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TRANSMITTAL OF OPERABLE UNIT 2 PROJECT SPECIFIC PLAN (PSP) FOR PHASE I AND II OF THE OPERABLE UNIT 2 PRE-DESIGN FIELD INVESTIGATION (COMMENT RESPONSES)

01/12/95

DOE-0422-95
DOE-FN EPAS
13
RESPONSES

Department of Energy
Fernald Environmental Management Project
P. O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 648-3155

JAN 12 1995

DOE-0422-95

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - 5HRE-8J
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF OPERABLE UNIT 2 PROJECT SPECIFIC PLAN (PSP) FOR PHASE I AND II OF THE OPERABLE UNIT 2 PRE-DESIGN FIELD INVESTIGATION

The Department of Energy, Fernald Area Office (DOE-FN) is pleased to submit the enclosed Operable Unit 2 (OU2) comment response document along with the revised draft Project Specific Plan (PSP) for your review and approval. The report has been revised according to the comments received from United States Environmental Protection Agency (U.S. EPA) and the Ohio Environmental Protection Agency (OEPA), and is scheduled to meet the EPA submittal date of January 12, 1995.

The PSP response document contains complete responses and actions to the comments received. The changed PSP pages contain strikeout and redlined text with the associated comment response number to indicate changes to the November 6, 1994, document.

If you have any questions, please contact Rod Warner at (513) 648-3156.

Sincerely,

for Jack R. Craig
Fernald Remedial Action
Project Manager

FN:Jalovec

Enclosure: As Stated

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cc w/encs:

K. H. Chaney, EM-423/QO
D. R. Kozlowski, EM-423/QO
G. Jablonowski, USEPA-V, AT-18J
P. Vanleeuwen, USEPA-V, HSRLT-5J
J. Kwasniewski, OEPA-Columbus
P. Harris, OEPA-Dayton
M. Proffitt, OEPA-Dayton
J. Michaels, PRC
R. Cohan, GeoTrans
F. Bell, ATSDR
R. Owen, ODOH
R. D. George, FERMCO/52-2
T. Hagen, FERMCO/65-2
AR Coordinator, FERMCO

cc w/o enc:

J. Thiesing, FERMCO
M. Yates, FERMCO/9

TECHNICAL REVIEW COMMENTS ON THE DRAFT PROJECT SPECIFIC PLAN FOR PHASES I AND II OF THE OPERABLE UNIT 2 PREDESIGN FIELD INVESTIGATION AT THE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP)

GENERAL COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA Code:
Original General Comment #: 1

Comment: The purpose of this draft project specific plan (PSP) is to define the most suitable location for the proposed disposal facility during Phases I and II of the planned investigation. More detailed geotechnical data will be collected at the selected location during Phase III for use in the design of the facility. In general, the proposed scope of the investigation would be adequate for the purpose of this PSP. However, it is not clear why samples from certain depths are selected for consolidation and compaction tests. (see specific comments # 11 and 16.)

Response: Agreed. Please refer to response/action for these specific comments.

Action: No action.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA Code:
Original General Comment #: 2

Comment: Many typographical errors exist throughout the draft PSP. Also, many references to attachments are incorrect. Considerable inconsistencies exist between the tables and the text found in Section 8.0. Most are included as specific comments. These errors hinder the readability and evaluation of this document.

Response: Agreed.

Action: The document was spell checked, and the inconsistencies corrected, between tables and text were completed, please refer to specific comments numbers 6, 9, 14, 15, 16, and 17. The reference to the attachments have been corrected on page 8-17, line 4, and page 8-38, line 29.

SPECIFIC COMMENT

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 1.0 Page #: 1-1 Line #: NA Code:
Original Specific Comment #: 1

Comment: It is unclear whether the predesign field investigation for the location of the on-site disposal facility is for disposal of waste materials generated from remediation at Operable Unit 2, as indicated in the title of this document, or for disposal of waste materials generated from site-wide remediation. The text should clearly state this purpose in the introduction section.

Response: The Disposal Facility is intended for waste materials generated from site-wide remediation.

