

M60050.000819 MCAS EL TORO SSIC # 5090.3		PROJECT NOTE NO. PN-0145-35 CLE-C01-01F145-I2-0029	PROJECT NO. 01-F145-H6
CONFIRMATION OF:	CONFERENCE TELECOM X OTHER	DATE HELD DATE ISSUED RECORDED BY PLACE	21 April 1992 26 May 1992 John Dolegowski/CH2M HILL Santa Ana
SUBJECT	Meeting with Regulatory Agencies Marine Corps Air Station El Toro Orange County, California Remedial Investigation/Feasibility Study Phase I		

PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)

See last page

TITLE: MEETING WITH REGULATORY AGENCIES
 AUTHOR: JOHN DOLEGOWSKI/CH2M HILL
 DATE: 05/26/92
 CATEGORY: 11.5

ACTION REQ'D. BY	ITEM
	<p>Representatives of Marine Corps Air Station (MCAS) El Toro, Naval Facilities Engineering Command-Southwest Division (SOUTHWESTDIV), CH2M HILL, U.S. Environmental Protection Agency (EPA), California-EPA Department of Toxic Substances Control (DTSC), and California Regional Water Quality Control Board (RWQCB), met at CH2M HILL's Santa Ana office at 0800 on 21 April 1992. These meeting minutes (prepared by CH2M HILL and reviewed by SOUTHWESTDIV) provide a summary of the major points of discussion, significant decisions reached during the meeting, and a list of action items.</p> <p>TOPICS OF DISCUSSION:</p> <ul style="list-style-type: none"> o Presentation on the Observational Method by Bill Wallace and Dave Lincoln o Discussion of proposed Sampling and Analysis Plan (SAP) changes in response to the probable impact of the Orange County Water District's (OCWD's) Desalter Project and to new information gathered during the review of aerial photographs and geophysics o Standardization of schedule dates for the monthly Manager Meetings o Upcoming community relations and Open House activities o Additional aerial photograph analysis o Resolution of EPA concerns regarding data validation o Update of the construction of office and decontamination facilities

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SUMMARY OF ACTION ITEMS

- o CH2M HILL will prepare summaries of proposed changes to the SAP and send them to the agencies in advance of the next Managers Meeting
- o CH2M HILL will proceed with permitting and access activities for wells to be drilled during Phase I
- o CH2M HILL will investigate the groundwater sampling schedule and propose an approach to collecting well development samples and analyzing them for Volatile Organic Compounds (VOCs), if necessary
- o CH2M HILL will propose an approach for selecting the 10 percent of samples subject to data validation, and ensuring that data packages are available for further data validation, if necessary
- o EPA will prepare a list of sites where they recommend soil samples be analyzed for pesticides and herbicides
- o Monthly Managers' meetings will be standardized to the Thursday of the second week of each month (i.e., 11 June, 9 July, 6 August)

INTRODUCTORY NOTES

Andy Piszkin started the meeting by announcing that the agenda would be altered so that the morning agenda items would be discussed in the afternoon. The morning session would also be altered to allow for a one-hour presentation by CH2M HILL of the observational method. Following the presentation, discussion would focus on the proposed Sampling and Analysis Plan (SAP) modifications.

PRESENTATION ON THE OBSERVATIONAL METHOD

John Dolegowski introduced Bill Wallace and Dave Lincoln of CH2M HILL, who made a presentation entitled "Observational Method for Waste Site Remediation". The Observational Method is an approach to site remediation that recognizes the inherent uncertainty in environmental investigations, and the high cost and lengthy duration of investigations that attempt to remove most uncertainty prior to implementation of a remedy. The observational method contains the following key elements: exploration sufficient to establish general conditions; the assessment of probable conditions and conceivable deviations; a remedial design based on the probable conditions and reasonable deviations; the comparison of actual values for parameters to the anticipated values; and the implementation of pre-planned contingency actions if deviations occur. Data sufficiency is defined as having been achieved when it is possible to proceed with manageable uncertainty. Following the presentation, discussion and questions focused on the potential impact that use of the observational method may have on a site such as MCAS El Toro (Station).

