

US EPA ARCHIVE DOCUMENT

# Response to Comments on Final Confirmation Sampling Plan – Revision No. 2 dated July 2012 Tyco Fire Products LP Facility USEPA WID 006 125 215

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On behalf of Tyco Fire Products LP (Tyco), CH2M HILL has reviewed the comments received on February 21, 2013, from the U.S. Environmental Protection Agency (USEPA) dated February 19, 2013, related to Revision 2 of the *Final Confirmation Sampling Plan* dated July 2012. The following responses to comments indicate how each comment has been addressed in Revision 3 of the document dated March 2013. Each comment is presented below, followed by the response (in italics).

## General Comments

1. As appropriate, the FCSP and Quality Assurance Project Plan (QAPP) should be amended to reflect the laboratory or laboratories to be used for confirmatory sampling analysis. TestAmerica Laboratory and PACE Analytical are currently listed in the QAPP Addendum 3. If an onsite laboratory is proposed to be used, an amended QAPP should address the issue of the location of the mobile laboratory so as not to become cross contaminated with onsite dredging operations or sediment processing activities.

*Response: Section 4.3 has been updated to include options for multiple laboratories, as a final selection has not been determined. The options listed include using a mobile laboratory (Environmental Chemistry Consulting Services, Inc.) or two offsite laboratories, including Pace Analytical Services or TestAmerica Laboratories located in Chicago or Pittsburgh. The project QAPP will be updated to include the potential use of an onsite mobile laboratory. The QAPP will be submitted to USEPA for review and approval.*

2. The Plan should specify that the Remedial Action Objective is 50.0 mg/kg total arsenic on a dry weight basis, and that confirmatory sampling will only be conducted in a given DMU after the dredging contractor has verified that the design elevations have been achieved for the specific DMUs, within the tolerances specified in the plans & specifications.

*Response: Bullet 4 of Section 2.2 already states results will be dry-weight corrected. Additional text was added to the 7th bullet of Section 2.2 and states, "Confirmation sampling for each DMU will commence once it and immediately adjacent DMUs are confirmed to be dredged to the design*

*elevation(s) and tolerances specified in the plans and specifications. Confirmation that each DMU is ready for sampling will be performed by the dredging contractor using bathymetric surveys."*

## Specific Comments

1. **Section 2.2 Confirmation Sampling Approach, Page 2-2, Bullet #4 on that page:** Revise the Plan to specify, that if redredging occurs, any additional sampling will be randomized in the same manner outlined in Section 3.2.2, and not taken at the same location as the original confirmation sample.

*Response: The text has been updated to implement comment.*

2. **Section 2.2, Table 1 Sampling and Analysis Scheme:** Needs revision to reflect additional sediment core locations in Phase V dredging where the dredge management unit (DMU) exceeds 4,900 square feet (sf). In particular, additional cores need to be added for DMUs 112 (5,138 sf), 116 (5,710 sf), 117 (5,647 sf), 129 (5,463 sf), 131 (10,414 sf) (3 cores needed), 132 (6,123 sf), and 133 (6,199 sf). The appropriate number of cores in Phase V is increased to 55, with 110 initial DMU samples. Corresponding changes are also needed to Table A-1 in Appendix A.

*Response: Table 1, Figures 2-4, and Table A-1 within Appendix A have been updated to include the number of cores per DMU appropriate to the DMU square footage. Figures and Table A-1 have been updated to reflect that the DMU boundary is the same as the dredge boundary if an overlap of the boundaries occurred. This was implemented in response to Specific Comment 4 below in order to clearly depict that sampling would not be conducted outside the dredge boundary. The number of DMU's has decreased to 150 from 151 due to the removal of a DMU which overlapped the island in dredge phase IV. The number of sediment cores per dredge phase as reported in Table 1 are below with the quantity in parentheses representing the number of cores previously reported. This update has resulted in an additional 16 core locations.*

- Phase II – 67 (65)
- Phase IV – 61 (54)
- Phase V – 55 (48)

3. **Section 3.1 Mobilization/Demobilization:** (a) Clarify bullet 2, is the IDW storage area on the vessel? (b) Delete bullet 3 as it assumes this work has already taken place.

