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Project No. 112G00447

Mr. Howard Hickey
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201 Decatur Avenue
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Reference: CLEAN Contract N62467-04-D-0055
Contract Task Order No. 0034

Subject: Response to United States Environmental Protection Agency (U.S. EPA) Comments Concerning the Resource Conservation and Recovery Act (RCRA) Addendum No. 2 to the Quality Assurance Project Plan (QAPP) for Naval Surface Warfare Center (NSWC) Crane Solid Waste Management Units (SWMUs) 8, 15, 18, 19, 20, and the Old Gun Tub Storage Lot for UXO 5 (Building 2044 Drop Tower/Test Rail Site) and UXO 7 (Ranges)

Dear Mr. Hickey:

Enclosed for your review are the subject responses to U.S. EPA comments specifically regarding UXO 5 and UXO 7.

Please contact James Goerdt at 412-921-8425 (e-mail James.Goerdt@ttnus.com) or me at 412-921-8308 (e-mail Ralph.Basinski@ttnus.com) regarding any questions or comments.

Sincerely,

Ralph R. Basinski
Task Order Manager

RRB/mlg
Enclosure

cc: Mr. Tom Brent, NSWC Crane (letter and enclosure)
Ms. Lee Anne Rapp, NAVFAC Atlantic (PDF copy of letter via e-mail)
Ms. Bonnie Capito, NAVFAC Atlantic (PDF copy of letter via e-mail)
Mr. John Trepanowski, Tetra Tech (letter and enclosure)
Mr. Garth Glenn, Tetra Tech (letter only)
Project File – CTO 0034

**RESPONSES TO UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY COMMENTS (DATED 17 APRIL 2007) CONCERNING THE UXO 5 /
UXO 7 QAAP ADDENDUM NO. 2 FOR NAVAL SURFACE WARFARE CENTER
CRANE (DATED MARCH, 2007)**

EPA Comment 1:

This document is packaged as an RFA, which really isn't the correct term for the proposed work as it is RFI in nature. Perhaps this would better be noted as an RFI Phase I.

Comment Response:

The Navy intends to prepare a Site Inspection (SI) Report for SWMU 5 and an RFI Report for SWMU 7. The Navy agrees that the proposed work is more RFI in nature, particularly in the case of UXO 7.

The last paragraph of Section 1.0 has been revised to now read as follows to address this comment:

This QAPP Addendum No. 2 presents the project organization, objectives, planned activities, and specific QA/QC procedures associated with sample collection and analysis for the RCRA Site Investigation (SI) of one site (UXO 5) and a Phase I RFI of a second site (UXO 7), under the Navy Munitions Response Program (MRP). All applicable portions of the previous QAPP and QAPP Addendum No. 1 that are not superseded by this QAPP Addendum No. 2 have been reviewed to ensure that they are still valid.

EPA Comment 2:

Page 1-4 mentions propellants and explosives. Would perchlorates be a potential COC at UXO 5?

Comment Response:

The Preliminary Assessment identified the following types of munitions that were tested at UXO 5.

- 20-mm cartridges
- M121, CAD
- M1447, PAD

None of the explosive fillers or propellants in these items would contain perchlorate. Therefore, perchlorate would not be a potential COC at UXO 5.

No changes were made to the QAPP regarding this comment.

EPA Comment 3:

Page 1-7, Section 1.3.8.1: The word 'highly' under the first bullet sounds subjective and rather leading & should be deleted. The fourth bullet is an incomplete sentence and should be clarified. The fifth bullet relies on a vague term, 'significant concentrations' which should be further defined.

Comment Response:

The word "highly" has been removed from the end of the first bullet in Section 1.3.8.1.

The fourth bullet under Section 1.3.8.1 has been reworded as follows:

4. *Potentially complete pathways exist for the transport of contaminants to human and ecological receptors under the current land use as well as any potential future land use.*

The fifth bullet has also been reworded to remove the term "significant concentrations".

5. *If present in soils, MCs could present risks to human and ecological receptors.*

EPA Comment 4:

Section 1.3.8.2: Determining whether MECs and MCs are 'present' is vague. How is presence (or absence) defined for the purposes of these assessments/investigations? This is a significant term because if presence is confirmed then the directive will be to proceed to the RFI Phase II/CMS. (Also see comment 28, below.)

