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TRANSMITTAL LETTER REGARDING FINAL QUALITY ASSURANCE PROJECT PLAN
ADDENDUM 5 REVISION 2 SOLID WASTE MANAGEMENT UNIT 9 (SWMU 9) NSA CRANE
IN
2/23/2010
TETRA TECH



TETRA TECH

February 23, 2010

Project Number 112G01019

Mr. Howard Hickey
NAVFAC MW
201 Decatur Avenue,
Building 1A, Code EV
Great Lakes, IL 60088

Reference: CLEAN Contract No. N62472-03-D-0057
Contract Task Order (CTO) No. 0467

Subject: Final (Revision 2) Quality Assurance Project Plan (QAPP) Addendum No. 5 for
SWMU 9 at Naval Support Activity (NSA) Crane in Crane, IN

Dear Mr. Hickey:

Enclosed, please find a final (Revision 2) QAPP Addendum No. 5 for SWMU 9 at Naval Support Activity (NSA) Crane in Crane, IN. This final QAPP Addendum No. 5 is for completing soil excavation work at SWMU 9. A complete electronic copy of Appendix D (Microbac Laboratory SOPs) is a contained on the enclosed CD in PDF format.

Also attached, please find a copy of the Response-To-Comment (RTC) document. Tetra Tech NUS, Inc. (Tetra Tech) prepared this RTC document in response to comments that were submitted by Mr. Peter Ramanauskas of the USEPA on the January 2010 Revision 1 version of the QAPP Addendum No. 5. It was revised in accordance with the RTC document.

This QAPP Addendum No. 5 describes the requirements for the EMAC contractor to complete the excavation work at the following areas of SWMU 9: 1) former Building 55 Area, and 2) former Fire Fighting Training Area. This QAPP Addendum No 5 includes the specific requirements of the EMAC contractor and specific labs that will perform the work.

Via copy of this letter, Tetra Tech is providing 6 copies of the QAPP Addendum No. 5 to Mr. Tom Brent.

The field work associated with this project is scheduled to begin in March 2010. If you have any questions regarding this CTO, please contact me at (513) 557-5057 or via email at Tony.Klimek@TetraTech.com.

Sincerely,

Anthony P. Klimek, PE
Project Manager

cc: Mr. Tom Brent, NSA Crane
Mr. John Trepanowski, Tetra Tech
Mr. Ralph Basinski, Tetra Tech (Letter only)
Ms. Kelly Carper, Tetra Tech (Letter only)
Project File – CTO 0467

RTC Document
For
QAPP ADDENDUM No. 5 for SWMU 9 – PESTICIDE CONTROL AREA
NSA CRANE

Prepared by Tetra Tech NUS
In Response to: Comments by USEPA – on January 2010, Rev 1 Version of QAPP
Comments Received February 10, 2010 - RTC Document Issued: February 17, 2010

Comments on SWMU 9 QAPP Addendum No 5, January 2010, Revision 1 Version

1. Comment: In addition to final confirmation sampling to ensure the 1 ppm and 25 ppm removal target levels have been met at the former fire training area, floor and sidewall samples should be collected upon removal of > 50 ppm soils to confirm that all > 50 ppm soils have been removed. This is indicated in Tetra Tech's response to comments (#2) from 9/23/09 "The agreement with the contractor will ensure that samples are collected at the limits defined in the Technical Memorandum so that no > 50 ppm material is inappropriately disposed of along with < 50 ppm material.", but this does not seem to be reflected in Figure 9 of the Technical Memorandum found in QAPP Appendix E or mentioned in an appropriate part of the QAPP Section 3.5.3.

Response: Existing fixed based laboratory analysis was used to delineate the extent of soil to be excavated and to segregate it into the different waste streams for treatment and disposal. The EMAC Contractor (LES/ToI Test JV) will also collect additional confirmation samples and utilize fixed based lab analytical results to confirm that the excavated material is segregated into the appropriate waste streams. Tetra Tech will collect verification samples to verify that soil contamination above the media cleanup standard (MCS) has been removed.

