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March 11, 2009

Ms Jane Powell
Fernald Preserve Manager
DOE-LM-20.1
10995 Hamilton Cleves Hwy
Harrison, Ohio 45030

**RE: RtCs – 2009 COMPREHENSIVE LEGACY MANAGEMENT AND
INSTITUTIONAL CONTROLS PLAN, REVISION 3 FINAL**

Ms Powell:

Ohio EPA has received DOE's responses to Ohio EPA comments regarding the "Transmittal of the 2009 Comprehensive Legacy Management and Institutional Controls Plan, Rev 3 Final", on January 23, 2009. Ohio EPA has reviewed DOE's responses and our comments are enclosed.

If there are any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Thomas A. Schneider for".

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

Cc: Tim Fischer, US EPA
Michelle Cullerton, Tetra Tech
Frank Johnston, Stoller

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**OHIO EPA COMMENS TO DOE RESPONSES ON THE
2009 COMPREHENSIVE LEGACY MANAGEMENT
AND INSTITUTIONAL CONTROLS PLAN
REV 3 FINAL**

General Comments:

1. Commenting Organization: Ohio EPA

Section: General Pg#: Line#: Code: C

Original Comment: #1

Comment: Our past experience with the Significant Changes Summary Sheet has always included more information on technical issues than with more recent Change Sheets. Some changes lack the detail necessary to clarify the issue.

The track changes need to be consistent. Not all "strike out" text was handled the same way. Some was completely removed and changed, some was moved to a different location in the document, some changes were written in black, and some in blue. The different authors of the different sections should agree upon a common method which allows the reviewer to realize changes to the document.

2. Commenting Organization: Ohio EPA

Section: General Pg#: Line#: Code: C

Original Comment: #2

Comment: Ohio EPA partially agrees with DOE's response on comment #2. Agreement was reached, in principle, of changing the scope of each quarterly OSDf inspection. However text was not revised, throughout the document to indicate to agreed changes. There are references to semi-annual OSDf inspections all through the document, including tables, appendices, and the Significant Changes Summary. For clarification, the OSDf inspections are still conducted quarterly. Full Cell walk downs are the only element which will change to semi-annual.

In addition, there is no mention of Cell One quarterly inspections in DOE's response or in the LMIC. Please include this information where appropriate, as it was agreed to continue conducting Cell One cap inspections quarterly due to revegetation issues.

DOE's response to Ohio EPA stated that they would not continue with the quarterly Cell 7/8 walk downs. However, Cells 7/8 were discussed during the February 10, 2009 conference call. It was agreed that monitoring of vegetation, with a close watch on erosion, regarding the interface between Cells 7/8 would continue quarterly.

Volume II – Institutional Controls Plan

3. Commenting Organization: Ohio EPA

Section: OSDf & Fernald Preserve Inspection Forms Pg#: Line#: Code: E

Original Comment: #16

Comment: The Maintenance and Repair Action Items form template was not included as agreed to in the RTC. Please include this form in future versions of the document.

**Volume II – Attachment B
 Post Closure Care and Inspection Plan**

4. Commenting Organization: Ohio EPA

Section: 3.5 Pg#: 3-8 Line#: Code: C

Original Comment: #22

Comment: The way inspections are currently conducted each inspector would need a camera to document the features listed in Table 3-5. Locating the feature with GPS coordinates would also be beneficial. The current use of flags to mark features has proven ineffective on numerous occasions. The tall vegetative cover on the OSDF prevents locating the flags at a later time. If an inspector could photo document and GPS the location the features would be able to be located in the future.

**Volume II – Attachment C
 Groundwater/Leak Detection and Leachate Monitoring Plan, OSDF**

5. Commenting Organization: OEPA

Section #: N/A Pg #: N/A Line #: N/A Code: C

Original Comment: #23

Comment: Under the water quality section of Table 1-1, the regulatory status should be changed to "proposed." In future versions of the GWMLP, the designation of "approved" for regulatory status will be reserved for monitoring parameters that have received both Ohio EPA and US EPA approval.

