



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

AUG 04 2011

REPLY TO THE ATTENTION OF:

Michael J. Weiss
Site Manager
United States Department of Energy
Fermi Site Office
P. O. Box 2000
Batavia, Illinois 60510

Dear Mr. Weiss:

The United States Environmental Protection Agency is providing you with the following evaluation of the inspection conducted at the Fermi National Accelerator Laboratory (FERMILAB) on May 23, 2011. This inspection covered the National Emission Standard for Hazardous Air Pollutants rules for Radionuclide Emissions rules found at 40 CFR 61 Subpart H, and was limited to the information provided by interviews with staff, tour of emission points for the site, quality assurance documentation and written compliance demonstration reports submitted.

A review of the complete data package for the last two years National Emission Standards for Hazardous Air Pollutants for Radionuclides was conducted. Additionally there were informal interviews of personnel regarding any changes in process since the prior years' annual report.

Based upon EPA's review of the information provided, there appear to be no compliance issues related to the Radionuclide NESHAP. If you have any questions or need additional information, feel free to contact me at (312) 353-6686 or by electronic mail at murphy.michael@epa.gov.

Sincerely yours,

A handwritten signature in cursive script that reads "Michael H. Murphy".

Michael H. Murphy, Health Physicist
Air and Radiation Division

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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REPLY TO THE ATTENTION OF:

Site Visit and Inspection of
Fermi National Accelerator Laboratory (FERMI LAB)
Under 40 CFR 61, Subpart H

I. FACILITY IDENTIFICATION

A. Facility Location

Fermi Site Office
U.S. Department of Energy
Kirk Road and Pine Street
Batavia, Illinois 60510

B. Responsible Official

Michael J. Weiss
Site Manager
U.S. Department of Energy
Fermi Site Office
P.O. Box 2000
Batavia, Illinois 60510

II. DATE OF INSPECTION

May 23, 2011

III. PARTICIPANTS

A. Facility- USDOE

John Scott
Rick Hersemann
Berline Short

B. Facility- FERMILAB

Nancy Grossman
Martha Michels
Donald Cossairt
Vernon Cupps

Amber Larson
Eric Mieland
Kamran Vaziri

C. U.S. EPA
Michael H. Murphy

IV. **ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT**

CFR	Code of Federal Regulations
g	Grams
km	Kilometer(s)
µm	Micrometer, Micron (0.000001 meter)
MDL	Minimum detection Limit
mph	Miles Per Hour
N/A	Not Applicable or Not Available
NESHAP	National Emission Standard for Hazardous Air Pollutants
QA	Quality Assurance
QAPjP	Quality Assurance Project Plan
QC	Quality Control
SOPs	Standard Operating Procedures
U.S. DOE	United States Department of Energy
U.S. EPA	United States Environmental Protection Agency

V. **OBJECTIVE/SCOPE OF INSPECTION**

The objective of this inspection/site visit is to verify the compliance of the facility with the NESHAP rules for Radionuclide Emissions rules found at 40 CFR 61 Subpart H. The inspection consisted of interviews with staff that collect, compile, and analyze the data, a site evaluation of the stack sites where emission data is collected, a document review of SOPs along with the appropriate QA/QC, and a review of the annual compliance demonstration reports that have been submitted to U.S. EPA for the last two years.

VI.

FACILITY DESCRIPTION

Fermi National Accelerator Laboratory (FERMILAB) is located in Kane and DuPage counties in the greater Chicago area. It covers roughly 10.6 square miles (27.5 square kilometers) in an area, which is rapidly changing from agricultural to residential use. Approximately eight million people reside within 50 miles (80 kilometers) of the site. The communities of Batavia (population 23,866), Warrenville (population 13,363), and West Chicago (population 23,469) are within 2 miles (3 kilometers) of FERMILAB, based on 2000 Census figures. The terrain is generally flat as a result of past glacial action, with elevations ranging from 715 feet (218 meters) to 800 feet (244 meters) above mean sea level (MSL). The climate is continental, with a typical rainfall of about 35 inches (90 centimeters) per year. The facility consists of a series of proton accelerators used to conduct basic research in high-energy physics and related disciplines.

VII.

INSPECTION FINDINGS

A site visit/inspection, held on May 23, 2011 at the FERMILAB site in Batavia, Illinois, covered the NESHAP rules for Radionuclide Emissions from Department of Energy owned or operated facilities found at 40 CFR 61, Subpart H. During the inspection, a site tour was provided to obtain a better understanding of the location of the stack emissions, the sampling processes, and the site terrain. A copy of Fermilab's 2009 compliance demonstration submittal was compared to the information found during the site visit no detectable differences were found from the documents received by U.S. EPA last year. The current year's report is currently undergoing FERMILAB's managerial review prior to being sent to U.S. EPA to meet the required submittal date of June 30, 2011 for the previous calendar year.

The Quality Assurance/Quality Control (QA/QC) information provided by the staff at FERMILAB documented the procedures that are followed for sampling the radionuclide emissions being generated from the activities of the facility. The documents followed standard protocols for this type of document.

GENERAL FINDINGS

No compliance issues were noted at this time.