

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460**

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Mr. Mark Rein
Peoria Disposal Company
4700 N. Sterling Avenue
Peoria, IL 61612-9071

Dear Mr. Rein:

In your letter dated December 18, 1996, you requested that we make a regulatory determination as to whether or not the provisional elimination of the F032 waste code established by the final wood preserving modifications rule of December 24, 1992 (57 FR 61492) could be applied to soils which contain pentachlorophenol and are subsequently actively managed. The purpose of this letter is to inform you that this provisional elimination does not apply to soils contaminated by chlorophenolic formulations. Thus, these wastes would carry the F032 waste code.

The final wood preserving modifications rule established standards that could be met more practically by industry in an effort to provide regulatory relief while still maintaining a high degree of protection of human health and the environment. One aspect of this final rule was the provisional elimination of the F032 waste code [40 CFR 261.31 (F032 listing description) and 261.35]. This provision was developed after the Agency found problems with implementing earlier versions relating to the F032 waste in the wood preserving listing rule of 1990 (55 FR 50450, December 6, 1990). For reasons explained below, this provisional elimination of the waste code does not apply to contaminated soils.

Under the original 40 CFR 261.35, in the 1990 rule, if a facility switched to a non-chlorophenolic chemical formulation, such as creosote or copper-chromium-arsenic, while still using the same equipment, it would not have to identify its new process wastes as having the F032 waste code provided certain stringent equipment decontamination standards were met. The decontamination standards required that the new process wastes not show any levels of dioxin, the hazardous constituent for which F032 is listed. Subsequent to promulgation of the rule, it became clear that as plants attempted to clean equipment under these cleaning standards, full decontamination could not be achieved, since detection levels for dioxin are extremely low and any detected amount of residual dioxin would fail the test prescribed at 40 CFR 261.35. As a consequence, this residual dioxin would be carried over into the new formulation as a contaminant, and any new wastes generated from

RO 14197

this point on in the process also would carry the F032 waste code via the "derived from" rule under RCRA. This waste code-carry through presented a serious problem for facilities trying to eliminate dioxin entirely from their wastes. Although the levels of dioxin found were very low (almost undetected), the facility still would be required to dispose of its waste in an incinerator meeting a "six nines" destruction capability, which is a measurement of the device's destruction-removal efficiency (DRE) to destroy and remove 99.9999% of the contaminants. EPA did not believe such treatment was appropriate for these wastes.

In the December 1992 modification, the provisional elimination of the F032 waste code specified that a facility could switch to an alternative chemical and would not need to identify the wastes as having the F032 waste code, as long as the facility owner or operator continued to manage the wastes as listed hazardous wastes, i.e., F034 or F035 (or other). The Agency made a determination that the risks to human health and the environment would be acceptable since current management standards (40 CFR Part 265, Subpart W) were then (and now) in place for wood preserving operations, the new wastes still would be managed as listed hazardous wastes under RCRA, and risks due to the dioxin component would diminish further over time.

This reasoning does not apply to soils previously contaminated by F032 waste, consisting of waste pentachlorophenol or its constituents. Instead of the minimal cross contamination associated with wastes from equipment previously used for chlorophenolic formulations, these soils would be contaminated with the higher dioxin level associated with F032 wastes resulting from equipment only used with chlorophenolic compounds.

Further, from a risk standpoint it is inappropriate to allow the provisional elimination to apply to the remediation of soils that have been contaminated previously by chlorophenolic use. Dioxin is not mobile in soils and tends to accumulate in soils over time. Soils thus often are expected to contain high levels of dioxin. Therefore, application of the provisional elimination would not be appropriate to deal with these wastes. However, it must be pointed out that other provisions of EPA regulations would be applicable to soils remediated from storage yard areas that contain dioxin as a result of infrequent and incidental drippage. For storage yard drippage, we would advise you to consult the provisions of 40 CFR 264.570 and the applicable discussions in the December 24, 1992 preamble to the final wood preserving modifications rule (57 FR 61494,98). In general, storage yard soils contaminated with "infrequent or incidental" drippage (termed "kickback") would not be classified as soils containing wood preserving wastes if wood preserving plants develop and implement a contingency plan for immediate response to drippage. Immediate response occurs within one consecutive working day when a facility is operating, or with 72 hours of drippage in situations where facilities do not have adequate staff during down times, weekends, or holidays.

The contained-in policy also can provide relief from RCRA Subtitle C for soils previously contaminated with relatively low-levels of F032. The contained-in policy is intended to clarify the application of RCRA hazardous waste regulations to environmental media. Contaminated media are not considered solid wastes in the sense of being abandoned, recycled, or inherently waste-like as those terms are defined in RCRA regulations. However, environmental media that contain listed hazardous wastes must be managed as hazardous wastes because--and only as long as--they contain listed waste(s). EPA Regions and authorized states may apply the contained-in policy to determine site-, media-, and contaminant-specific levels at which environmental media contaminated with listed hazardous waste no longer contain that hazardous waste. Such "contained-in determinations" may be made before or after treatment of the contaminated environmental media and should include consideration of site-specific exposure pathways (e.g., potential for human exposure, soil permeability, depth to groundwater). More information on the contained-in policy can be found in the September 15, 1995 letter from Michael Shapiro, Director of EPA's Office of Solid Waste to Peter Wright of the Monsanto Company which can be accessed through the Internet at "www.epa.gov/correctiveaction."

I hope this information is helpful. Should you have additional questions, please contact Wanda Levine of my staff at 703-308-0438.

Sincerely,

Elizabeth A. Cotsworth, Acting
Director
Office of Solid Waste