Comment Response:

The PA stated (Section 5.2.4) that there are no areas at UXO 5 which are known or suspected to contain MEC. Therefore, there is no need to address MEC in the UXO 5 SI. The first bullet has been deleted. If MC is shown to be present in significant quantities, then it will be necessary to proceed to the RFI. Otherwise a no further action (NFA) determination will be made.

Section 1.3.8.2 has been revised to address this comment. It now reads as follows:

1.3.8.2 Step 2 - DECISIONS TO BE MADE

The primary goal of this SI at UXO 5 is to obtain environmental data for use in making the following decisions:

1. *Determine whether MCs are present within the study area in quantities or concentrations that require proceeding to an RFI/Corrective Measures Study (RFI/CMS). If they are, proceed to the RFI/CMS; otherwise do not investigate further.*
2. *If MCs are not present in quantities or concentrations that require proceeding to an RFI/CMS, then proceed to an NFA determination.*

All references to MEC have been removed in sections 1.3.8.3 and 1.3.8.4. These sections now read as follows:

1.3.8.3 Step 3 - INPUTS REQUIRED TO MAKE THE DECISION

Data and information that will be required to make these decisions includes the following:

1. *Concentrations in surface soils of SW-846 Method 8330 explosives.*
2. *Concentrations in surface soils of SW-846 Method 3050B/6020 metals to determine if Target Analyte List (TAL) metals are present in soils at concentrations greater than background and screening levels.*

- a. *All UXO 5 surface soils belong to Soil Group 3 as defined in the NSW Crane Basewide Soil Background Study (TiNUS, 2001). This knowledge will allow site and background soils to be matched so the data represent similar soils when conducting background comparisons.*
- b. *Background lead data in soils similar to UXO 5 (from NSW Crane Basewide Soil Background Study, January, 2001). The 95% Upper Tolerance Level (UTL) from the background study will be used for comparisons.*
3. *Screening levels for explosives and TAL metals to determine if it is necessary to expand the study area and whether or not to proceed to an RFI.*
4. *Method detection limits less than screening levels.*

1.3.8.4 Step 4 - DELINEATION OF STUDY BOUNDARY

1. *The horizontal boundary is defined as the area where testing most likely took place, as shown on Figure 3-1:*
2. *MCs, if present, would be primarily in surface soils; therefore, the depth of interest is 0 to 2 feet bgs.*

EPA Comment 5:

Sections 1.3.8.4 and 1.3.8.5 discuss how visual observations of MEC will be made. Perhaps some clarification could be provided on how UXO will be discerned from MEC, and then MC. (Also see p. 1-10.)

Comment Response:

See the response to EPA comment 4.

EPA Comment 6:

Page 1-10, 4th bullet from top of page: A complete SOP for soil compositing is needed somewhere in this document. The relevant section(s) of proposed Section A from 8330B that will be implemented or a basis of rationale for the sampling technique should be incorporated into this SOP. (Also see comment 32.)

Comment Response:

A complete SOP_CTO0034-10 titled "Composite Sampling for Soil and Sediment" has been added to the Field SOPs and is now referenced in Section 3.4.1. A basis of rationale for the sampling technique was incorporated into this SOP.

Also, the reference at the end of the second bullet under subsection 1 in Section 1.3.8.7 has been changed to now reference this newly added composite sampling SOP (SOP_CTO0034-10).

EPA Comment 7:

Page 1-10: Under '2-Analysis', rationale for excluding other likely or possible compounds should be provided.

The conceptual site models contain a listing of munitions constituents that are likely to be present based on the former land use at UXO 5 and 7. The Munitions Release Profile in the tabular CSM for UXO 5 has been revised to read as follows to address this comment:

<i>Munitions/Release Profile</i>	<i>Munitions Types</i>	<i>20-mm cartridges, CADs/PADs</i>
	<i>Maximum Probability Penetration Depth</i>	<i>Surface only</i>
	<i>MEC Density</i>	<i>Range related debris was not found at the site and would not be expected to be at the site based upon the Navy operating procedures to collect and remove related debris immediately after testing. There are no known or suspected MEC areas.</i>
	<i>MEC Scrap/Fragments</i>	<i>None found during site visit.</i>
	<i>Munitions Constituents</i>	<i>Explosives and metals.</i>

