Final

Travis Air Force Base
Environmental Management
Environmental Management, Building 570, Travis AFB, California
Environmental Restoration Program
Remedial Program Managers Meeting
Meeting Minutes

14 July 2004, 0930 Hours

Mr. Mark Smith, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 14 July 2004 at 0930 in the Base Civil Engineering Conference Room, Building 570, Travis AFB, California. Attendees included:

• Mark Smith	Travis AFB
• Glenn Anderson	Travis AFB
• Dale Malsberger	Travis AFB
• Tom Sreenivasan	Travis AFB
• Wilford Day	Travis AFB
• Gregory Parrott	60 AMW/JA
• John Lucey	U.S. Environment Protection Agency (U.S. EPA)
• Elizabeth Allen	TechLaw
• Sarah Raker	Regional Water Quality Control Board (Water Board)
• Alan Friedman	Water Board
• Jose Salcedo	Department of Toxic Substances Control (DTSC)
• Chuck Elliott	CH2M Hill
• Amir Matin	URS
• Eric Rixen	Shaw Engineering and Infrastructure (Shaw E&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 (June 2004)
• Attachment 4	CGWTP Monthly Data Sheet (June 2004)
• Attachment 5	NGWTP Monthly Data Sheet (June 2004)
• Attachment 6	URS Field Activities, Travis AFB (June 2004)

1. ADMINISTRATIVE

Ms. Sarah Raker introduced Mr. Alan Friedman. Mr. Friedman will be Ms. Raker's replacement as the Water Board's RPM for Travis AFB's Environmental Restoration Program. Mr. Friedman has been with the Water Board for approximately 18 years, and has experience with NPDES Permitting issues, surface water discharges,

industrial/municipal facilities, as well as storm water permitting. For the last seven years he has been involved in various groundwater cleanup activities and solid waste disposal units.

A. Previous Meeting Minutes

The meeting minutes from the May and June 2004 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). Mr. Friedman was given a brief overview of the purpose, intent, and status of the Master Meeting and Document Schedule.

Travis AFB Master Document Schedule

— Page 5, LF008 Remedial Action Report, LF008 Groundwater Extraction System Operation and Maintenance (O&M) Manual, and DP039 Groundwater Dual Phase Extraction System O&M Manual were moved to the Historical Document Section.

Ms. Raker asked if there will be any changes in the groundwater treatment plant O&M manuals. Mr. Sreenivasan stated that changes will occur in the North Groundwater Treatment Plant (NGWTP) as a result of the ongoing work in support of LF007C and the future work at FT004. The O&M manuals for the South Base Boundary Groundwater Treatment Plant (SBBGWTP) and the Central Groundwater Treatment Plant (CGWTP) have been completed.

Ms. Raker informed the Air Force that the Water Board will issue a new General Order Permit Number for the O&M manuals. Travis will review the contents of the new General Order Permit and compare it to the 1999 Order. She will send the new order numbers next week. (These numbers are updated every five years.)

2. OPERABLE UNIT UPDATE

A. North, East, West, Industrial Operable Unit Plan of Action and Milestones

1. Ecological Technical Memorandum

Mr. Malsberger gave a brief overview on the NEWIOU Soil, Sediment, and Surface Water Record of Decision (ROD), Groundwater Protection Technical Memorandum, Human Health Protection Technical Memorandum and the Ecological Technical Memorandum.

Ms. Raker commented that the Ecological Technical Memorandum is based on approximately nine months of meetings with the regulators and risk assessors. Ms. Raker also stated that the Water Board has referred this issue to U.S. EPA and DTSC.

a. Union Creek Sampling

Mr. Malsberger stated that the data from the upland sites was adequate; therefore, the risk assessments are being finalized.

It was also determined that the data collected in 1995 does not accurately reflect the condition of Union Creek because of dredging and natural forces. Samples were collected in June 2004 and the preliminary results will be in next week. An updated risk assessment will be developed based on these results.

An email was submitted to the regulators stating that the old data will be removed and the new data will be placed in an appendix. An explanation about the old and new data will be added to the body of the Ecological Technical Memorandum along with the revised risk assessment for Union Creek based on the new data

A revised draft Ecological Technical Memorandum will be submitted to the regulators to include the response to comments and the risk management decision for the document.

When funding and the results are received, a revised schedule will be submitted.

