



## Department of Energy

**Environmental Management  
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**Cincinnati, Ohio 45202**

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**FEB 22 2007**

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

EMCBC-00296-07

Mr. Thomas Schneider, Project Manager  
Ohio Environmental Protection Agency  
Southwest District Office  
401 East Fifth Street  
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

### **TRANSMITTAL OF RESPONSES TO THE ADDITIONAL OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON REVISION 0PCN1 AND THE FINAL CERTIFICATION REPORT FOR AREA 6 GENERAL AREA WEST, REVISION 1**

- References:
- 1) Letter DOE-0031-07, J. Reising to J. Saric/T. Schneider, "Transmittal of the Draft Certification Report for Area 6 General Area West," dated October 25, 2006
  - 2) Letter, J. Saric to J. Reising, "Area 6 General Area West Certification Report," dated November 8, 2006
  - 3) Letter DOE-0064-07, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to U.S. Environmental Protection Agency Comments on the Draft Certification Report for Area 6 General Area West," dated November 14, 2006
  - 4) Letter, J. Saric to J. Reising, "Area 6 General Area West Certification Report RTC," dated November 29, 2006
  - 5) Letter, T. Schneider to J. Reising, "Disapproval – Draft Certification Report for Area 6 General Area West," dated November 29, 2006
  - 6) Letter DOE-0091-07, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to Ohio Environmental Protection Agency Comments on the Final Certification Report for Area 6 General Area West, Revision 0," dated December 12, 2006

- 7) Letter, T. Schneider to J. Reising, "Comments – Response to Comments on the Certification Report for the Area 6 General Area West," dated January 3, 2007
- 8) Letter EMCBC-0201-07, J. Reising to J. Saric/T. Schneider, "Transmittal of Responses to the Additional Ohio Environmental Protection Agency Comments and Changes to the Final Certification Report for the Area 6 General Area West," dated January 16, 2007
- 9) Letter, T. Schneider to J. Reising, "Disapproval – Response to Comments to Ohio EPA Comments & Change Pages Final Certification Report Area 6 General Area West," dated January 25, 2007

Enclosed for your approval are responses to the additional Ohio Environmental Protection Agency (OEPA) comments and the final Certification Report for Area 6 General Area West, Revision 1. All comment responses have been incorporated into Revision 1 of the final report. U.S. Environmental Protection Agency (USEPA) has approved the response to their comments as noted in reference 4.

Please contact me at (513) 648-3139, if you have any questions or require additional information.

Sincerely,



Johnny Reising  
Director, Fernald Closure Project

Enclosures: As Stated

cc w/enclosures:

Jack Craig, EMCBC  
Robert Everson, EMCBC  
T. Schneider, OEPA-Dayton (three copies of enclosures)  
M. Cullerton, Tetra Tech  
M. Shupe, HSI GeoTrans  
S. Helmer, ODH  
AR Coordinator, Fluor Fernald, Inc.

cc w/o enclosures:

F. Johnston, Stoller

**ADDITIONAL RESPONSES TO THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY  
COMMENTS ON THE FINAL REVISION 0 PCN1  
CERTIFICATION REPORT  
FOR THE AREA 6 GENERAL AREA WEST**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**

**FEBRUARY 2007**

**U.S. DEPARTMENT OF ENERGY**



4. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.1 Pg #: 5-2 Line #: Code: C  
Original Comment #:

Comment: Delete the phrase, "and demonstrate that the levels of arsenic in the subsurface utility trenches are consistent with the area background conditions." The 40 ppm concentration is not within the background conditions and is clearly site related. The population when considered in whole may have a mean that falls within background range but the data when considering the 40 ppm is not consistent with background.

Response: Agree. The text will be revised.

Action: The text will be revised as recommended.

5. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.1 Pg #: 5-2 Line #: Code: C  
Original Comment #:

Comment: Recommend replacing the first sentence of the last paragraph with "Based upon the information provided above, regarding contaminant distribution and residual risk, the arsenic hot spot within CU01 does not warrant further remediation. "

Response: Agree.

Action: The text will be revised as recommended.

6. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.1 Pg #: 5-2 Line #: Code: C  
Original Comment #:

Comment: The last sentence suggests statistical evaluations discussed in Section 5.1 are provided within Appendix B. Appendix B was not provided with the change pages so it would seem that Appendix B does not include the statistical calculations looking at arsenic in subsurface background soils. The data and statistics used in this comparison should be provided within the Appendices.

Response: Agree. Note that the 95% confidence level values have changed in the text slightly due to a typographical error during transcription of the background data from the CERCLA/RCRA Soil Background Study to the statistical program. This does not change the original conclusion.

Action: The data and statistics will be provided in Appendix B.

7. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.2 Pg #: 5-3 Line #: Code: C  
Original Comment #:

Comment: This entire section discusses CU05 whereas previously on page 5-1 the CU with the As hot spot and certification failure is represented as CU01. The section needs to be revised to accurately describe the CU being evaluated in the risk assessment additionally a review to ensure the correct data were used in the risk assessment is necessary.

Response: Agree. The data was reviewed and CU01 contained the arsenic hot-spot.

Action: All references to CU05 in Section 5.2 will be corrected to CU01.

8. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.2 Pg #: 5-3 Line #: Code: C  
Original Comment #:  
Comment: Recommend revising the second sentence to read "...the trench was backfilled. The two plus feet of backfill significantly.."

Response: Agree.

Action: The text will be revised as recommended.

9. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.2 Pg #: 5-3 Line #: Code: C  
Original Comment #:  
Comment: The first paragraph references Figure 5-2 which is not included in the submittal. Additionally no reference to a Figure 5-1 is found within the preceding section 5 text. The document needs to be revised appropriately.

Response: Agree. There are no figures in Section 5. The reference to Figure 5-2 was a typographical error and the text should have referenced Figures 2-8 and 2-12.

Action: The text will be revised to reference the correct figures, Figure 2-8 and Figure 2-12.

10. Commenting Organization: Ohio EPA Commenter: OFFO  
Section #: 5.2 Pg #: 5-5 Line #: Code: C  
Original Comment #:  
Comment: The Exposure Duration was changed from CRARE, 70 to 30 years. The drop in years is inconsistent with the actual number of years that the population lives in the Fernald area, and it is inconsistent with the CRARE. One example is the Butterfield family who has been in the area since the 1800's. In addition when the number of years is shortened, each age range is cut in half. This suggests a constant moving of residents in and out of the area, which is not typical of the Fernald population.

Response: EPA (1989a) notes that national trends show most individuals do not live in a region of the country for more than 30 years. This reflects the EPA guidance to use the reasonable maximum exposure when performing risk calculations. Therefore, 30 years is used as the sum across the age groups for the undeveloped park user, with the years partitioned into 3 years for child, 6 for youth, 14 for adult and 7 for senior adult. However, DOE concurs that some residents in the Fernald area will spend their entire life in one residence. As the risk increases linearly with the increase in exposure duration, one need only multiply the 30-year exposure duration ILCR for the undeveloped park user (2.19E-05, Appendix E) by 2.33 (70/30) to obtain the total ILCR for a resident living in the area for 70 years (5.10E-05).

Action: The following text will be added to the report.

"However, some residents in the Fernald area will spend their entire life in one residence. As the risk increases linearly with the increase in exposure duration, one need only multiply the 30-year exposure duration ILCR for the undeveloped park user (2.19E-05, Appendix E) by 2.33 (70/30) to obtain the total ILCR for a resident living in the area for 70 years (5.10E-05)."

