PPC 9444.1984(10)

WASTEWATER TREATMENT EFFLUENT FROM PROCESSES THAT GENERATE K001 AND F006 WASTEWATER TREATMENT

25 JUL 1984

MEMORANDUM

SUBJECT: Regulation of Wastewater Treatment Effluent from Processes that Generate K001 and F006 Wastewater Treatment Sludge

FROM: John H. Skinner, Ph.D.
Director
Office of Solid Waste

TO: James H. Scarbrough, Chief
Residuals Management Branch
Air and Waste Management Division

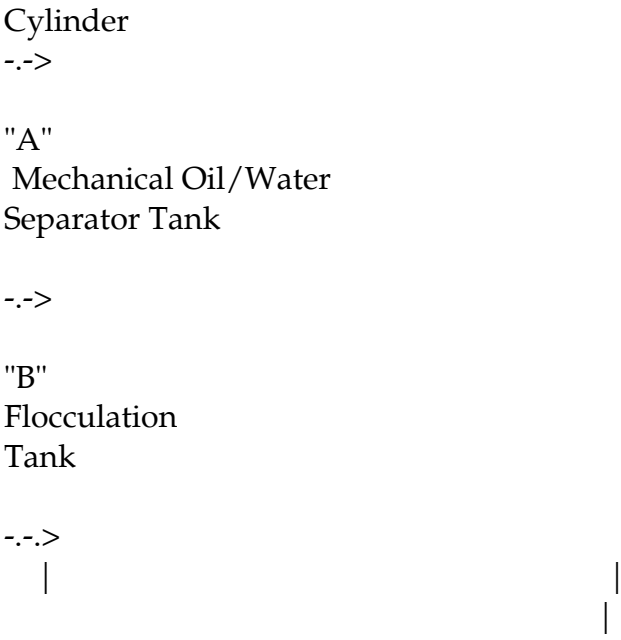
This memo is in response to your request dated May 21, 1984, concerning regulation of EPA Hazardous Waste Nos. K001 and K006.

First, you requested clarification of the listings K001 and F006 as to the scope of their coverage. These listings include any sludges derived from the treatment of wastewaters regardless of where the sludges are formed. Thus, if a sludge is formed in a wastewater treatment tank, filtration device, or surface impoundment, it is K001 or F006 sludge. These wastewater treatment units would be subject to all hazardous waste regulations, including appropriate permitting standards.*

* There is an exception: tanks that treat or store hazardous wastewaters are exempt from the Part 264 and 265 management standards when the tank is part of a wastewater treatment unit as defined in §260.10.

You also requested clarification of the regulatory status of the effluents from a particular wood preserving facility. The wastewater treatment train is illustrated schematically below:

Wood Preserving



The effluents from the oil/water separator tank (*A*) and the chemical flocculation tank (*B*) are not classified as the listed hazardous waste K001 after the listed hazardous wastewater treatment sludges have settled out, even though some flocculated material is carried along with the effluent stream. When the Agency listed wastewater treatment sludges from wood preserving processes, the Agency differentiated between sludges which settle out from successive treatments of process wastewaters and the wastewater stream itself. The wastewater effluents from these two tanks would, therefore, be subject to regulation only if they meet one or more of the characteristics of a hazardous waste, as set forth in §§261.21-261.24.

This facility next uses a sand filtration surface impoundment (*C*) to treat the wastewater effluent after oil/water separation

and flocculation. The sand filter consists of two 20 x 20 x 15 ft. surface impoundments, with natural clay bottoms, and sides constructed of preserved wood. The wastewater is added to the top of these units and collected as an effluent from the bottom, and sent to a holding pond (*D*) where additional wastewater treatment sludges are generated. Both the sand filter and the holding pond would be subject to all hazardous waste regulations and permitting standards since they are surface impoundments used to manage a hazardous waste (i.e., the sludge).

The principal regulatory question presented by this sand filtration unit is whether the wastewater that passes through the unit loses its status as "wastewater" and becomes "leachate" because it percolates through the listed sludge that has been trapped in the unit. We do not believe that the passage of a contaminated liquid (e.g., leachate, wastewater) through a filter should cause us to redefine what that liquid is, even though the filter may change the chemical makeup of the contaminated liquid. For purpose of our regulatory definitions, what comes out of a filter is the same thing that goes into the filter. A wastewater that passes through a filter in a treatment system is still a wastewater. That result is not changed by the fact that the filter happens to be a sand bed and the wastewater emerges from the bottom rather than the top of the treatment unit.*

The final step in the wastewater treatment system used by the wood preserving facility in question is a spray irrigation field (*E*). We are currently investigating the status of this unit to determine if it meets the definition of a land treatment unit, a surface impoundment, or a landfill. We expect to get back to you on this point in the near future.

The above discussion regarding wastewater treatment units, wastewaters, and the storage or disposal of hazardous wastewater treatment sludges wastes is also applicable to other facilities generating similar wastes.

* It should be noted that this approach also prevents an operator from placing a sand filter at the bottom of a landfill and then arguing that the liquid emerging from the bottom of the unit is no longer a leachate. Leachate emerging from waste in a landfill remains a leachate even after it has passed through a filter.