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COMMENTS STP CONTAMINATED SOILS  
R.A.W.P.

02-20-92

OEPA/DOE-FO  
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LETTER



State of Ohio Environmental Protection Agency

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George V. Voinovich  
Governor

February 20, 1992

Re: COMMENTS STP CONTAMINATED  
SOILS R.A.W.P.

Mr. Jack Craig  
Project Manager  
U.S. DOE FEMP  
P.O. Box 398705  
Cincinnati, Ohio 45239

Dear Mr. Craig:

Attached are Ohio EPA comments on the Sewage Treatment Plant Contaminated Soils Removal Action Work Plan. In general we agree with the approach but have concerns about:

1. Using Risk Assessment Methodology.
2. Action Levels.
3. Off Property Contamination.
4. Minimizing the mixing of RAD and potentially HSL/Dioxin contaminated soils.

If you have any questions about these comments please contact me.

Sincerely,

Graham E. Mitchell  
Project Manager

GEM/ycr

cc: Section Manager, DERR T & PSS  
Jim Saric, USEPA  
Lisa August, GeoTrans  
Ed Schuessler, PRC  
Robert Owen, ODH

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**OHIO EPA COMMENTS - CONTAMINATED SOILS ADJACENT TO THE  
SEWAGE TREATMENT PLANT REMOVAL ACTION WORK PLAN**

GENERAL COMMENTS

1. In order to achieve the reduction of possible immediate risk to the public, DOE must prioritize the investigation and removal of contaminated soil from any off-property locations. The mechanism for achieving this goal needs to be developed further within this work plan. A lower action level for off-site contamination should also be considered.
2. The 100 pCi/g cleanup level seems inappropriate, since it does not even meet the NRC guidance concentrations provided on page 6 of the RSE. DOE should employ a lower cleanup level in association with the use of the on-site lab for screening samples.
3. Ohio EPA has found significant questions/problems with the risk assessment derivation of 100 pCi/g for a removal clean-up level. All reference to the development of this clean-up level via risk assessment should be deleted.

SPECIFIC COMMENTS

1. Section 1, pg. 3, Figure 2: Provide a scale for this figure. Does this figure accurately depict all fences in the area of the sewage treatment plant? What type of fence is in place at the east property line?
2. Section 1.1, pg. 4, para. 1: Change the typographical error "formerly" to "formally".
3. Section 1.3, pg. 6, para. 4: The field walkover procedures described in the work plan will miss contamination below the surface, such as the example in this paragraph. Propose a method to identify contamination at shallow depths and in areas of obvious disturbance of the ground surface to 6 feet.
4. Section 1.3, pg. 7, partial para.: Are all of the areas of "higher concentrations" within a fenced area?
5. Section 1.2, pg. 6, para. 2: Is it possible that the relatively high concentrations of uranium (25,670 and 2,376 pCi/g) are the result of ash disposal or spillage from the incinerator? What were the historical procedures for handling incinerator ash and sewage sludge.
6. Section 2.0, pg. 8, para. 1: Why not sample prior to regrading and reseeding the excavated areas. This would save doing it again if additional excavations are necessary.

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7. Section 2, pg. 8, para. 2: How were the boundaries for the study area established?
8. Section 2, pg. 8, para. 2: What radionuclides will the NaI detector effectively survey? What radionuclides will it not effectively survey?
9. Section 2, pg. 9, para. 2: Explain in detail how the hand held radiological instrumentation can be correlated to 100 pCi/g total uranium in soils.
10. Section 2.1, pg. 10: All materials excavated in Phase I should be analyzed for HSL contaminants and dioxins. Until these analytical results are received, these soils should not be mixed with other contaminated soils. This may reduce the volume of potential mixed waste and dioxin contaminated RAD soils.
11. Section 2.1, pg. 10, para. 4: Change the typographical error "isotropic" to "isotopic".
12. Section 2.1, pg. 10, para. 4: Does "above background level" refer to the 100 pCi/gm for uranium or the organic vapor analyzer readings?
13. Section 2.1, pg. 11, para. 1: Explain what procedures will be followed to avoid grading more highly contaminated soils into a less contaminated excavated area. Clearly explain in the work plan if areas will be graded/backfilled before analytical results are received from Phase II sampling.
14. Section 2.1, pg. 11, para. 1: Containerized soils should be analyzed for dioxins.
15. Section 2.2, pg. 11, para. 3: Explain in the rationale for collecting samples for HSL analyses only in the northwest and southeast portions of the study area. Past waste management practices would, at a minimum suggest that HSL contamination might be found in locations close to structures in the sewage treatment plant area and incinerator area.
16. Section 2.2, pg. 11, para. 3: Explain the rationale for only collecting dioxin samples in locations immediately adjacent to the incinerator. Describe the exact sample locations.
17. Section 4.0, pg. 13: Since this is a removal action, DOE may wish to consider different Data Quality Objectives than are appropriate for RI/FS investigations (i.e., unapproved labs for quicker turnaround). The only data that should be of RI/FS quality is validation sampling conducted following the removal action.

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18. Appendix I, Figure 1: Two sample locations are labeled "1443". Correct this error.
19. Appendix I, pg. 4, para. 3: Explain how the information in this paragraph has been incorporated in the strategy and procedures in the removal action work plan.
20. Appendix II: Provide a discussion of the methods to arrive at the correlation for roughly equating cpm data to radionuclide concentrations.

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