2. Human Health Technical Memorandum

a. Hits Above Residential Preliminary Remediation Goals

Mr. Malsberger stated that the draft Human Health Technical Memorandum was submitted to the agencies. Comments were received from Ms. Raker and Mr. Salcedo.

The comments from Ms. Raker included helpful suggestions and improvements for the document. All of Ms. Raker's comments have been resolved.

Mr. Salcedo's comments asked for information on hits that were above PRGs. The Air Force provided a response that was satisfactory to DTSC. Ms. Raker has deferred to DTSC on this topic.

Mr. Lucey stated that he is satisfied with the response to Mr. Salcedo's comments; however, he would like to have Mr. Dan Stralka review the document for feedback.

b. Vapor Intrusion

Mr. Malsberger stated that the Air Force is attempting to determine if there are human health concerns from the possible migration of vapor originating from the vadose zone and whether land use control is necessary for the contaminants in the vadose zone.

Ms. Raker asked if there is contaminated groundwater under a soil site, is the Air Force looking at the groundwater. Mr. Malsberger stated no, not for the NEWIOU Soil ROD.

Ms. Raker asked how the Air Force will protect human health, i.e., does the Interim Groundwater ROD address indoor air. Mr. Malsberger stated no, indoor air is addressed through dig permits and an Air Force Form 332 process which reviews planned construction for environmental considerations.

Ms. Raker asked how the buildings above the current plumes are being addressed. Mr. Malsberger stated that this is not a Soil ROD issue. This issue will be placed in the final Basewide Groundwater ROD.

Ms. Raker asked why is it necessary to wait for the final Basewide Groundwater ROD to find out that there may be an indoor issue.

Mr. Malsberger stated that a few years ago, testing was conducted to determine if there was a contamination problem inside the buildings. The conclusion of the testing was that there was not a human health risk from contamination within the building.

The focus is now on what is a safe level and have the safe levels changed. The Air Force realizes that indoor air can pose a potential human health risk.

Mr. Malsberger stated that for the NEWIOU Soil ROD, the Air Force is looking into the question of whether there are enough VOCs in the vadose zone to warrant a land use control for indoor air. Most sites have very little or no volatile organic compounds (VOCs) in the vadose zone, it is in the groundwater. The VOCs were not considered as contaminants of concern (COCs) because COCs were looked at in terms of direct exposure.

Ms. Raker asked if there is any documentation – was indoor air considered.

Ms. Allen stated that perhaps one should determine if it is worth having any kind of remedy in this ROD to address the vadose zone, since the vadose zone is so thin that any contamination is from off gassing in the groundwater, which the vadose zone remedy will not address.

Mr. Smith stated that the Air Force is funded to cleanup contaminated sites that fit a certain timeframe, (prior to 1984) after 1984; they are treated as RCRA issues. Indoor air concerns a basewide Air Force issue that must be addressed. Mr. Smith suggested in the interim that when ERP reviews an environmental impact analysis process, if it is over a groundwater plume, a comment will be made that a potential exists for vapors from the plume to permeate into the building and recommend the maximum air changeout levels for the air conditioning system. Indoor air gas problems may not be funded by Air Mobility Command (AMC). Handling of indoor air may be more of an Air Force decision at the base level.

Mr. Smith stated he will bring this to the Air Force's attention. He agrees that that the Soil ROD is not the best place to address vapor intrusion. Vapor intrusion may be a CERCLA issue and in other cases it may not be. Mr. Smith will check with AMC for guidance.

Mr. Lucey suggested that the Air Force voluntarily implement a land use control prior to the Groundwater ROD being signed. He stated that it would be appropriate in the Base Master Plan under the Land Use Control Section to address vapor intrusion.

Mr. Matin stated that the only thing that is going to ultimately count is the reviewers of the ROD. If the regulatory agency community anticipates that the Air Force is going to raise the issue of indoor air, even though some compounds were not part of the COCs, it should be addressed now before it gets to that review cycle. Once it gets there, it is too late.

Ms. Raker suggested that the Air Force draw up a groundwater evaluation of indoor air technical memorandum for groundwater sites.

Mr. Matin recommended that the Air Force do the calculations, come to an agreement on a realistic screening number, and place the value in the ROD.

