

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

JUN 09 2005

IN THE MATTER OF)
)
PETITION OF WASTE MANAGEMENT OF)
ILLINOIS, INC. FOR AN ADJUSTED)
STANDARD FROM SUBPART D OF)
35 ILL. ADM. CODE 721 AND FOR RCRA)
WASTE DELISTING UNDER 35 ILL. ADM.)
CODE 720.122 FOR TREATMENT RESIDUAL)
OF CID RECYCLING AND DISPOSAL)
FACILITY BIOLOGICAL LIQUID)
TREATMENT CENTER)

STATE OF ILLINOIS
Pollution Control Board

AS 05- 07
(Adjusted Standard – Land)

RCRA DELISTING ADJUSTED STANDARD PETITION

Waste Management of Illinois, Inc. ("WMII"), by its attorneys Pedersen & Houpt, P.C., pursuant to Section 28.1 of the Illinois Environmental Protection Act (the "Act"), 415 ILCS 5/28.1 and 35 Ill. Adm. Code Part 104, Subpart D, petitions the Illinois Pollution Control Board ("Board") to grant it an adjusted standard delisting the treatment residual generated at the CID Recycling and Disposal Facility.

INTRODUCTION

WMII operates the CID Recycling and Disposal Facility, 138th Street and I-94, Calumet City, Illinois ("CID"). CID is an integrated environmental complex which includes (a) landfills for solid, special and hazardous wastes, (b) soil biological treatment and recovery, (c) non-hazardous liquid and sludge solidification, and (d) leachate and wastewater treatment at the Biological Liquid Treatment Center ("BLTC").

The BLTC pretreats a variety of wastewaters from both on-site and off-site sources. Approximately 78 percent of the wastewater treated is generated by operations at CID. The majority of the wastewater is leachate or leachate/condensate mixtures (about 89 percent). Approximately 55 percent of the wastewaters treated are hazardous.

The treatment process at the BLTC yields waste solids and residuals, including a lime-conditioned filter cake ("treatment residual"). The treatment residual has been characterized by the application of a variety of hazardous waste codes. However, the actual characteristics of the treatment residual do not exhibit the characteristics of a hazardous waste. Hence, WMII seeks a more efficient and appropriate means of managing the treatment residual in light of its actual characteristics.

A. Standard From Which Relief is Sought (35 Ill. Adm. Code 104.406(a))

WMII seeks an adjusted standard from Subpart D of 35 Ill. Adm. Code 721 for the lime conditioned filter cake generated from the treatment of hazardous and non-hazardous leachate and wastewater at the BLTC, in accordance with the Waste Delisting Petition requirements set forth in 35 Ill. Adm. Code 720.122. These regulations originally became effective on or about May 17, 1982, and have been amended numerous times through July 17, 2003.

B. Statement of Applicability (35 Ill. Adm. Code 104.406(b))

Subpart D of Section 721 and Section 720.122 were promulgated in accordance with the USEPA and Illinois IEPA Resource Conservation and Recovery Act ("RCRA") hazardous waste programs.

C. Level of Justification (35 Ill. Adm. Code 104.406(c))

The requirements for waste delisting are found in 35 Ill. Adm. Code 720.122 (40 CFR 260.22). Specifically, the petitioned waste must not:

1. meet the criteria under which it was listed as a hazardous waste;
2. exhibit any of the hazardous waste characteristics; and

3. exhibit any other factor (including additional constituents) that could cause the waste to be a hazardous waste, unless it is determined that such factors do not warrant characterizing the waste as hazardous.

The requirements, and the demonstration that they have been satisfied, are described in the document titled "Waste Management of Illinois, Inc., CID Recycling and Disposal Facility, Biological Liquid Treatment Center, Treatment Residual Delisting Request, Information Submittal," Volume I, filed with this Board on January 28, 2005, under docket number AS 05-03 ("Delisting Request"), which is incorporated in this Petition and made a part hereof. As the Delisting Request is currently on file with the Board, WMII requests that the Board waive filing of the Request with this Petition.

D. Description of Petitioner's Activity (35 Ill. Adm. Code 104.406(d))

A complete description of the activity that is the subject of the proposed adjusted standard is set forth in Section 4 of the Delisting Request.

