

Memorandum

November 23, 2005

To: Gerald Brown
From: William Griffing *Griff*
Subject: Revised FESHM Chapter 8040.3 - Toxic Release Inventory Reporting (TRI) Program

Enclosed you will find revised FESHM Chapter 8040.3 - Toxic Release Inventory Reporting (TRI) Program is a new chapter developed to provide a framework for compliance with Section 313 of the Emergency Planning and Community Right to Know Act.

The chapter formally describes the components of the toxic release inventory reporting program that has been in place at Fermilab for several years. The chapter summarizes the requirements, including inventory and record keeping of all TRI chemicals and the reporting of those TRI chemicals used on site in quantities at or above regulatory threshold levels. Terms are defined, responsibilities are outlined and links to important guidance documents are included in the chapter.

After final approval, please return this approval page to Elizabeth May at MS119 for posting on the web.

Encl.

Recommended for Approval:

Gerald Brown

Gerald Brown
Date 11/29/2005

Approved:

Piermaria Oddone

Piermaria Oddone
Date 12/1/05

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TOXICS RELEASE INVENTORY (TRI) REPORTING PROGRAM

INTRODUCTION

This chapter describes the program that ensures that Fermilab will complete and submit an accurate and timely Environmental Protection Agency (EPA) "Form R" report summarizing releases of certain toxic chemicals, as defined by Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA), into the environment. For purposes of Section 313, reporting is not limited to unpermitted or accidental spills into the environment. Rather, it includes any method by which the facility allows a toxic chemical to enter an environmental medium such as air, water, or soil. Releases include transfers to offsite landfills or other treatment facilities, discharges to municipal sewer systems, direct additions of a toxic chemical to the environment through air emissions (including fugitive emissions), direct discharges to surface water, and onsite land filling or placement in other forms of impoundments.

Reports must be submitted annually to EPA by owners or operators of facilities that manufacture, process, or otherwise use chemicals listed in Section 313 at levels above regulatory defined thresholds. Section 313 allows owners or operators to rely on readily available data and reasonable estimates. If the owner or operator of a facility is required to report under Section 313, the following must be retained for 3 years from the date of submission: a copy of the report, all documents and materials used in determining that the report was required, and all supporting documents. Pursuant to Executive Order 13148, "Greening the Government through Leadership in Environmental Management," federal facilities, and therefore Fermilab, are required to comply with the reporting requirements of EPCRA Section 313 regardless of the federal facility SIC code.

Certain amounts of chemicals need not be factored into the threshold calculations due to a regulatory defined exemption for specific chemical uses. The categories of exemptions are the following: (1) General, Personal Use, and Intake Water or Air; (2) Facility Maintenance and Structural Components; (3) Vehicle Maintenance; (4) Laboratory (analytical testing) Activities; (5) De Minimis; (6) Articles; and (7) Coal Mining/Extraction. Because the application of these exemptions is not easily discernible, EPA published guidance documents in which specific scenarios and activities were examined to determine the applicability of the various exemptions. Two important guidance documents used to determine how and what Fermilab reports are: Revised 1998 EPCRA 313 Questions and Answers and EPCRA 313 Questions and Answers Addendum for Federal Facilities. It is advised that Sections/Divisions consult with the ES&H Section concerning the application of 'exemptions' as violations of Section 313 reporting requirements can result in civil penalties.

DEFINITIONS

Article means a manufactured item: (1) Which is formed to a specific shape or design during manufacture; (2) which has end use functions dependent in whole or in part upon its shape or design during end use; and (3) which does not release a toxic chemical under normal conditions of processing or use of that item at the facility or establishments.

Disposal means any underground injection, placement in landfills/surface impoundments, land treatment, or other intentional land disposal.

Establishment means an economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed.

Facility means all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person). A facility may contain more than one establishment.

Import means to cause a chemical to be imported into the customs territory of the United States. For purposes of this definition, to cause means to intend that the chemical be imported and to control the identity of the imported chemical and the amount to be imported.

