

**NSWC CRANE  
CRANE, INDIANA**

**QUALITY ASSURANCE PROJECT PLAN FOR FULL-SCALE OPERATIONS  
AT THE BIOREMEDIATION FACILITY  
REV. 2, March 12, 1998**

**COMMENT- RESOLUTION**

**A. Comments on QAPP**

**Comments by: Allen A. Debus, EPA Region 5.**

**Telecon on March 13, 1998 with Chris Freeman, NSWC Crane EPD**

**Comment 1** On pages 34 through 36, indicate that the compounds 2,4 DNT and NB will be analyzed for TCLP test if the totals values are high.

**Response 1** 2,4 DNT and NB will initially analyzed as totals using Method 8330 and results will be calculated using a correction factor of 20 to check if the values are below the TCLP regulatory limit. If the total analyses results with the correction factor indicate values are higher than the regulatory limits, then TCLP analysis will be requested to verify if indeed the sample exceeds the TCLP criteria. This approach is provided in Section 1.3.1 of the Full-Scale Operational Plan. Additionally, the QAPP (Revision 2, Dated 3/12/98) Section 1.4.1 has already been revised to include this discussion.

**Comment 2** In Table 1-10, does the range indicated for TNT and RDX tests represent a "reporting limit range" or "linear range of analysis" ? Revise the title, "Measurement and accuracy ranges" to "Measurement range and accuracy criteria". Does the 8% RSD for TNT and RDX tests indicate precision instead of accuracy? Also, are there QA objectives for these parameters?

**Response 2**

- a. The range 1 to 30 ug/g for TNT and RDX tests represent a "linear range of analyses". The least detectable concentration is 0.7 ug/g for TNT and 0.8 ug/g for RDX. Refer to Appendix A, Field SOP QAPP-5.0 -- SDI User's Guide for additional information.
- b. The title for Table 1-10 has been revised as suggested.
- c. The %RSD indicates the linearity of the measurement. Thereby represents the accuracy of the test.
- d. QA objectives for these parameters are provided in Table 3-8 of the QAPP.

**Comment 3** Table 1-11 second column page 41 and 43. Change VOCs note to include using the EnCore sampling technique.

**Response 3** Comment noted. Text has been revised as suggested.

**Comment 4** The ecological use cleanup goal for chloroethane is 230 mg/L. Revise Table 1-4b, page 9f of 44 accordingly.

**Response 4** Comment noted. Text has been revised as suggested.