The Munitions Release Profile in the tabular CSM for UXO 7 has been revised to read as follows to address this comment:

<i>Munitions/Release Profile</i>	<i>Munitions Types</i>	<i>Small arms.</i>
	<i>Maximum Probability Penetration Depth</i>	<i>Surface only (less than 6 inches bgs).</i>
	<i>MEC Density</i>	<i>Minimal range-related debris is expected to be at the site based on the Navy operating procedures of collecting and removing related debris immediately after firing and based on the dispersion pattern of shot.</i>
	<i>MEC Scrap/Fragments</i>	<i>None found during site visit.</i>
	<i>Munitions Constituents</i>	<i>Primarily lead from bullets, and to a lesser extent, other metals such as copper and antimony.</i>

Paragraphs 2 through 5 of Section 1.3.1 discuss the MCs of concern at UXO 5 and provide background information regarding other compounds that were determined not to be of concern. Section 1.3.8.7 outlines the plans for obtaining data necessary to achieve the data quality objectives as well as the rationales for analysis for determining analytical schemes for UXO 5.

EPA Comment 8:

Section 1.4.5: The last sentence states that "All water and sediment discharging from UXO 7 eventually enters Turkey Creek." Perhaps the creek area would be a prime location for additional sampling during this mobilization to check for impacts from runoff?

Comment Response:

Surface water and sediment samples have been collected during previous investigations at SWMU 7. This data will be incorporated into the SWMU 7 RFI Report. A new 6th bullet has been added to the end of Section 1.4.8.3 regarding this comment, and reads as follows:

6. *Existing historical data regarding metals concentrations in drainages at SWMU 7 leading to Turkey Creek and in Turkey Creek itself will be reviewed and incorporated.*

EPA Comment 9:

Section 1.4.8.5: Does decision rule #2 mean that the study area will be expanded automatically during this field event if lead is detected above screening levels at the horizontal or vertical boundaries of sampling? If so, that is acceptable. The order and text of the decision rules should be changed as follows:

"1. If lead or other constituents of interest are detected in any surface soil sample at concentrations greater than background concentrations and screening levels at horizontal or vertical boundaries of sampling, expand the study area to bound the constituents.

2. If lead or other constituents of interest are detected in surface soils greater than background concentrations and screening values and are bounded, perform an initial human health and ecological risk screening evaluation. The risk evaluation shall be based on fix based laboratory data or, if a reasonable correlation (i.e. $r > 0.65$) as determined in Section 4.5.1 between XRF and laboratory data exists, laboratory equivalent concentrations as well.

3. If the initial risk screening evaluation shows that a potentially unacceptable condition exists, proceed to an RFI Phase II in consultation with U.S. EPA and/or IDEM; otherwise, investigate no further."

Comment Response:

Yes, the intent of the sampling plan at UXO 7 is to allow for flexibility so expansion of the sampling area can occur if lead is detected above screening levels at the horizontal or vertical boundaries of the described sampling area.

The order and text of the decision rules has been modified as described within this comment.

Section 1.4.8.2. should be modified to reflect similar text. The document should present information (or reference a previously approved document) on how this risk screening evaluation (both human health/ecological) will be performed (e.g. OPR investigation). A table of human health and ecological screening values along with appropriate XRF and laboratory detection/reporting limits should be included in this document for ease of reference for both UXO 5 and UXO 7. This table should include field target decision levels for XRF lead and any other COCs deemed necessary.

Comment Response:

A new Section 1.5 titled "Risk Screening" has been added, as well as new Tables 1-3 and 1-4. The new Section 1.5 reads as follows:

1.5 Risk Screening

Risk screening methodology will proceed in a similar manner to the procedures discussed in the RFI Report for the Old Pistol Range (TtNUS, 2005). Table 1-3 provides a tabular presentation of soil risk-based screening levels for risk-based target level selection in explosives, PAHs, and metals. Table 1-4 provides reporting limits in soil for explosives, PAHs, and metals.

EPA Comment 10:

Section 1.4.8.7: Is 6020 the best method for confirmation analysis presuming low level detection is needed? Would a GFAA method be more effective? How do Laucks' reporting limits compare for lead? The UXO 7 XRF analytical suite should include additional metals potentially found at ranges such as antimony, arsenic, cobalt, chromium, copper, nickel tin, and zinc. Why not report all 6020 metals if included and reported by the lab anyway? PAHs should be included in analysis at the trap ranges as PAHs could have been present in clay targets. Modify Table 3-1 as necessary.

