	COMMENT	RESPONSE TO COMMENT
#17) nume	have completed our Comment review of the subject first revision QAPjP (QAS Log-In received on April 15, 1991. The present QAPjP is not approvable since it contains erous deficiencies which are detailed in this memorandum. These deficiencies de CRL comments on both the QAPjP and laboratory QAPjP.	
CRL	has some general project concerns which must be addressed:	
does the p For V 5,000	a 3 of the QAPjP shows a map of high volatile concentrations. Page 75 of the QAPjP not address how volatiles (Appendix IX, BTEX, or TCL) are going to be measured in dresence of large concentrations of volatiles (i.e., toluene and xylene at 70,000 μ g/L). Vell 6A, the best detection limit for the remaining Appendix IX compounds is 3,000 to μ g/L. This was discussed in the Laboratory Evaluation Report and several times Hatcher-Sayre. Therefore, the following items must be addressed:	
1.	Specialized QA objectives are necessary for TCL volatiles and BTEX Method 602. The toluene and xylene could even effect Method 8270.	Based on discussions with David Payne of CRL on September 30, 1991, if a dilution is needed to bring individual volatile constituents within the upper half of the initial calibration range for an 8240 analysis, then a secondary analysis will be performed. The secondary analysis will consist of an analysis at 10x more concentration than the primary analysis. When the primary analysis is at a dilution factor of 10 or less, then the secondary analysis will be conducted undiluted. If 8270 analysis is affected by high xylene/toluene concentrations, then similar steps will be taken.
2.	The selection of sampling wells for Appendix IX will be critical since relatively clean downgradient wells may have to be selected for Appendix IX testing.	The three Ranney Collectors have been selected for Appendix IX analysis because they effectively collect samples from a broad area of the site, rather than at discrete points.

	COMMENT	RESPONSE TO COMMENT
C) Analytica 1)	I <u>Procedures</u> The laboratory QAPjP does not address extraction procedures for Methods 8080, 8140, and 8150. Specify in a table the extraction procedures to be used for each of these procedures.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.
2)	Test procedures for 8140 and 8150 were found not acceptable during the laboratory evaluation. ERCO should have new SOPs developed by now (see Lab Evaluation Report). Please address.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.
3)	Methyl methacrylate, Pyridine, Ethyl methacrylate, and 2-Picoline need to be added to calibration standards. We recommend they be added to Method 8270 (along with 1,4-Dioxane). Correct Table 7-10 to reflect these additions.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.
4)	Table 7-2 of this QAPjP (Method 8270) has reporting limits inconsistent with our observations of June 1990 (see Items 3a through 3g on Page 5 of the Laboratory Evaluation Report). Please correct.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.
5)	See comment on Item 4 of Page 5 of the Laboratory Evaluation Report (vs. Table 7-1) regarding inconsistent reporting limits for volatiles. Please correct accordingly.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.
6)	The Laboratory Evaluation Report indicated that sample prep procedures, extract cleanups, matrix spike compounds, and surrogates be used. These procedures have not been stated in the laboratory QAPjP. Provide tables for this information in this section. NOTE: We have not approved sample extraction, extract cleanups, and test procedures for Methods 8140, 8150, and 8080. These items must be presented for review and approval.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.

	COMMENT	RESPONSE TO COMMENT	
7)	QA objectives do not address specific matrix spikes and surrogates to be used (see Pages 5 and 6 of the Laboratory Evaluation Report). Prepare a table for all matrix spikes, surrogates, and their control limits, based upon the recommendations of the Laboratory Evaluation Report.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.	
D) Data Reduction, Validation, and Reporting - Please specify in this section that the data reporting package will include "CLP-like" deliverables.		A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.	
E) Performar 1)	Section 10.1: Add the following sentence to the last paragraph of this section: "For this project, external laboratory audits will be performed by U.S. EPA Central Regional Lab (CRL), while field audits will be performed by U.S. EPA Central District Office (CDO)."	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.	
2)	Section 10.2: The first sentence states, "Each laboratory is subjected to quarterly systems audits by ERCOs QA director as well as external audits by" Change the word "external" in this sentence to "internal." From a project standpoint, only U.S. EPA is responsible for external audits.	A new laboratory QAPjP was submitted to reflect a change in laboratories. The new laboratory QAPjP incorporates the Review comments.	
II: QUALITY ASSURANCE PROJECT PLAN			
performance	.2.2, bottom of Page 5 - The QA/QC Coordinator is responsible for internal and system audits only. The external performance and system audits are bility of U.S. EPA. Please delete "external" from the descriptions in this	The change was made.	
analyses. For dibenzofuran	.2.2 - This section should specify the laboratories involved in sample or example, if ENSECO/CAL is to do Method 8280 for dioxins and is, and ENSECO/RMAL is to test sulfide, these laboratories need to be a this section. Please add.	The change was made to reflect all the laboratories conducting analyses.	