Action: The following text was added to Page 1-1, line 4: "Also, the design will include accepting other waste material generated from site-wide remediation."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.0 Page #: 2-1 Line #: 28 Code:
Original Specific Comment #: 2
Comment: The referenced for the glacial till report should be "(Parsons, 1994)" instead of "(DOE, 1994)."
Response: Agreed.
Action: The reference has been changed.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.3.1 Page #: 4-3 Line #: NA Code:
Original Specific Comment #: 3
Comment: In Figure 4-1, it is not clear if quality assurance (QA) activities are independent of investigation activities. QA activities should be conducted independently of the investigation activities. This independence should be shown in the figure and stated clearly in the text.
Response: QA is independent of the investigation activities as depicted on Figure 4-1, which shows QA does not fall under the Task Manager for the Pre-Design Investigation.
Action: Added the following text to Section 4.3.2, Page 4-4, Line 17.

- Quality Assurance - Independent of investigation activities and responsible for assuring field activities follow the identified procedures.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 5.1 Page #: 5-1 Line #: 29 Code:
Original Specific Comment #: 4
Comment: It appears that the site database of underground utilities will be checked only prior to drilling, trenching and soil boring and not prior to cone penetration tests (CPT). It is recommended that the presence of underground utilities be checked for all CPT locations.
Response: Agreed. Penetration permits are required for all activities which penetrate more than 2 feet vertically.
Action: "Cone penetrometer work" has been added to line 30.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.1 Page #: 8-1 Line #: 15 Code:
Original Specific Comment #: 5
Comment: This paragraph describes CPTs, but does not include their total number. Figure 8-1 shows 31 CPT locations. In addition, in Attachment 1, "Data Quality Objectives for Cone Penetrometer Tests for Disposal Cell Design, "Page 3 of 5, The Boundaries of the Decision the text states that "approximately 43 cone pentrometer samples are proposed"; and on Page 5 of 5, Obtaining Quality Data, the text indicates that 50 sampling locations should be used. This discrepancy should be resolved, and the correct number of CPT locations should be indicated in the text of Section 8.1.
Response: Agreed. The DQO number was very preliminary. However, Section 8 will be revised to reflect the correct number.
Action: The text on page 8-1, line 21, has been changed to in "Forty Nine CPT locations..."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.1 Page #: 8-2 Line #: NA Code:
Original Specific Comment #: 6
Comment: Many of the numbers of samples to be controlled for testing that are listed in Table 8-1 do not match those listed elsewhere. For instance, Table 8-6 on Page 8-10 shows one remolded permeability test and two vertical permeability tests at Location 11468 for a total of three permeability tests. However, table 8-1 lists only two permeability tests. Except for locations 11468 and 11470, all other boring locations should list seven samples as shown in Table 8-6, not six samples as shown in Table 8-1. These inconsistencies should be corrected.
Response: Agreed.
Action: The Tables have been made consistent.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.1 Page #: 8-3 Line #: NA Code:
Original Specific Comment #: 7
Comment: In Table 8-1, the meaning for the symbol "X" is not clear. This symbol should be checked and removed, if appropriate.
Response: Agreed.
Action: X has been changed to 1.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.1 Page #: 8-3 Line #: NA Code:
Original Specific Comment #: 8
Comment: Because Table 8-1 is for soil samples only, the footnote on "s-soil samples" and "w-water samples" is inappropriate and should be removed.
Response: Agreed.
Action: The footnotes were deleted.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.2 Page #: 8-6 Line #: 21 Code:
Original Specific Comment #: 9
Comment: The text here specifies that hourly readings will be taken with a data logger at seven specified wells. However, only four of the seven specified wells are presented in Table 8-3. This discrepancy should be corrected.
Response: Agreed.
Action: Text on page 8-6, line 19 has been changed to coincide with Table 8-3.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.2 Page #: 8-6 Line #: 25 Code:
Original Specific Comment #: 10
Comment: The text in Section 8.2.2 and Table 8-3 do not agree. The text specifies seven wells that will undergo additional weekly water level measurement, but the bottom portion of Table 8-3 shows only six wells. Also, only wells 1444 and 11067 appear both here and in Table 8-3. These discrepancies should be reviewed carefully and corrections should be made as appropriate.
Response: Agreed.
Action: Text on page 8-6, line 24 has been changed to reflect locations on Table 8-3.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3 Page #: 8-7 Line #: NA Code:
Original Specific Comment #: 11

Comment: Insufficient information is presented on the rationale for the selected sample depths and tests. Unless the base for the disposal facility is to be at about 15 feet below grade, some of the tests seem inappropriate. For example, most Proctor tests are performed on shallow soil samples because surface soil is more readily available for use as fill. In this case, surface soil is apparently not considered to be used as fill. The reason for using soils from 10 feet below ground surface for Proctor tests instead of surface soil samples should be fully explained.

