Final

Meeting Minutes
Travis Air Force Base
Environmental Management
Building 246, Upstairs Conference Room
Installation Restoration Program
Remedial Program Managers Meeting

12 February 2003, 0930 Hours

Mr. Mark Smith, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 12 February 2003 at 0930 in Building 246, Upstairs Conference Room, Travis AFB, California. Attendees included:

• Mark Smith	Travis AFB
• Glenn Anderson	Travis AFB
• Dale Malsberger	Travis AFB
• Wilford Day	Travis AFB
• Tom Sreenivasan	Travis AFB
• DeAnn Lehigh	Travis AFB
• John Lucey	U.S. Environment Protection Agency (U.S. EPA)
• Elizabeth Allen	TechLaw
• Sarah Raker	Regional Water Quality Control Board (RWQCB)
• Mike Wray	CH2M Hill
• Ross Overby	URS
• Adam Harvey	URS
• Brian Garber	Shaw Engineering and Infrastructure (SE&I)

Handouts distributed throughout the meeting included:

• Attachment 1	Meeting Agenda
• Attachment 2	Master Meeting, Teleconference, and Document Schedules
• Attachment 3	SBBGWTP Monthly Data Sheet
• Attachment 4	CGWTP Monthly Data Sheet
• Attachment 5	NGWTP Monthly Data Sheet
• Attachment 6	Travis AFB – CH2M Hill Field Activities (February 2003)
• Attachment 7	URS Field Activities, Travis AFB (January 2003)

1. ADMINISTRATIVE

Mr. Mark Smith has been appointed as the Installation Restoration Program (IRP) Director.

A. Previous Meeting Minutes

The minutes from the December 2002 and January 2003 RPM meetings were approved and finalized.

B. Master Meeting and Document Schedule

The revised Travis AFB Master Meeting, Teleconference, and Document Schedules were distributed (see Attachment 2).

— Page 1, Groundwater Interim Record of Decision (IROD) Five-Year Review schedule was updated.

— Page 2, South Base Boundary Treatment Plant point of contact for the Air Force was changed to Mr. Sreenivasan.

— Page 3, SS015 Soil Remedial Design (RD) response to comments meeting was changed to 12 February 2003. SS041 RD final due date was changed to 20 January 2003.

— Page 4, Groundwater Sampling Analysis Program (GSAP) Annual Report schedule was updated.

— Page 5, Quarterly Newsletter schedule was updated. CH2M Hill point of contact for the Quarterly Newsletter and Fact Sheet was changed to Ms. Sarah Madams.

— Page 9, West Annexes Basewide Operable Unit (WABOU) Soil Record of Decision (ROD) was moved to the historical section.

2. OPERABLE UNIT UPDATE

A. North/East/West/ Industrial Operable Unit

1. NEWIOU ROD Plan of Action and Milestone

a. Sections 1 – 5 Review of the Draft ROD

Mr. Malsberger requested comments on the site reviews. Mr. Lucey had no comments on Set 1 at this time; however, he may have comments on Set 5 once the ecological risk assessors have reviewed the sites on 19 February 2002.

Ms. Raker deferred comments to U.S. EPA.

b. Ecological Protection Technical Memorandum – Site Visit

Mr. Malsberger stated a determination of which sites are habitats has to be made. Once the presence of a habitat has been determined, the quality of habitat and the types of receptors will need to be assessed.

Ms. Raker asked that the visit begin with the most sensitive areas. Mr. Malsberger stated that the visit can be prioritized by site and geographically. The main ecological habitat will be Union Creek, so the tour may start at FT005 and Union Creek. Mr. Malsberger will develop an agenda and site summary for the agencies and ecological assessors to review, prioritize, and come to consensus prior to the visit.

Mr. Malsberger asked if it would be appropriate use of the remedial investigation (RI) to determine if a site has habitat. The RI can be used as a starting point as long as site-specific follow-on review is done. Mr. Lucey stated that it is not necessary to drive by parking lots in industrial areas as part of the follow-on review; however, OT010, WP017, SS029, SS030, and questionable sites should be visited.

Ms. Raker asked if the WABOU Ecological Technical Memorandum excludes sites that were paved. Mr. Anderson stated yes.

It was agreed that a van will be used for the visit and an email will be sent to instruct the participants on access to the base.

