

APPENDIX F
RESPONSE TO AGENCY COMMENTS

**Response to Agency Comments
Draft Basewide Remedial Investigation/Feasibility Study
Volume II - Site 31 Remedial Investigation
Fort Ord, California**

The following are the Army's responses to the comments of the regulatory agencies on the Draft Basewide Remedial Investigation/Feasibility Study. All comments and the associated responses pertaining to Volume II, Site 31, of the Basewide Remedial Investigation/Feasibility Study are provided below.

I. U.S. Environmental Protection Agency Technical Review Comments

Analysis of Conclusions and Recommendations

Comment 1: The information presented in the report does not support the conclusion that the potential for impacts to groundwater quality from metals is very low.

Response: We disagree with the above-cited EPA review comment. A fate and transport discussion, which presents available data on the expected mobility of metals in soil, has been added to the Introduction of Volume II (Section 3.0) and in Section 5.0 of this binder. As presented in these sections, based on data collected from Site 31 and other areas of Fort Ord, site conditions are not conducive to the mobility of metals in soil. Also, analytical results from soil samples collected at Site 31 from within the debris soils and just below the debris soils show that metal concentrations decrease to concentrations approaching maximum background within a few feet below the debris soil. Since most of the debris was dumped over 40 years ago and the depth to groundwater is at least 135 feet below the bottom of the debris, this site-specific data supports the conclusion that the potential of impact to groundwater quality is very low.

Comment 2: Without any fate and transport discussion, risk assessment, or ecological assessment data presented in this report, it is not apparent that the high concentrations of various compounds do not warrant further investigation.

Response: As stated in the response to EPA Comment 1 above, a fate and transport discussion has been added to the RI. Summaries of the Human Health Risk Assessment and the Ecological Risk Assessment are presented in Volumes III and IV. In addition, a statement has been added to the text in the conclusions section of this RI stating that the data collected at Site 31 are adequate to perform the Human Health Risk Assessment and Feasibility Study. Additional sampling, which is summarized in this RI, was collected as part of the Baseline Ecological Risk Assessment subsequent to the completion of the Site 31 RI field program. In all cases at Site 31, analytes were either below detection limits, of relatively low concentrations, or at concentrations approaching maximum background levels. For those analytes approaching maximum background levels, data were evaluated by risk assessors before completion of the RI field program to assess whether enough data had been collected to complete the Human Health Risk Assessment. Additional data were collected, as needed, at that time, and enough data have now been collected for the now completed Human Health Risk Assessment.

Comment 3: The extent of chlorinated dioxins (CDD) contamination has not been adequately defined.

Response: We disagree with the above-cited EPA review comment. Chlorinated dibenzodioxins (CDDs) and chlorinated dibenzofurans (CDFs) were detected in soils at Site 31. However, the nature and extent of CDD/CDF contamination have been characterized in the RI to levels below what would be considered a risk to human health; additional sampling was performed as part of the baseline Ecological Risk Assessment to complete evaluation of data with respect to potential ecological risks. Generally, concentrations are significantly lower in soil samples collected in areas outside the debris area compared to soil samples collected within the debris soils. It is likely that most of the CDDs and CDFs in soils outside the debris area are from the air emissions released from the former incinerator or are potentially representative of background conditions, rather than from the direct act of dumping CDD/CDF-containing materials over the ravine slope. Site 31 concentrations of CDDs/CDFs in soil inside and outside of debris areas are significantly lower than mean concentrations found during an EPA study for soil samples collected from areas within North America not believed to be contaminated (EPA, 1994c). Because concentrations of CDDs and CDFs detected in debris-free areas are not considered a risk to human health, and because low concentrations are likely widespread throughout the area, no further sampling was required for the RI.

Comment 4: Although hexavalent chromium (chromium VI) is listed in the analytical program for Site 31, there appears to be no discussion of chromium VI data in the text and there are no chromium VI results in Appendix C. Because chromium VI is anionic and extremely mobile, there is a high potential for migration of this species to groundwater. Without analytical results for chromium VI in soil or groundwater, there is no support for the conclusion that the potential for impacts to groundwater by metals is very low.

Response: We disagree with the above-cited EPA review comment. As presented Section 2.1.7 and Table 7, hexavalent chromium was analyzed in 84 soil samples, but was not detected in any samples. The narrative in Section 4.4 summarizes the distribution of organic and inorganic chemicals detected in soil samples, and, therefore, hexavalent chromium was not discussed. Also, Appendix C contains tables that summarize analytical results for only those organic and inorganic compounds that were detected at least once above laboratory detection limits. A computer diskette containing all laboratory analytical data has been provided with the RI/FS report. Therefore, no revision to the RI related to EPA Comment 4 were necessary.