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DISCUSSION OF PROPOSED SAMPLING AND ANALYSIS PLAN CHANGES

Chuck Elliott made a presentation on proposed changes to the Regional Groundwater Investigation (OU-1, Site 18) necessitated by OCWD's Desalter Project. The Desalter Project will involve the installation of four new extraction wells on or near the western boundary of MCAS El Toro. These wells, together with three existing extraction wells, will form a cone of depression that will extend across nearly all of the Station and capture the entire plume of contaminated groundwater, according to OCWD models. Construction on the new wells is scheduled to begin this summer, and the wells should begin pumping two years after construction starts. The Desalter Project is expected to have a major impact on the groundwater flow in the area, with effects ranging from lowering the water table to altering local flow directions.

The proposed RI/FS Phase 1 response to the Desalter Project involves two main actions: increasing the length of the wellscreen in water table wells by 20 feet, and altering the placement of wells installed as part of the OU-1 investigation. The regulatory agencies had previously approved the addition of 20 feet of screen to water table wells at its September 1991 meeting.

Two additional multi-depth wells were proposed for construction west of MCAS El Toro, in the vicinity of the extraction wells. These wells will help evaluate the horizontal and vertical extent of groundwater contamination in this area, and monitor gradient changes after the extraction wells go on line. Other wells were proposed for deletion. For example, shallow water table wells near the southwestern boundary of MCAS El Toro were deleted in response to recent sample results by OCWD that indicate that the plume of groundwater contaminated with trichloroethylene now extends further to the north than previously believed. Finally, some wells were proposed to be moved. For example, the cluster well located in the north central part of the Station will be moved away from the ongoing Tank 398 investigation. In summary, the overall number of wells constructed for the Regional Groundwater Investigation is not expected to change by more than one.

Following the presentation, Andy Piszkin requested that the agencies approve the proposed changes to allow access, permitting, and utility clearance activities to proceed. After brief discussion, the agencies gave their approval to the proposed changes to the OU-1 investigation.

Discussion then turned to other proposed changes to the SAP. John Hamill asked whether additional aerial photography analysis would take place. Andy Piszkin responded that no further aerial photography analysis would occur now in order that Phase I field work could proceed without further delay or complication. The Navy anticipates funding additional aerial photography analysis at a later date, possibly with IT Corporation doing the analysis. Results may be used during Phase II, or as part of the OU-4 investigation. There was brief discussion whether it would be appropriate to delay the OU-3 investigation and conduct further aerial photography assessment, but it was agreed to not change OU-3's current schedule.

As a way of illustrating typical proposed changes to the SAP, attention was then focused on Site 17, the Communication Station Landfill. CH2M HILL proposed extending the boundaries for the area of concern up the canyon to incorporate the pits

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and stains noted in the review of historic aerial photography. However, CH2M HILL felt that three surface samples distributed randomly across the landfill would still be sufficient for risk assessment. Also, CH2M HILL proposed continuing to drill the deep boring at Site 17, but not converting it to a monitoring well.

In summary, the discussion centered on whether three samples were enough; whether the samples should be judgmentally located in pits/stains identified on the photography; where the downgradient wells should be located—one to the southeast and one further downgradient from the site; and whether it was okay to not convert the deep boring into a well. At the end, John Hamill said the proposed approach seemed okay, and the others concurred.

Ken Williams said that at the last meeting he thought it was implied that the aerial photography analysis would have the effect of increasing the number of samples. Also, he thought that the Phase I approach would allow the number of samples to be reduced in Phase II. Now, it appears that a large number of samples will be required in Phase II. Andy Piszkin replied that the general approach was to have a limited number of samples in Phase I but to analyze these samples for a wide variety of contaminants. During Phase II, there may be a larger number of samples, but they would be analyzed for a more restricted list of parameters. However, in Phase II the Navy would try to do the appropriate thing, and not necessarily reduce the number of samples or parameters in advance.

Ken Williams then said he was unsure of the utility of the samples. Chuck Elliott said that the purpose of the samples varied, from risk assessment to characterization. The goal is not to determine the extent of contamination, but only to evaluate whether contamination exists and what are its constituents. Ken Williams said further that he could not see why the samples were not judgmentally placed in stains. Bruce Peterson pointed out that at Site 17, which is a landfill, the areas of disturbed soil were not stains, but pits. The photos showed the locations of pits at instants in time, but it may be expected that the pits would move around the landfill continuously over time. By locating the samples randomly, statistical inferences could be drawn from the data. Again the goal during this phase is only to determine what is typically out there.

Wayne Lee summed up the discussion by stating that while there were concerns with the soil samples, there seemed to be consensus with the number and location of the wells. Ken Williams said he agreed with the well locations at Site 17. John Hamill said that the general approach at Site 17 seemed okay.