Ms. Raker asked if the Air Force will have proposed protection standards to consider during the site review. Mr. Malsberger stated that a protocol is being developed based on ambient water quality standards.

Mr. Malsberger requested that the ecological assessors review the RI, Tier I, and Tier II reports prior to the visit.

Mr. Lucey asked which sites have vernal pools. Mr. Malsberger stated that FT007, FT004, and FT005 have vernal pools.

Ms. Lehigh commented that the U.S. Fish and Wildlife Service (USF&WS) might place higher standards on various sites. This may create a basewide critical habitat designation, which could affect final decisions on remedial actions. This decision is scheduled to be release by the summer of 2003.

Mr. Malsberger stated that it may be possible to do more damage to habitat by remediation. The total environmental impact from an action needs to be considered when determining the wisdom of actions. USF&WS decisions may result in cost increases driven by offset mitigation measures that may be required.

Ms. Raker asked what quality criteria are being used for sediment. Mr. Malsberger stated that sediment criteria being considered are based on constituents that would be of concern based on bioaccumulation.

Ms. Raker asked if fish were a concern. Mr. Malsberger stated impacts have been seen, but the cause of the impacts is not discernible.

Ms. Raker asked how the Air Force determines if impacts in stormwater are from past operations at the base or current operations. Mr. Malsberger stated that some influence from parking lots has been seen in stormwater. Impacts from IRP sites have not been clearly seen. Groundwater infiltration into storm drains is a greater concern.

Mr. Malsberger stated that Ms. Lynn Suer's (RWQCB) primary concern regarding stormwater was that the TPH concentrations in Union Creek were high right after a storm event. The conclusion was made that the observation was attributed to parking lot runoff and not from past spills or problems with oil/water separators. Ms. Raker stated that along the south base area along the creek the conclusion in the GSAP is that the source of the VOCs in this area is not known. Ms. Raker asked if TCE in the area is coming from other sites. Mr. Malsberger stated that TCE is most likely originating from historical operations because Travis AFB no longer uses TCE in industrial processes and Travis AFB does not have any sites with TCE contamination in the surface soil. The TCE could be from infiltration from groundwater plumes into the storm sewer. This migration path will improve with time as the plumes are remediated. Sampling is conducted within the area of concern to document that the sites are not contributing contaminants to Union Creek.

Mr. Lucey requested a wrap-up meeting after the site visits to discuss expectations for the Ecological Protection Technical Memorandum. Mr. Malsberger agreed.

c. SS015 Soil Gas and Construction Interface

Mr. Malsberger stated that the response to comments on the SS015 remedial design were sent to the agencies via email. Mr.

Malsberger asked if the agencies agreed to the response to comments. Mr. Lucey stated that he has to review the comments more closely.

Mr. Malsberger stated that all the agencies had comments addressing the soil gas at the site and its potential impact. The Air Force requested the U.S. Army Corps of Engineers (USACE) to modify the building design to include both a vapor barrier under the building with all seams and sides taped and a passive vent system at four sides of the building. The USACE has agreed to make this change. Ms. Raker stated that this would address the issue; however, the Air Force should review the input parameters in the impact analysis to make sure the model findings are correctly presented.

Ms. Raker requested that the Air Force present some of the findings of the five-year review regarding SS015. Mr. Malsberger stated that additional wells will be installed to compensate for lost wells that will occur while building the new building. Also, the treatability study contractor (Parsons Engineering) will also sample wells that are scheduled for removal before they are abandoned.

Ms. Raker stated that the GORE SORBER study indicates more site characterization is required and that high concentrations of VOCs may be left in the ground. Ms. Raker asked if the five-year review addresses the uncertainties of the sites. Ms. Raker stated that she is concerned that data on soil gas and groundwater are not sufficient to determine if there is a problem. The concentrations are high; Ms. Raker is concerned that the Air Force will leave high concentrations in the groundwater and that the plume has not been delineated.

Ms. Raker asked what the findings of the five-year report are regarding this site. Mr. Sreenivasan stated that the proposal is to install additional wells in the northeast to get more data to characterize the levels of contaminants.

Ms. Raker expressed concerns that once the building is there, the Air Force will not be able to adequately characterize the groundwater and soil gas.

Mr. Malsberger stated that the Air Force expects the plume remediation will address the soil gas.

Mr. Overby proposed that the Air Force sample the soil gas in the proposed vent pipes to determine if there is a soil gas problem under the building. At that point a decision can be made on whether to use the pipes as a part of a remedial action.