The following text will be added to Section 3.5.3.3 to more clearly describe the confirmation sampling for waste classification:

"At the former Building 55 Area, LES/ToI Test JV will initially excavate the soil that is estimated to contain pesticide contamination above LDRs and transport it off-site to an appropriate treatment facility. This excavation will be in accordance the pre-excavation sampling and analysis limits as shown on Figure 6B in Technical Memorandum in Appendix E. LES/ToI Test JV will then collect confirmation samples from the boundaries of this initial excavation to confirm that the remaining soil contains contamination below the LDRs. Confirmatory grab samples will be collected from every 25 linear feet of excavated sidewall, with no less than one sample collected from each directionally facing sidewall. Confirmatory grab samples will be collected from every 1000 square feet of exposed excavation floor, with no less than one sample collected from each excavation floor. This confirmation sampling and the pre-excavation sampling will be used to characterize the remaining soil that will be excavated as shown of Figure 6B that has contamination below the LDRs but is above the MCS.

At the former Fire Fighting Training Area, LES/ToI Test JV will initially excavate the soil that is estimated to contain PCB contamination above 50 ppm (TSCA waste) and transport it off-site to an appropriate TSCA facility. This excavation will be in accordance the pre-excavation sampling and analysis limits as shown on Figure 7B in Technical Memorandum in Appendix E. LES/ToI Test JV will then collect confirmation samples from the boundaries of the excavation for analysis to confirm that the remaining soil is not a TSCA waste (less than 50 ppm PCBs). Confirmatory grab samples will be collected from every 25 linear feet of excavated sidewall, with no less than one sample collected from each directionally facing sidewall. Confirmatory grab samples will be collected from every 1000 square feet of exposed excavation floor, with no less than one sample collected from each excavation floor. This confirmatory sampling and the pre-excavation sampling will be used to characterize the remaining soil that will be excavated that was estimated to be above the MCS as shown of Figure 7B."

In addition, the following text will be added to Section 3.5.1 to clarify verification sampling that will be performed to verify achievement of the MCS:

“After excavation by LES/ToI Test JV, Tetra Tech will collect verification samples from the sidewalls and floors (bottom) of the excavations to verify that the remaining soil contamination is below the MCS. The requirements for this verification sampling at the former Building 55 Area and the former Fire Fighting Training Area are described on the notes on Figure 8 and Figure 9 in the Technical Memorandum (Appendix E). As described on Note 1, verification samples will be collected from every 25 linear feet of excavated sidewall. As described on Note 2, verification samples will be collected from every 1000 square feet of exposed excavation floor.”

2. Comment: Table 3-6: Is the random grid sequencing the same as before? (It would be appropriate to generate some new numbers now.) Or is this merely an example illustrating how random numbers would be generated onsite.

Response: This is a continuation of work that was started by a different EMAC contractor. Therefore, it is appropriate to follow the same procedures and random numbers that were used previously. They should be sufficient for this next phase of the work.

3. Comment: The title should be simplified because this project emphasizes only one of the previous 11 SWMUs and AOCs (i.e. SWMU # 9). It is confusing carrying forward all these references to ten other areas not subject to this current phase of investigation.

Response: The title page and cover were revised to accurately reflect the scope.

4. Comment: Sections 3.4 and 3.5.2 refer to Field instrument PCB test kits as 'confirmation sampling,' which they are not.

Response: Field instruments such as PCB test kits will be used to guide field activities and provide general information to identify verification sampling locations. Fixed-based laboratory analyses will be the definitive data for verification sampling decisions.

The following text was added to Section 3.4 to clarify this requirement: “Field instruments such as PCB test kits will be used to guide field activities and provide general information to identify verification sampling locations. Fixed-base laboratory analyses will be the definitive data for verification sampling decisions.”