Chuck Elliott asked for agreement to reduce the number of TOC and sieve analyses of soil samples collected from the screened interval of the wells, and asked what would be a suitable number. Manny Alonzo said that he thought that about one-fourth to one-third would be okay, but he felt that the samples should be adequately distributed to assure that the range of subsurface conditions would be sampled. Ken Williams suggested that perhaps collecting a sample from all upgradient wells would meet these conditions, and there was general agreement.

Ken Williams also suggested that it may be possible to drop the collection of the sample of well development water that is being analyzed for VOCs if the regular sample episode follows soon enough after the well is developed. Gary Stewart



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suggested that about one month would be a suitable time limit. John Dolegowski said that in certain instances the information from the sample could be useful and assist in siting other wells. Chuck Elliott said he was unsure of the sample schedule. He will check the schedule and propose something on well development sampling in the SAP Amendment.

Manny Alonzo emphasized that when samples were saved, they should be used in appropriate places elsewhere. Ken Williams stated that the wellscreen soil sample should still be analyzed for VOCs, if indicated by headspace analysis (as called for in the SAP). It is important to have this sample to compare with groundwater VOC analyses.

Chuck Elliott raised the issue of pesticide/herbicide sampling. He said that based on the discussion from the previous meeting, the SAP Amendment would possibly contain some additional background sampling for pesticides and herbicides. The existing background samples for metals will be collected in places undisturbed by human activities. Since the pesticide/herbicide samples are to show what typical concentrations are in human impacted areas outside the Station, these samples would have to be collected in different places. The current thought was to collect 22 background samples, distributed among agricultural, residential, and office park landscaped areas.

Sebastian Tindall expressed his opinions that regulatory standards were stricter for herbicides than pesticides, since these chemicals were regarded as labor-saving devices, while pesticides were seen as protecting the food supply. Any level of herbicides above regulatory limits is too high, whether on or off of MCAS El Toro. Background levels therefore should not matter. For example, what if background levels turned out to be very high (and hazardous). Should these levels be used to set standards? Also, samples are not currently schedule to be analyzed for EPA Methods 8140 and 8150 compounds (organophosphorus pesticides and herbicides respectively.).

Bruce Peterson asked whether the use of background samples was appropriate if the goal is to assess risk? Wayne Lee raised the issue of fairness--was it fair to require MCAS El Toro to live by different standards than the community at large? In this context, background samples would assess whether practices at MCAS El Toro were causing additional risk above that caused by routine pesticide/herbicide application in the community.

John Hamill said that EPA had prepared a list of sites at MCAS El Toro that they considered good candidates for pesticide and herbicide sampling. John Dolegowski pointed out that the list had contained nearly every site at MCAS El Toro. John Hamill suggested that EPA prepare a revised list of sites and also recommend depths at which to sample. The Navy could then make a proposal in the SAP Amendment on this list and also on possible background samples.

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STANDARDIZATION OF MONTHLY MANAGER MEETINGS

Andy Piszkin said that because everyone had busy schedules, it was difficult to set a date for the Manager Meetings. This month, for example, it was necessary to set the meeting at a time that conflicted with an internal CH2M HILL QA/QC audit of the MCAS El Toro project. As field work begins, it will be necessary to increase the frequency of the meetings, to at least monthly. He suggested that it would be best if they could set a certain time aside each month so that everyone could mark it on their calendars and plan around it. After brief discussion, it was agreed to standardize the date for monthly Manager Meetings; to be held on the Thursday of the second week of each month John Dolegowski suggested that the May meeting be set for two days, because it was necessary to discuss the Sampling Plan Amendment. It was then agreed to meet on May 14-15, 1992. Chuck Elliott said that there was not enough time to prepare the SAP Amendment by that time, but agreed to prepare summary sheets and tables that would list the proposed changes. These would be sent to the agencies in advance so that they could review the materials prior to the meeting.

COMMUNITY RELATIONS

Andy Piszkin announced that the MCAS El Toro Open House was set for June 19-20, 1992. Field equipment and drill rigs would be on display to the public. He asked that the regulatory agencies attend to help answer questions. Manny Alonzo requested that more public notification be given to bring people to the Open House. At the last community relations event, hardly anyone showed up. The Air Show would have been a good opportunity. Chrisa Mitchell said that they could consider the Air Show next year. This time, every effort is being made to get the word out to the Marines.

