

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

8 June 2005, 0930 Hours

Mr. Mark Smith, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 8 June 2005 at 0930 in the Base Civil Engineering Conference Room, Building 570, Travis AFB, California. Attendees included:

- Mark Smith Travis AFB
- Glenn Anderson Travis AFB
- Wilford Day Travis AFB
- Dale Malsberger Travis AFB
- Gregory Parrott Travis AFB
- Wayne Williams Travis AFB
- John Lucey U.S. Environmental Protection Agency (EPA)
- Jose Salcedo Department of Toxic Substances Control (DTSC)
- Alan Friedman Regional Water Quality Control Board (Water Board)
- Amir Matin URS
- Eric Rixen Shaw Engineering and Infrastructure (Shaw E&I)
- Martha Adams Shaw E&I
- Mike Wray CH2M Hill

Handouts distributed throughout the meeting included:

- Attachment 1 Meeting Agenda
- Attachment 2 Master Meeting, Teleconference, and Document Schedules
- Attachment 3 SBBGWTP Monthly Data Sheet (May 2005)
- Attachment 4 CGWTP Monthly Data Sheet (May 2005)
- Attachment 5 NGWTP Monthly Data Sheet (May 2005)
- Attachment 6 URS Field Activities, Travis AFB (May 2005)

1. ADMINISTRATIVE

A. Introduction

Mr. Smith introduced Ms. Martha Adams who will be replacing Mr. Eric Rixen.

B. Previous Meeting Minutes

The meeting minutes from the May 2005 RPM meeting were corrected, approved, and finalized.

C. Master Meeting and Document Schedule

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

Travis AFB Annual Meeting and Teleconference Schedule

— Page 1, July RPM Meeting, Mr. Friedman commented that he will not be at the July RPM meeting.

Travis AFB Master Document Schedule

— No changes.

2. OPERABLE UNIT UPDATE

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

1. Ecological Technical Memorandum Response to Comments

Mr. Malsberger stated that the Ms. Heather Loso, URS and Mr. Mike Anderson, DTSC have been discussing the responses to DTSC's comments on the Revised Draft Ecological Technical Memorandum. Mr. Mike Anderson requested a teleconference at the end of June 2005 to discuss the responses and get any input from other agencies. Mr. Malsberger sent an email to the agencies to determine who would participate and what date they are available for this teleconference. Mr. Malsberger requested the agencies to respond if they desire to participate in the teleconference. If agreement is reached through the teleconference, the Ecological Technical Memorandum can be finalized.

Mr. Friedman asked how close they are to an agreement. Mr. Malsberger stated that they are very close. One of the points that Mr. Anderson wanted to reach consensus on regards PCB contamination in LF007 Area E. Travis has agreed to excavation of PCBs to a level of 0.079 mg/kg in the upland area to within a foot or two of an adjacent vernal pool. Travis recommended that the pool be left undisturbed rather than damage the habitat by excavating in the pool to remove some residual PCB contamination. The pool in question was previously visited by representatives from USEPA, USFWS, and the Water Board in 2000 and it was determined that wood debris should be left in place as beneficial habitat.

Mr. Smith asked what is needed to make the Ecological Technical Memorandum final. Mr. Malsberger stated that we need agreement between the Air Force and the agencies on all of the ecological issues prior to the final so that once issued as final, everyone will be in agreement to the cleanup levels and the supporting ecological risk assessment.

Mr. Lucey asked if the current draft ROD cleanup levels were finalized. Mr. Malsberger stated that the cleanup levels in Union Creek will change because it states that there is no action for surface water and soil and land use control for sediment. However, in risk-management discussion on the Ecological Technical Memorandum, the Air Force agreed to excavate various areas in the creek sediment. Once finalized, the information will be placed in the ROD.

Mr. Lucey requested a revised table of the cleanup levels for the ecological representatives to review. Mr. Malsberger stated that the Air Force sent out the response to comments with documentation of all agreements reached. Mr. Smith stated that in finalizing the Ecological Technical Memorandum, the intent is to discuss the content, to preclude changes. The key points are cleanup levels and to avoid any errors, he requested the agencies to review cleanup levels first.