Mr. Lucey stated the Air Force should discuss the thickness of the vadose zone and a rationale as to why it is or is not a problem. Work on the draft language that would be part of the human health

technical memorandum. There will be a section that will address the vapor intrusion pathway. He stated the best thing may be to discount the whole pathway and state that it is not a complete pathway because there are existing land use control in the Base General Plan, which addresses it in construction and engineering. It will also be included and addressed in the final Basewide Groundwater ROD. To put a lot of energy and effort and time and money into going through an academic exercise to show that vapor intrusion is there is futile.

Mr. Malsberger will develop a rationale for why the vadose zone contamination does not require an action for vapor intrusion in the NEWIOU Soil ROD and Travis AFB existing controls are adequate.

3. Early Remedial Designs for FT005 and FT003

Mr. Malsberger stated that the draft remedial design for FT003 will be submitted to the agencies this week.

The remedial design for FT005 will not be accomplish due to lack of funds. The Air Force will propose that FT005 become a non-excavation and land use control site. This proposal will affect the Human Health Technical Memorandum.

The ecological risk assessors have worked out the FT003 and FT005 ecological risk assessments. Mr. Malsberger will send the tables that can be used to make risk management decisions to the agencies.

4. Other

- Mr. Lucey stated that his branch chief who will sign the ROD desires to have a review of proposed plan remedial actions. Mr. Lucey requested a draft of Table 1-1 in the executive summary of the ROD. Mr. Malsberger stated that he would submit this to Mr. Lucey with a caveat that this is a preliminary report and is subject to change.

- Mr. Lucey asked for the status on the Land Use Control letter that was sent to the Air Force. Mr. Smith stated that the Travis AFB had to coordinate with AMC and Air Staff on Travis AFB's response to U.S. EPA's response to the land use control report.

  Mr. Lucey asked if there is anything that the U.S. EPA can do to expedite this process. Mr. Smith stated no; however, he will continue to keep the RPMs updated.

- Mr. Lucey suggested that Travis AFB do a revision on the signage. Mr. Smith stated that this has already been accomplished.

  Ms. Raker suggested that Mr. Lucey could go out to the sites that have signage, take pictures, and take it back to his management.

3. CURRENT PROJECTS

A. South Base Boundary Groundwater Treatment Plant

Mr. Sreenivasan reported that the SBBGWTP performed at 98.3% uptime with approximately 6.5 million gallons of groundwater extracted and treated during the month of June 2004. The average flow rate for the SBBGWTP was 152 gallons per minute (gpm). Approximately 2.2 pounds of VOCs were removed during June 2004. The total mass of VOCs removed since startup of the system is approximately 253 pounds (see Attachment 3).

The SBBGWTP experienced one shutdown during the month of June 2004, which was the result of a Base power outage.

No construction water or hydrant pit was processed through SBBGWTP during June 2004.

No optimization activities were planned or performed at the SBBGWTP during June 2004.

B. Central Groundwater Treatment Plant

Mr. Sreenivasan reported that the CGWTP performed at 98.1% uptime with approximately 3.5 million gallons of groundwater extracted and treated during the month of June 2004. The average flow rate for the CGWTP was 82.5 gpm. Approximately 52 pounds of VOCs (of which 32.5 pounds were from vapor) were removed during June 2004. The total mass of VOCs removed since startup of the system is 5,406 pounds (see Attachment 4).

The thermal oxidation system continued to treat soil vapor from the 2-phase well as part of the SS016 focused vapor extraction activities. The quarterly June sample detected TCE at 18 parts per million by volume (ppmv) compared to the previous sample of April at 340 ppmv. System vapor samples are scheduled to be collected again in September 2004 which will provide direction for future operations.

The West Treatment and Transfer Plant vacuum blowers remained off line during the rebound study. Rebound samples will be collected and analyzed in September 2004.

Approximately 1.96 million gallons of the 3.5 million gallons of the treated water from CGWTP were used for irrigation this month. The remainder was discharged to the storm drain.

Mr. Salcedo asked if Travis AFB collect effluent and influent samples at different times. Mr. Salcedo stated no.

No optimization activities were planned or performed at CGWTP during June.

C. North Groundwater Treatment Plant

Mr. Sreenivasan reported that the North Groundwater Treatment Plant (NGWTP) performed at 96.8% uptime with approximately 1 million gallons of groundwater extracted and treated during the month of June 2004. The average flow for the NGWTP was 24.6 gpm. Approximately 20 pounds of VOC were removed during June 2004 of which 19 pounds were removed from vapor and one pound was removed from groundwater through extraction. The total mass of VOCs removed since startup of the system is 5,301 pounds (see Attachment 5).