6. Commenting Organization: OEPA

Section #: N/A Pg #: N/A Line #: N/A Code: C

Original Comment: #23

Comment: Since Ohio EPA has rejected the proposed water quality analyses in Table 1-1, change the water quality entries in this table to read as follows:

Parameter Type	Parameter Description	Basis	Monitoring Frequency	Action Level	Action Level Units	Regulatory Status ¹
Water Quality	LCS Analysis for Full List Appendix I and PCB	Each Cell	Annual	N/A ²	N/A	Approved
	LCS, LDS, HTW, GMA Aqueous Sample Analysis for parameters listed in Table 2-2, Appendix B	Each Cell	Quarterly	N/A	N/A	Approved

1. Regulatory status (regarding description, basis, frequency, & action level) as of time of plan submittal for EPA/Ohio EPA review (e.g., "proposed" or "approved").
2. N/A: Not Applicable

Ms. Jane Powell

March 11, 2009

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7. Commenting Organization: OEPA

Section #: 3 Pg #: 3-6 Line #: 40 Code: C

Original Comment: #24

Comment: The technical problems with the x4 screening parameter were clearly articulated to DOE in Ohio EPA's comments on the Common Ion Study Report and in the associated conference call discussions. A restatement of these problems was provided once again to DOE in Ohio EPA's comments on the 2007 SER and again in the agency's response to DOE's comment response. For a review of these problems, please see the noted comments/responses. Because of the problems documented in these comments/responses, the 4:1 source to target criteria is inappropriate for use in the OSDF alternative parameter list definition strategy or in any other capacity in this document.

8. Commenting Organization: OEPA

Section #: 3 Pg #: 3-7 Line #: 35 Code: C

Original Comment: #25

Comment: Since upward trends in key monitoring parameters are occurring at the OSDF, there is no acceptable justification to reduce monitoring to once per year. Sampling should continue on a quarterly interval.

9. Commenting Organization: OEPA

Section #: 4 Pg #: 4-13 Line #: 18 Code: C

Original Comment: #26

Comment: The well locations shown on Figures 4-3, 4-4, and 4-5 continue to contradict the locations shown on Figure 4-2. Specifically, on Figure 4-2, Well 22204 plots south of its position on Figures 4-3, 4-4, and 4-5. A comparison of Figure 4-2 with Figure 2-1 from the 2002 Cell 1, 2, and 3 data package shows that Figure 4-2 correctly shows the location of Well 22204 and that Figures 4-3, 4, and 5 are incorrect. In addition, wells 22203, 22213, and 22217 are in different locations on Figure 4-2 than they are on the other figures. Please correct these figures as appropriate and verify that the correct well locations are used on all figures in the document.

10. Commenting Organization: OEPA

Section #: 4 Pg #: 4-13 Line #: 18 Code: C

Original Comment: #27

Comment: As indicated in the above response from Ohio EPA to Original Comment #24, the technical problems with the x4 factor have been discussed ad nauseam with DOE. Further, a path forward for the determination of a technically justified screening parameter has been discussed with DOE. This path forward has been communicated in the referenced comment from the agency, in previous comments, and in discussions. As stated previously, the x4 parameter is unacceptable for the reasons presented in the response to Original Comment #24.

11. Commenting Organization: OEPA

Section #: 5 Pg #: 5-1 Line #: 30 Code: C

Original Comment: #30

Comment: The Proposed Parameter List (see Table 3-4 in Appendix E) was approved but this approval cannot limit the capability to update the OSDF monitoring parameter

list based on the real data obtained by annually sampling the LCS for a more extensive list of constituents. Use of the LMICP Volume II Attachment C procedure to evaluate the results of this sampling will then identify only those constituents that may enhance leak detection capability. The annual LCS sampling for an extensive list of constituents is not "extra monitoring" but is required by law since the real list of leachate constituents for any landfill cannot be determined any other way.

12. Commenting Organization: OEPA

Section #: 5 Pg #: 5-1 Line #: 30 Code: C

Original Comment: #31

Comment: As noted in Ohio EPA's most recent responses in the comment/response dialogue on the 2007 SER, the Cell 1, 2, and 3 leachate analyses completed to date do indicate that the existing LCS constituent list can be reduced. As stated in the SER response, future analysis of LCS samples from Cells 1, 2, and 3 can be reduced to the following parameters:

- The two radionuclides shown on DOE's Proposed Parameter List,
- The 10 organic compounds from DOE's Proposed Parameter List, and
- The 32 inorganic constituents from the OAC 3745-27-10 Appendix I list.

With respect to Cells 4 through 8, after eight annual LCS sampling rounds have been completed for the full Appendix I and PCB list and this data has been evaluated in accordance with the LMICP Volume II Attachment C procedure, the analysis of additional LCS samples could transition to the above proposed list for Cells 1, 2, and 3, provided that the results of the procedure support this action.

13. Commenting Organization: OEPA

Section #: Appendix B Pg #: B-1 Line #: 21 Code: C

Original Comment#33

Comment: The well locations on this figure are inconsistent with the locations shown on Figure 4-2. Please correct this figure or Figure 4-2 (as appropriate) and verify that the correct well locations are used on all figures in the document.

**Volume II – Attachment C
Appendix B**

14. Commenting Organization: OEPA
Section #: Appendix B Pg #: B-1 Line #: 21 Code: C
Original Comment: #33
Comment: The well locations on this figure are inconsistent with the locations shown on Figure 4-2. Please correct this figure or Figure 4-2 (as appropriate) and verify that the correct well locations are used on all figures in the document.