Mr. Lucey stated that he would like ensure that everyone is reviewing the most current cleanup levels. He also suggested that the Air Force give the ARARs to the attorneys early on for review. Mr. Malsberger stated that the summary table is Tables I-3 and II-5-11 in the ROD lists what the selected action is for all the sites. Each site summary in section 5 gives the action and cleanup level for the site. Table II-3-2 is a summary from the remedial investigation and does not give the final action or cleanup level. Since Table II-3-2 seems to cause confusion, we can leave it out of the ROD.

2. Draft Record of Decision

Mr. Malsberger stated that the Air Force is currently developing the preliminary response to comments on the draft ROD and will submit this to the agencies for review.

Once the Ecological Technical Memorandum has been finalized and resolution of all comments on the Draft ROD has been agreed upon, a Revised Draft ROD will be submitted.

3. Quarterly Report

Mr. Malsberger stated that the next Report on CAMU Inspection and Monitoring will be submitted at the end of June 2005.

3. CURRENT PROJECTS

A. South Base Boundary Groundwater Treatment Plant

Mr. Matin reported that the South Base Boundary Treatment Plant (SBBGWTP) performed at 100% uptime with approximately 6.6 million gallons of groundwater extracted and treated during the month of May 2005. The average flow rate for the SBBGWTP was 146.6 gallons per minute (gpm). Approximately 2.0 pounds of volatile organic compounds (VOCs) were removed during May

2005. The total mass of VOCs removed since startup of the system is approximately 279 pounds (see Attachment 3).

There was no plant shutdown during the month of May 2005.

No construction water was processed through SBBGWTP during May 2005.

No optimization activities were planned or performed at the SBBGWTP during May 2005.

B. Central Groundwater Treatment Plant

Mr. Matin reported that the Central Groundwater Treatment Plant (CGWTP) performed at 100% uptime with approximately 3.8 million gallons of groundwater extracted and treated during the month of May 2005. The average flow rate for the CGWTP was 86 gpm. Approximately 365 pounds of VOCs (of which 342 pounds were from vapor) were removed during May 2005. The total mass of VOCs removed since startup of the system is 8,401 pounds (see Attachment 4).

Two shutdowns of the thermal oxidation (ThOx) system occurred during this month due to flame loss at the burner. Because of safety considerations, the system could not be started remotely, resulting in longer downtime.

The ThOx system continued to treat soil vapor from the 2-phase well as part of the SS016 focused vapor extraction activities. Quarterly vapor samples collected in March indicated an increase in TCE concentrations from 54 parts per million by volume (ppmv) in December 2004 to 280 ppmv in March. Recent concentrations continue to indicate TCE in the vicinity of the 2-phase well. Therefore, focused extractions will continue at this well and samples will be collected in May 2005 as the quarterly sample.

The West Treatment Transfer Plant (WTTP) vacuum blowers remain off line during the rebound study. Recent samples indicate a decrease in TCE concentrations from 120 parts per billion by volume (ppbv) (September 2004) to 36 ppbv (March 2005). Previous samples collected during the rebound study have shown TCE concentrations to be at 39 ppbv (June 2003), 110 ppbv (September 2003), and 48 ppbv (March 2004). Due to very little changes in the contaminant concentrations in the vapor stream, the WTTP blowers will still remain off line. The blowers will be properly maintained during this period for ready use as needed. The next semi annual sample will be collected and analyzed in September 2005.

All treated water from this plant is being diverted to the storm drain.

No optimization activities were planned or performed at this plant during May 2005.

C. North Groundwater Treatment Plant

Mr. Matin reported that the NGWTP performed at 99.6% uptime with approximately one million gallons of groundwater extracted and treated during the month of May 2005. The average flow for the NGWTP was 23.0 gpm. One pound of VOC was removed during May 2005 which was from groundwater. The total mass of VOCs removed since startup of the system is 5,388 pounds (see Attachment 5).

The plant experienced one minor shutdown due to a failure of the irrigation pump motor.

The soil vapor extraction system was taken off line on 8 December 2004 due to high water levels rising above the well screens. The system will be started after checking the water levels to make sure the system is ready for vapor extraction.