Note that although hexavalent chromium was not detected in soil samples collected at the site, hexavalent chromium matrix spike results indicate that the method as applied to the sample matrix produces unreliable results. Hexavalent chromium analysis is unique with respect to the stability of the analyte in the matrix; under field and laboratory analytical conditions present at the site, hexavalent chromium in soil will likely be rapidly reduced to trivalent chromium, rendering hexavalent chromium matrix spike data inconclusive. Therefore, nondetections for hexavalent chromium data were not rejected during data validation as a consequence of poor matrix spike recovery.

General Comments

Comment 1: Numerous inaccuracies were noted in this report. Several are noted in the specific comments below. This RI report, as well as the entire RI/FS document, should receive a thorough technical edit and quality control check.

Response: A thorough technical edit and quality control check are consistent with HLA's standard policy on all documents and was performed for the Draft RI/FS. In addition, the Draft Final report was edited, reviewed, and revisions were incorporated, as appropriate. Based on our review of the comments provided by EPA's technical review, as well as those provided by other agency reviewers, we disagree with the statement regarding numerous inaccuracies. In many cases, we have noted that, in fact, some of the EPA review comments were in error and the information in question was already present in the document. In other cases, the reviewers either did not understand the information or were requesting information present in other non-RI volumes. Specifics are addressed in the responses below.

Comment 2: The report should include a more thorough discussion of COPCs/COCs including fate and transport, and a summary of the Risk Assessment and Ecological Assessment as related to these chemicals.

Response: As stated in the response to EPA Comment 2 above, a fate and transport discussion has been added to the text of this RI. Summaries of the Human Health Risk Assessment and the Ecological Risk Assessment are present in Volumes III and IV. In addition, a statement has been added to this RI stating that the data collected are adequate to perform the Human Health Risk Assessment and Feasibility Study. Additional sampling was performed as part of the Basewide Ecological Risk Assessment subsequent to the completion of the RI field program. A refined list of the COPCs for Site 31 has been developed and presented in the Human Health Risk Assessment (Volume III). All chemicals detected at Site 31 are considered as potential COPCs in the Human Health Risk Assessment.

Comment 3: This report does not include any discussion of remedial action objectives, remedial alternatives, conclusions, or recommendations.

Response: A discussion of remedial action objectives, remedial alternatives, and corresponding conclusions and recommendations were presented in the Feasibility Study (Volume V), based on the RI data, risk assessments (Vols. III and IV), are ARAR review. Therefore, no revisions to the RI relative to EPA General Comment 3 are necessary.

Comment 4: Criteria established for background levels of inorganics (metals) in soils are being used inappropriately or are being disregarded.

- a) First, a maximum value or threshold represents the upper limit of naturally occurring levels of a given parameter. This implies a normal distribution of concentrations around some lower value for the naturally occurring levels of this parameter. Any values greater than the threshold clearly represent contamination and should be addressed as such. Dismissal of values because they are not "significantly" greater than the background threshold is inappropriate.

Just as background values consist of a range of concentrations, contaminant values will consist of a range of concentrations such that all samples collected

may represent contamination although some values are below the "threshold." Possible sources should be identified and fate and transport should be addressed any time analytical results exceed the background threshold value.

- b) Second, some parameters were not detected in background soil samples (e.g., antimony in shallow NQTP). This does not mean that there is no maximum concentration for that parameter in background soils, but, rather, that there is no detectable concentration in background soils. Therefore, if measurable levels of that parameter are detected, they must represent contamination. Possible sources should be identified and fate and transport should be addressed any time analytical results are above detection limits for parameters not detected in background soil.

Response: We disagree with the above-cited EPA review comment. Maximum background soil concentrations presented in the Basewide Background Soils Investigation were selected as a screening criteria to focus the presentation of the metals data to areas that may represent potential areas of contamination or release. Threshold values were not used because threshold values had not been developed for all metals. Also, samples that have metal concentrations above the maximum background levels do not necessarily indicate that the soil is contaminated because local background conditions may be different in the sampled area. An assessment of the distribution of analyte concentrations with association to potential sources is required to evaluate whether the analyte concentrations represent contamination. All soil sample results exceeding maximum background concentrations were presented on plates and tables to facilitate the evaluation of potential metals contamination.

