



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

N00129.AR.000180
NSB NEW LONDON
5090.3a

August 9, 1993

David Mui
Environmental Restoration Branch
Naval Facilities Engineering Command
U.S. Department of the Navy
10 Industrial Way
Mail Stop 82
Lester, PA 19113-2090

Re: Review of Building 31 Field Verification Sampling Plan

Dear Mr. Mui:

This office is in receipt of the document entitled "Field Verification Sampling Plan for Building 31 Naval Submarine Base New London, Groton, Connecticut" dated July 1993 and prepared by Halliburton NUS Corporation.

Upon review of this document, this office has the following comments which are included on the attached pages. Please review these comments, and if you wish to discuss any of these comments prior to submitting a response, please do not hesitate to contact me at (617) 573-5793.

Sincerely yours,

Paul N. Marchessault, Remedial Project Manager
Federal Facilities Superfund Section

Attachment: as noted

cc: Mark Krivansky, NORTHDIV
William Mansfield, SUBASE-NLON
Adam Sullivan, CT DEP
Jean-Luc Glorieux, Halliburton
Charles Porfert, EPA
Dale Weiss, TRC

Mark K's project. Mark will review.

Reeb 8-30-93



EPA REVIEW COMMENTS ON FIELD VERIFICATION SAMPLING
PLAN FOR BUILDING 31

GENERAL COMMENTS

The Action Memorandum indicates that additional sampling will be proposed as part of the Study Area Screening Evaluation (SASE). The timing and scope of this study with respect to the removal action should be clarified.

The field verification sample analysis turnaround time needs to be stated and the sequence of events clarified. The text needs to specify how the confirmatory data will be used to ensure complete removal of contaminated soil.

The sampling plan should indicate if and by whom the soil slated for offsite removal and solidification will be sampled.

PAGE-SPECIFIC COMMENTS

Page 2-1, §2.0, ¶1 A map showing the proposed grid should be provided. It is understood that the grid will change based on actual field conditions; however, the map is necessary to support the sampling estimates. The depth of the proposed grid cells should be stated.

Page 2-2, §2.2, ¶1 The text needs to more clearly explain the sequencing of events with respect to excavation sampling and analysis, soil removal, soil treatment, treated soil sampling and analysis and return of cured, treated soil to the excavation. Since laboratory rather than field screening analyses are proposed, the laboratory turnaround time needs to be stated. The text should clarify how work will proceed to avoid downtime and avoid backfilling areas before analytical results are available. The text should clearly state how the limits of excavation will be determined (other than those structural limitations outlined in the Action Memorandum).

In the first bullet, the text should clarify in what case the grid will be smaller than 20 x 20 feet (for example, outside Building 31, only 10 feet of excavation is proposed). The depth of the proposed grid cells should be stated.

Composite samples provide ambiguous data. If composite samples are collected, at least 1 additional grab sample should be also collected from each of the areas (approximately 4 areas shown in Figure 2-13 of the Action Memorandum) where lead contamination was detected at depths between 4 and 6 feet, or where any discoloration is noted.

In the second bullet, the rationale for collecting the samples from 12 inches below the top of the excavation should be provided. The samples should be collected based on the visual evidence (discoloration) or the depth at which the highest levels

of contamination were detected in the nearest soil boring during the study area investigation. Five or six additional grab samples should be collected from areas where elevated contaminants were detected previously or near floor drains/sumps in addition to the proposed composite samples.

Page 2-3, §2.4 The text states that a total of 56 wipe samples are proposed to be taken following the cleaning of the demolished concrete floor and railroad tracks. Sampling data in Table 2-1, however, show 87 wipe samples to be taken. Please clarify this discrepancy.

In the first bullet, please identify the terms "appropriate filter" and "solvent". The appropriate solvent for total lead analysis is distilled/deionized water.

Page 3-4, §3.5 The text states that field duplicates for soil samples is a single sample split into two portions. This definition describes replicate samples. Duplicate samples are two collocated samples taken at the same time using identical sampling techniques. This comment also applies to footnote 4 in Table 3.1 and in the QAPjP and to Section 5.6, page D-14 of the QAPjP.

