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LETTER REPORT REGARDING DATA USEABILITY WORKSHEETS FOR SITES 41 AND 46
NWS EARLE NJ
06/10/2011
TETRA TECH NUS

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June 10, 2011

Project Number 02091

U.S. Environmental Protection Agency
Region 2
290 Broadway, 20th Floor
New York, New York 10007-1866

Attn: Ms. Jessica Mollin

Reference: Contract No. N62470-08-D-1001
Contract Task Order (CTO) No. WE15

Subject: Response to EPA Request for Site 41 and Site 46 Data Useability Worksheets
Naval Weapons Station (NWS) Earle, Colts Neck, New Jersey

Dear Ms. Mollin:

On behalf of the Navy, enclosed are the completed Data Useability Worksheets for Site 41 (EPIC Site L)-MSC Van Parking Lot and Site 46 (EPIC Site Q)-Military Sealift Command Firefighting School. The worksheets were prepared per EPA's April 12, 2011 request to the Navy. Worksheets were completed for the various media that were sampled at each site as part of the 1995-1996 Remedial Investigation at NWS Earle. Three paper and electronic (CD) copies of the attached document are provided for your use.

Should you have any questions on the enclosed material, please do not hesitate to contact Roberto Pagtalunan or me.

Sincerely,

Mary M. Mang

Mary M. Mang
Project Manager

MMM/nfs

Enclosures

c: Scott Fleming (NWS Earle) (1 copy)
Roberto Pagtalunan (NAVFAC Midlant) (1 copy)
Erica Bergman (NJDEP) (3 copies)
Garth Glenn (Tetra Tech) (no enclosure)
Russell Sloboda (Tetra Tech) (1 copy)
John Trepanowski (Tetra Tech) (no enclosure)
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SITE 41 WORKSHEETS

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 41 (EPIC Site L) – MSC Van Parking Lot
Medium: Soil

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	There were no apparent sampling or field problems that would affect data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Yes. Surface soil sample results are representative of locations of storage and/or material lay down areas within the site. Site is actively used by NWS Earle Public Works Department. There was no evidence of waste burial or disposal at the site. Sampling was conducted in December 1995 for full TCL/TAL analytes and TPH.
Assess the effect of field QC results on data useability.	Field QA/QC samples included trip, rinsate, and field blanks, and field duplicates. Data validation was performed and did not reveal any evidence of QC blank contamination originating in the field. Acceptable field precision was indicated by field duplicate results.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There were no field sampling issues identified that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Samples were analyzed for organic compounds following Contract Laboratory Program (CLP) routine analytical methods. Inorganic analyses were also performed according to CLP routine analysis methods.
Were detection limits adequate?	Yes. The method detection and quantitation limits achieved the CLP contract required detection limits (CRDLs) and contract required quantitation limits (CRQLs) for routine soil analysis.
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There were no analytical technique issues that should affect the risk assessment.
Data Quality Objectives	
Precision - How were duplicates handled?	Laboratory duplicates and matrix spikes/matrix spike duplicates were analyzed as required by the methods. Field duplicates were also collected. Region II Data Validation Guidance was followed to evaluate precision.
Accuracy - How were split samples handled?	No split samples were collected.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 41 (EPIC Site L) – MSC Van Parking Lot
Medium: Soil

Activity	Comment
Data Quality Objectives (continued)	
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	Laboratory blanks caused a few low level results to be qualified "U" for aldrin, 4,4'-DDE, endosulfan sulfate, methoxychlor, endrin aldehyde, and endrin ketone. No chain of custody issues were noted.
Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	No problems were associated with data completeness.
Comparability - Indicate any problems associated with data comparability.	No problems are anticipated with data comparability due to the use of routine CLP methods of analysis.
Were the DQOs specified in the QAPP satisfied?	The DQOs specified in the QAPP were met with respect to the frequency and types of field QA/QC samples, use of proper field QC preventative measures (e.g., decontamination and sample handling), and achieving successful analysis of 99 percent of analytes in samples (Only 10 results out of 1,203 results were rejected.)
Summarize the effect of DQO issues on the risk assessment, if applicable.	There were no DQO issues identified that should affect the risk assessment.
Data Validation and Interpretation	
What are the data validation requirements?	Data validation was conducted on 100 percent of the laboratory data following the Region II SOPs. Field samples were qualified based on field QC sample results and laboratory QC results per SOP guidelines.
What method or guidance was used to validate the data?	Laboratory data were validated in accordance with the QAPP requirements, which refer to Region II SOPs for Evaluation of Metals Data for CLP, Revision 1/92, and the SOP for CLP Organic Data Review, Revision 5/93.
Was the data validation method consistent with guidance? Discuss any discrepancies.	All validation qualifiers were applied in accordance with Region II SOP guidelines.
Were all data qualifiers defined? Discuss those which were not.	Data qualifiers were defined in the footnotes to the analytical results tables.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 41 (EPIC Site L) – MSC Van Parking Lot
Medium: Soil