Laboratory (for purposes of the regulatory defined 'Laboratory Activity Exemption') means those activities under the supervision of a 'technically qualified person' as defined in 40 CFR Section 720.3 Subpart ee. This may apply to a laboratory on site such as the radiation counting laboratory but does not apply to the overall Fermilab complex.

Manufacture means to produce, prepare, import, or compound a toxic chemical. Manufacture also applies to a toxic chemical that is produced coincidentally during the manufacture, processing, use, or disposal of another chemical or mixture of chemicals, including a toxic chemical that is separated from that other chemical or mixture of chemicals as a byproduct, and a toxic chemical that remains in that other chemical or mixture of chemicals as an impurity.

Mixture means any combination of two or more chemicals, if the combination is not, in whole or in part, the result of a chemical reaction. However, if the combination was produced by a chemical reaction but could have been produced without a chemical reaction, it is also treated as a mixture. A mixture also includes any combination which consists of a chemical and associated impurities.

Otherwise use means any use of a toxic chemical, including a toxic chemical contained in a mixture or other trade name product or waste, that is not covered by the terms "manufacture" or "process." Otherwise use of a toxic chemical does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:

- (1) The toxic chemical that was disposed, stabilized, or treated for destruction was received from off-site for the purposes of further waste management; or
- (2) The toxic chemical that was disposed, stabilized, or treated for destruction was manufactured as a result of waste management activities on materials received from off-site for the purposes of further waste management activities. Relabeling or redistributing of the toxic chemical where no repackaging of the toxic chemical occurs does not constitute otherwise use or processing of the toxic chemical.

Process means the preparation of a toxic chemical, after its manufacture, for distribution in commerce:

- (1) In the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance, or
- (2) As part of an article containing the toxic chemical. Process also applies to the processing of a toxic chemical contained in a mixture or trade name product.

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any toxic chemical.

Senior management official means an official with management responsibility for the person or persons completing the report, or the manager of environmental programs for the facility or establishments, or for the corporation owning or operating the facility or establishments responsible for certifying similar reports under other environmental regulatory requirements.

Toxic chemical means a chemical or chemical category listed in §372.65 of 40 CFR.

RESPONSIBILITIES

Division/Section Heads shall ensure compliance with applicable regulations by:

- Compiling and transmitting to the ES&H Section an annual list of all TRI chemicals in their areas that are "otherwise used" as defined by the regulations in quantities at or above the TRI reporting thresholds
- Determining, in consultation with the ES&H Section, and documenting the applicability of potential regulatory defined "exemptions" to TRI chemical reporting.
- Ensuring that their D/S Environmental Officer or a designee attends regular EPA sponsored TRI training.
- Ensuring that the list of TRI chemicals, as described above, in their D/S is submitted to the ES&H Section by June 1 for the previous calendar year.

ES&H Section Head shall:

- Maintain Fermilab site wide TRI chemical inventory information collected from all Divisions/Sections.
- Consult with Division/Sections to assist in exemption determinations.
- Coordinate communications with DOE and regulatory agencies regarding TRI issues, including submitting the annual TRI Form "R" report.

REFERENCES

The Emergency Planning & Community Right-To-Know Act (EPCRA); 42 U.S.C. 11001 et seq. (1986)

The Pollution Prevention Act (PPA); 42 U.S.C. 13101 et seq. (1990)

Title 40, Part 372, Toxic Chemical Release Reporting: Community Right to Know

Environmental Guidance on Emergency Planning and Community Right-to-Know Act Section 313 Toxic Release Inventory Reporting Questions & Answer Update, U.S. Department of Energy Office of Environmental Policy & Assistance RCRA/CERCLA Division (EH-413). Washington, D.C., May 2001, DOE/EH-413-0101

1998 EPCRA Section 313 Questions and Answers Document, U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics, Washington, D.C., December 1998, EPA 745-B-98-004

1999 EPCRA Section 313 Questions and Answers Addendum for Federal Facilities, U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics, Washington, D.C., May 2000, EPA 745-R-00-003