The NGWTP experienced one shutdown during the month of June 2004, which was the result of a Base power outage.

The soil vapor extraction (SVE) system was restarted on 18 May 2004 and approximately five pounds of vapor were extracted and treated during the last two weeks of June 2004.

A set (i.e., influent, mid-bed, and effluent) of samples was collected on 11 June 2004. These results are presented in Table 2. Influent concentrations are similar to concentrations detected on the 18 May 2004. 2,2,-4 trimethylpentane, a petroleum byproduct, was the contaminant with the highest concentration in the sample at 780 parts per billion by volume (ppbv).

EW566x31 may be the source of 2,2,4-trimethylpentane. Although EW566x31 is offline, the well has historically produced high petroleum concentrations. The high concentrations of 2,-4 trimethylpentane may be associated with the source of petroleum hydrocarbons within the radius of influence of EW566x31.

EW566x31 will be sampled separately in July 2004 to determine if this is the well that is contributing 2,-4 trimethylpentane to the influent stream. Influent TCE vapor concentrations were detected at 11 ppbv, which is similar to concentrations seen from the system last year.

The proposal for the project for the enhanced contaminant removal at site FT004 is with AFCEE contracts for procurement. The anticipated award date will be late in July 2004.

All treated groundwater from the plant was sent to the duck pond for beneficial use.

Ms. Raker requested that Mr. Sreenivasan give Mr. Friedman a tour of the treatment plants on 22 July 2004. He agreed.

D. CAMU

1. CAMU Wetland Mitigation Performance Criteria

Mr. Malsberger stated that the Air Force is reviewing the report which describes the condition of the vernal pools in addition to recommendations for any necessary actions.

E. LF007 C Groundwater Interim Remedial Action

Mr. Malsberger stated that the extraction wells and the off base and on base monitoring wells has been installed. Travis AFB is now installing the solar powered pumps and connecting the extraction wells to the NGWTP. A startup report will be submitted to the agencies for review.

F. Draft RW013 Closure Report

Mr. Smith stated that the Air Force is developing a template for site closure with the RW013 Closure Report, which will be used for future site closures. Coordination with the legal and regulatory offices had started with the purpose to create a solid format. Since that time AMC and Air Staff requested additional coordination. U.S. EPA and DTSC have signed the closeout report although the Air Force has not.

This document is at the Air Staff level for coordination and they have 30 days from today to sign. Once this document has been coordinated by Air Staff, it will be submitted to Air Force vice-Wing Commander for signature and the agencies will be notified.

G. DP039 Optimization Project

Mr. Anderson stated that Travis AFB is waiting for the haloprobe results. Travis AFB will also collect confirmation data during the next field event at DP039 to support the haloprobe results.

4. PROGRAM ISSUES UPDATE

A. Air Mobility Command Remedial Process Optimization

Mr. Smith stated that AMC has taken an interest in Travis AFB's long-term monitoring and remedial action operations. AMC has asked for an inventory on long-term monitoring projects. AMC is starting a Remedial Process

Optimization Project and will visit Travis AFB in September 2004 to determine how the remedial process may be optimized.

B. Field Activity Reports

Mr. Anderson distributed the field activity reports from URS (see Attachment 6).

ACTION ITEM LIST

(Action Items Closed)

ITEM #	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	Air Force	Develop a presentation on the CAMU to the Water Board's landfill regulators.	23 June 2004	Completed. Ms. Raker suggested that this presentation be given to other regulatory agencies. **Item Closed.**
1.				
2.	DTSC	To provide the Air Force with the new DTSC's TPH policy.	28 June 2004	Completed. **Item Closed.**

ACTION ITEM LIST

(Action Items Open)

ITEM #	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	Air Force	To develop the NFRAP document for SS041.	October 2004	Ongoing. Additional coordination with AMC is required.
2.	Air Force	Will seek internal guidance on vapor intrusion.	August 11, 2004	New Item.
3.	Air Force	To provide the status on the land use control response.	Ongoing	New Item.
4.	Air Force U.S. EPA	To schedule a land use control signage review field trip with the U.S. EPA RPM.	TBD	New Item.