The activity occurs at CID and the BLTC. Hence, the area affected will be confined to the CID Property.

The number of persons employed varies based on the operational requirements at CID. An average of 32 persons are employed, including the six persons managing and operating the BLTC.

The BLTC began operation in November 1987, and is operated and permitted as a Centralized Waste Treatment Facility (35 Ill. Adm. Code 307.47 [40 CFR 437]), treating organic and oily wastewaters. The BLTC processes a variety of wastewaters from CID operations as well as from off-site sources. (Delisting Request, Tables 3-4.)

Relevant pollution control equipment already in use in the permitted operation is described in Section 4 of the Delisting Request. There are no significant emission control devices required or permitted through CID's Title V Air Permit.

The BLTC discharges a pre-treated liquid effluent to the Metropolitan Water Reclamation District of Greater Chicago under Discharge Authorization 12114-3.3. This Authorization reiterates the qualitative and quantitative requirements of the discharge in accordance with 35 Ill. Adm. Code 307.4704 (40 CFR 437.46).

E. Efforts necessary to comply (35 Ill. Adm. Code 104.406(e))

Since 1999, all of the treatment residual with the exception of one container (24,700 pounds) has been landfilled in Area 4, CID's permitted RCRA Subtitle C unit. The waste is tested and managed pursuant to the current CID operating permit (Delisting Request, Attachment 2), with the number of samples analyzed per year being determined by the quantity of residual produced. (Delisting Request, Table 7.) Area 4 is fast approaching its permitted capacity, and closure will most likely commence within 12 months. Once Area 4 reaches capacity, the only compliance alternatives to manage the petitioned waste will be off-site disposal at a RCRA Subtitle C landfill or incineration.

The costs for these compliance alternatives are presented below:

Disposal in a RCRA Subtitle C landfill

	Estimated cost per 30 cubic yard shipment	Estimated cost per year (25 loads avg.)
Transportation for Disposal	\$3,692	\$92,300
Disposal	\$2,313	\$57,825
Total Costs for Management by Subtitle C Disposal	\$6,005	\$150,125

Incineration

	Estimated cost per 30 cubic yard shipment	Estimated cost per year (25 loads avg.)
Transportation for Incineration	\$ 5,000	\$125,000
Incineration	\$10,500	\$262,500
Total Costs for Management By Incineration	\$15,500	\$387,500

Assumptions: Current on-site disposal has no external transportation or disposal costs.
 On-site disposal option not available after December 2005.
 Average annual volume generated = 733,200 pounds / 25 loads.
 Average weight of 30 cubic yard container = 30,000 pounds.

The proposed compliance alternative is disposal in a RCRA Subtitle D landfill. The costs for this alternative are as follows:

Disposal in a RCRA Subtitle D landfill

	Estimated cost per 30 cubic yard shipment	Estimated cost per year (25 loads avg.)
Transportation for Disposal	\$ 325	\$ 8,125
Disposal	\$1,000	\$25,000
Total Costs for Management By Subtitle D Disposal	\$1,325	\$33,125

Assumptions: Current on-site disposal option not available after December 2005.
 Average annual volume generated = 733,200 pounds / 25 loads.
 Average weight of 30 cubic yard container = 30,000 pounds.

F. Proposed adjusted standard (35 Ill. Adm. Code 104.406(f))

WMII proposes that the Board adopt the following adjusted standard:

The treatment residual generated at the CID Recycling and Disposal Facility, Biological Liquid Treatment Center, is not considered to be a hazardous waste as defined in 35 Ill. Adm. Code 721, when managed in an Illinois EPA permitted RCRA Subtitle D landfill unit in accordance with the following conditions:

1. Samples of the treatment residual shall be analyzed and evaluated to ensure that it does not exhibit the following:
 - Hazardous waste characteristic of ignitibility as identified in 35 IAC 721.121 (40 CFR 261.21);
 - Hazardous waste characteristic of corrosivity as defined in 35 IAC 721.122 (40 CFR 261.22);
 - Hazardous waste characteristic of reactivity as identified in 35 IAC 721.123 (40 CFR 261.23);
 - Hazardous waste characteristic of toxicity ("TCLP Hazard Criteria") as found in 35 IAC 721.124 (40 CFR 261.24);
 - A TCLP concentration for Nitrosodiethylamine greater than 0.0138 mg/l;
 - A TCLP concentration for Nitrosodimethylamine greater than 0.0111 mg/l.
2. Samples of the treatment residual shall be representative of the waste and shall be analyzed in accordance with the following schedule:

Number of Waste Shipments per Year	Number of Samples Analyzed
1-4 Shipments of Waste per Year	1 Confirmation Test Per Year
5-12 Shipments of Waste per Year	2 Confirmation Tests Per Year
13-24 Shipments of Waste per Year	3 Confirmation Tests Per Year
>24 Shipments of Waste per Year	4 Confirmation Tests Per Year

If a sample does not meet the adjusted standard, it must be managed as a hazardous waste (in accordance with 35 Ill. Adm. Code 721), or reprocessed and retested. If a sample does not meet the adjusted standard, the next five (5) boxes of the treatment residual will be sampled and analyzed in accordance with Condition 1 above. Each box of treatment residual must be in compliance with the adjusted standard, before the confirmation sampling schedule (Condition 2) may be resumed.

There are no additional efforts or costs necessary to achieve the proposed standard, as the treatment residual being petitioned for delisting satisfies the applicable delisting standards.

G. Quantitative and qualitative impact of compliance with existing regulations versus the impact of compliance with adjusted standard (35 Ill. Adm. Code 104.406(g))

The quantitative and qualitative impacts have been described in the detailed risk assessment and data evaluation presented in Section 7 of the Delisting Request. There should be no changes in any expected emissions or discharges from the BLTC other than those presented in the Delisting Request.

H. Justification of the proposed adjusted standard (35 Ill. Adm. Code 104.406(h))

Justification for the proposed adjusted standard is provided in Sections 5 and 7 of the Delisting Request.

The delisting requirements found in 35 Ill. Adm. Code 720.122 [40 CFR 260.22] include three criteria. Namely, the petitioned waste must not:

1. meet the criteria under which it was listed as a hazardous waste;
2. exhibit any of the hazardous waste characteristics;
3. exhibit any other factors (including additional constituents) that could cause the waste to be a hazardous waste, unless it is determined that such factors do not warrant characterizing the waste as hazardous.

With regard to the first criterion, the petitioned waste sampling results indicate that the waste does not meet the criteria for which it was listed (ignitibility and toxicity).

With regard to the second criterion, the petitioned waste sampling results indicate that the waste does not exhibit any of the hazardous waste characteristics. It does not exceed the

ignitibility (as identified in 35 IAC 721.121 [40 CFR 261.21]), corrosivity (as identified in 35 IAC 721.122 [40 CFR 262.22]), reactivity (as identified in 35 IAC 721.123 [40 CFR 261.23]), or toxicity criteria ("TCLP Hazard Criteria" – the regulatory threshold level, as found in 35 IAC 721.124 [40 CFR 261.24]). Further, the waste does not exceed any of the applicable Land Disposal Restriction limits, as found in 35 IAC 728.148 [40 CFR 268.48].

With regard to the third criterion, risk assessment modeling in accordance with the EPA Delisting Program: Guidance Manual for the Petitioner (USEPA, March 23, 2000), performed for the treatment residual, indicates that when the petitioned waste is disposed in a lined Subtitle D Landfill, the carcinogenic risk and the non-carcinogenic hazard of the petitioned waste are well within acceptable ranges, and therefore the petitioned waste does not pose an unacceptable carcinogenic or non-carcinogenic risk.

The analysis provided clearly demonstrates that the treatment residual has met all of the requirements for delisting.

I. Consistency with federal law (35 Ill. Adm. Code 104.406(i))

This Board may grant a delisting petition in accordance with the requirements of 35 Ill. Adm. Code 720.122 (40 CFR 260.22). Thus the Board may grant the proposed adjusted standard consistent with federal law.

J. Waiver of hearing (35 Ill. Adm. Code 104.406(j))

WMII waives hearing on this petition.

K. Supporting documents (35 Ill. Adm. Code 104.406(k))