Comment Response:

Laucks Testing Laboratories no longer utilizes the GFAA Method. It was replaced by ICP/MS with a practical quantitation limit for lead in water at 1 µg/L, and in soil at 0.5 mg/kg.

Lead is the primary contaminant of concern at UXO 7. Lead would be present in the highest concentrations because it is the major component of lead bullets. The Navy agrees that other metals associated with lead bullets may also be present; however, these metals would normally be expected to be present only when associated with lead. Therefore, lead serves as an ideal "marker" compound for investigations at small arms ranges and skeet ranges. Based on experience at other small arms and skeet ranges lead would also be expected to be the major "risk driver". Field XRF techniques are applicable to metals in general. XRF techniques are particularly suited to analysis of soils/sediments for lead. The intent is to use XRF to be the primary delineation tool because of its ease of use and the ability to make virtually real-time field decisions. The XRF analytical suite will include other metals; however, field decisions will be made primarily on lead results.

All Method 6020 metals will be reported by the laboratory. PAHs are often a component of clay pigeons used at skeet ranges; therefore, PAHs will be analyzed at select sample locations at UXO 7. Table 3-1 has been updated to include PAH analysis at UXO 7, and the column titled SW-846 3050B/6020 (Lead Only) has been removed.

The second bullet in Section 1.4.8.7 has been modified to read as follows to address this comment.

2. *Analysis*

- *Select surface soils will be analyzed for all TAL metals (SW-846 3050B/6020) and PAHs (SW-846 8270C).*

EPA Comment 11:

Table 1-1, page 1 of 4: In the 3rd column, 4th row, the date Dec. 1973 appears when it reads as Dec. 1983 on p. 1-4. Also, note the typo in the 3rd column, 2nd row from bottom. 12. Table 1-1, page 3 of 4: 'Bald Eagle' - see 3rd column, 4th row from bottom.

Comment Response:

Based on the information from interviews conducted with former employees at Crane, the date in Table 1-1 regarding Range/Site History has been changed to 1983. The typo in the 3rd column, 2nd row from bottom has been corrected. The typos regarding the Bald Eagle have also been corrected.

EPA Comment 12:

Section 2.2.2: Who performs data validation independent of the laboratory?

Comment Response:

Data validation is performed by TtNUS staff. Data validation has been added under the responsibilities of the TtNUS Project Chemist in Section 2.1.4.

EPA Comment 13:

Section 2.2.4: Which function or who performs data review and prepares case narratives for Laucks?

Comment Response:

The Laboratory Quality Assurance Officer performs the data review and also reviews the case narratives for Laucks Testing.

A bullet was added to section 2.2.4 under the heading Laboratory Quality Assurance Officer which states:

- Reviews overall data packages and case narratives for completeness according to project requirements and analytical methods.

EPA Comment 14:

Section 2.3.2: The Site QA/QC should also document that all this work has been performed appropriately too.

Comment Response:

Part of the responsibility of the Site QA/QC Advisor is to document all aspects of the work being performed in a daily log. This function has been added as the last bullet under Section 2.3.2.

EPA Comment 15:

Figure 2-1: The relationship between IDEM and USEPA on UXO 5 seems a little murky as presented on this organizational diagram. Could it be otherwise clarified to identify IDEM as lead agency?

Comment Response:

Figure 2-1 has been modified to clarify IDEM as the lead agency for UXO 5.

EPA Comment 16:

Page 3-2, section 3.2: How will it be decided which portion of the 0' to 2' interval of the spoon should be composited? (Also see comment 32.)

Comment Response:

Equal amounts of the individual soil cores are initially homogenized to make up the composite sample. A complete SOP_CTO0034-10 titled "Composite Sampling for Soil and Sediment" has been added to the Field SOPs. A reference to SOP_CTO0034-10 has been added at the end of the first sentence of the second paragraph in Section 3.2.

EPA Comment 17:

Section 3.3.1, page 3-3: The word 'stratified' should be changed to something else like 'structured.' Stratified implies something 'geological,' or other than what is probably intended here.

Comment Response:

The word stratified has been removed as suggested and replaced with "structured".