Response: Presently, locating the cell is dependent on the gray clay which is at an average depth of approximately 11 feet. Therefore, soils at a 10 foot depth have a potential to be used as fill. Phase III geotechnical sampling will be used to obtain additional information for the design of the facility.

Action: A note has been added to Table 8-5 giving rationale for Proctor sampling.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3 Page #: 8-7 Line #: 3 Code:
Original Specific Comment #: 12

Comment: The text states that there are 14 boring locations proposed for collecting soil samples to determine the solubility of uranium. However, Table 8-1 on Page 8-2 indicates that seven soil boring locations, not 14, will be used for determining toxicity characteristic leaching procedure (TCLP) total and isotopic uranium. The text should be revised for consistency.

Response: Agreed.

Action: The text on Page 8-7, line 6 has been changed to ...Seven of these locations are proposed to determine the solubility of uranium.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3 Page #: 8-7 Line #: 26 Code:
Original Specific Comment #: 13

Comment: The text states that samples will be collected from seven borings to determine the partitioning coefficient, K_d. However, line 3 on this page states 14 soil borings will be collected. This discrepancy should be corrected.

Response: Agreed.

Action: Please refer to comment #12.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3 Page #: 8-7 Line #: 14, 15, and 27 Code:
Original Specific Comment #: 14

Comment: The text refers to Table 8-4 for analytical methods, but there is no Table 8-4 in the document. Table 8-5, however, lists the analytical methods. Also sample depth information is presented in Table 8-6, not Table 8-5, as stated on line 14. The table numbers should be corrected so that the text agrees with the table numbers cited.

Response: Agreed.