Activity	Comment
Data Validation and Interpretation (continued)	
Which qualifiers represent useable data?	Usable data were represented as positive results annotated with no qualifier or with a "J" qualifier, or as nondetected results with a "U" qualifier or a "UJ" qualifier. Pesticides with "NJ" qualifier (tentatively identified, estimated value) were also used.
Which qualifiers represent unuseable data?	Ten pesticide results were rejected (qualified "R") based on high percent differences in the concentration results obtained on two gas chromatographic (GC) columns. Data qualified "U" for blank contamination were considered as not detected in the risk assessment.
How are tentatively identified compounds handled?	Tentatively identified compounds (TICs) were evaluated during data validation to determine if any target compounds were inadvertently missed and to determine if any classes of chemicals were present that were not adequately represented by the concurrent identification of one or more analogous target compounds belonging to the same chemical class.
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	There were no other significant issues in data interpretation or data validation. Data qualified as estimated "J" included organics detected below the CRQL, a few pesticides with high percent differences between two GC columns, and 6 metals qualified for serial dilution. Nondetects qualified estimated "UJ" included 1 metal qualified for matrix spike recovery and 5 organics qualified for calibration percent difference.
Additional notes:	No other problems were noted.

Note: The purpose of this Worksheet is to succinctly summarize the data useability analysis and conclusions. Reference specific pages in the Remedial Investigation and/or the Risk Assessment text to further expand on the information presented here.

SITE 46 WORKSHEETS

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Groundwater

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	There were no apparent sampling or field problems that would affect data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Yes. Groundwater sample results are representative of potential locations where runoff originating from the fire training area may have flowed through cracks in the containment pad or over a berm and infiltrated soil and eventually groundwater. Sampling was conducted in December 1995 for TCL VOCs and SVOCs and TPH.
Assess the effect of field QC results on data useability.	Field QA/QC samples included trip, rinsate, and field blanks, but these results were included within a different laboratory SDG report. Data validation was performed and did not reveal any evidence of QC blank contamination originating in the field.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There were no field sampling issues identified that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Samples were analyzed for organic compounds following Contract Laboratory Program (CLP) routine analytical methods. TPH analytical methods were used to evaluate evidence of contamination but not to estimate risks. TCL VOC and SVOC analyses include components of TPH with toxic properties.
Were detection limits adequate?	Yes. The method quantitation limits achieved the CLP contract required quantitation limits (CRQLs).
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There were no analytical technique issues that should affect the risk assessment.
Data Quality Objectives	
Precision - How were duplicates handled?	Laboratory matrix spikes/matrix spike duplicates were analyzed as required by the methods. No field duplicates were collected at this NWS Earle site due to the limited number of groundwater samples. Region II Data Validation Guidance was used to assess precision.
Accuracy - How were split samples handled?	No split samples were collected.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Groundwater

Activity	Comment
Data Quality Objectives (continued)	
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	No problems were noted that impacted sample results associated with laboratory blanks or field QC blanks. No chain of custody issues were noted.
Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	No problems were associated with data completeness.
Comparability - Indicate any problems associated with data comparability.	No problems are anticipated with data comparability due to the use of routine CLP methods of analysis.
Were the DQOs specified in the QAPP satisfied?	The DQOs specified in the QAPP were met with respect to the frequency and types of field QA/QC samples, use of proper field QC preventative measures (e.g., decontamination and sample handling), and achieving successful analysis of 100 percent of analytes in samples (No results were rejected out of the data set).
Summarize the effect of DQO issues on the risk assessment, if applicable.	There were no DQO issues identified that should affect the risk assessment.
Data Validation and Interpretation	
What are the data validation requirements?	Data validation was conducted on 100 percent of the laboratory data following the Region II SOPs. Field samples were qualified based on QC measurement data per SOP guidelines.
What method or guidance was used to validate the data?	Organic data were validated in accordance with the QAPP requirements, which refer to the Region II SOP for CLP Organic Data Review, Revision 5/93. TPH data were validated using the analogous requirements in the Region II SOP for Evaluation of Metals Data for CLP, Revision 1/92.
Was the data validation method consistent with guidance? Discuss any discrepancies.	All validation qualifiers were applied in accordance with Region II SOP guidelines.
Were all data qualifiers defined? Discuss those which were not.	Data qualifiers were defined in the footnotes to the analytical results tables.
Which qualifiers represent useable data?	Usable data were represented as positive results annotated with no qualifier or with a “J” qualifier, or as nondetected results with a “U” qualifier.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Groundwater