DATA VALIDATION

John Dolegowski stated that the Navy and CH2M HILL had received review comments from EPA on the position memorandum that he and Artemis Antipas had written to Andy Piszkin regarding data validation. He asked whether the comments represented the official EPA position. John Hamill confirmed that they did.

Sebastian Tindall said that he did not believe that 100 percent of the data should be validated; rather, that 10 percent of the data should be validated from a random selection of 100 percent of the data. All data must have a Naval Energy and Environmental Support Activity (NEESA) Level IV laboratory data package. Randomly selected samples may then be sent to an outside laboratory for validation.

Artemis Antipas replied that NEESA Level D and EPA Level IV data validation are different, and serve different purposes. It would be too confusing and difficult to try to meet both sets of requirements during the project. The Navy and CH2M HILL had decided early in the project to follow EPA Region 9 standards. We are requiring EPA Level IV Contract Laboratory Program (CLP) data packages. If we see problems, we can go back and validate up to 100 percent of the data as necessary.

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John Dolegowski pointed out that it was not necessary to validate 100 percent of risk assessment samples. John Hamill replied that 100 percent is required for "critical" risk assessment, although this would be less than 100 percent of all risk assessment. The data packages need to be available for later review.

Sebastian Tindall stated that if the laboratory retains full data packages, and they are able to be retrieved later if necessary, then the issue is resolved. The Navy should provide some rationale for how the 10 percent of samples are selected for data validation. Also, the Navy needs a contingency plan on how to obtain full packages as necessary for any additional data validation. Andy Piszkin and Wayne Lee agreed with this suggestion.

CONSTRUCTION OF OFFICE AND DECONTAMINATION FACILITIES

Andy Piszkin stated that there had been a one-month delay in construction caused by bad weather. The main body of field work therefore could not begin until the first week of June 1992. However, the Navy was attempting to start work on a limited basis during May. This involved identifying sites where drilling could begin, and meant that drilling waste would have to be stored on the site and transferred when the storage pad facility was ready. This would require an exemption from DTSC to allow the temporary storage of waste onsite.

Manny Alonzo said that there would be no problem with temporary waste storage on-site as long as it was less than 90 days. Gary Stewart said that in reality this only meant extending the time already required to transfer the waste.

Manny Alonzo/DTSC
Artemis Antipas/CH2M HILL
John Dolegowski/CH2M HILL
Chuck Elliot/CH2M HILL
John Hamill/U.S. EPA
Wayne Lee/MCAS El Toro
Dave Lincoln/CH2M HILL
Chrisa Mitchell/MCAS El Toro
Larry Nuzum/Code 1812.LN
Bruce Peterson/CH2M HILL
Andy Piszkin/Code 1812.AP
Sylvia H. Ross/CH2M HILL

Gary Stewart/RWQCB-SAR
Sebastian Tindall/SAIC/TSC
Bill Wallace/CH2M HILL
Kenneth R. Williams/RWQCB-SAR
**Robin Green/Code 0232.RG
**Ed Rogan/CH2M HILL
**Ken Tomeo/CH2M HILL
File - PMO
File - CTO Notebook/PMO
File - PAS
File - CTO Notebook/PAS
File - CH2M HILL

**Non-participant

**AGENDA
MANAGERS MEETING
MARINE CORPS AIR STATION EL TORO RI/FS
PHASE I FIELDWORK ACTIVITIES**

Tuesday 21 April 1992
8:00 A.M.

Location: CH2M HILL's Irvine Office
2510 Red Hill Avenue
Santa Ana, CA 92705
714/250-5500

*David Lincoln
Bill Wallace*

- 0800-1145. Discussion of Sampling Plan Changes**
- Reallocation of Sampling Locations and Strategies
 - Affect of OUs-1 & 2, OU-3, & RFA
 - Affect on schedules, contracting, costs, quality.

*Chuck
Bruce
John D.
Silvia*

1145-1300. LUNCH.

- 1300-1320. Update of Progress**
- February & March Monthly Reports
(No presentation - Short Q & A session only)
 - Provide copy of RFPs to Agencies.
 - Review/clarification of previous minutes.

Dolegowski

- 1320-1420. Construction of Office and Decontamination Facilities**
- Weather conditions & schedule impact
 - Temporary decon/waste storage, right thing to do?
(See enclosure letter from CH2M Hill dtd 3/3/91)
 - o Stage wastes at sites, temporary decon areas?
 - Discuss direction (delays, exemptions, pros & cons)

Tomeo

- 1420-1450. Community Relations - Open House Activities**
- Information/Discussion

Sharon Weinberg

1450-1505. SHORT BREAK.

