



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

June 22, 1994

Mr. David Nash  
Waste Engineering and Enforcement Division  
CT Department of Environmental Protection  
79 Elm Street - P.O. Box 5066  
Hartford, CT 06106

RE: Pfizer's Proposed Modifications to their Wastewater Treatment System.

Dear Mr. ~~Nash~~: *DAVE*

On June 9, 1994 US EPA was informed by CT DEP that Pfizer has been examining the feasibility of sending most of its hazardous waste to their new biological wastewater treatment system (WWTS) which, as proposed, includes two fluidized bed combustor units. These hazardous wastes would include those presently being sent to Pfizer's existing hazardous waste pyrolyzers. Wastewater treatment sludge<sup>1</sup> generated from the WWTS system would then be treated in the fluidized bed combustors. EPA would like to provide the following clarification on the wastewater treatment exemption, specifically the treatment of sludge, as it applies to the proposed modified treatment system at Pfizer.

In order to be covered under this wastewater treatment exclusion, sludge dryers must meet the criteria set forth in the definition of "wastewater treatment unit". One criteria of this definition is that the sludge dryer<sup>2</sup> must qualify as a tank as defined in 40 CFR §260.10. EPA has clarified the definition of tank for this exemption to include unit operations such as presses, filters and sumps. [Please refer to the enclosed EPA Headquarters letter dated March 12, 1986.] (The definition of wastewater treatment unit was also clarified and covers sludge digesters, thickeners, dryers, and other processing tanks.) A fluidized bed combustor is by definition an incinerator and not a tank-like device. These combustion units would therefore be subject to RCRA permitting as hazardous waste incinerators.

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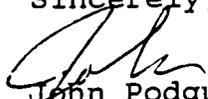
<sup>1</sup> Wastewater treatment sludge generated from the treatment of industrial waste that either exhibits a characteristic listed in Subpart C of 40 CFR 261 or derived from the treatment of a listed waste in Subpart D of 40 CFR 261 is a hazardous waste.

<sup>2</sup> Any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb of sludge treated on a wet-weight basis.



If you have any questions on this matter please contact James Gaffey at (617) 223-5542.

Sincerely,



John Podgurski, Chief  
CT Waste Regulations Section

cc:

James Gaffey, US EPA  
Steve Yee, US EPA  
Fred Friedman, LAI  
Dave Sattler, CT DEP

Enclosure



WASTE WATER TREATMENT /

SLUDGE DRYERS

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

MAR 12 1986

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

C. T. Philipp, P.E.  
President  
Water Management, Incorporated  
2300 Highway 70 East  
Hot Springs, Arkansas 71901

Dear Mr. Philipp:

In your letter of December 5, 1985 you requested that the Agency identify the Resource Conservation and Recovery Act (RCRA) status of sludge dryers that are part of a "conventional treatment system" not regulated by RCRA. You questioned whether adding a sludge dryer to a wastewater treatment unit exempted from RCRA permitting will jeopardize the exemption. The RCRA-Superfund Hotline correctly identified sludge drying for you as a treatment process according to the definition of treatment in 40 CFR §260.10. However, when sludge dryers meet the definition of wastewater treatment units, they qualify for the wastewater treatment exemption of §§264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v). In your case, adding a sludge dryer to treat sludge generated by a treatment system operating under a wastewater treatment exemption does not subject the treatment system to RCRA permitting.

As you know, sludge dryers must meet the three criteria in the definition of wastewater treatment unit in order to be part of a wastewater treatment exclusion. First, the information you sent shows that your sludge dryer qualifies as a tank as defined in §260.10; that is, it is designed to contain hazardous waste and is constructed primarily of nonearthen materials that provide structural support. Furthermore, the Agency has clarified the definition of tank--for this exemption--to include unit operations such as presses, filters, sumps, and many other types of processing equipment. (See the attached memorandum dated July 31, 1981, from John Lehman to Region I.) In addition, the preamble of the November 17, 1980, proposed rule (45 FR 76077-76078) clarified the definition of a wastewater treatment unit as follows:

This definition...covers...the sludge digesters, thickeners, dryers and other sludge processing tanks... in which hazardous wastewater treatment sludge is treated; and any...tanks used for the storage of such sludge.

