



Department of Energy

Ohio Field Office  
Fernald Closure Project  
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6027

AUG 4 2005

Mr. Michael Murphy, Health Physicist  
U.S. Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0297-05

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SR-6J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402-2911

Dear Mr. Murphy, Mr. Schneider, and Mr. Kurey:

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
ON THE APPROACH FOR THE PHASED REDUCTION OF PROJECT RELATED AIR  
MONITORS IN THE IEMP**

- Reference:
- 1) W. Taylor to M. Murphy, J. Saric and T. Schneider, "Transmittal of Approach for the Phased Reduction of Project Related Air Monitors in the IEMP," dated March 22, 2005
  - 2) Letter, T. Schneider to W. Taylor, "Comments – Approach for the Phased Reduction of Project Related Air Monitors in the IEMP," dated April 22, 2005
  - 3) Letter, J. Saric to J. Reising, "IEMP Air Monitor Reduction," dated June 16, 2005
  - 4) Letter, W. Taylor to J. Saric and T. Schneider, "Transmittal of Responses to OEPA Comments on the IEMP, Revision 4 and Associated Change Pages," dated March 25, 2005

This letter transmits the subject comment responses to U.S. Environmental Protection Agency (EPA) and OEPA. The comments on the Approach for the Phased Reduction of Project Related Air Monitors in the IEMP (Reference 1) were provided by OEPA (Reference 2). EPA provided approval on June 16, 2005 (Reference 3).

During 2005, several air monitors have been removed from service with approval from EPA and OEPA through several conference calls:

- January 31  
Radon monitors: KTOP and Silo 1 Headspace
- March 8  
Radon monitor: Silo 2 Headspace
- July 12  
Radon monitors: KNO, KSW-A, and KNW-A (Note: KSO relocated to the east of TLD location 47)  
TLD locations: 23A, 24, 25, 26, 43, 44, 45, and 46.  
Note: Also discussed in July 28, 2005 FRESH meeting.

As necessary, removal or relocation of air monitors will be communicated to the agencies via the weekly conference calls.

In addition, it should be noted that a separate correspondence is being prepared to outline and seek approval for the path forward for the remaining monitors (site boundary and background monitors). Submittals and subsequent approval will complete the required actions as identified in the Comment Response/Action #1 to OEPA Comments on the Integrated Environmental Monitoring Plan, Revision 4, Draft Final (Reference 4).

If you have any questions or need further information, please contact Ed Skintik at (513) 246-1369.

Sincerely,

  
William J. Taylor  
Director

FCP:Skintik

Mr. Michael Murphy  
Mr. James A. Saric  
Mr. Tom Schneider

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DOE-0297-05

Enclosure: As Stated

cc w/enclosure:

J. Reising, OH/FCP  
E. Skintik, DOE-OH  
J. Powell, DOE-LM  
J. Craig, DOE-LM  
C. Jacobson, Stoller, Inc.  
M. Lutz, Stoller, Inc.  
F. Bell, ATSDR  
M. Cullerton, Tetra Tech  
G. Jablonowski, USEPA-V, SR-6J  
T. Schneider, OEPA-Dayton (3 copies of enclosures)  
M. Shupe, HSI GeoTrans  
R. Vandegrift, ODH  
AR Coordinator, Fluor Fernald, Inc., MS78

cc w/o enclosures:

K. Alkema, Fluor Fernald, Inc., MS1  
S. Beckman, Fluor Fernald, Inc., MS20  
H. Bilson, Fluor Fernald, Inc., MS1  
J. Chiou, Fluor Fernald, Inc., MS88  
W. Hertel, Fluor Fernald, Inc., MS12  
M. Cherry, Fluor Fernald, Inc., MS77  
C. Murphy, Fluor Fernald, Inc., MS1  
D. Nixon, Fluor Fernald, Inc., MS1  
D. Powell, Fluor Fernald, Inc., MS64  
P. Spotts, Fluor Fernald, Inc., MS52-3  
C. Tabor, Fluor Fernald, Inc., MS12

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**RESPONSES TO  
OHIO ENVIRONMENTAL PROTECTION AGENCY  
COMMENTS ON THE  
APPROACH FOR THE PHASED REDUCTION OF  
PROJECT RELATED AIR MONITORS IN THE IEMP**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**

**AUGUST 2005**

**U.S. DEPARTMENT OF ENERGY**



4. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: A.1.2 Pg #: A.1-2 Line #: NA Code: C

Specific Comment #: 3

Comment: Change the text in Criteria 2 to state that the Waste Pit area footprint has been certified to meet FRLs.

Response: As indicated in Comment Response #3, more frequent monitoring of thorium was and has been performed to identify the impacts associated with excavating and processing the waste pits materials. The waste pits materials were excavated and processed from September 1999 through May 2005. The thorium-230 concentrations from the excavated and processed material ranged from non-detectable to 6,400 pCi/g. Environmental air monitoring for thorium-230 collected at the site boundary from October 2000 through February 2005 ranged from non-detectable to 0.00074 pCi/m<sup>3</sup>, with an overall average of 0.00005 pCi/m<sup>3</sup>. For comparison, if 0.00005 pCi/m<sup>3</sup> of thorium-230 were inhaled continuously (24 hours/day, 365 days/year) at the standard breathing rate, it would produce an effective dose equivalent of 0.12 millirem (mrem). 0.12 mrem represents 1.2 percent of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) limit of 10 mrem per year. The data from the site boundary monitors indicate that excavations and processing of thorium-bearing waste pits materials have not significantly affected compliance with NESHAP Subpart H limit of 10 mrem per year.

The removal of the waste pits liners and materials during certification processes should result in considerably lower environmental monitoring air thorium concentrations than those concentrations observed during actual excavation/processing of the waste. Therefore, monitoring could be addressed through the quarterly composite analysis as was done prior to waste pit excavations.

Action: No action required. After the criteria identified as part of Section A.1.2 are met, then the EPA and OEPA will be notified and provided with information pertaining to Criterion 3 (air inhalation dose calculated from the most current monthly or quarterly thorium data). Quarterly thorium analysis will continue on the filters collected at the site fenceline (boundary) and background locations to demonstrate NESHAP compliance.

5. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: A.2 Pg #: A.1-3 Line #: NA Code: C

Specific Comment #: 4

Comment: Change Criteria 1 to reflect that all waste from the Waste Pits and the Silos have been removed from the site.

Response: As of July 2005; DOE, EPA and OEPA have agreed that several of the radon monitors identified in Section A.2 could be removed from service (KTOP, KNO, KSW-A, and KNW-A). Note that in 1999, five radon monitors were added to the IEMP Silos area monitoring to account for the pending relocation of radium-bearing waste from the Silos to the Transfer Tank Area (TTA). With the movement of the material to the TTA completed; the Silos dismantled; and extensive project level monitoring being performed, some monitors under the IEMP have been removed. It is agreed that some of the monitors listed in Section A.2 should remain in service until all the waste from the Waste Pits and the Silos have been removed from the site. DOE will continue to work with EPA and OEPA on maintaining a limited monitoring infrastructure, while ensuring that construction and D & D activities continue.

Action: As noted in the comment response.