- 1505-1550. "The Road to ROD"**
- Is the booklet realistic, what are the assumptions?
 - How can the schedule be revised by us, Team El Toro?

- 1550-1635. Additional Efforts to Improve Productivity & Quality**
- Aerial Photo Evaluation: Discussion/Status/Timetable
 - Data Validation: Resolve EPA concerns.
 - Data Quality Objectives: What part can be played now.

- 1635-1645. Standardize Monthly Manager Meetings/Forward Planning**
- Next meeting at El Toro on 14 May, then each Thursday of the second week: 11 Jun 92, 9 Jul, 6 Aug, 10 Sep, 8 Oct, 12 Nov, 10 Dec. (Plan ahead)



MEETING NOTES

PROJECT NUMBER _____ SHEET _____ OF _____

NOTES ISSUED BY _____ REGION _____

DATE _____

SUBJECT: MCRS E1 To 0.

MEETING

DATE: 21 April 92 LOCATION LAO

ATTENDEES:

NOTES BY:

REGION _____

TOPICS DISCUSSED

ACTION/NOTES

Hannell: In SD they talked about perhaps delaying the start of O2-3.

J.C.: Add photo review (incorporated into Phase II, but for new aerial photographs would be done in 1 month.

Hannell: Thought that new photos may greatly impact O2-3.

Andy (see entry photo) ^{identified} ~~drawings~~ ^{drawings} ~~root~~ ^{root} of the site.

BILL WALLACE OBSERVATIONAL METHOD

Sebastian: How will obs. method

Favors major scoping activities

John L. 3 rules of obs. method -

Wannay: Wants agreement on critical issues

Identify opp. costs.

Suggested use of site mitigation tree.

Process used is secondary; emphasize what data will be used for.

Obs method - how to proceed in the presence of ^{or remedial action}



MEETING NOTES

PROJECT NUMBER _____ SHEET 3 OF _____

NOTES ISSUED BY _____

DATE _____ REGION _____

SUBJECT: _____

MEETING

DATE: _____ LOCATION _____

ATTENDEES: _____

NOTES BY: _____

REGION _____

TOPICS DISCUSSED

ACTION/NOTES

Herb felt that homogeneity of LF is not appropriate
Herb was hoping for more quantity of surface
soils for full analysis

Hannah: Will be difficult to identify COCs if
insuff. samples are not included.

Herb thought

Random approach to patchy site is not appropriate

Wayne: We agreed in Jan to optimize sampling
based upon new aerial photos.

Sebastian: What's where

We missed the boat on identifying
COCs.

Data Validation

Sebastian: Herb ~~stated~~ 100% of samples
need

Alicia: If BSA QAPP is patchy region then
CLP requirements. It was approved
on that basis.

~~Sebastian~~

We agreed to the 10% validation, since
full data valid packets are available
from the labs

PLI/FS MANAGERS MEETING

4/21/92

<u>NAME (Print)</u>	<u>LOCATION</u>	<u>PHONE</u>
Sylvia H. Ross.	CH2M HILL	
Manny Azonzo	CH EPA/DISC R-4	(310) 590-4404
Gary Stewart	RWOQB	(714) 782-4379
SEBASTIAN TINDALL	SAIC/TSC	(415) 399-0140
John Hamill	EPA	(415) 777-2100
Ken Williams	RWOQB	714-782-4496
Chuck Elliott	CH2M HILL	916-920-0300
CHRISA MITCHELL	MCAF EL TORO	714-726-6607
WAYNE LEE	MCAF EL TORO	714-726-2821
Bill Wallace	CH2M HILL	206/453-5000
David Lincoln	CH2M HILL	206/453-5000
Andy Fischer	NAVY-SOUTHWEST DIV	619/572-2111
John Dolegowski	CH2M HILL	714/250-5500
TOMER	"	"
Bruce Peterson	"	206/453-5000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

21 April 1992

Andy Piszkin
Remedial Project Manager
Naval Facilities Engineering Command
Southwest Division
Code 1811
1220 Pacific Highway
San Diego, California 92132

Subject: EPA Review of MCAS El Toro Response
to EPA Comments on the RCRA Facility
Assessment Sampling Visit Work Plan

Dear Mr. Piszkin:

This letter transmits EPA's comments and review of the above referenced document.

