or disposal of wastes that were disposed before the effective date of the listing are nevertheless subject to the derived-from rule. These residues therefore could become subject to the land disposal ban for the listed waste from which they derive if they are managed actively after the effective date of the land disposal prohibition for the underlying waste. This result follows from direct application of the regulations and the statute.

First, hazardous waste listings are retroactive—that is, once a particular

material is identified as a hazardous waste, all of that material, no matter when disposed, is a listed hazardous waste (albeit, not subject to Subtitle C regulations if in an inactive unit, and not subject to the land ban if disposed of before the ban effective date and not removed or exhumed thereafter). See CERCLA section 103(c) (owners of inactive sites that handled hazardous waste identified or listed by EPA, where the identification or listing occurred after the site was closed, must still notify EPA of their existence); 46 FR 22146, 22149 (April 15, 1981) (same); RCRA sections 3004(d)(3), 3004(e)(3), and 3020(b) (application of RCRA) Subtitle C requirements to listed wastes and residues from CERCLA response actions, most of which involve wastes disposed of before the listing date); 50 FR 1994 (Jan. 14, 1985) (listing of dioxincontaining waste applies to waste and residues like contaminated soil, disposed before the listing effective date—and before the Subtitle C regulation effective date). Second, residues derived-from treating, storing, or disposing (including leaking—see, e.g. RCRA section 1004(3) and United States v. Waste Industries, Inc., 743 F.2d 159, 164 (4th Cir. 1983)), of these wastes are also hazardous by virtue of the derivedfrom rule.

Thus, residues from managing First Third wastes, listed California list wastes, and spent solvents and dioxin wastes are all considered to be subject to the prohibitions for the underlying hazardous wastes. As explained above, this result stems directly from the derived-from rule in 40 CFR 261.3(c)(2), or in some cases because the waste is mixed with or otherwise contains the listed waste. The underlying principle stated in all of these provisions is that listed wastes remain hazardous until they are delisted.

Nor is there any argument that a residue from managing a listed waste is not considered to be the listed waste. For example, the Agency's historic practice in processing delisting petitions addressing mixed residuals has been to consider them to be the listed waste and to require that delisting petitioners address all constituents for which the original derived-from waste (or other mixed waste) was listed. The language in 40 CFR 260.22(b) states that mixtures or derived-from residues can be delisted provided a delisting petitioner makes the identical demonstration that a delisting petitioner would make for the underlying waste. These residues consequently are treated as the underlying listed waste for delisting purposes. The statute likewise takes this position, indicating that soil and debris that are contaminated with listed spent solvents or dioxin wastes are subject to the prohibition for these wastes even though these wastes are not the originally generated waste, but rather are a residual from the waste's management (RCRA section 3004(e)(3)). It is EPA's view that all such residues are covered by the existing prohibitions and by the treatment standards for the listed hazardous waste that these residues contain and from which they are derived.

8. Transfer of Treatment Standards

In today's notice, EPA is proposing some treatment standards that are not based on testing of the treatment technology of the specific waste subject to the treatment standard. Instead, the Agency determined that the constituents present in the waste can be treated to the same performance levels as observed in other wastes for which EPA has previously developed treatment data. EPA believes transferring treatment performance for use in establishing treatment standards for untested wastes is valid technically in cases where the untested wastes are generated from similar industries or from similar processing steps. As explained earlier in this preamble, transfer of treatment standards to wastes from similar processing steps requires little formal analysis because of the likelihood that similar production processes will produce a waste matrix with similar characteristics. However, in the case where only the industry is similar, EPA more closely examines the waste characteristics prior to concluding that the untested waste constituents can be treated to levels associated with tested wastes.

EPA undertakes a two-step analysis when determining whether wastes generated by different processes within a single industry can be treated to the same level of performance. First, EPA reviews the available waste characteristic data for identifying those parameters which are expected to affect treatment selection. EPA has identified some of the most important constituents and other parameters needed to select the treatment technology appropriate for a given waste. A detailed discussion of each analysis, including how each parameter was selected for each waste, can be found in the background document for each waste.

Second, when an individual analysis suggests that an untested waste can be treated with the same technology as a waste for which treatment performance data are already available, EPA then