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

D. Draft SD042 Closeout Report

Mr. Anderson stated that there has been no change to the draft SD042 Closeout Report.

E. Phytostabilization Report

Mr. Anderson stated that the agencies should be receiving the draft final Phytostabilization Report. He stated that this would be a great opportunity for agencies to provide comments on what type of data is important to them for making decisions about this groundwater strategy. This report will include CD-ROMs of previous report.

F. DP039

Mr. Anderson stated the Air Force is waiting for dry weather to collect soil gas samples from monitoring points and two extraction wells within the DP039 Dual-Phase Extraction System area. Once this has been accomplished, the Air Force can determine the next action. The Air Force will hook up to the existing dual phase wells and fire up the blowers. Based on the contamination within the groundwater there is a high probability that pure product will be removed. The Air Force also will probably experiment with the system to determine optimization methods.

4. PROGRAM ISSUES UPDATE

- Mr. Smith stated that he does not see any problems or funding issues arising. Travis AFB has enough funds to execute program for 2005 and 2006. Mr. Smith will be at Scott AFB to participate in a program review and will present shifting of excavation sites into the 2007 construction season.

- Mr. Smith stated that the Remedial Process Optimization has turned into a regional contract, which will be awarded at four installations west of the Mississippi. It is anticipated that the contract will be awarded mid-September.

Mr. Smith stated that he will keep the RPM updated on performance-based management (PBM) review information.

Mr. Lucey asked if the regional contract related to the performance-based contract (PBC). Mr. Smith stated PBC is one tool used in PBM. The regional contract originated as an optimization effort that will be awarded as a PBC and will only address the remedial operations.

TRAVIS AIR FORCE BASE ERP

REMEDIAL PROGRAM MANAGER'S MEETING

8 June, 9:30 A.M.

(Building 570, Main Conference Room)

AGENDA

1. ADMINISTRATIVE

- A. PREVIOUS MEETING MINUTES
- B. ACTION ITEM REVIEW (ALL)
- C. MEETING DATES AND MASTER DOCUMENT SCHEDULE REVIEW

2. OPERABLE UNIT UPDATE

- A. NEWIOU ROD PLAN OF ACTION AND MILESTONES
 - (1). ECOLOGICAL TECH MEMO RESPONSE TO COMMENTS (DALE)
 - (2). DRAFT ROD RESPONSE TO COMMENTS (DALE)

3. CURRENT PROJECTS

- A. SOUTH BASE BOUNDARY GROUNDWATER TREATMENT PLANT
 - (1). OPERATIONAL STATUS (TOM)
- B. CENTRAL GROUNDWATER TREATMENT PLANT
 - (1). OPERATIONAL STATUS (TOM)
- C. NORTH GROUNDWATER TREATMENT PLANT
 - (1). OPERATIONAL STATUS (TOM)
- D. DRAFT SD042 CLOSEOUT REPORT (GLENN)

4. PROGRAM ISSUES UPDATE

5. NEW ACTION ITEM REVIEW

Travis AFB Annual Meeting and Teleconference Schedule

Suppliers Teleconference ¹ (8:30 a.m. - 10:00 a.m.)	Monthly RPM Meeting (Begins at 9:30 a.m.)	Monthly RPM Teleconference (Begins at 9:30 a.m.)	Restoration Advisory Board Meeting (Begins at 6:30 p.m.)
1-11-05	1-12-05	1-26-05	1-27-05
2-8-05	2-9-05	2-23-05 ²	—
3-8-05	3-9-05	3-23-05	—
4-12-05	4-13-05	4-27-05	4-28-05
5-10-05	5-11-05	5-25-05	—
6-7-05	6-8-05	6-22-05	—
7-5-05 ³	7-6-05 ⁴	7-27-05	— ⁴
8-9-05	8-10-05	8-24-05	—
9-13-05	9-14-05	9-28-05	—
10-11-05	10-12-05	10-26-05	10-27-05
—	—	11-16-05	—
12-13-05	12-14-05	—	—

¹ Formerly the Suppliers Meeting.

² This meeting was cancelled to allow for the Ecological Technical Memorandum Risk Assessor Meeting.

