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COMMENTS R.A. #17

04-29-92

OEPA/DOE-FN

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LETTER



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George V. Voinovich
Governor

April 29, 1992

RE: COMMENTS R.A. #17

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

Dear Mr. Craig:

Listed below are part of Ohio EPA's comments on the Improved Storage of Soil and Debris Removal Action Work Plan. Comments from our Hazardous waste Group will be available within the next 14 days. Ohio EPA agrees with the basic approach of this removal action but many of the details need additional work.

General Comments

1. Ohio EPA suggests, if OU5 Treatability Study produces an early successful result showing a significant portion of soil can be cleaned, that DOE consider developing an EE/CA for soil treatment and initiate treatment of soils as part of a non-time critical removal action. As shown by the necessity of Removal Action 17, the stockpiling of soils at the FEMP is becoming an overburdensome problem and it would appear that treatment prior to the issuance of a ROD is justified. DOE needs to investigate the potential for expediting treatment of soils in addition to its efforts to better store contamination soil. How can such an effort be coordinated with the integrated demonstration for soils at Fernald?
2. This removal action work plan fails to incorporate the concept that soils can be non-hazardous but still pose a significant risk and require cleanup. The work plan defines a hazardous substance within Section 1.3 but never again refers to them. DOE must incorporate a process of preventing the dilution/dispersion of soil significantly contaminated with a hazardous substance but not defined as a hazardous waste. This issue is a primary shortcoming of this work plan.
3. The removal action work plan must include a discussion of solid wastes and how soils may be considered solid wastes. This is especially true for petroleum contaminated soils from UST removals.
4. The removal action work plan must incorporate radionuclides in addition to uranium. Basing segregation solely on the level of uranium is unacceptable. The levels of thorium and radium at a minimum should be included in determining action levels.

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5. This removal action should not be constructed by DOE as a justification for limiting or cutting back on shipments of contamination material to off-site disposal locations. Present procedures call for boxing >100 pCi/g soil and preparing it and contaminated debris for shipment. DOE appears to be moving away from this procedure under this work plan. DOE needs to at least maintain and hopefully increase the shipment of materials ready for disposal.

Specific Comments

1. Section 1.3, pg. 4: DOE needs to include a definition of solid waste as it applied to this removal action.
2. Section 1.3, pg. 4, UST: Petroleum contaminated soils from UST removals may be considered a solid waste under Ohio Law (see attached policy). The potential for this soil to a solid waste needs to be included in the definition.
3. Section 2.2, pg. 1, Phase I:
 - a. This section should include DOE's rationale for using the 100 pCi/g action level. The document generally fails to include a sufficient justification for the use of the 100 pCi/g of uranium action level.
 - b. It is not clear why DOE has chosen to overlook its previous policy of dividing uranium contaminated soils into three types: <35 pCi/g; >35 pCi/g & <100 pCi/g; DOE needs to discuss its previous procedures and why it will change them within the justification for the 100 pCi/g action level.
4. Section 2.2, pg. 1, 3rd Paragraph: Please provide more detail as to what is "current policy" for the management of soil piles (eg. attach SOP).
5. Section 3, pg. 1, 2nd Paragraph: DOE should not indicate that any preselection of the final remedial action has taken place.
6. Section 3.1.1, pg. 2: The AOC concept should not be used to allow contaminated soil to be transferred from one area of the site to another for use as backfill. DOE must realize the complexity of trying to develop a complete RI report while soil may be transferred from one area of the site to another. As stated in previous comments on this document and others DOE must be aware of the potential for soil to be contaminated and act as a source area without being a hazardous waste. DOE needs to develop a procedure to prevent the dispersal of various hazardous substances

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across the site. This is especially important in light of the fact that organic and inorganic contaminated soils may require different treatment options.

7. Section 3.1.1, pg. 2, bullets: It would appear that benefit bullets 1) and 2) are contradictory, if source soils contaminated with hazardous substances are allowed to be used for backfill anywhere within the AOC.
8. Section 3.1.1, pg. 4, AOC B: The proposed AOC B covers five operable units and a very diverse assortment of contaminants and contaminant levels. It does not seem reasonable to consider the contamination in the K-65 silo berms and the waste pit soils to be contiguous with that in the solid waste landfill soils. DOE needs to reconsider the boundaries of this AOC.
9. Section 3.1.1, pg. 4, AOC C: No evidence or data is provided to suggest that contamination is contiguous across the production area. Ohio EPA is concerned that DOE will be allowing hazardous substance contaminated soils to be placed in areas which were not previously contaminated with these substances. The need to keep various contaminants separate becomes more important as we near the completion of RI reports and develop treatment options for the soils.
10. Section 3.3, pg. 9, last Paragraph: DOE may wish to consider using HSL analysis instead of TCLP for initial characterization, then if HSL concentrations warrant run TCLP. This procedure is likely to be more cost effective and allow for a better hazardous substance characterization of the soils. TCLP data will be limited in its usefulness for hazardous substance characterization due to higher detection limits and leachability requirements.
11. Section 3.4.2, pg. 11, last Paragraph: It appears acceptable to Ohio EPA to place contaminated soil back into the hole from which it was removed. Allowing hazardous waste substance contaminated soil to be used as backfill anywhere within the AOC's, as currently defined, is unacceptable.
12. Section 3.4.2, pg. 15, 1st Paragraph: DOE should not allow and should stop if already occurring the redistribution of contaminants around the site via the use of contaminated soils for backfill. Ohio EPA's concerns with the redistribution of contaminated soils has been expressed in 3 our comments on numerous previous DOE submittals.

