



Department of Energy

Washington, DC 20585

June 9, 2003

RCRA Docket Information Center
Office of Solid Waste
Environmental Protection Agency
Mailcode: 5305W
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Attention Docket ID No. RCRA-2002-0028

Dear Sir or Madam:

Re: 68 FR 17234, Revision of Wastewater Treatment Exemptions for Hazardous Waste Mixtures ("Headworks Exemptions"); Proposed Rule

On April 8, 2003, the U.S. Environmental Protection Agency (EPA) published a proposed rule, Revision of Wastewater Treatment Exemptions for Hazardous Waste Mixtures ("Headworks Exemptions"), in which EPA proposes to add benzene and 2-ethoxyethanol to the list of solvents whose mixtures with wastewater are exempted [under 40 CFR 261.3(a)(2)(iv)] from the Resource Conservation and Recovery Act (RCRA) definition of hazardous waste. The U.S. Department of Energy (DOE) appreciates the opportunity to comment on this proposed regulatory revision.

The enclosed DOE comments are divided into two sections: general and specific. The general comments address broad issues regarding the proposed rule. The specific comments address particular sections of the proposed rule. For clarity, each specific comment is preceded by a reference to the section of the proposed rule to which it applies and a quote of the text to which DOE's comment is directed.

If you have any questions or need further clarification of our comments, please contact Jerry Coalgate (at 202-586-6075; jerry.coalgate@eh.doe.gov) or Al Sikri (at 202-586-1879; atam.sikri@eh.doe.gov) of my staff.

Sincerely,

A handwritten signature in black ink that reads "Andy Lawrence".

Andy Lawrence
Director
Office of Environmental Policy and Guidance

Enclosure

U.S. DEPARTMENT OF ENERGY



COMMENTS ON
REVISION OF WASTEWATER TREATMENT EXEMPTIONS
FOR HAZARDOUS WASTE MIXTURES
“HEADWORKS EXEMPTIONS”

Notice of Proposed Rulemaking
68 *FR* 17234; April 8, 2003

U.S. Department of Energy
Comments on
Revision of Wastewater Treatment Exemptions for Hazardous Waste Mixtures
“Headworks Exemptions”
Notice of Proposed Rulemaking
(68 FR 17234-17250; April 8, 2003)

GENERAL COMMENT

In general, the Department of Energy (DOE) supports the proposed revisions and expansion of the headworks exemptions. Certain of the proposed changes, however, appear to be somewhat restrictive and inflexible to be of use to many generators. In particular, DOE suggests that the Environmental Protection Agency (EPA) revise the approach of limiting benzene discharges to an aerated biological wastewater treatment system, and allow for other wastewater treatment units (WWTU) to receive benzene discharges at their headworks when acceptable levels of treatment can be demonstrated. DOE also seeks clarification regarding several specific elements of the proposed rule.

SPECIFIC COMMENTS

I. II.A. Adding Solvents to the Headworks Exemption

1. p. 17238, col. 2: “That is, the Agency is proposing to add benzene to the solvents with a total 1ppm headworks limit under §261.3(a)(2)(iv)(A) and is proposing to add 2-ethoxyethanol (2-EE) to the 25 ppm total limit under §261.3(a)(2)(iv)(B). The exemption for benzene is conditioned on the use of aerated biological treatment units ...”

- a. EPA is proposing a conditional exemption that would allow the discharge of benzene at 1 ppm at the headworks of the WWTU. However, the exemption requires that, for wastewater containing benzene (used as a solvent), the wastewater must be treated using an aerated biological treatment system. The exemption further requires that, for any facility using benzene as a solvent, only lined surface impoundments or tanks be used prior to secondary clarification. DOE requests the Agency reconsider the proposed condition that mixtures containing benzene must be managed only in aerated biological wastewater treatment systems, and allow benzene to be discharged to the headworks of any WWTU (at the 1 part per million (ppm) total headworks limit) as is allowed for the other solvents listed in §261.3(a)(2)(iv)(A).

A WWTU operated at DOE’s Oak Ridge National Laboratory (ORNL) utilizes a combination of air strippers and granular activated carbon columns that remove organics, including benzene, as effectively as an aerated biological treatment

unit.¹ Moreover, the on-site treatability data for industrial wastewaters provided by EPA in the background document *Proposed Rule to Expand the RCRA Wastewater Treatment Exemptions for Hazardous Waste Mixtures; Technical Document, September 2002*, indicates that the majority of WWTUs have >90% median removal efficiencies, with most at 99% or higher. Only solvent extraction had a low median removal efficiency (<50%). DOE suggests the unrestricted wording of the existing exemption be retained and “benzene” be simply added as an additional listed spent solvent subject to the 1 ppm limit.

- b. DOE supports the inclusion of 2-ethoxyethanol to the headworks exemption under 261.3(a)(2)(iv)(B) at the 25 ppm limit. The exemption would encourage on-site WWTU management options that would be environmentally beneficial.

II.B. Revising Headworks Compliance Monitoring Method

1. p. 17241, cols. 2-3: “The Agency is proposing to expand the ways in which compliance with the headworks rule may be determined by adding the option of directly measuring solvent chemical levels at the headworks of the wastewater treatment system ... Facilities that choose to use direct monitoring must be subject to Clean Air Act regulations that minimize fugitive process or waste water emissions.”