Metals that were not detected in the background study were evaluated as potential contaminants if they were detected at the site. For these metals, all detected values were presented on the plates and tables and the distribution of each evaluated as a potential contaminant.

Therefore, no revisions to the RI relative to EPA General Comment 4 are necessary.

Comment 5: **It should also be noted that the issue of background soils concentrations has been handled differently in the different basewide and RI reports throughout the entire RI/FS document. These inconsistencies should be resolved.**

Response: Inconsistencies with regard to the handling of background issues have been resolved throughout the report.

Comment 6: **Data expression/presentation in the Figures is very "dense" and makes for difficult reading.**

Response: Oversized plates have been prepared for the Draft and Draft Final of this report to facilitate the evaluation of data; copies have been provided to the primary regulatory agencies and are available for public review through the COE.

Comment 7: The acronym list provided in other reports in the RI/FS document is not included in this RI report.

Response: The acronym list has been provided in each volume but not in each binder. The acronym list for Volume II is located in the Introduction to Volume II. The primary reasons for not including the list in each binder are to reduce the report volume and to conserve paper.

Specific Comments

Comment 1: Executive Summary, Page vii, sixth bullet; Section 5.0, Page 20, first bullet: The text makes the statement that "...the lateral and vertical extent of several organic and inorganic compounds is not defined by background concentration..." The meaning of this is unclear. This is a general statement that needs to be expanded due to two concerns:

- a) Most organics do not occur naturally and therefore should not be present at the site at any "background concentration."
- b) There is no explanation of how background information was derived.

Response: This statement has been revised accordingly.

Comment 2: Executive Summary, Page vii, last paragraph: This report, as well as several others, make the general statement that since the soil pH is above 5, metals will not be mobile. This is not true. Some metals, such as arsenic and chromium, are amphoteric, i.e., mobile within more than one pH range including both neutral and basic pH ranges.

Response: This statement has been revised accordingly.

Comment 3: Section 1.1, Page 1: The text here mentions that a crushed 55-gallon drum was found in the debris. This is not mentioned in the Executive Summary or later in Section 5. In addition there are several other inconsistencies. These should be resolved. Also, the presence of the drum provides the potential that liquid wastes may have been disposed of here. When there is a potential for disposal of liquid wastes, a groundwater investigation should be required.

Response: The text has been revised in the Executive Summary and in Section 5.0 to include the description of the empty, crushed 55-gallon drum. The description of the debris in Section 1.1, which was intended only to describe the readily visible debris at the surface, has also been revised to include a complete list of debris observed on the ground surface and in the subsurface. The drum had been observed during the Phase 1 mapping activity, but had not been noted during the Phase 2 mapping activity and, therefore, was not included in the detailed description of surface debris distribution. The crushed drum may not have been noted during the Phase 2 mapping either because the drum was perceived by the field geologist as scrap metal or because the drum was wholly or partially covered by loose sand or other material.

Because the drum had apparently been crushed prior to being dumped over the ravine slope, it is likely that the drum did not contain liquids at the time of disposal. No other intact drums were observed during the investigation, which suggests that

containers containing liquids were not disposed of at the site. Also, because most of the debris appears to have been wholly or partially incinerated, most if not all the liquids would likely have been volatilized prior to dumping. For these reasons, and because analytical results for soil samples did not detect high concentrations of organic contaminants, it does not appear that dumping of liquid contaminants occurred at this site and, therefore, a groundwater investigation was not performed.

Comment 4: Section 1.3, Page 1: By referring only to "...no previous subsurface investigation...", the text suggests that previous investigations of surface soil or surface conditions have been conducted on this area. Because no reference list is included in this report, the nature of the EA (1991a) document cited in Section 1.2 cannot be ascertained. If previous surface investigations have been conducted at Site 31, the details of these investigations should be provided. If this is not the case, the text should be changed to say that no investigations, surface or subsurface, have been conducted.

Response: No known surface or subsurface investigation was performed prior to the RI at this site. The text has been clarified as suggested.

Comment 5: Section 2.1.1, Page 2, first paragraph: The text states that debris mapping was conducted as part of both Phase 1 and Phase 2, but the bullets in Section 2.1 list this activity for Phase 2 only. This discrepancy should be resolved.

Response: An additional bullet has been added to Section 2.1 indicating that preliminary surface debris mapping was performed as part of Phase 1.

