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COMMENTS ON THE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT "CONTAMINATED SOILS ADJACENT TO THE SEWAGE TREATMENT PLANT INCINERATOR, REMOVAL ACTION NUMBER 14"

07-14-92

DOE-FN/EPA
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COMMENTS

COMMENTS ON THE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
"Contaminated Soils Adjacent to the Sewage Treatment Plant Incinerator, Removal Action Number 14 Work Plan"

OEPA COMMENTS:

General:

1) Comment: DOE must consider a lower action level for off-property contamination. DOE should at least be as conservative as the NRC Branch Technical Position concentrations referenced in the RSE. The use of the 100 pCi/g action level for uranium in soils on-property is not. DOE could incorporate use of the on-site lab to direct an off-property excavation to lower action level.

Response: The off-property action levels were established in the Revision 0 Work Plan. Phase I off-property actions include performing the walkover survey with the 2" x 2" NaI detector and marking the areas which exceed 100 pCi/g total uranium, sampling these highlighted areas and also taking the off-property samples along the pre-established sampling grid as part of Phase II. Duplicate samples will be taken from the highlighted areas and one set will be sent to the on-site lab for quick analysis of uranium, thorium and radium. Once these analytical results are available the need for further off-property action will be evaluated and EPA will be provided with analytical results and any information on further actions. Based on previous surveys there is no indication of wide spread off-property contamination. There is one potential localized "hot spot" immediately adjacent to the property fence in an unused area. DOE considers "clean-up" to 100 pCi/g to represent the most prudent course of action for Phase I on-property soils, in addition, DOE will expedite analysis and the evaluation of the need for further action in Phase III. The work plan will be revised to clarify off-property "action levels" and sampling activities. The work plan will be revised to state that 35 pCi/g total uranium will be the off-site action level used for this removal action based on previous cleanup activities at MH 180.

Specific:

2) Comment: Section 2.1, pg. 10, 3rd paragraph: DOE should collect duplicate off-property samples so that one set can be sent to the off-site lab and another set can be submitted to the on-site lab for quick analysis of uranium, thorium, and radium. The results of the on-site lab analysis must be used to support an expedited excavation of off-property soil to reduce radionuclide concentrations to levels consistent with the NRC BTP.

Response: Agreed. The sample collection will be performed as noted. The Phase I soil removals will be based on the hand held surveys. DOE will expedite the evaluation and possible excavation of off-property contamination greater than 35 pCi/g total uranium by performing the off-property sampling coincident with the walk-over correlation sampling. Upon the receipt of laboratory results which indicate contamination above the 35 pCi/g total uranium action level for off-property soil, access rights and subsequent excavation activities will be pursued immediately.

3) Comment: Section 3.0, pg. 15, last paragraph: Will the 20 samples collected to calibrate the 2" x 2" NaI detector be collected from the area of the incinerator/STP? It would appear from the discussion in the text that this should be the case. If these 20 samples are collected from the STP area and analyzed as suggested in the paragraph (for iso U, iso Th, and Ra-226), then these results need to be included in the Phase II interim report. Additionally, if any of these samples are collected off-property they can be incorporated into an early decision to excavate off-property.

Response: The correlation samples will be taken from the study area of the incinerator/STP. These results will be included in the Phase II interim report. The correlation samples will be collected on-property. Also, the off-property samples will be collected at the same time as the walk-over correlation samples in order to expedite the excavation of off-property contamination. The excavation of any off-property contaminated soil will be expedited as soon as the onsite laboratory results are available. The work plan will be revised to include this data in the Phase II interim report.

U.S. EPA COMMENTS:

General:

4) Comment: The sampling and analysis section has been revised extensively to include specific references to the remedial investigation/feasibility study (RI/FS) quality assurance project plan (QAPjP). However, the section should include specific details for certain QAPjP elements. At a minimum the section should include. (1) sample containerization, holding time, and preservation requirements; (2) chain-of-custody procedures and sample handling requirements; (3) analytical methods, method detection limits, and designated laboratories; and (4) specific numbers and types of samples, including field blanks, trip blanks, field duplicates, and matrix spike/matrix spike duplicates. The sampling and analysis plan should be revised to include these elements. Furthermore, these elements should conform to the requirements of the RI/FS QAPjP.

Response: The work plan will be revised to include applicable elements of the RI/FS QAPP and/or the draft Sitewide CERCLA Quality Assurance Project Plan (SCQ), which was called the RI/FS QAPjP. To date the RI/FS QAPP is the approved quality plan which includes Items 1-3. Item 4 will be developed for this action based on the sampling guidelines.

Specific:

5) Comment: Section 3.0, pg. 16, paragraph 1: The analytical procedures for verification samples should be identified. Also, the data quality objectives for field screening and verification samples should be identified.

Response: DQOs for verification samples will be developed and included in the revised work plan. Typically, DQO levels A/B will be used for surveys and C/D will be used for verification samples. The list of analytical procedures with appropriate referencing for total uranium will be included as an attachment to the work plan.

6) Comment: Section 3.1, pg. 16, Table 3: The specific criteria of QAPjP elements to be used by samplers should be identified and included as attachments. For instance, the general procedures for soil sampling and procedures for using a sodium iodide (NaI) detector should be included. Likewise, relevant portions of the sample collection procedures should be included. It is unrealistic to expect that sampling personnel will carry the six volume RI/FS QAPjP with them during sampling activities.

Response: The general procedures for soil sampling and for using a 2" x 2" NaI detector will be included as attachments to the revised work plan.