



DIRECTIVE NUMBER: 9441.13(85)

TITLE: Disposal of Waste Electrolyte from Rechargeable
Nickel-Cadmium Batteries with a Potassium
Hydroxide Electrolyte

APPROVAL DATE: 5-15-85

EFFECTIVE DATE: 5-15-85

ORIGINATING OFFICE: Office of Solid Waste

☒ **FINAL**

☐ **DRAFT**

LEVEL OF DRAFT

- ☐ A — Signed by AA or DAA
- ☐ B — Signed by Office Director
- ☐ C — Review & Comment

REFERENCE (other documents):

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Key Words: Batteries, Corrosive Wastes

Regulations:

Subject: Disposal of Waste Electrolyte from Rechargeable Nickel-Cadmium Batteries with a Potassium Hydroxide Electrolyte

Addressee: R. Chudacek, Power System Division, McGraw-Edison Company
P.O. Box 28, Bloomfield, NJ 07003

Originator: David Friedman, Manager, Methods Program

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Summary:

This letter states that disposal of a waste electrolyte from rechargeable nickel-cadmium batteries containing a potassium hydroxide electrolyte into a municipal sewer does not constitute disposal under RCRA. Disposal of the spent electrolyte in another way would, however, constitute solid waste disposal under RCRA.

MAY 15 1985

Mr. R. Chudacek
Power Systems Division
McGraw-Edison Company
Post Office Box 28
Bloomfield, NJ 07003

Dear Mr. Chudacek:

I am writing in response to your letter of April 3, 1985 concerning the regulatory status of waste electrolyte from rechargeable nickel-cadmium batteries containing a potassium hydroxide electrolyte.

Two questions must be asked in order to determine if disposal of a given waste is regulated under the Resource Conservation and Recovery Act (RCRA). These are:

1. Is the waste or its disposal considered to be "solid waste disposal" within the meaning of RCRA?
2. Does the waste meet the definition of a hazardous waste (i.e., exhibits one or more characteristics of a hazardous waste or is a listed hazardous waste)?

In the case of the situation you described, disposal of the spent electrolyte into a municipal sanitary sewer does not constitute disposal under the RCRA. Such disposal is, however, subject to regulation under other environmental regulations and the disposer would have to check with their local sewage treatment authority for specific disposal restrictions.

Spent electrolyte disposed of in any other manner would be solid waste disposal within the meaning of the RCRA. Furthermore, from the information you presented, the spent electrolyte would likely exhibit characteristics of hazardous waste. In addition to being a corrosive waste (40 CFR 261.22), the spent electrolyte is likely to exhibit the characteristic of Extraction Procedure Toxicity (40 CFR 261.24). While neutralization would eliminate the waste's corrosivity, it may not change its status under 40 CFR 261.24.

I hope I have answered your questions to your satisfaction. Unfortunately, these answers may not be identical to those you might receive from State officials. Many states have been awarded authorization to conduct their own hazardous waste regulatory programs in lieu of the RCRA program. I thus urge you to contact those states in which disposal of the batteries might occur, in order to ascertain their status under the applicable State programs. If the State is unable to help you, I recommend contacting the applicable EPA Regional office. For your convenience, I am enclosing a list of State and EPA hazardous waste management offices and officials.

Sincerely yours,

David Friedman
Manager
Methods Program (WH-562B)

Enclosure