DOE supports EPA’s proposal to allow an additional option to demonstrate compliance with the headworks exclusion. However, DOE is concerned with the component of the proposal that would limit use of the direct monitoring option to those “facilities” that are subject to Clean Air Act (CAA) regulations (40 CFR 60, 61 or 63).

The ORNL WWTU, and potentially WWTUs at other DOE facilities, may qualify for this exemption. The ORNL wastewater treatment unit is not itself subject to CAA standards, however, other operations at ORNL are subject to the CAA standards. DOE requests clarification of the meaning of the term “facility” with regard to the facility being subject to the CAA regulations. If EPA intends that the receiving WWTU must, itself, be subject to CAA regulations, this would limit the number of facilities that could utilize the alternative monitoring method at their WWTU headworks.

2. p. 17242, col. 2: “The Agency also seeks comment as to whether the overseeing agency should either approve a sampling and analysis plan, or require facilities to wait a certain period of time for agency review before embarking on a direct monitoring program.”

EPA is requesting input on whether to require its approval of sampling and analysis plans, to only require submittal of the plan, or to require facilities to wait a period of time

¹ Benzene is among the toxic organics that is monitored in the ORNL effluent under the National Priority Discharge Elimination System (NPDES) permit. Benzene has not been detected in the ORNL WWTU effluent in monthly monitoring results from February 1997 through April 2003. Total toxic organics in ORNL’s effluent has been consistently below 10 ug/L throughout that period.

before implementing the plan to allow for a review period by EPA. DOE supports a 30-day waiting period, to allow for overseeing agency review of the proposed sampling and analysis plan, before the facility implements that plan. If no concerns are raised by the agency at the end of the 30-day period, the facility should be allowed to proceed with direct monitoring without further delay or notification.

3. p. 17242, col 2: “If the sampling and analysis plan is rejected, or if the Director finds that facility is not following the sampling and analysis plan, the facility must no longer use the direct monitoring option until such time as the bases for rejection are corrected.”

DOE requests that EPA further address the comment resolution process for facilities whose plan has been rejected. The preamble discussion (on page 17242) implies that the facility cannot use the direct monitoring option until “the bases for the rejection are corrected.” In particular, DOE requests that EPA clarify the actions that need to be undertaken before the facility can restart its direct monitoring. For instance, would the facility need only to resubmit a plan that it believes corrects the rejection, or would the revised plan need to be approved by EPA?

4. p. 17242, col. 3: “EPA seeks comment on whether or not facilities are currently performing influent monitoring for other media programs.”

EPA requested information on influent monitoring at WWTUs. Influent monitoring at the ORNL WWTU includes flow rates, pH (3 times per day), total hardness (every 4 hrs), phenolphthalein (every 8 hrs), bicarbonate (every 8 hrs), organic sweeps [Total Organic Carbon and semi-volatile and volatile organic analysis totals (monthly)], and radiological sweeps (daily). Effluent monitoring is based on the National Pollutant Discharge Elimination System (NPDES) permit requirements, for example:

- a. Individual toxic organics are analyzed and the individual results above detection are totaled.
- b. The results of the total toxic organics detected are compared to the permit’s discharge limits for total toxic organics.
- c. Cyanide and toxic metals are also monitored at the WWTU discharge.

Benzene is among the toxic organics that is monitored in the effluent under the NPDES permit. Benzene has not been detected in the WWTU effluent in monthly monitoring results from February 1997 through April 2003. Total toxic organics in the effluent has been consistently below 10 micrograms/liter throughout that period.

II.C. Exempting Scrubber Water Derived From Solvent Combustion

1. p. 17243, col. 1: “The Agency is proposing that scrubber water derived from the combustion of spent solvents and sent to a facility’s wastewater treatment system for the

exemption under 40 CFR 261.3(a)(2)(iv)(A) and (B)....The Agency requests comment on this proposed revision.”

DOE supports EPA’s proposal to exempt scrubber waters derived from combustion of spent solvent wastes, in accordance with the proposed conditions of exemption delineated in 40 CFR 261.3(a)(2)(iv)(A) and (B).

II.F. Expanding the De Minimis Exemption

1. p. 17244, col. 2: “The Agency is therefore proposing that the *de minimis* eligibility be expanded to non-manufacturing sites that either (1) have a permit subject to the CWA that contains limits for (a) the constituents for which the waste was listed...By conditioning the expanded exemption on having a CWA permit that addresses the specific chemicals associated with the listed waste, EPA will help ensure that the waste water treatment systems at non-manufacturing facilities will effectively treat such chemicals...”

DOE supports EPA’s proposal to expand the *de minimis* exemption beyond manufacturing facilities and to expand the types of wastes included in that exemption. Non-manufacturing facilities should not be required to meet additional burdens that are not imposed on manufacturing facilities as part of the *de minimis* exemption. Non-manufacturing facilities, that discharge to CWA facilities, have their own discharge limitations that have been set by their NPDES permit or pretreatment programs under the CWA. If the revised *de minimis* exemption requires a CWA-basis (e.g., constituents defined in the permit), then that standard should be consistently imposed on both manufacturing facilities and non-manufacturing facilities. Additionally, DOE suggests that an option to use a general limit (e.g., total toxic organics) be made available under the *de minimis* exemption criteria for wastewater subjects to the CWA §§ 402 and 307(b) rather than confining it to chemical constituent-specific limits. As such, manufacturing and non-manufacturing facilities could be eligible for the *de minimis* exemption without having to necessarily modify its CWA NPDES permit for each chemical constituent (e.g., benzene) proposed for the exemption.