

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

November 1, 1996

Dr. Melvin L. Mouton
Intercontinental Terminals Company
P.O. Box 698
Deer Park, Texas 77536-0698

Dear Dr. Mouton:

EPA has reviewed your request for a "determination of equivalent treatment" as authorized by 40 CFR 268.42(b) for the sludges derived from the wastewater treatment of bulk liquid storage tank washings, line cleanings, shipboard ballast water, and other wastes.

Based on the information provided in your application and conversations between your staff and mine, EPA is approving the request for a "determination of equivalent treatment". The EPA agrees that combustion is not appropriate for this waste, due to the low concentration of constituents of concern that are accumulated in the sludges generated. Compliance with the replacement concentration-based treatment standards for the applicable waste codes should effectively minimize threats to human health and the environment. Compliance with these standards does not relieve the facility from compliance with any other applicable treatment standards associated with this waste. This standard does not replace any other applicable federal, state, or local requirements as specified in the facility's waste analysis plan.

Enclosed you will find our determination on your request. If you need further assistance, please contact Shaun McGarvey, Chemical Engineer, Waste Treatment Branch (703-308-8603).

Sincerely yours,

Michael Shapiro, Director
Office of Solid Waste

Enclosure

FaxBack # 11988

**Determination of Equivalent Treatment
40 CFR 268.42(b)
Notification of Acceptance**

Notification Number: OSW-DE011-1096

Requesting Facility: Intercontinental Terminals Company
Deer Park, Texas

Facility Address: 1943 Battleground Road
Deer Park, Texas 77536-0698

EPA Facility ID #: TXD073912974

Facility Representative: Dr. Melvin L. Mouton

Phone: (713) 884-0375

Date of Initial Request: June 13, 1996

Waste Description for Which Replacement Standard is Applicable:

Approximately 25 tons annually of WWT sludge from dissolved air floatation (DAF), clarifiers, digestors, lift stations currently being incinerated and approximately 408 tons of accumulated sludge solids.

Basis of Request:

The Applicant's WWTP sludge results from aggressive biological treatment of bulk liquid storage tank washings, line cleanings, shipboard ballast water followed by carbon adsorption, and other wastes for which the required Best Determined Available Treatment is incineration. The treatment train consists of neutralization, flocculation, dissolved air floatation, biotreatment, clarification, disinfection and final air stripping of the solvent residuals on to carbon filters. Sludges generated are dewatered, and heat dried for disposal. The applicants requests a Hazardous Waste Disposal Variance to enable the disposal of both sludges in a hazardous waste landfill without additional incineration prior to land disposal, because the sludges produced do not contain significant concentrations of the toxic constituents of concern. The proposed waste disposal location is Texas Ecologist (Robstown, Texas) Class 1 Hazardous Waste Landfill.

Previously Applicable Treatment Standard for Which Equivalency is Granted:

Waste codes of concern		Non wastewater
U 056	Cyclohexane	CMBST
U 154	Methanol	CMBST or 0.75 mg/l TCLP
U 113	Ethyl acrylate	CMBST
U 008	Acrylic acid	CMBST
P 069	Acetone cyanohydrin	CMBST
U055	Cumene	CMBST
U 057	Cyclohexanone	CMBST or 0.75 mg/l TCLP

Replacement Treatment Standards:

Waste codes of concern		Non wastewater
U 056	Cyclohexane	198mg/kg
U 154	Methanol	15.0 mg/kg
U 113	Ethyl acrylate	2.8 mg/kg
U 008	Acrylic acid	2.8 mg/kg
P 069	Acetone cyanohydrin	14.0 mg/kg
U 055	Cumene	0.14mg/kg
U 057	Cyclohexanone	15.0 mg/kg

Compliance with these standards does not relieve the facility from compliance with any other applicable treatment standards associated with these wastes. This standard does not replace any other applicable federal, state, or local requirements as specified in the facility's waste analysis plan.

Justification for the Equivalent Treatment Standard:

The EPA agrees that combustion is not appropriate for this waste sludge, because of its low organic hazardous constituent content. Hazardous organic constituents are biologically treated, stripped, and adsorbed on activated carbon as part of the wastewater treatment. As a result hazardous organic constituents are not present in concentrations sufficient to make aggressive destruction technologies such as combustion appropriate for the treatment of this waste. Combustion remains as the treatment for the spent carbon.

With the exception of acetone cyanohydrin (P069) each of the products was listed for ignitability only. Acetone cyanohydrin (P069) decomposes readily to toxic hydrogen cyanide and has not been measured in detectable levels in the wastes. All ignitable constituents are not detectable or are present

at less than 100 ppm. The waste must still comply with the treatment standards for all other applicable waste codes

Authorities and References:

This Determination of Equivalent Treatment is in accordance with 40 CFR 268.42(b) which states: “Any person may submit an application to the Administrator demonstrating that an alternative treatment method can achieve a measure of performance equivalent to that achievable by methods specified in paragraphs (a), (c), and (d) of this section. The applicant must submit information demonstrating that his treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the Administrator may approve the use of the alternative treatment method if he finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraphs (a), (c), and (d) of this section. Any approval must be stated in writing and may contain such provisions and conditions as the Administrator deems appropriate. The person to whom such approval is issued must comply with all limitations contained in such a determination.” This provision was further clarified in the preamble for the Land Disposal Restrictions for Third Third Scheduled Wastes; Final Rule (55 FR 22536 (June 1, 1990)) as follows: “When EPA requires the use of a technology (or technologies), a generator or treater may demonstrate that an alternative treatment method can achieve the equivalent level of performance as that of the specified treatment method [40 CFR 268.42(b)], this demonstration is typically both waste-specific and site-specific and may be based on: (1) The development of a concentration based standard that utilizes a surrogate or indicator compound that guarantees effective treatment of the hazardous constituents; (2) the development of a new analytical method for quantifying the hazardous constituents; and (3) other demonstrations of equivalence for an alternative method of treatment based on a statistical comparison of technologies, including a comparison of specific design and operating parameters.”

Attachments:

Effective Date: Date of Signature.

Dated: 11/1/96

Michael Shapiro, Director
Office of Solid Waste