EPA Comment 18:

Page 3-3, section 3.3.1.1: Further clarification is needed concerning the sentence containing the phrase, "viewed to be equivalent to grab samples of background."

Comment Response:

To further clarify the comparison of composite sample collection to individual grab samples for background, the following paragraph has replaced the second paragraph in Section 3.3.1.1:

Two conflicting factors were evident during planning for this investigation. On one hand, the heterogeneous nature of explosives release to soil was driving the collection of composite samples at UXO 5 in an attempt to limit the variability of analytical data that is expected to be caused by this heterogeneity. On the other hand, data collected for the basewide background study for metals were based on individual grab samples. The lateral distance between individual aliquots in a composite sample will be on the order of a few feet. Given the degree of spatial separation of grab samples collected for the basewide background study (TtNUS, 2001), the technical team believes that composite samples from relatively small areas such as those planned for UXO 5 would be similar to grab samples from the basewide study in terms of the soils they represent. Therefore, the composite background samples from UXO 5 will be treated as equivalent to grab samples from the basewide background study when interpreting the metals data.

EPA Comment 19:

Page 3-4, section 3.3.1.2: Insert 'XRF' into "All proposed [XRF] sample locations are shown on figure 3-2."

Comment response:

XRF has been inserted as suggested.

EPA Comment 20:

Page 3-5: For the West Trap Range, I counted either 41 or 43 soil sample locations instead of 44. At the bottom of this page, it should be stated that for all areas, XRF samples will be taken on the 'same' 0' to 2' sample interval, (i.e. in reference to the phrase "...one soil sample from each boring...").

Comment response:

Forty-four samples is the correct sample number at the West Trap Range. Forty samples are located within the black outlined boundary and the additional four samples are located along the east edge of the outline. Due to the small overlapping of the East and West Trap Ranges, the samples are difficult to distinguish between the two in that area on Figure 3-2.

The last sentence under the subsection West Trap Range has been modified as follows:

All soil borings will be advanced to a maximum depth of 2 feet bgs, and the XRF samples will be collected on the same 0 to 2 feet sample interval.

EPA Comment 21:

Section 3.4, page 3-7: Is the term 'dedicated decontaminated equipment' correct?

Comment Response:

The word dedicated has been removed from the second to last sentence in Section 3.4.

EPA Comment 22:

The last sentence of the first paragraph of Section 3.4.2 states "an attempt" will be made to ensure that each sample submitted for laboratory analysis represents the same soil associated with XRF results. Modify this language. Each sample submitted for lab analysis must represent the same associated XRF sample. Something to consider would be to take final XRF readings after aliquots have been selected for fixed lab analysis. By subjecting these to 'final' XRF analysis, a field measurement used for evaluating whether the '> .65' correlation has been achieved. Also see comment 20, above.

Comment Response:

The last sentence in the first paragraph of Section 3.4.2 has been deleted and replaced with the following new sentence:

Each sample submitted for laboratory analysis will represent the same associated XFR sample.

EPA Comment 23:

Section 3.6.5, page 3-11: Will full chain of custody be maintained for XRF field sampling and refrigerator storage?

Comment Response:

The following sentence has been added at the end of the paragraph in Section 3.6.5 to better clarify that a chain-of-custody will be maintained for samples analyzed in the field as well as those being sent for fixed-base laboratory analyses:

A chain-of-custody will be maintained for all samples collected during the investigation, including field analyses and fixed-base laboratory analyses.

EPA Comment 24:

Section 3.7.6: Will a chain of custody form be used for XRF field samples?

Comment Response:

A Chain-of-Custody will be used for all XRF field samples. To better clarify this, the paragraph in Section 3.7.6 has been changed to the following:

A Chain-of-Custody will be maintained for all samples collected during the investigations, including field analyses and fixed-base laboratory analyses. These forms are a record of the people having custody of the samples from the time the samples are collected to the time they are analyzed and disposed (see SOP_CTO0034-03). For samples being shipped for analyses at a fixed-base laboratory, the completed field Chain-of-Custody document will be placed in a sealed plastic envelope, and taped to the top inside lid of the shipping container before it is shipped. For samples maintained on-site, the completed Chain-of-Custody will remain on-site with those samples. A copy of each Chain-of-Custody document will be retained by the FOL

EPA Comment 25:

Table 3-1: In the Note on p. 1 of 6, the term 'presence or absence' requires more definition. Note that page 1-10 of the Addendum No. 2 refers to 6010B for 'TAL metals' for UXO 5, although here it is stated that 6020 will be used instead. Which is it? In the portion of this table dedicated to UXO 7, the sample numbers should refer to each of the 4 areas to be sampled described on pp. 3-5 to 3-6. (A better map will be needed eventually showing all these grab locations.)