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13. Section 3.4.5: See attached petroleum contaminated soil policy.
14. Section 3.4.6, pg. 16: Please provide more detail as to what "shipped on site for management: entails.
15. Section 3.6.1, pg. 20, 1st Paragraph:
 - a. This paragraph is somewhat confusing with the multiple types of debris. It may be less confusing if broken up into several paragraphs.
 - b. Why is a pile needed for non-recoverable, uncontaminated debris? This material should be moved off-site for proper disposal. If the material is piled on-site, it is likely it will become contaminated and need to be dealt with during remediation.
16. Figure 3-4, pg. 21: It is unclear from this figure where decontamination of debris fits in. Please include debris decontamination in the figure.
17. Figure 3-5, pg. 22: See the preceding comment.
18. Section 3.6.3.2: Is it DOE's intention to decontaminate this debris to a level of free release for disposal? And is this an effective/efficient strategy if the debris will have to be disposed of anyway? DOE needs to provide more detail within the work plan concerning the strategy for this debris.
19. Section 3.6.3.4, pg. 25: What is DOE's current practice for disposal of PCB contaminated and PCB/Rad contaminated debris?
20. Section 3.6.3.5, pg. 25: DOE needs to detail what steps will be taken to prevent hazardous waste that is contaminated with organic material from off-gassing within the CSF. The combination of materials, potential off-gassing, and dust emissions may cause considerable health risks to workers within such a structure. DOE needs to discuss how dust created by equipment usage and off-gassing will be controlled to protect workers.
21. Section 3.7, pg. 3-26 - Typo: Line 5 "addresses" should be "addressed".
22. Table 3-6, pg. 3-28: Why are security fences installed around soil piles?

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23. Section 3.8, pg. 3-31: Is the tracking system proposed for material going to be manageable to the point where a credible RI characterization can be made?
24. Section 3.8, pg. 3-31: The computerized database should be used to facilitate the RI/FS and ROD for O.U.s 3 and 5. The site wide post remediation risk assessment is a final screening tool to see if site wide cleanup goals were met. O.U.s 3 and 5 should already be cleaned up before the site wide post remediation risk assessment is conducted. DOE should remove the reference to this risk assessment.
25. Section 4.1.1, pg. 4-2, 2nd Paragraph: Why not anchor the tarp to the pad with stakes through grommets instead of using concrete blocks.
26. Section 4.2, pg. 7, design bullets: An additional design consideration should be to place the structures within the current or proposed stormwater runoff capture system.
27. Figure 4-2, pg. 9: It would seem that the sides of the concrete slab or foundation will need to be elevated to a higher level so that heavy equipment will be able to push soil against it for pick up. Otherwise the soil will be pushed against the sprung structure walls.
28. Section 4.2.1.3, pg. 11: DOE should consider installing a lighting system within the CSF due to the potential future uses and the possibility for needing to complete nighttime or overcast day activities.
29. Section 4.2.1.4, pg. 11: As stated in a previous comment DOE needs to address potential off-gassing from hazardous wastes, petroleum contaminated soils, and radionuclides as well as dust generation. Further detail should be provided in this section concerning such efforts.
30. Section 4.2.1.5, pg. 11: Why has DOE not considered the buildover criteria which it has previously used for other construction activities? Due to the long term nature of the CSF the buildover criteria should be applied to the facility.
31. Section 4.2.3, pg. 13, 2nd Paragraph: DOE should underlay all stockpiles with tarpaulins or linens to prevent infiltration and to help delineate the bottom of the pile during excavation and removal.

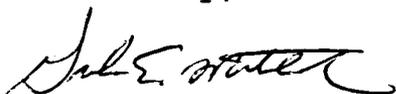
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32. Section 4.2.3, pg. 13, 3rd Paragraph: DOE should not allow the soils from stockpiles to be freely used for backfill within the AOCs.
33. Section 5, pg. 3, Waivers: In its considerations for a waiver DOE has failed to address or consider off-site disposal as an alternative option. The fact that disposal capacity is available in the private sector for mixed wastes (i.e. Envirocare) suggests that DOE should consider this alternative before requesting the waiver of ARARs. DOE needs to provide a more in depth discussion of this option and why long-term bulk storage is preferable over immediate, permitted disposal.
34. Section 6.2, pg. 2, last Paragraph: DOE should include the SOPs and their revisions within the work plan. This should be possible as soon as the basic ground rules are determined (e.g. action levels, storage configuration).
35. Section 7: As previously stated Ohio EPA is concerned that DOE is overlooking the hazardous substances at the site and that the TCLP will not provide the detail needed to make decisions concerning soil disposition.

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

Sincerely,



Graham E. Mitchell
Project Manager

GEM/bjb

cc: Jennifer Kwasniewski, DERR
Tom Schneider, DERR
Jim Saric, U.S. EPA
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