Comment 6: Section 2.1.1, Page 2 and 3: This discussion should refer readers to the section(s) of the report that contain the results of the mapping effort.

Response: A reference to Section 4.2.2 has been added to the text of Section 2.1.1 to direct the reader to the results.

Comment 7: Section 2.1.3, Page 3, first paragraph: What method of geophysical clearance was used? The report calls it "downhole clearance." This implies an intrusive technique. A more thorough description should be provided.

Response: A downhole magnetometer was used to clear the boreholes for unexploded ordnance. The text has been revised to state this.

Comment 8: Section 2.1.6, Pages 4 and 5: Why were different analytical techniques used for soil analysis in Phase 1 and Phase 2? An explanation should be provided.

Response: Techniques for specific analyses did not change between Phases 1 and 2. However, the analytical program (i.e., the selection of analyses per sample) did vary for several reasons. The suite of chemical analyses for Phase 2 surface soil samples was selected based on the Phase 1 results of soil sample analyses. Chemical analyses for soil samples from Phase 2 soil borings were selected based primarily on the need to fill data gaps for the extent of contamination evaluation (i.e., delineate the lateral and vertical extent of chemicals to nondetect or maximum background, where needed). Also, physical testing performed during Phase 1 was to characterize the nature of the geologic materials, while the Phase 2 physical testing was to obtain data needed to support the FS. No revisions to the RI are necessary.

Comment 9: Section 4.2.1, Page 9: This section states that the electromagnetic (EM) data was of limited use. No statement to this effect is included in Section 2.1.2. Section 2.1.2 implies that the EM survey did not find any anomalous responses; however, this section says that anomalous responses were found, but they could not be interpreted. This discrepancy should be resolved.

Response: A reference to Section 4.2.1 has been added to the text of Section 2.1.2 to direct the reader to the results of the EM data evaluation.

Comment 10: Section 4.4.1, Page 11, first bullet: The fact that acetone and methylene chloride are common laboratory contaminants is only relevant if the data validation effort indicated that the results are due to laboratory contamination (i.e., these two compounds were detected in laboratory or method blanks as well as in actual samples). If these compounds were not detected in laboratory blanks, this comment should be deleted here and throughout the report. The following discrepancies occur in this section:

- a) Although this section refers the reader to Section 4.6, there is no discussion of either laboratory blank analysis or of these two compounds in Section 4.6. If these compounds were present in laboratory blanks, it should be stated explicitly.
- b) This section also refers the reader to the qualifiers attached to the analytical results (without telling the reader where to find such results). Examination of analytical results in Appendix C shows that a qualifier of Jb, rather than U1 or B, is attached to these results. The definitions of the qualifiers Jb, U1, and B are provided in Table 9. According to Table 9, a qualifier of Jb on the acetone and methylene chloride results means that these values are estimated and unreliable because these are common laboratory contaminants, but these compounds were not actually found in laboratory blanks. On the other hand, if these two compounds had been found in laboratory blanks, the qualifier U1 or B would have been used and the analytical results would have been designated as undetected due to the presence of these compounds in laboratory blanks.

Response: During data validation, if a common laboratory contaminant was not detected in a method blank or field related blank, associated sample results were not qualified as nondetect. However, the absence of a common laboratory contaminant in a method blank does not mean that the common laboratory contaminant detected in a field sample is a site-related chemical. It should not be assumed that laboratory analytical processes that take place after the analysis of a "clean" method blank are free from potential laboratory contamination. For example, method blanks analyzed at the beginning of the analytical sequence (e.g., first analyses of the day) may be free from contamination, but subsequent sample analyses that occur later in the day (after commencement of laboratory operations that use organic solvents) may also be impacted by contamination present in the analytical laboratory environment. Furthermore, EPA recognizes the compounds acetone and methylene chloride as common laboratory contaminants (EPA, 1988c).

Based on an evaluation of Fort Ord and site-specific analytical data and of site-specific historical information, it was concluded that these analytes, acetone and methylene chloride, were likely laboratory contaminants and likely did not represent site conditions; the rationale is as follows. A significant number of the method blanks generated for the Fort Ord project during the period 1991 through 1994

contain low level (e.g., less than five times the reporting limit) detections of acetone and methylene chloride. They were detected in EPA Test Method 8240 method blanks at a frequency of 45 and 57 percent, respectively. Site history along with the site-specific project objectives were considered during data evaluation. The review of Site 31 history did not indicate a potential for use of these two frequently detected common laboratory contaminants. Such chemicals would have been destroyed during incineration. Also, detected acetone and methylene chloride were mostly detected outside the debris area. Considering this, and that the reported concentrations of the contaminants were less than ten times the reporting limit for that compound, the presence of the contaminants was assumed to be a result of laboratory analytical processes. The text has been revised to reference Section 4.6.1 for a discussion of these common laboratory contaminants and Appendix C for the analytical results with associated qualifiers.

