

17 April 1997

Re: NEPA Call-In Technical Inquiry 0057 - Phase II Review

Dear NEPA Call-In User:

This letter is in response to your March 27, 1997 request for NEPA Call-In to review the Phase II Subsurface Investigation and Interior Building Inspection for the Ohio Federal Building - U.S. Courthouse, Site B, prepared by Louis Berger & Associates (LBA) and submitted to the General Services Administration (GSA) in February 1995. You asked NEPA Call-In to review the document and comment on the technical accuracy of the report. Specifically, you want to know if the report's methods, conclusions, and recommendations are sound.

NEPA Call-In reviewed the above report and compared it to the guidance in American Society for Testing and Materials (ASTM) Standard E 1527-94 and E 1528-93, "ASTM Standards on Environmental Site Assessments for Commercial Real Estate." NEPA Call-In found the report meets minimum ASTM standard requirements. We did discover some inconsistencies between the stated objectives, sampling methods chosen to satisfy the objectives, and the presentation of data. We also found the report did not meet its stated objective to "determine the extent of any soil or groundwater contamination that may be present." It is our conclusion that recommendations contained in the report are sound. Specific comments and recommendations are listed below.

1. Page 3, paragraph 2 of the report states "The ESA recommended that a subsurface sampling and testing program be undertaken to determine if any contamination has occurred as a result of the previous presence of the railroad and oil storage facility. This sampling and testing program is necessary to characterize and determine the extent of any soil or groundwater contamination that may be present." The stated purpose of the investigation was to determine the "extent of any soil or groundwater contamination." The report should interpret the horizontal or vertical extent of the contamination. We suggest the report discuss the horizontal and vertical distribution of the contaminants and point out any additional data gaps regarding the extent of contamination. The report's stated objectives also imply groundwater and soil would be sampled and tested in order to determine if either groundwater or soil contamination had taken place. It is our understanding that no groundwater testing was performed. In Section 4.2 it is recommended that the groundwater be sampled. We suggest the report give an explanation why groundwater sampling did not take place in the original Phase II Investigation. With the levels of constituents detected (see table on pages 8 through 10 of the report), NEPA Call-In recommends a beneficial use survey be conducted for the impacted aquifer so that affected groundwater users can be identified.
2. Page 6, paragraph 2, states "The ceilings of the structure were composed of suspended acoustical tile, which may be ACM (Asbestos Containing Material); however, no determination can be made without laboratory analysis." The report later states on page 11, section 4.1, Recommendations, "In light of the above findings, LBA recommends no further action with respect to recognized environmental conditions in connection with the interior of the drive-thru bank." If the contractor identified possible asbestos containing materials, then the report's

recommendations should suggest a sampling regime to determine if asbestos is present. If the contractor who prepared the report determined later there was no concern for asbestos, then the factors which led to this determination should have been discussed in the Conclusions/Recommendations section. NEPA Call-In consulted the National Emissions Standards for Hazardous Air Pollutants (NESHAPS), Title 40 Code of Federal Regulations (CFR), Part 61, Subpart M, "National Emission Standards for Asbestos" (enclosed on 3.5" diskette in ASCII format), which states "Prior to any demolition or renovation subject to NESHAPS, all regulated ACM must be removed from the building before activities would breakup, dislodge, or disturb the material." These regulations are important to GSA because building owners are responsible for identifying and managing asbestos accordingly.

3. Page 6, paragraph 2, states "Ballasts could not be observed readily because of the design of the fixture; therefore, no comment can be made with respect to possible PCBs." We recommend adding a detailed explanation why PCBs are not an issue to be further investigated.
4. Sampling Results, pages 8-10. According to page 3, Section 2.2, soil samples were analyzed for Toxicity Characteristic Leaching Procedure (TCLP) Metals, Base Neutrals, and Diesel Range Organics. We suggest adding an explanation as to why these parameters were chosen to satisfy the objective of the investigation. Additionally, the report should include the rationale for the three listed testing methods and discuss the relevance of each test result in the context of satisfying the objectives of the investigation.

We recommend the purpose for conducting the TCLP be clearly stated in the objectives. Title 40 CFR 261.24(a), "Toxicity characteristic" (enclosed), explains the use of TCLP Metals test for determining toxicity. This test does not determine if the presence of a metal was caused by a release or if it occurs naturally in the soil. The purpose of the TCLP test is solely to determine if a material must be managed as a hazardous waste under the Resource Conservation and Recovery Act (RCRA). If identification of hazardous waste is an objective of the study, then TCLP testing for organic compounds should also have been performed.

To be meaningful, the results of the TCLP test must be compared to appropriate TCLP regulatory levels contained in Title 40 CFR 261.24, "Toxicity characteristic" (enclosed). The text should also state whether the soil was determined to be a hazardous waste based on this comparison. In the tables on pages 8-10, column three, "Levels Found," the TCLP unit mg/L should be used instead of mg/kg. The text should explain why the data in the tables on pages 8-10, column three, was compared with the Environmental Protection Agency (EPA) Constituent Concentrations in Wastes (CCW) listed in column four, "EPA CCW Level." Title 40 CFR 260, "Subpart D-Treatment Standards," refers to EPA's disposal restriction where wastes may be land disposed only if it is below the regulatory limits (CCW). The importance of the CCW numbers should be explained in the report so the user is able to draw conclusions based on the data. We also recommend the report make reference to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) regulations concerning hazardous waste concentrations in comparison to the sampling. The report should ask and answer the question, "Are CERCLA Hazardous Wastes present on the site?" This is the objective of ASTM E 1527-93 (Section 1.1 Purpose).

5. NEPA Call-In found the table format on pages 8-10 to be confusing and

inconsistent. For example, the entry for test probe hole #7 show TCLP Metals results. However, since Diesel Range Organics are tested collectively, it looks as though PCB is covered under the Diesel Range Organics category, following the format for TCLP. NEPA Call-In recommends that a format be used which is easier to follow. Inconsistencies with the data reporting in the table on pages 8-10 and the observations on pages 5-7 of the Appendix include the following:

- a) The levels below ground at which observations are made are different for each test probe. If observations were the same at all levels, we recommend this be stated in the observations section.
- b) Test probe # 2 observations state a sample was taken at 0.5-2.0' level, but the table states the sample was taken at 13-15' depth. The sample depth for test probe 3 is inconsistent with the observational depth levels on pages 5-7.
- c) In general, the depths given for the sample locations for each probe are not the same in the table as they are in the observations.

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Sincerely,

(Original Signed)

NEPA Call-In Researcher