



U.S. Environmental Protection Agency Applicability Determination Index

Control Number: Z960010

Category: NESHAP
EPA Office: Region 8
Date: 06/26/1996
Title: Benzene Waste Production
Recipient: Mount, Dana
Author: Hestmark, Martin

Subparts: Part 61, FF, Benzene Waste Operations

References: 61.341
61.342

Abstract:

Q. Does a source's calculation of total annual benezene waste generated need to include the tank water draws for each storage tank as points of generation?

A. Yes, the points of generation were correctly identified. In addition, the source should report a particular tank where material containing waste is accumulated, stored, or treated as a waste management unit.

Letter:

Dana Mount
Director, Division of Environmental Engineering North Dakota Department of Health 1200 Missouri Avenue P.O. Box 5520 Bismark, ND 58506-5520

RE: Concurrence with State of North Dakota's NESHAP applicability determination

Dear Mr. Dana Mount:

The Office of Enforcement, Compliance, & Environmental Justice has reviewed Amoco Petroleum Products, Mandan Refinery's interpretation of the Benzene Waste Operations NESHAP Subpart FF regulations and its applicability to their refinery's tank field operations.

This office has also reviewed the North Dakota Division of Environmental Health's response and concluding applicability determination.

EPA Region VIII concurs with North Dakota Division of Environmental Health on this matter. The points of waste generation are at the tank water draws for each storage tank. Tank 503 is a waste management unit as applied to the National Emission Standard for Benzene Waste Operations, 40 CFR Subpart FF. The calculation of this refinery's Total Annual Benzene should include these points of generation prior to Tank 503.

If you have any questions or need any further review, please contact Scott Whitmore of my staff at (303) 312-6317.

Sincerely,

Martin Hestmark, Director
Technical Enforcement Program, Office of Enforcement, Compliance, & Environmental Justice

Enclosures: Applicability request from Amoco Petroleum, Mandan, 3/11/96 Draft applicability determination, North Dakota Division of Environmental Health April 19, 1996

D.K. Litchfield
Manager, Environmental, Health, & Safety
Amoco Petroleum Products
Mandan Refinery
Post Office Box 5000
Mandan, ND 58554-5500

Re: Determination of Benzene NESHAPs Applicability to the Tank Water Draw System

Dear Mr. Litchfield:

This Department has reviewed your March 11, 1996 letter requesting a review of the refinery's current Benzene emissions reporting for the tank water draw system. To summarize your letter, various tanks located in the refineries' tank field transfer bottoms to a small product storage tank, Tank 503, where residual product is separated from solids, emulsions, and/or water. The refinery has been reporting the tank bottoms as separate waste streams for the annual TAB (Total Annual Benzene) report. Your interpretation of the Benzene NESHAP is that the product storage tank is part of an integral process unit, and the point of Benzene waste generation is the line leaving Tank 503 which drains to the refinery process sewer.

Per 40 CFR Part 61.341, the point of waste generation is defined as "the location where the waste stream exits the process unit component or storage tank prior to handling or treatment in an operation that is not an integral part of the production process, or in the case of waste management units that generate new wastes after treatment, the location where the waste stream exits the waste management component." If given that the tank bottoms exiting the individual storage tanks meet the rules' definition of waste streams, the reporting requirements are determined by the definition of Tank 503's relation to the product storage tank system.

In the Benzene NESHAP Preamble, Section III; Facility Applicability: B. Clarification on Point of Waste Generation - Definition of Point of Generation, which facilities are subject to control requirements is determined by the characteristics of waste streams at the point of generation. The Preamble states, " The point of generation of a stream is after it has left a process and prior to handling or management in a unit that is not integral to the process, including prior to processes that promote resource recovery. In general, and as discussed in the proposed preamble, the distinction between what is a waste management unit and what is a process unit is based on the material managed in the unit. If the material meets the definition of waste in the rule, then the unit is a waste management unit and the point of generation would be at a location prior to where the waste enters this unit. This is primary criterion for distinguishing waste management units from process units for the purposes of subpart FF." The section continues that in limited situations the material may meet the definition of waste, but never leaves the process unit. "This may be the case where materials are recycled within a process (e.g., product distillation reflux streams) or where materials are directly hard piped from one process to another without accumulation, storage or treatment." As this Department interprets your letter, material entering Tank 503 is accumulated, stored, or treated, and certain material streams entering the tank meet the definition of waste material. Therefore, Tank 503 is a waste management unit used to treat waste streams as defined in the Benzene NESHAP.

Further material definition is presented in section III.E. - Materials Recycled to a Process or Within a Process, of the preamble. This section contains: "To meet the definition of waste in the rule, a material must either be discarded or accumulated: stored, or physically, chemically, thermally, or biologically treated prior to being discarded, recycled or discharged." The test for whether materials recycled within a process or that are recycled directly to another process are subject to the rule is where they are accumulated, stored, or treated prior to recycling. If they are, they are subject to the rule." Again, Tank 503 meets the definition of a waste management unit.

Therefore, your initial interpretation of the rule was correct in reporting the point of waste generation at the tank water draws of the storage tanks. Tank 503 should also be reported as a waste management unit as defined in the Benzene NESHAP under 61.342., paragraph (c), subparagraph (1), item (iii). If you feel this issue needs further review, we encourage you to submit additional information justifying a definition of Tank 503's operation in regard to material treatment and handling. Any information regarding determinations for similar processes or units located nationwide would also aid this Department in re-reviewing a change in your current TAR reporting practices. Please be reminded that exempting the tank water draws may be precedent setting and subject to Federal EPA review.

If you have any questions or additional comments, please contact Mr. Steven Smokey of my staff at 701-328-5188.

Sincerely,

Dana K. Mount, P.E.
Director, Division
Environmental Engineering