Comment 11: Section 4.4.1, Page 12, first bullet: For a better understanding of the distribution of PAHs found in surface and subsurface soil, the distance between SS-31-29 and SB-31-30 and the distances between SS-31-29 , SS-31-34, SB-31-29, and SB-31-39 should be given in the text.

Response: The text has been revised to indicate distances between boring locations.

Comment 12: Section 4.4.2, Page 13, paragraph 1: The interpretation of the Basewide Background Soil Investigation results presented in this paragraph is in error. There is no maximum background value for some metals for NQTP soil because these metals were not present at concentrations above the detection limit in either shallow soil samples (antimony and cadmium), deep soil samples (mercury), or both shallow and deep soil samples (selenium). The size of the data set was not too small as stated in this paragraph, but, rather, the naturally-occurring concentrations of these metals is too low to be detected by the analytical methods employed for this investigation. It follows that if these metals are detected in soil samples collected for characterization of Site 31, they are at above background concentrations and are present as contaminants.

Response: We disagree with the above-cited EPA review comment. For the metals that were not detected above detection limits in the Basewide Background Soils Investigation, nondetect is considered the maximum background concentration for that dataset. As discussed in the response to EPA General Comment 4, samples from Site 31 that contain concentrations of metals exceeding background concentrations do not necessarily represent contamination because local background conditions may be different than those represented by the Background Study. However, all Site 31 results for the metals not detected in the Background Study were evaluated as potential contaminants and were presented on plates and tables, as appropriate.

Comment 13: Section 4.4.2, Page 14: The results of the Basewide Background Soil Investigation are applied inappropriately for discussion of the presence of cadmium and antimony in soil samples for Site 31. Any detection of cadmium or antimony in shallow soil samples should be regarded as potential contamination. This interpretation is based on the Basewide Background Soils Investigation which indicated that any naturally-occurring cadmium and antimony concentrations in shallow NQTP soils are below detection limits and not that "... no maximum background concentration for

surface soil is established..." Furthermore, cadmium and antimony levels in shallow soils should not be compared to the deep soil background levels.

Response: We disagree with the above-cited EPA review comment. See the response to EPA General Comment 4 and EPA Specific Comment 12. Also, cadmium and antimony levels in shallow soils have been compared to deep soil background levels to facilitate evaluation of their distribution and not to screen detected concentrations. All detected concentrations of these metals in shallow soil were presented on plates and tables and were evaluated as potential contaminants. Therefore, no revisions to the RI relative to this comment are necessary.

Comment 14: Section 4.5, Page 15, first bullet: State the names of all three of the surrogate compounds used for TPH modeling.

Response: The text has been revised to include the names of the three surrogate compounds, dodecane, naphthalene, and chrysene.

Comment 15: Section 4.5, Page 16, first dash: State the name of the PAH compound used as a surrogate.

Response: The names of the two PAH compounds used as surrogates (chrysene and naphthalene) have been added to the text.

Comment 16: Section 4.5, Page 16, first dash: PAHs can not be "...defined vertically to less than 15 feet bgs..." as stated in the text. A more appropriate description is that "the extent of contamination can be determined to extend less than 15 feet bgs."

Response: The text has been revised as suggested.

Comment 17: Section 4.5, Page 16, first bullet: The discussion of mobility of metals and the potential for groundwater impacts is too brief, lacks detail, and overlooks some major factors.

- a) Metals mobility is also a function of Eh, the redox potential of the soil. This is of major importance for arsenic which is generally more mobile under reducing conditions, as are iron and manganese, although these are not contaminants of concern. Although only non-standard or untested methods are available for determining Eh in soil, the redox potential of soil moisture or groundwater should have been addressed.
- b) Cation exchange capacity (CEC) was recognized in the text as important for controlling metals mobility, but it was not measured as part of the soil characterization. It should have been determined as it is a simple and relatively inexpensive test. Even without data, estimates of CEC could be made using general quantities associated with typical soils.
- c) There are no specifics on metal migration estimates related to soil type. This is a major deficiency. The soil needs to be characterized with respect to mobility parameters.
- d) The report should not generalize about pH controlling metal mobility. Arsenic is anionic and could actually become more mobile at high pH.

