

JUN 13 2011

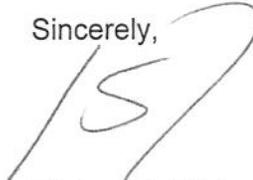
Mr. Mike Murphy, AE-17J
Radiation and Indoor Air Section
U.S. Environmental Protection Agency
Region V
77 West Jackson
Chicago, IL 60604-3590

Dear Mr. Murphy:

SUBJECT: CALENDAR YEAR (CY) 2010 RADIONUCLIDE AIR EMISSIONS ANNUAL
REPORT – FERMI NATIONAL ACCELERATOR LABORATORY (FERMILAB)

Enclosed for your information are two copies (one original) of the Fermilab CY 2010 Radionuclide Air Emissions Annual Report, prepared in accordance with the Environmental Protection Agency (EPA) regulations 40 CFR Part 61, Subpart H. The CAP-88PC computer code, Version 3.1.0.0, was used to estimate the effective dose equivalent to the public due to radionuclide air emissions from Fermilab accelerator operations. Please contact Berline Short, of my staff, at (630) 840-4197 if you have any questions.

Sincerely,



Michael J. Weis
Site Manager

Enclosure:
As Stated

cc: G. Ordija, IEPA, Des Plaines, IL., w/o encl.
E. Bakowski, IEPA, Springfield, IL., w/encl.
R. Rosnick, USEPA, Wash., DC, w/encl.
G. Vazquez, HS-22, FORS, w/encl.
S. Goel, SC-31.1, GTN, w/encl.

bc N. Grossman, Fermilab, w/signed Section III
J. Scott, FSO, w/o encl.
B. Short, FSO, w/encl.

<i>Radionuclide</i>	<i>Annual Quantity (Curies)*</i>
O-15	15.5
C-11	60.8
N-13	30.7
Ar-41	8.8
Br-77	1.1E-5
Br-82	1.6E-5
H-3	26.7
Total	142.5

*1 Curie=3.7E+10 Becquerels

SECTION III. DOSE ASSESSMENTS

Description of Dose Model

The effective dose equivalent to the public due to radionuclide air emissions is calculated using the computer program CAP88-PC (Version 3.1.0.0), a Gaussian plume diffusion model.

Summary of Input Parameters

1. Meteorological input for CY2010 was taken from an onsite monitoring station maintained by Fermilab. The population grid from the 2000 U.S. Census was used for calculating collective effective dose equivalent.
2. The default (Illinois average) values were selected for the agricultural data input.

Compliance Assessment

The total estimated dose to the maximally exposed individual offsite for the CY 2010 is
Maximum Effective Dose Equivalent: 0.0411 mrem/yr

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. (See, 18 U.S. C. 1001)

Name: Michael J. Weis, Fermi Site Manager, USDOE, Fermi Site Office

Signature: _____

Date: 6/10/2011