Action: Tables have been changed to reflect the correct numbers.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3.2 Page #: 8-7 Line #: 20 to 23 Code:
Original Specific Comment #: 15
Comment: The text states that soil samples will be collected from each boring, with one sample collected from the brown clay layer and one from the gray clay layer, for a total of 28 samples. The text further states that all samples will be analyzed for total uranium, isotopic uranium, TCLP total uranium, a TCLP isotopic uranium. However, Table 8-6 shows that a total of 27 samples will be analyzed for total uranium and isotopic uranium. This discrepancy should be corrected. In addition, total uranium and isotopic uranium analyses and TCLP total uranium and TCLP isotopic uranium analyses are to be conducted on samples taken at the same depths for the brown clay (5 feet) but at different depths (15 and 20 feet) for the gray clay. The text should explain why total uranium analyses and TCLP uranium analyses are to be conducted on soil samples taken from different depths of the gray clay.
Response: Agreed. TCLP analysis will not be conducted on geotech samples. Total uranium and isotopic uranium analysis are being collected from different depths to define the vertical and horizontal distribution of uranium in the soil of the study area. This is presented in the text.
Action: TCLP analysis for the geotechnical borings have been deleted from Table 8-6.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-6 Page #: 8-10 Line #: NA Code:
Original Specific Comment #: 16
Comment: Because consolidation tests are typically performed to estimate settlement, samples for consolidation testing should be collected from below the anticipated base level. If the lower Proctor sample depth shown in Table 8-6 represents the base level, one-half of the consolidation tests would be above the base level. The reason for testing samples potentially above the base level should be given.
Response: Agreed.
Action: Table 8-5 (was Table 8-6) has been revised to reflect that the consolidation tests will be on sets from the gray soil, these soils will definitely be below the anticipated base level.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-6 Page #: 8-10 Line #: NA Code:
Original Specific Comment #: 17
Comment: See original specific comment #6 on Page 8-2. The number of samples for each boring in Table 8-6 needs to be summarized and used to prepare Table 8-1. The revised text and tables should agree.
Response: Agreed.
Action: Table 8-1 has been corrected to summarize Table 8-5 was Table 8-6.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-6 Page #: NA Line #: NA Code:
Original Specific Comment #: 18
Comment: The format presenting the depth of "brown" and "gray" clay in Table 8-6 (first and second columns) is confusing. For example, Locations 11468 through 11471 show two successive "gray clay depths while Locations 11472 through 11481 show only one "gray" clay depth. The table should more clearly present data regarding brown and gray clay layers.
Response: Agreed.
Action: Table 8-5 (was 8-6) has been revised by deleting the successive depths.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-6 Page #: 8-14 Line #: NA Code:
Original Specific Comment #: 19
Comment: The text referring to "2 Task Manager" in the footnote is not clear and this individual is not in Figure 4-1. The meaning of this footnote should be clarified.
Response: Agreed.
Action: The footnote has been deleted.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-6 Page #: 8-15 Line #: NA Code:
Original Specific Comment #: 20
Comment: Locations 11491 through 11505 are new piezometer nests. Typically, nested piezometers are not drilled to the same depth. Here 15 nested piezometers are all drilled to 20 feet (maximum 30 feet according to page 8-25, line 14). The rationale for having the same depth for all three piezometers at each nested location is not provided but should be. Also, these piezometers are called wells on page 8-25, line 14. This discrepancy should also be addressed.
Response: Agreed. The depths for these wells are estimates. The actual depths will vary for each nest and will be determined in the field in conjunction with cone penetrometer data.
Action: The text on Page 8-23, lines 22, 23, and 24 have been changed to the following: "The locations of these wells have been selected using a 3D model which was generated from the Sitewide Environmental Database and CPT data."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-7 Page #: 8-16 Line #: NA Code:
Original Specific Comment #: 21
Comment: This table lists sample volumes, containers, and preservatives required for soil samples. However, it does not provide any information on sample volume for standard Proctor tests. This test generally requires a large volume of sample material, and obtaining this volume at depth may be difficult unless the borings are drilled with augers. The last parameter listed in Table 8-7 uses the phrase "consolidated undrained;" however, the word "triaxial" should be added to be consistent with Table 8-1. Also, "hydraulic conductivity" should be called "permeability" to be consistent with Table 8-1, or the table should be changed to be consistent with American Society for Testing and Materials (ASTM) terminology.

Response: The borings will be drilled with augers; therefore, sample volume is not a problem. Standard Proctor tests have been collected for prior geotech activities using the same method planned for this activity.

Action: "Triaxial" has been added to Table 8-6 (was Table 8-7). Permeability was also been added.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.3 Page #: 8-18 Line #: NA Code:
Original Specific Comment #: 22

Comment: This page was not found in the copy received for review. If this page is not needed, the remainder of Section 8.0 should be repaginated. In addition, several tables in Section 8.0 were not paginated. These pages should be paginated to minimize confusion.

Response: Agreed.

Action: Section 8 has been repaginated.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.4.2 Page #: 8-19 Line #: 24 Code:
Original Specific Comment #: 23

Comment: The text states that two on-site locations and one off-site location will have three nested lysimeters each. Figure 8-1, however, shows that the proposed three nested lysimeter locations are all on site. Without one off-site location, it will not be possible to determine the background uranium concentration in vadose zone, as stated in Table 3-1. This discrepancy should be corrected.

Response: Agreed.

Action: Figure 8-1 has been changed.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Figure 8-1 Page #: 8-20 Line #: NA Code:
Original Specific Comment #: 24

Comment: According to this figure, the proposed locations of cone penetrometers, nested lysimeters, and nested piezometers appear to adequately cover the east side of the study area (east of the north access road). However, no proposed investigation activities are shown for the northwest portion of the study are (except for one well or piezometer nest) or for the southwest portion of the study area. The text should present the rationale for not conducting investigation activities for these two areas.

Response: The 3-D uncertainty modeling was conducted using all of the available Sitewide Environmental Database (SED) data. The modeling was used to select the CPT locations. With additional information from the CPT's, further modeling was conducted and the subsequent results were used to select the well, lysimeter, and geotechnical locations.