Response: Fate and transport discussions have been added to the RI. A general discussion of fate and transport for Fort Ord is presented in the Introduction to Volume II (Section 3.0) and a fate and transport discussion specific to Site 31 is presented in Section 5.0. Detailed consideration of the mobility of metals and the potential threat to groundwater has been provided in these sections.

Comment 18: Section 4.6.2, Page 17: There seems to be an unusually high amount of data that was qualified during the data validation effort. It is not clear how the conclusion that the 80 percent completeness goal has been applied. The text should state what percentage of results for each method represent useable data. For example, the text suggests many metals results were qualified such that actual concentrations may have been underreported. Although the data are not rejected for use, it reduces the overall credibility of the results of the analytical program and the 80 percent completeness goal may not have been achieved.

Response: The 80 percent completeness goal was met if 80 percent or more of the analytical data were either not rejected (i.e., were not qualified with a "R" qualifier) or did not exceed holding times (i.e., were not qualified with a "J5" qualifier). Although some data have been qualified as estimated the data were considered usable in accordance with the EPA Risk Assessment Guidelines (EPA, 1989b,c), and were counted toward the completeness goal. Therefore, no revisions to the RI relative to this comment are necessary.

Comment 19: Section 5.0, Page 20: The potential for groundwater contamination by metals is not well addressed. Not all of the metals detected at elevated concentrations may be immobile. Not all of the metals values are low or near background. For example, the maximum concentrations of zinc (3,000 mg/kg) and of lead (22,000 mg/kg) detected in shallow soil are, respectively, 40 and 400 times higher than background concentrations. Without any fate and transport discussion, risk assessment, or ecological assessment data presented in this report, it is not apparent that no further investigation is needed. This comment also applies to the Executive Summary.

Response: See the Response to EPA Comment 1 of the Analysis of Conclusions and Recommendations section for a discussion of the addition of a fate and transport section and text revisions made to the discussion of the potential threat to groundwater by metals. Also, a statement has been added to the conclusions section (Section 7.0) indicating that the data collected were adequate to perform the Human Health Risk Assessment and Feasibility Study. Additional sampling was performed as part of the Ecological Risk Assessment subsequent to completion of the RI field program.

Comment 20: Table 1: This table does not list the surface debris mapping in Phase 1.

Response: The surface debris mapping activity in Phase 1 has been added to Table 1.

Comment 21: Table 8: This table is confusing. Specifically:

- a) The locations with concentrations above background column should be the number above background out of the total number of samples (i.e. 3 of 10). The information would be much easier to understand if it was split into a table for shallow soils and one for deep soils.

- b) From this table, copper, lead, mercury, silver, and zinc appear to occur the most frequently in shallow soils. This is inconsistent with the discussion in the text.
- c) From this table, beryllium, chromium, copper, lead, and zinc appear to occur the most frequent in deep soils. This is inconsistent with the discussion in the text.
- d) It is not clear how the metals for which the report claims that background concentrations could not be determined were handled. All concentrations above the detection limits for these metals should have been reported as exceeding background.

Response: The table has been revised as suggested in comments a) and d). Also, all metals were detected above depth-specific maximum background concentrations in at least one sample. For purposes of discussion, five metals were selected for presentation on Plate 13 and for a metal-specific discussion of distribution in the text. Although a few of these metals were among the most frequently detected above maximum background concentrations at Site 31, the metals were primarily selected based on the potential threat to human health (Volume III - Baseline Human Health Risk Assessment). This has been clarified in the text. In general, the highest concentrations of the priority pollutant metals at Site 31 occur in the same samples or the same areas and, as a result, the distribution of these five metals are representative of the remaining metals not specifically described.

Comment 22: Plates 1, 2, 4 and 13: These plates should be reprinted so that the insert map is clearly visible. Plate 2 should be revised so that the ground surface contours are easier to read.

Response: These plates will be reprinted for distribution in the draft final RI/FS.

Comment 23: Appendix D, Section D1.0, Page D1: It is very difficult to verify several of the chemical concentrations used for the VLEACH model. A table should be added to show how they were arrived at, and which samples they were taken from.

Response: Table D1 has been modified to indicate which samples were used for modelling.