15. Commenting Organization: OEPA
Section #: Appendix B Pg #: B-3 Line #: 23 Code: C
Original Comment: #34
Comment: See response to Original Comment #31.

16. Commenting Organization: OEPA
Section #: Appendix B Pg #: B-3 Line #: 24 Code: C
Original Comment: #35
Comment: See response to Original Comment #25.

**Volume II – Attachment C
Appendix C**

17. Commenting Organization: OEPA
Section #: Appendix C Pg #: C-2 Line #: 30 Code: C
Original Comment: #35
Comment: See response to Original Comment #31.

**Volume II – Attachment C
Appendix D**

18. Commenting Organization: OEPA
Section #: Appendix D Pg #: D-7 Line #: 17 Code: C
Original Comment: #39
Comment: Any changes to modify or suspend leachate management requirements must be substantiated by supporting leachate monitoring data that is both representative and complete.

**Volume II – Attachment C
Appendix E**

19. Commenting Organization: OEPA
Section #: Appendix E Pg #: E-14 Line #: 25 Code: C
Original Comment: #41
Comment: See response to Original Comment #31.

**Volume II – Attachment D
Integrated Environmental Monitoring Plan**

20. Commenting Organization: Ohio EPA

Section: 2.1 Pg#: 2-1 Line#: 21-22 Code: C

Original Comment: #45

Comment: Ohio EPA is in consultation with USEPA Division of Air & Radiation. The correct interpretation NESHAP Subpart H is that there is no language in the order that exempts DOE from continuing to monitor for radionuclides, indefinitely. Without explicit orders from the Director of the USEPA Division of Air and Radiation, DOE is to continue with compliance of Subpart H and submit the Annual NESHAPs Report by June 30 of each calendar year until 2011, as was previously agreed upon. Failure to submit the annual report may result in enforcement action being taken.

21. Commenting Organization: Ohio EPA

Section: IEMP Pg#: Line#: Code: C

Original Comment: #43

Comment: As noted in the Action section of the comment response, the sentence was added in order to include DOE Orders and other environmental regulations in a generic way. Notably excluded, are any references to addressing concerns of the community and stakeholders. This seems to be a recurring theme in DOE, i.e. moving away from making the concerns of the community and stakeholders a high priority, a position OEPA strongly opposes.

22. Commenting Organization: Ohio EPA

Section: IEMP Table 4-1 Pg#: 4-3 Line#: Code: C

Original Comment: #50

Comment: When something has not been identified or included previously, is there a justification for *not* including it now? If the reference is inappropriate, then an explanation as to why it is inappropriate should be stated. If it is not inappropriate, it should be included.

23. Commenting Organization: Ohio EPA

Section: IEMP/3.5 Pg#: 3-8 Line#: Code: C

Original Comment: #22

Comment: DOE has indeed received such expressions of concern. These concerns were generally made during public meetings by concerned community members. One of these concerns was captured in writing i.e., review the Public Hearing for the Master Use Plan (2/28/2002). There was extended discussion about people finding their way to the lakes on site fishing, and concerns about contaminated water in the lakes and potentially in the fish. Contrary to the response assertion, the public will be restricted to defined areas; the Public Hearing record demonstrates the folly of this assertion. This appears to be yet another example of lack of sensitivity of DOE to community concerns. Again, this is not the only instance in which these concerns were expressed by the public and it does show that DOE has indeed received such expressions of concern.

24. Commenting Organization: Ohio EPA

Section: IEMP Pg#: Line#: Code: C

Original Comment: #65

Comment: 1) See comment 3. 2) DOE states, "DOE does not agree that air monitoring should remain along the perimeter of the OSDF." DOE has never performed environmental air monitoring along the OSDF perimeter. DOE has no data to support that the maximum exposed individual would not be at the perimeter of the OSDF, where the majority of excavated soils and debris are stored. 4) The requirement for monitoring for air borne radionuclides is 10% of the 10 mrem/yr standard.

25. Commenting Organization: Ohio EPA

Section: IEMP/5.7.2 Pg#: 5-19 Line#: Codec

Original Comment: #66

Comment: See comments 3 and 4.

26. Commenting Organization: Ohio EPA

Section: Pg#: Line#: Codec

Original Comment: #67

Comment: 1) See comment #3. 2) Not only will biota be burned but lofting of soils from the fire may cause contaminants to become airborne. 3) The public is concerned about the release of radioactive contaminants during a controlled burn. Having data to support the contention that doses to the public from a controlled burn will be negligible would appear to be a best management practice.