*Response: Bullet 3 has been deleted, and text has been added to clarify that temporary IDW storage will be on the sampling vessel.*

4. **Section 3 Field Operations and Procedures, Section 3.2.2, Page 3-2 and Figure 2:** (a) Revise the plan to explain how the Dredge Management Units (DMU) that contain the Dredge Phase Boundary will be sampled randomly. That is, how will DMU's 1-12, 18, 21, 22 & 32 be sampled? Would the sampling efforts potentially include sampling both inside and outside the Dredge Phase Boundary? (b) This section states that once the vessel is navigated within 10 feet of the proposed sample location coordinates, the sample point will be randomly selected using 10-foot increments up to 40 feet in a randomly selected cardinal direction. Suggest that the randomization occur on shore and revised coordinates be generated to be used for anchoring purposes. Revise Section 3.2.2 as appropriate.

*Response: (a) Text has been updated to the following, "Collection of confirmation samples will only take place inside the dredge extent boundary as shown in the Figures 2 through 4."*

*(b) Text has been updated to state the following, "Before the daily sampling activities commence, the actual sample location will be randomly selected and revised coordinates will be generated."*

5. **Section 3.2.2 Sediment Sampling Procedures, page 3-3:** The text states that the last sample interval from each location will go to the interface of the native sediments. Clarify whether this reference is to the glacial till. According to the text in this section, the sample will be collected to glacial till or to a maximum depth of 4 feet below the sediment surface. Revise to reflect that the last sample may not be into till if more than 4 feet of sediment remains.

*Response: Reference to native sediments has been changed globally to "glacial till". Text was revised within the second paragraph to state the following, "If samples are collected to glacial till material, glacial till will not be sampled and care will be taken to not composite the glacial till material with overlying sediment. If more than 4 feet of sediment remains, the last sample may not be into glacial till."*

6. **Section 3.2.4 Collection of Samples for Analysis:** Please note that EPA does not object to decanting off excess liquid prior to homogenizing the sample.

*Response: Reference to decanting excess liquid has been removed.*

7. **Section 3.4 Field Equipment Decontamination:** Revise the text to specify that if methanol rinse is used, a separate bucket will be used to collect and segregate the methanol rinse and final rinse from other wash waters for separate disposal.

*Response: Text has been updated to read as follows, "If a methanol rinse is used, a separate container will be used to collect and segregate the methanol rinsate for separate disposal."*

8. **Section 3.5 IDW Waste Characterization:** Revise to reflect that any buckets of methanol rinse waters will be separately managed for disposal.

*Response: Text has been updated to read as follows, "Liquids containing the methanol rinse used for sampling equipment decontamination will be separately managed for disposal, while remaining liquids generated from sampling will be transferred directly to the onsite treatment system."*

9. **Section 4.1 Sample Nomenclature:** Revise the numbering scheme for DMUs to reflect a three number code since there are 151 DMUs.

*Response: The numbering scheme has been updated to a three-number code within Table A-1, figures, and text.*

10. **Section 4.2.2 Equipment Blanks:** Revise to reflect that one equipment blank will be run per day, not per week.

*Response: Text has been updated to state the following, "One equipment blank will be collected on each day of sampling per piece of nondedicated equipment used during field activities and analyzed for the same parameters as the sediment samples."*

11. **Appendix A. Table A-1:** Revise consistent with Specific Condition 2 above.

*Response: Table A-1 within Appendix A has been updated with the corrected number of sample locations per DMU grid and the respective square footage of each DMU.*

12. **Appendix C FOPs:** (a) FOP-01 Positioning of the Sampling Vessel, expand this section to discuss anchoring the vessel; (b) FOP-02 Equipment and Materials, revise to specify that PPE is Level D plus PFD; Procedures and Guidelines, revise item 2 to reflect recording the water depth to the nearest 0.1 foot; Decontamination of Drilling Rigs and Equipment the FOP is inconsistent with Section 3.4 of the plan which specifies a deionized water rinse, vs. distilled water.

*Response: Discussion pertaining to vessel anchoring was added to FOP-01 to coincide with existing text in Section 3.2.1. FOP-02 has been updated to state PPE is Level D and includes a PFD. The water depth measurement interval was corrected from 0.01 to 0.1 foot. Section 3.4 of the main text has been updated to specify the use of distilled water instead of deionized water to be consistent with the FOP.*