Mr. Malsberger stated that pipe design calls for the passive vent to be placed above the vapor barrier and below the slab. The soil gas is coming from the plume; therefore, the solution is to clean the plume. Once the plume has been remediated the soil gas concentrations will decline. The plume can be remediated with the building present.

Mr. Lucey asked if this site a candidate for dual-phase extraction. Mr. Malsberger stated possibly; the Air Force would need to determine if monitored natural attenuation is viable. Mr. Malsberger also agreed that the plume should be delineated and remediated as needed.

Mr. Smith stated that he will investigate to determine if funds were set aside for further study of this site.

Ms. Raker stated that the agencies want to characterize the problem and determine how to optimize the cleanup.

Mr. Lucey commented that the soil gas and groundwater studies should be conducted simultaneously to develop a complete site characterization and, thus, a better allocation of remedial action funding.

Ms. Raker stated that she would review the existing data to determine the data gaps at this site.

Mr. Lucey proposed that the Air Force conduct a hydropunch study rather than install wells. The hydropunch study would help identify locations for new wells.

Mr. Malsberger stated that the Air Force will get Parsons to do a quick turnaround on the sampling of the SS015 wells during the second week in March 2003 sampling round and the official report will be submitted in May 2003. This was agreed.

Mr. Malsberger asked if the agencies agree in finalizing the remedial design in order for the USACE to construct the building. Ms. Raker stated she has no comments to the Air Force on cleanup of the soil.

Mr. Lucey stated that he agrees with all of them; however, he asked what the design specifications were based on. Mr. Lucey recommended that the Air Force change the design and install additional pipes in the office area of the building (i.e., add another vent in the office area). Mr. Malsberger said he will check with the USACE to see if the design has been finalized yet.

Mr. Malsberger stated that he would send Mr. Salcedo a copy of the design for comments.

Mr. Malsberger will attach the design of the proposed ventilation system to the response to comments.

Mr. Lucey and Ms. Raker agreed with the report. Mr. Lucey requested a definition on where excavated soil will be placed while the laboratory analyses are being conducted. Mr. Malsberger stated the Air Force will report on where the soil will be stored prior to disposal. The goal is to begin excavation on 15 May 2003 and complete the effort by 30 June 2003.

Mr. Malsberger stated that the next step will be defining confirmation sampling points, relocating the exclusion zone, and not excavating up to the edge of the road – leaving a 3-foot traffic barrier. Ms. Raker and Mr. Lucey agreed.

The Air Force will need quick agency response to the confirmation laboratory results. The project will proceed at a fast pace. The Air Force and agencies will work together, reviewing the excavation confirmation analyses, and will agree on the achievement of the project objectives using real time data. The excavation report will be prepared after the completion of the project documenting the agreements made by the agencies and the Air Force during the implementation of the project.

It was agreed that the changeout pages will be provided to make the remedial design final.

B. West/Annexes/Basewide Operable Unit

1. Final ROD Distribution

Mr. Anderson distributed the final WABOU Soil ROD, the electronic copy, and changeout pages to change the draft final to final.

2. RD/RA Schedule

Mr. Anderson stated that the RD/RA schedule was mailed out in December 2003.

3. CURRENT PROJECTS

A. South Base Boundary Groundwater Treatment Plant

Mr. Sreenivasan reported that the South Base Boundary Groundwater Treatment Plant (SBBGWTP) performed at 100% uptime with approximately 6.1 million gallons of groundwater extracted and treated during the month of

January 2003. The average flow was 137 gallons per minute (gpm). Approximately 5.6 pounds of VOCs were removed during the month of January 2003. The total mass of VOCs removed since startup of the system is 200 pounds (see Attachment 3).

Two well pumps in the FT005 area and one in SS030 failed. One of the FT005 pumps, which is still under warranty, was replaced in January. The replacements for the other two have been ordered.

During January, EW05x05 displayed varying levels and flows even when the pump has been turned off. The problem is being corrected. Minor problems with EW07x29 alarms occurred in January and were corrected immediately.

B. Central Groundwater Treatment Plant

Mr. Sreenivasan reported that the Central Groundwater Treatment Plant (CGWTP) performed at 99.7% uptime with approximately 3.8 million gallons of groundwater extracted and treated. The average flow for the CGWTP was 86 gpm during January 2003. Approximately 22 pounds of VOCs were removed during January 2003. The total mass of VOCs removed since startup of the system is 2,410 pounds (see Attachment 4).