Activity	Comment
Data Validation and Interpretation (continued)	
Which qualifiers represent unuseable data?	No analytical results were qualified as unusable or rejected ("R").
How are tentatively identified compounds handled?	Tentatively identified compounds (TICs) were evaluated during data validation to determine if any target compounds were inadvertently missed and to determine if any classes of chemicals were present that were not adequately represented by the concurrent identification of one or more analogous target compounds belonging to the same chemical class.
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	There were no other significant issues in data interpretation or data validation. Data qualified as estimated "J" included organics detected below the CRQL.
Additional notes:	No other problems were noted.

Note: The purpose of this Worksheet is to succinctly summarize the data useability analysis and conclusions. Reference specific pages in the Remedial Investigation and/or the Risk Assessment text to further expand on the information presented here.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Sediment

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	There were no apparent sampling or field problems that would affect data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Yes. Sediment sample results are representative of the pond area potentially impacted by discharges prior to installation of the oil-water separator upgrades. Sampling was conducted in December 1995 for TCL VOCs and SVOCs and TPH.
Assess the effect of field QC results on data useability.	Field QA/QC samples included trip, rinsate, and field blanks. Data validation was performed and did not reveal any evidence of QC blank contamination originating in the field.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There were no field sampling issues identified that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Samples were analyzed for organic compounds following Contract Laboratory Program (CLP) routine analytical methods. TPH analytical methods were used to evaluate evidence of contamination but not to estimate risks. TCL VOC and SVOC analyses include components of TPH with toxic properties.
Were detection limits adequate?	Yes. The method quantitation limits achieved the CLP contract required quantitation limits (CRQLs) on a wet-weight basis for routine solid analysis. Sediment samples contained high percent moisture. As expected, this impacts dry weight-adjusted detection limits.
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There were no analytical technique issues that should affect the risk assessment.
Data Quality Objectives	
Precision - How were duplicates handled?	Laboratory matrix spikes/matrix spike duplicates were analyzed as required by the methods. No field duplicates were collected at this NWS Earle site due to the limited number of sediment samples. Region II Data Validation Guidance was followed to evaluate precision.
Accuracy - How were split samples handled?	No split samples were collected.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Sediment

Activity	Comment
Data Quality Objectives (continued)	
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	Laboratory blanks revealed low level results for bis(2-ethylhexyl) phthalate, 2-butanone, acetone, and methylene chloride. Any associated sample results were qualified as nondetected ("U"). No chain of custody issues were noted.
Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	No problems were associated with data completeness.
Comparability - Indicate any problems associated with data comparability.	No problems are anticipated with data comparability due to the use of routine CLP methods of analysis.
Were the DQOs specified in the QAPP satisfied?	The DQOs specified in the QAPP were met with respect to the frequency and types of field QA/QC samples, use of proper field QC preventative measures (e.g., decontamination and sample handling), and achieving successful analysis of 100 percent of analytes in samples (No results were rejected out of the data set).
Summarize the effect of DQO issues on the risk assessment, if applicable.	There were no DQO issues identified that should affect the risk assessment.
Data Validation and Interpretation	
What are the data validation requirements?	Data validation was conducted on 100 percent of the laboratory data following the Region II SOPs. Field samples were qualified based on field QC sample results and laboratory QC results per SOP guidelines.
What method or guidance was used to validate the data?	Organic data were validated in accordance with the QAPP requirements, which refer to the Region II SOP for CLP Organic Data Review, Revision 5/93. TPH data were validated using the analogous requirements in the Region II SOP for Evaluation of Metals Data for CLP, Revision 1/92.
Was the data validation method consistent with guidance? Discuss any discrepancies.	All validation qualifiers were applied in accordance with Region II SOP guidelines.
Were all data qualifiers defined? Discuss those which were not.	Data qualifiers were defined in the footnotes to the analytical results tables.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Sediment

Activity	Comment
Data Validation and Interpretation (continued)	
Which qualifiers represent useable data?	Usable data were represented as positive results annotated with no qualifier or with a "J" qualifier, or as nondetected results with a "U" qualifier.
Which qualifiers represent unuseable data?	No analytical results were qualified as unusable or rejected ("R").
How are tentatively identified compounds handled?	Tentatively identified compounds (TICs) were evaluated during data validation to determine if any target compounds were inadvertently missed and to determine if any classes of chemicals were present that were not adequately represented by the concurrent identification of one or more analogous target compounds belonging to the same chemical class.
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	There were no other significant issues in data interpretation or data validation. Data qualified as estimated "J" included organics detected below the CRQL.
Additional notes:	No other problems were noted.