Second, the sludge dryer treats or stores a wastewater treatment sludge which is a hazardous waste as defined in §261.3 (i.e., the sludge itself is a listed waste, derived from treatment of a listed waste, or is hazardous on the basis of characteristics identified in §261 Subpart C). This means that the treatment of sludges generated from wastewater treatment units is also exempt from regulation under the RCRA treatment standards.

Tanks (here a sludge dryer) that do not themselves have any discharge subject to regulation under Sections 402 or 307(b) of the Clean Water Act, but that are part of the wastewater treatment system, qualify for the exemption if other tanks in the treatment train have discharges that are subject to these Clean Water Act provisions. So the third condition, being part of a wastewater treatment unit subject to regulation under Section 402 or 307(b) of the Clean Water Act, can be met by sludge dryers in certain circumstances. However, as the November 17, 1980 preamble stated (45 FR 76077), even the proposed regulations...."may not provide adequate environmental protection where treatment of the hazardous wastewater tends to result in the escape of hazardous waste constituents into the atmosphere (e.g., the treatment of highly toxic volatile wastes in open tanks)." Unless the Administrator promulgates regulations covering wastewater treatment units, wastewater treatment tanks that qualify for exemption under current RCRA standards may volatilize their contents and retain the exemption.

Sludge dryers may be used as part of a program to meet the waste minimization requirements of Section 3002(b) of RCRA without requiring permitting if the above conditions are met. Of course, although exempted from permitting requirements in the wastewater treatment units, any hazardous waste sludge that is removed from the tanks is subject to applicable regulations under §§260-266, such as manifesting off site, permitted storage after 90 days, and so on. If you have any additional questions regarding this exemption for wastewater treatment units, please do not hesitate to call Irene Horner at 202-382-7917.

Sincerely yours,

J. Winston Porter  
Assistant Administrator

Enclosure

# SLUDGE DRYER

For all non flammable sludge produced by metal finishing, chemical processing or industrial waste treatment systems.



## Introduction

The WMI Sludge Dryer will reduce your operating costs and simplify compliance with the 1984 RCRA Act Amendments. Waste treatment has always stopped at the "Free Standing Solids" stage. Actually a Free Standing Solid is 70% to 80% water. For every ton of "hazardous" waste that you landfilled last year, up to 1600 pounds was pure water. Why pay "hazardous" waste disposal cost for water?

## System Benefits

- Cut RCRA disposal costs by 75%
- Operates on your available power - gas or electric
- Can operate without filter cake dumpsters
- State of the art mixers
- Sized to take a complete press load
- Pays for itself within months
- Delivery within 8 weeks of drawing approval
- Applications to fit largest or smallest needs

## Why WMI?

The realistic approach to sludge disposal is weight and volume reduction. Sludge disposal is the single most costly expense of your waste water treatment system. If your press produces 25% solids, you are land filling 75% water! WMI produces Sludge Cake Dryers that can reduce your sludge handling costs by 75%. Our units can be skid mounted and installed remote to your existing Waste Treatment System allowing standard waste cake carts to be utilized. A cart full of sludge cake can be dumped into the WMI dryer and then the cart returned to the sludge press. WMI can reduce labor costs and space requirements for sludge handling by installing the Dryer underneath the press.

## WATER MANAGEMENT, INCORPORATED

<b>WMI-Ohio</b> 2480 Broadway Ave. Cleveland, OH 44115 (218) 536-3090	<b>WMI-Arkansas</b> 2300 Hwy. 70 East Hot Springs, AR 71901 (501) 623-2221	<b>WMI-Georgia</b> 5304 Panola Ind. Blvd. Decatur, GA 30035 (404) 987-3248	<b>WMI-West</b> 3001 Redhill Ave. Esplanade I-107 Costa Mesa, CA 92626 (714) 641-2010
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