The CGWTP operated without any shutdowns during January.

The thermal oxidation system went offline and remained offline during January. Discussions are ongoing with the manufacturer of the burner assembly to come up with robust material to withstand heat and corrosion.

All treated water is being diverted to the storm sewer until next spring due to the onset of the wet winter months.

Ms. Raker commented that the RWQCB would like the Air Force to consider early irrigation if the dry weather continues.

C. North Groundwater Treatment Plant

Mr. Sreenivasan reported that the North Groundwater Treatment Plant (NGWTP) performed at 95% uptime with approximately 947,000 gallons of groundwater extracted and treated during the month of January 2003. The average flow for the NGWTP was 22.4 gpm during January 2003. Approximately 1.5 pound of VOCs was removed during January 2003. The total mass of VOCs removed since startup of the system is 196 pounds (see Attachment 5).

The system was shut down for installation and testing of PC Anywhere software and restarted with a downtime of 5 hours.

The irrigation pump motor starter tripped resulting in direct flow of treated water to the storm drain instead of to the duck pond. The pump was restarted and the system resumed normal operation.

All treated water is being diverted to the duck pond for beneficial use.

Ms. Raker asked for an update on the source of TPH at the NGWTP. Mr. Sreenivasan stated that the wells are still off, and the Air Force is trying to determine a method to handle the vapor along with how to reconfigure the three plants.

Ms. Raker asked if the source of TPH was determined. Mr. Sreenivasan stated that an analysis was conducted; however, the source could not be identified. Mr. Overby stated that it could be a mixture solvent and diesel and it has its own finger print.

D. RW013/LF044 Remedial Action Work Plan

Mr. Anderson stated that three containers with contaminated soil were transferred to EnviroCare. The site restoration is almost complete; the Air Force only has to reseed the site. The Air Force is currently working on the remedial action report, which will also serve as a site closure report.

Mr. Lucey gave Mr. Anderson the U.S. EPA confirmation sampling results, which will be included in the report.

Mr. Anderson reported that LF044 is extremely water logged so work has stopped. Mr. Anderson gave appreciation to Mr. Lucey for getting Mr. Dean out to do the survey work.

E. LF008 O&M Manual

Mr. Anderson stated that he would like to meet with the agencies to discuss the structure of the operations and maintenance (O&M) manual. The current plan is to include reports and data by reference.

Ms. Raker stated that during a previous discussion, it was proposed that the O&M manuals for LF008 and DP039 could be incorporated into the CGWTP manual. Mr. Sreenivasan stated that it was agreed that LF008 will be a standalone document.

F. GSAP Review

Mr. Sreenivasan stated that the GSAP final report will be distributed on 14 February 2003 along with the changeout sheets.

Mr. Sreenivasan stated that a teleconference discussion took place concerning information from the GSAP report. This information was submitted to the

agencies via email. Maps were also furnished. Mr. Sreenivasan encouraged the agencies to comment.

G. April 2003 Guardian and RAB Update

Mr. Sreenivasan stated that the draft layout of the April 2003 *Guardian* will be issued on 14 March 2003. Mr. Lucey is scheduled to provide an article for the newsletter on 21 February 2003. The Restoration Advisory Board (RAB) meeting will be held on 24 April 2003. Mr. Lucey is also scheduled to give a presentation on the U.S. EPA during the April 2003 RAB meeting.

4. PROGRAM ISSUES UPDATE

A. Other

Ms. Raker stated that the Water Board is running out of space and requested that all final documents be submitted in an electronic format. She still requires the draft in a hardcopy.

B. Field Activity Reports

Mr. Smith distributed the field activity reports from CH2M Hill and URS (see Attachments 6 and 7).

ACTION ITEM LIST

(Action Items Closed)

AGENDA	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	Agencies	To the determine risk assessors' availability.	teleconference	Mr. Malsberger stated that the assessors are available and will be scheduled. Completed. **Item Closed.**

ACTION ITEM LIST

(Action Items Open)

AGENDA	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	RWQCB	To provide the recommended changes to the Storm Water Pollution Prevention Plan (SWPPP).	6-11-2003	Pending. Ms. Raker stated that the Phase II Storm Water Permit comes into effect March 2003.