If you have any questions regarding the attached comments or if you wish to discuss other matters related to the RI/FS, please contact me at (415) 744-2391.

Sincerely,

A handwritten signature in cursive script that reads "John Hamill".

John Hamill
Remedial Project Manager
Federal Facility Enforcement
Branch

Attachment

cc: Lt. Commander Serafini, USMCAS El Toro
Manny Alonzo, DHS
Ken Williams, RWQCB

FINAL TECHNICAL REVIEW OF MCAS EL TORO
RESPONSE TO EPA COMMENTS
ON THE TECHNICAL REVIEW OF THE
RCRA FACILITY ASSESSMENT SAMPLING VISIT WORK PLAN
APRIL 1992

Item 1: Our concern about scoping, chemicals of concern, etc. continues, based on the line in the response "it was not possible to positively identify the wastes managed at some SWMUs (e.g., Hazardous Waste Storage Areas [HWSAs]) over the course of time." Therefore, the list primarily focused on "current wastes." How extensive has the scoping really been? Has an intensive effort been performed? Our related concern is that if sampling is only done at stains or cracks or where information indicated possible releases, then there may well be other locations where significant releases will not be detected because they won't be sampled. Ultimately, how sure can we be that these releases would likely be detected by the extensive groundwater monitoring network which will be installed under the RI/FS program?

Item 2: Response indicates there has been review of records as part of scoping effort. "Informal basis" for validation of old data may or may not lead to correct decisions, depending upon the amount and kind of data validated (the percent, which sites, which samples, etc.). Hasn't anyone applied criteria, such as the Functional Guidelines, to historical data? The last line indicates background soil samples will be collected in the RI/FS, which is appropriate. It appears that the "stratification" question was not answered in the response.

Item 3: Use of Level 4 rather than Level 3 may only increase analytical costs 20%, but data validation costs will be significantly higher for the complete data packages. Without a plan to look for more than the Contract Laboratory Program (CLP) parameters and a few tentatively identified compounds (TICs), chemicals of concern may be missed, which may be detectable by more specific, non-CLP methods. This gets back to the question of scoping and how complete the catalog of chemicals of concern is. While it was necessary to use the lists of chemicals from other sites (e.g., landfills) to select analytical parameters, this is not

sufficient. The types of materials specific to military bases need to be incorporated. That is to say that if contamination from a release is present, it may not be detected using these methods for only these parameters.

Item 4: Again, it comes down to the extent of scoping to determine whether testing at any particular site is warranted and the fallback hope that groundwater contamination will pick up whatever has come down from possibly untested sites.

Item 5: Acceptable.

Item 6: To put it another way, what is the size of a possible "hot spot" which might be missed by the sampling proposed? If samples are to be taken only from areas where staining or cracks are present, then releases which didn't stain or cause cracking might go undetected.

Item 7: Acceptable, however, the QAPjP should have a complete table with each method's precision, accuracy, and completeness goals listed, whether the methods are for Levels II, III, IV, or V.

Item 8: Still need to state how many field method blanks and frequencies of equipment rinsates are planned. Unless the field crew uses dedicated equipment (e.g., one set of boring equipment for one site only), they will need to clean the equipment and reuse it. In which case, an equipment rinsate is necessary to demonstrate it was properly cleaned and did not carry over any cross-contamination to the next sample.

Item 9: Perhaps no one has put PCBs into the waste oil from these operations, but this can't be certain without testing.

Item 10: Same as 9 above.

Item 11: Isn't 100% data validation required, not 10% or more "if problems are encountered?"

Item 12: Acceptable.

Item 13: We would recommend including some plans to audit the laboratories because the Navy audits are done annually at best, sometimes only once in three years or when problems are suspected. System audits would be a good idea, but at least plan on submitting some blind Performance Evaluation samples as part of a performance audit program.

Item 14: Acceptable.

The Department of Toxic Substance Controls (DTSC) comments on replacing Total Petroleum Hydrocarbons (TPH)/Total Fuel Hydrocarbons (TFH) with semivolatile organic compounds (SVOC) testing make sense to us, since more information can be obtained about specific compounds this way. However, given the costs associated with sample preparation and Gas Chromatography/Mass Spectrometry (GC/MS) analysis, there may be merit in using TPH/TFH for screening samples to be tested for SVOCs. Positive TPH/TFH at levels which could be detected by GC/MS could then be tested for individual compound's identities and quantities.