Action: The following text has been added to Page 8-7, line 18: "The 3-D uncertainty modeling was conducted using all of the available Sitewide Environmental Database (SED) data. The modeling was used to select the CPT locations. With additional information from the CPT's, further modeling was conducted and the subsequent results were used to select the well, lysimeter, and geotechnical locations."

The following text has been added to Page 8-17, line 18: "The 3-D uncertainty modeling was conducted using all of the available Sitewide Environmental Database (SED) data. The modeling was used to select the CPT locations. With additional information from the CPT's, further modeling was conducted and the subsequent results were used to select the well, lysimeter, and geotechnical locations."
The following text has been added to Page 8-23, line 15: "The 3-D uncertainty modeling was conducted using all of the available Sitewide Environmental Database (SED) data. The modeling was used to select the CPT locations. With additional information from the CPT's, further modeling was conducted and the subsequent results were used to select the well, lysimeter, and geotechnical locations."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Figure 8-1 Page #: 8-20 Line #: Na Code:
Original Specific Comment #: 25
Comment: This figure shows 31 CPTs, but one of them, near the southern end of the study area, is shown as location 11468, which is also indicated as a new boring in Tables 8-1 and 8-6. Also, location 11453 is missing from the sequence of numbers for the CPTs in Figure 8-1. These discrepancies should be addressed.
Response: Agreed.
Action: Figure 8-1 has been updated to reflect the correct CPT locations.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.4.3 Page #: 8-23 Line #: 9 Code:
Original Specific Comment #: 26
Comment: The text states that lysimeter pressure should be slowly increased until it reaches 9 psi to lift the sample into the lysimeter. The proposed TIMCO lysimeter to be used for the study specifies 0.44 psi pressure for each foot of depth and 9 psi for 20 feet to lift the sample into the holding chamber of the lysimeter. The possibility of using 9 psi pressure for 35 and 55 feet should be verified with the manufacturer and should be explained.
Response: Agreed.
Action: The reference to 9 psi has been removed.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.4.3 Page #: 8-23 Line #: 18 Code:
Original Specific Comment #: 27
Comment: The text states that the final round of lysimeter sampling, which will be at equilibrium, will be analyzed for total uranium, isotopic uranium, bromide, calcium, magnesium, alkalinity, nitrates, and sulfates. However, the parameters listed in Table 8-2 are not consistent with this statement. The text and Table 8-2 should be consistent.
Response: Agreed.
Action: The text and tables have been made consistent.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.2.4.3 Page #: 8-24 Line #: 28 Code:
Original Specific Comment #: 28
Comment: The text states "In addition to sampling the newly installed lysimeters, lysimeters 11132, 11133, 11130, and 11131 will be samples for..." Figure 8-1 shows the locations of lysimeters 11133 and 11130, but the locations of lysimeters 11131 and 11132 are not shown. These locations should also be shown in Figure 8-1.
Response: Agreed.
Action: Figure 8-1 has been revised.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.4.1 Page #: 8-30 Line #: 3 Code:
Original Specific Comment #: 29
Comment: The text mentions that only soil sampling equipment will be cleaned by rinsing with deionized water. The text should clarify if water sampling equipment will also be cleaned and by what method.
Response: This section only discusses Field QC sample collection. Sample Equipment cleaning is not addressed in this Section. It is addressed in Section 8.4.4.
Action: No action.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.4.2 Page #: 8-31 Line #: 15 Code:
Original Specific Comment #: 30
Comment: The text in this section mentions the Operable Unit 2 project manager, but this position is not listed in Figure 4-1. It is unclear if this refers to the director of the operable unit. The text or the figure should be revised.
Response: Agreed.
Action: The text has been changed to "Sitewide Disposal Facility Project Manager".

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.4.6 Page #: 8-32 Line #: 15 Code:
Original Specific Comment #: 31
Comment: The text states that collection of soil and subsoil materials will be documented in several forms, including a Subsurface Soil Sample Collection Log. However, no such log is found in Attachment IV. It is possible that the Sample Collection Log may be used instead. Either the missing form should be included or the text should be revised accordingly.
Response: Agreed.
Action: The text on page 8-32, line 19 has been changed to "Sample Collection Log".