	COMMENT	RESPONSE TO COMMENT
C) Table 2 (I	Page 11) - The following items need to be corrected:	
1)	Field blanks and field duplicates are to be collected at a frequency of one per ten or fewer investigative samples. For 15 samples, TWO field duplicates and TWO field blanks need to be collected. Change these numbers and examine all other values in this table for accurate numbers of field duplicates and field blanks.	Table 2 has been replaced. Comments are addressed in the new table.
2)	This table shows that there will be four sampling rounds for BTX in ground water. However, the number of quarterly samples to be taken is 15, while the annual number is also 15. Why, then, are there three OTHER sampling rounds if all the samples are collected in the first round? Correct all entries in this table to provide continuity.	Table 2 has been replaced. Comments are addressed in the new table.
3)	This table specifies that one ground water sample will be collected for Appendix IX analysis. However, the project scope on Page 23 and beyond specifies more than one well to be sampled for Appendix IX. Correct this discrepancy between the samples to be collected in the project and the number of samples, as stated in this table.	Table 2 has been replaced. Comments are addressed in the new table.
4)	Methods listed in this table are not 600 series methods but 8000 series methods of SW-846. Also, "Total Sulfide" is not based on Method 376.2, but a different method. Please clarify these methods to be used as SW-846 third edition methods. Also, review ALL methods and specify the actual reference the method is based on.	Table 2 has been replaced. Comments are addressed in the new table.
D) Pages 18 to be change	3 and 75 (and others) - Trans-1,2-DCE is mentioned. This terminology needs ed. The volatile is "1,2-DCE (total). Please correct all "trans-" terminologies.	The change was made.
E) Page 24	- The "phenolics" test is mentioned. This is not in Table 2 or the ERCO ase correct the discrepancy by placing this analysis in Table 2 or deleting this	Phenolics analysis is included because of a request by the Saukville POTW, and has been shown in Table 2.

COMMENT	RESPONSE TO COMMENT
F) Table 8 - No sample preservation, container, or holding time is listed for sulfide, mercury, or cyanide. Please add and review this table to ensure all methods specified in the QAPjP are in this table.	Sample preservation, container, and holding times are included in Table 4-1 of the Laboratory Quality Assurance Project Plan.
G) The soil sampling discussed in Sections 2.9 and 2.10 (Page 48) - is not discussed in the ERCO QAPjP and this information does not appear in Table 2. Table 2 must include ALL samples and analyses to be performed for the project. Add the number of soil samples to be collected in this section to Table 2.	Soil sampling discussed in Sections 2.9 and 2.10 has been deleted from this plan, and will be submitted later as a separate sampling plan.
H) Appendix D - The ENSECO/ERCO QAPjP is out of date and is not the QA plan usually presented by ENSECO in 1990. Please update the QA manual by submitting the most current revision (the present one is dated 3/87).	Since a new laboratory (RMT Laboratories) is being used, the QA plan for RMT was substituted.
I) Please specify in this QAPiP that the data reporting package will include "CLP-like" deliverables, as well as the contents of evidential records. NOTE: This includes not just the laboratory deliverables but ALL information generated during the project (i.e., airbills, field logbooks, field calibration information, field corrective actions, etc.). Please provide.	RMT Laboratories will provide "CLP-like" deliverables as well as the contents of evidential records.
Please have the RPM forward this memo to the contractor immediately. For the next revision, submit only those pages which need to be corrected. If you have any questions regarding this report, please feel free to contact Mike DeRosa, of my staff, at (312) 353-5966.	The whole document was resubmitted, but deleted text was retained and shown with a single line through it, and new text is clearly delineated by shading.