Note: The purpose of this Worksheet is to succinctly summarize the data useability analysis and conclusions. Reference specific pages in the Remedial Investigation and/or the Risk Assessment text to further expand on the information presented here.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Soil

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	There were no apparent sampling or field problems that would affect data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Yes. Subsurface soil sample results are representative of potential locations where runoff originating from the fire training area may have flowed through cracks in the containment pad or over a berm and infiltrated soil. Sampling was conducted in December 1995 for TCL VOCs and SVOCs and TPH.
Assess the effect of field QC results on data useability.	Field QA/QC samples included trip, rinsate, and field blanks. Data validation was performed and did not reveal any evidence of QC blank contamination originating in the field.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There were no field sampling issues identified that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Samples were analyzed for organic compounds following Contract Laboratory Program (CLP) routine analytical methods. TPH analytical methods were used to evaluate evidence of contamination but not to estimate risks. TCL VOC and SVOC analyses include components of TPH with toxic properties.
Were detection limits adequate?	Yes. The method quantitation limits achieved the CLP contract required quantitation limits (CRQLs) for routine soil analysis.
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There were no analytical technique issues that should affect the risk assessment.
Data Quality Objectives	
Precision - How were duplicates handled?	Laboratory matrix spikes/matrix spike duplicates were analyzed as required by the methods. No field duplicates were collected at this NWS Earle site due to the limited number of soil samples. Region II Data Validation Guidance was followed to evaluate precision.
Accuracy - How were split samples handled?	No split samples were collected.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Soil

Activity	Comment
Data Quality Objectives (continued)	
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	Laboratory blanks revealed low level results for bis(2-ethylhexyl) phthalate, 2-butanone, acetone, and methylene chloride. Associated sample results were qualified as nondetected ("U"). No chain of custody issues were noted.
Completeness - Indicate any problems associated with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	No problems were associated with data completeness.
Comparability - Indicate any problems associated with data comparability.	No problems are anticipated with data comparability due to the use of routine CLP methods of analysis.
Were the DQOs specified in the QAPP satisfied?	The DQOs specified in the QAPP were met with respect to the frequency and types of field QA/QC samples, use of proper field QC preventative measures (e.g., decontamination and sample handling), and achieving successful analysis of 100 percent of analytes in samples (No results were rejected out of the data set).
Summarize the effect of DQO issues on the risk assessment, if applicable.	There were no DQO issues identified that should affect the risk assessment.
Data Validation and Interpretation	
What are the data validation requirements?	Data validation was conducted on 100 percent of the laboratory data following the Region II SOPs. Field samples were qualified based on field QC sample results and laboratory QC results per SOP guidelines.
What method or guidance was used to validate the data?	Laboratory data were validated in accordance with the QAPP requirements, which refer to the Region II SOP for CLP Organic Data Review, Revision 5/93. TPH data were validated using the analogous requirements in the Region II SOP for Evaluation of Metals Data for CLP, Revision 1/92.
Was the data validation method consistent with guidance? Discuss any discrepancies.	All validation qualifiers were applied in accordance with Region II SOP guidelines.
Were all data qualifiers defined? Discuss those which were not.	Data qualifiers were defined in the footnotes to the analytical results tables.

DATA USEABILITY WORKSHEET
Site: NWS Earle Site 46 (EPIC Site Q) – Military Sealift Command Firefighting School
Medium: Soil

Activity	Comment
Data Validation and Interpretation (continued)	
Which qualifiers represent useable data?	Usable data were represented as positive results annotated with no qualifier or with a "J" qualifier, or as nondetected results with a "U" qualifier.
Which qualifiers represent unuseable data?	No analytical results were qualified as unusable or rejected ("R").
How are tentatively identified compounds handled?	Tentatively identified compounds (TICs) were evaluated during data validation to determine if any target compounds were inadvertently missed and to determine if any classes of chemicals were present that were not adequately represented by the concurrent identification of one or more analogous target compounds belonging to the same chemical class.
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	There were no other significant issues in data interpretation or data validation. Data qualified as estimated "J" included organics detected below the CRQL.
Additional notes:	No other problems were noted.

Note: The purpose of this Worksheet is to succinctly summarize the data useability analysis and conclusions. Reference specific pages in the Remedial Investigation and/or the Risk Assessment text to further expand on the information presented here.