Page 3-6, Table 3-1 A field blank must be submitted to the laboratory for wipe sample determinations.

Page 4-1, §4.1, Bullets A dust monitor may be necessary because of the lead inhalation hazard during excavation.

The text states that field instruments will be calibrated daily according to the manufacturer's operating manual. The text needs to state that calibration will be done at the beginning and at the end of the day to check for instrument drift.

Page C-6, §4.4 Several physical hazards are identified in this section. Additional hazards that should be considered include heat and/or cold related stresses or dangers associated with Building 31.

Page C-13, §6.1.2 The HASP refers to "steel-toe hard sole work boots." Note that OSHA (29 CFR1910.120) requires steel-toe, **steel shank** boots for hazardous waste operations. This distinction needs to be made in order to clarify the requirement.

Page C-15, §6.3.2 This section indicates that half-face or full-face respirators will be worn "anytime dusty conditions are observed and these emissions cannot be suppressed with water." This implies that upgrade will not be required until visible dust is observed. It is strongly recommended that the language in this section be modified to require air monitoring if water spray is not used to control particulate emissions and to set exposure

limits. In addition, note that OSHA allows for the use of half-face respirators but the full-face respirator offers greater protection and is recommended in favor of the half-face respirator.

Page C-21, §9.1.1, ¶1 The HASP does not indicate that HALLIBURTON NUS or subcontractor personnel are required, in addition to their 40-hour training, to have three days of supervised field training, as is required by OSHA 29 CFR 1910.120 (e)(3). This section should be modified to include this requirement. Certificates to document this training must also be available.

Page C-21, §9.2 It is indicated that site-specific training will be provided only once and personnel who do not attend will not be permitted to perform work at the site. It is unclear what allowances, if any, will be made for the involvement of new or alternate team members or for site visitors.

Page C-28, §11.2 The discussion on the contamination reduction zone does not clearly indicate where the personnel decontamination stations will be located (e.g, various locations within Building 31). A description of where the personnel and equipment decontamination stations will be situated in relation to the support zone should be added.

Page C-30, §12.1 The HASP prohibits entry into confined spaces. Although buildings do not necessarily constitute confined space by definition, hazards such as limited ventilation and restricted escape routes may exist. A provision should be added to the HASP requiring site personnel to be familiar with escape routes and to ensure that these routes are all clear. In addition, the HASP should emphasize that buildings without sufficient illumination, ventilation or with questionable structural stability should not be entered.

Page C-33, §13.8 This section discusses evacuation routes but no instructions on specific routes are provided. Evacuation routes out of Building 31 need to be established prior to the commencement of work activities. See also previous comment.

Appendix D The QAPjP does not contain a table of contents. A table of contents needs to be provided.

Page D-13, §5.3 The QAPjP must present analyte and method specific quantitation and/or detection limits for TCLP Method SW 6010.

The method used for the wipe samples must be presented since CLP methods do not address wipe samples as a matrix. The method must include how the wipe samples will be prepared including how much of the sample will be used for the analysis.

Page D-25, §10.0 The third paragraph of Section 10.0 states that 15% of the total number of environmental samples will be validated using EPA procedures. The QAPjP must present a more specific reference of the EPA validation procedures NUS intends to use. The following EPA Region I data validation guidelines should be utilized:

- Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses. February, 1989.

The data validation guidelines referenced above are intended to be used for analytical data produced utilizing CLP protocol and quality control requirements. NUS must describe how the validation performed on only 15% of the environmental samples affect the statistical validity of the remaining 85% of the samples. NUS needs to describe how it will evaluate the remaining 85% of the data.

Page D-32, §14.2 The text states that 100% of the analytical data packages for each media will be validated and that if problems are found during "this partial validation", then additional or all data packages may be validated. If 100% of the data packages will be validated, why is there discussion of partial validation? Also, the text on page D-25 states that approximately 15% of the total number of environmental samples will be validated. Please clarify these discrepancies.