Section 3.5.2 was revised to present field calibration requirements.

5. Comment: What is this 'in-situ testing' that is referenced on p. 3-10? Do they mean immunoassay testing for PCBs? Also, for this same section, wouldn't the cited pesticides have to be < TC value before the soils could go to a nonhazardous landfill?

Response: The in-situ testing listed in Section 3.5.3.3 refers to the pre-excavation sampling that was performed by Tetra Tech and described in the Technical Memorandum. Field testing using immunoassay testing for PCBs will be used to select sample locations but will not be the basis for waste characterization or verification. All characterization for waste classification will be based on fixed based laboratory analysis.

At the former Building 55 Area, the EMAC contractor will initially excavate the soil that is estimated to contain pesticide contamination above LDRs and transport it off-site to an appropriate treatment facility (EQ-Michigan Disposal, Inc). The remaining contaminated soil in the area is also pesticide contaminated soil and will be handled as hazardous material unless proven otherwise; the hazardous material will be disposed in a hazardous waste facility (Heritage Environmental Services). However, some of this material may be in a special waste category if it has pesticide contamination less than LDRs and is not hazardous as per TCLP

analysis. The Navy and EMAC contractor are evaluating the option of disposing of this special waste as non-hazardous if it can be verified by analysis and accepted by a licensed facility.

6. Comment: We need further indication of Empirical's analytical capabilities for PCBs and pesticides for this project. Please provide NELAC certification and PE sample information appropriate to the matrices, analytes, and methods which will be utilized for this project.

Response: Empirical is a NELAP certified lab. A copy of their Certification as well as PE reports applicable to this project from their two most recent Proficiency Test studies will also be added to, and provided in, Appendix C.

7. Comment: In the Word Tracked Changes document recently received, Crane has removed DRO from the analytical suite - Table 3-1: no references to DRO are made; Table 3-2: references to DRO have been deleted; Section 1.2: DRO was eliminated. The PDF QAPP of January 2010 contains references to DRO. Please clarify.

Response: The Word tracked changes version of the document with regard to DRO is correct.

QAPP Addendum No. 5 addresses additional excavation for the proposed interim measures for two areas of SWMU 9 – 1) former Building 55 Area, and 2) former Fire Fighting Training Area. As described in the Technical Memorandum dated October 5, 2009, previous verification sampling and analysis (from September and October 2008) and pre-excavation sampling and analysis (from July 2009) was performed at these two areas to delineate the excavation limits for the proposed interim measures. The identified chemicals-of-concern (COC) at the former Building 55 Area are pesticides, and the COC at the former Fire Fighting Training Area are PCBs. DRO were removed as a COC for the former Building 55 Area.

During the previous verification sampling, Diesel Range Organics (DRO) were detected in only one sample location at the former Building 55 Area above the MCS; the sample containing DRO also contained pesticides. Also, twenty-seven (27) pre-excavation samples collected from the former Building 55 Area were analyzed for DRO; none of these samples contained DRO above the MCS. Therefore, samples were not proposed to be analyzed for DROs as part of the verification sampling. As shown on Figure 8 in the Technical Memorandum, verification samples from the former Building 55 Area will be analyzed for pesticides. As shown on the Figure 9 in the Technical Memorandum, verification samples from the former Fire Fighting Training Area will be analyzed for Polychlorinated Biphenyls (PCBs).

The following text has been added to Section 1.2:

“Pesticides are the only COC at the former Building 55 Area; DRO are no longer considered COC in this area. Analytical results from the previous verification sampling and analysis (from September and October 2008) contained only one sample with DRO above the MCS; pesticides were also detected in that sample. Twenty-seven (27) pre-excavation samples collected from the former Building 55 Area were also analyzed for DRO; none of these samples contained DRO above the MCS. Therefore, DRO were removed as a COC for the former Building 55 Area.”