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.7 Page #: 8-36 Line #: 3 Code:
Original Specific Comment #: 32
Comment: Some of the analytes of interest listed here (for example, chloride) are not presented in Table 8-7. This information should be provided.
Response: Agreed.
Action: The Table and text have been revised to be consistent.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.8.2 Page #: 8-36 Line #: NA Code:
Original Specific Comment #: 33
Comment: This section on the determination of distribution factors (K_d) for uranium in FEMP soil and groundwater contains all relevant factors. However, it omits most of the necessary specifics, such as the equation for K_d and how the experimental results will be used to solve the equation. More details should be provided.
Response: The equation for K_d is given in the DQO in Attachment II.
Action: Text has been added to Page 8-37 referencing the Attached DQO.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.8.2 Page #: 8-36 Line #: 21 Code:
Original Specific Comment #: 34
Comment: In this section and in Table 8-9, the document cites "standard adsorption tests and desorption tests." However, the specific standard is never cited. If the standard tests are published or vary from the published tests (such as Standard Test Method for Determination of a Sorption Constant for an Organic Chemical in Soil and Sediments," ASTM Method E-1195), a citation, and brief summary of the differences between the tests will suffice. If the standard tests are not published, FEMP should include the laboratory's standard operating procedures or a comparable document.
Response: The ASTM reference will be added to this sentence.
Action: The following text will be added, "Fourteen standard adsorption tests and desorption tests, and desorption tests, following ASTM Method D-4319-83..."

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.8.2 Page #: 8-37 Line #: 3 Code:
Original Specific Comment #: 35
Comment: The text states that "speciation studies have shown..." The references for these studies should be provided.
Response: Agreed.
Action: The text discussing speciation has been removed.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.8.2 Page #: 8-38 Line #: 26 Code:
Original Specific Comment #: 36
Comment: Because the term "duplicate" is used here but "split" is used in Table 8-9, the meaning is confusing. It would be better to use the same term throughout the text discussing Kd testing, if appropriate. The text should be revised accordingly.
Response: Agreed.
Action: "Duplicate" has been changed to "split".

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-9 Page #: 8-40 Line #: NA Code:
Original Specific Comment #: 37
Comment: This table refers to standard methods but does not identify the specific standard methods being referred to. In addition, this table should clarify whether a given portion of a soil sample will be used in two or more experiments. If sample portions are reused, the order during which the experiments will be performed is a critical variable. If sample portions are not reused, then the selection of the samples for the various tests is critical. Moreover, the rationale for using gray clay, but not brown clay, for the series of studies should be provided. Finally, the unbalanced design (seven brown clay samples but only four gray clay samples in the primary test) should be explained.
Response: Agreed.
Action: Table 8-9 has been replaced with a new Table 8-9 which addresses the comment.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Table 8-10 Page #: 8-41 Line #: NA Code:
Original Specific Comment #: 38
Comment: There appears to be no correlation between the samples in Table 8-10 and the tests listed in Table 8-9. A single table, combining contents of these two tables, would be less confusing. Also Section 8.8.2 notes that many factors such as carbonate and phosphate concentrations, pH, and other chemical factors can affect the observed sorption phenomena. The parameters should also be monitored.
Response: Agreed.
Action: Tables have been modified to show correlation with 8.8.2.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.9 Page #: 8-44 Line #: 31 Code:
Original Specific Comment #: 39
Comment: The text states that the contract performance requirements will be identified in the PSP. It is not clear if the referenced PSP is the one that is being reviewed or whether the performance requirements will be identified in the final PSP. The text should be revised to clarify this point, as well as identify the performance requirements.
Response: The contract performance requirements are not to be identified in this PSP.
Action: The reference to contract performance requirements has been deleted.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 8.9 Page #: 8-45 Line #: NA Code:
Original Specific Comment #: 40
Comment: Some of the acronyms are not defined and some do not match their definitions in Figure 4-1. The acronyms should be defined and used consistently.
Response: Agreed.
Action: The acronyms have been defined and match figure 4-1.