Comment Response:

The Note on top of page 1 of Table 3-1 regarding sample rationale has been removed. The rationale for collecting samples is described in Section 1.0

All surface soils to be analyzed for TAL Metals will be done by Method SW-846 3050B/6020. The method for TAL metals at the end of the sentence in the second bullet under Section 1.3.8.7 has been changed to (SW-846 3050B/6020).

As with UXO 5, the individual areas under investigation within UXO 7 will be treated as a single investigative area since this is an initial site investigation. The overall number of samples will not change, but the locations from which they are collected may be altered based on field observations and field XRF analyses. Therefore, the sample nomenclature for UXO 7 is such that sample IDs will identify with UXO 7 as a whole, and not on individual areas within the site. The site investigation report will clearly show all collected sample locations.

Figure 3-2 will be used as a basis for the general sample locations. Field observations and field analyses (XRF) will drive exact sample locations. All final sample locations will be clearly located on individual figures in the site investigation reports.

EPA Comment 26:

Method 7471A is mentioned for mercury in Table 3-3, although it isn't mentioned in Tables 3-1 or 3-2.

Comment Response:

Table 3-3 has been modified to remove Method 7471A which was mistakenly added. Mercury has not been identified as an MC.

EPA Comment 27:

Should Tables 3-2 and 3-3 be expanded to include other parameters, per comments 10 and 25, above?

Comment Response:

Tables 3-2 and 3-3 have been modified to include PAHs for select samples at UXO 7.

EPA Comment 28:

To relieve the sense of 'fuzziness' associated with such terms as 'presence or absence' or 'significant concentrations,' relevant portions of Table 1-5 of the TtNUS 2004 QA document mentioned in section 4.3.2 of Addendum no. 2 should be more directly incorporated into the current document, possibly as an Appendix. (Also see comment 4.)

Comment Response:

Section 1.5 has been added to address risk assessment procedures and comparisons to screening levels.

EPA Comment 29:

Section 4.5.1, page 4-2: In the final report, rationale for establishing up to three 'regions' of calibration and correlation should be stated, should that occur. In this document, better decision rules should be established for use of data which has been split into 'regions' (e.g. If correlation coefficients are above or below 0.65 for different 'regions', then...). Additionally, prior to proceeding with the risk screening evaluations, draft XRF/lab data should be shared with U.S. EPA so that agreement on use for risk screening can be made. All samples should be sent to the lab in case analyses will be required at a later date.

Comment Response:

Draft XRF / laboratory data will be shared with US EPA prior to risk screening.

EPA Comment 30:

Section 4.8.2, page 4-4: How will field XRF data be validated?

Comment Response:

Field XRF data is not validated in the same manner that laboratory data is validated. Field XRF data is evaluated as described in existing Section 4.5.1.

No change has been made to the document regarding this comment.

EPA Comment 31:

Table 4-1: On both pages of this table, note that the GC-MS and GC aren't (so far) germane to these investigations.

Comment Response:

GC/MS is germane to explosives and metals and HPLC is germane to PAHs. GC has been removed from column 2 on the second page of Table 4-1.

EPA Comment 32:

SOP - CTO0034-05: Under section 3.4, how many samples/locations comprise the 'composite' sample and how much from each spoon goes into each composite?

Comment Response:

As noted in the response to EPA Comment Number 6, a new SOP (SOP_CTO0034-10) for the collection of composite sampling has been added to the Field SOPs in Appendix A which better defines how the soil from each individual soil aliquot is used for the composite sample.

EPA Comment 33:

Appendix C: An SOP for XRF is needed & Appendix C would appear to be more than mere 'instruction.' Should this be renamed the XRF 'SOP'?

Comment Response:

An SOP for XRF (SOP_CTO0034-07) is included with the other Field SOPs in Appendix A. The XRF manufacturer's instruction manual is included in Appendix C as an additional resource for the field operator.

No change has been made to the document regarding this comment.