³ Changed to accommodate DTSC's schedule.

⁴ The RAB voted on revising the RAB meetings to April and October during the April RAB meeting.

**Travis AFB Master Document Schedule
(Continued)**

Travis AFB Master Document Schedule

PRIMARY DOCUMENTS	
Life Cycle	Draft NEWIOU Soil/Sediment/Surface Water ROD Travis, Dale Malsberger; URS, Amir Matin
Scoping Meeting	4-3-98
Predraft to AF/Service Center	10-04-04
AF/Service Center Comments Due	11-03-04
Draft to Agencies	3-16-05
Draft to RAB	3.16-05
Agency Comments Due	5-16-05
Response to Comments Meeting	TBD
Response to Comments Due	TBD
Draft Final Due	TBD
Final Due	TBD
Public Comment Period	TBD
Public Meeting	TBD

**Travis AFB Master Document Schedule
(Continued)**

SECONDARY DOCUMENTS	
Life Cycle	GSAP Annual Report Travis, Tom Sreenivasan; URS, Amir Matin
Scoping Meeting	NA
Predraft to AF/Service Center	12-15-04
AF/Service Center Comments Due	1-13-05
Draft to Agencies	1-17-05
Draft to RAB	1-17-05
Agency Comments Due	3-25-05
Response to Comments Meeting	4-13-05
Response to Comments Due	4-13-05
Draft Final Due	NA
Final Due	5-04-05
Public Comment Period	NA
Public Meeting	NA

**Travis AFB Master Document Schedule
(Continued)**

INFORMATIONAL DOCUMENTS	
Life Cycle	Quarterly Newsletters (for July 2005) Travis, Mark Smith
Scoping Meeting	NA
Predraft to AF/Service Center	6-08-05
AF/Service Center Comments Due	6-15-05
Draft to Agencies	6-29-05
Draft to RAB	6-29-05
Agency Comments Due	7-13-05
Response to Comments Meeting	NA
Response to Comments Due	NA
Draft Final Due	NA
Final Due	7-20-05
Public Meeting	7-27-05

**Travis AFB Master Document Schedule
(Continued)**

INFORMATIONAL DOCUMENTS				
Life Cycle	Travis, Tom Sreenivasan; URS, Amir Matin			
	Groundwater Treatment Plants Annual Reports Fiscal Year 2005	Groundwater Treatment Plants First Quarter Report Fiscal Year 2005	Groundwater Treatment Plants Second Quarter Report Fiscal Year 2005	Groundwater Treatment Plants Third Quarter Report Fiscal Year 2005
Scoping Meeting	NA	NA	NA	NA
Predraft to AF/Service Center	1-19-05	4-16-05	7-15-05	10-14-05
AF/Service Center Comments Due	1-23-05	4-23-05	7-22-05	10-21-05
Draft to Agencies	NA	NA	NA	NA
Draft to RAB	NA	NA	NA	NA
Agency Comments Due	NA	NA	NA	NA
Response to Comments Meeting	NA	NA	NA	NA
Response to Comments Due	NA	NA	NA	NA
Draft Final Due	NA	NA	NA	NA
Final Due	1-28-05	4-29-05	7-29-05	10-28-05
Public Comment Period	NA	NA	NA	NA
Public Meeting	NA	NA	NA	NA

**Travis AFB Master Document Schedule
(Continued)**

South Base Boundary Groundwater Treatment Plant Monthly Data Sheet

Report Number: 83

Reporting Period: 1– 31 May 2005

Date Submitted: 2 June 2005

This data sheet includes the following: results for the operation of the South Base Boundary Groundwater Treatment Plant (SBBGWTP); a summary of flow rates for individual extraction wells; a brief description of any shutdowns or significant events related to the system; and a summary of analytical results for samples collected.

Operations Summary – May 2005

Operating Time: 744 hours	Percent Uptime: 100%
Gallons Treated: 6.54 million gallons	Gallons Treated Since July 1998: 468.3 million gallons
Volume Discharged to Union Creek: 6.54 million gallons	
Percentage of Treated Water to Beneficial Use: 0% ^c	
Total VOC Mass Removed: 2.13 pounds ^a	VOC Mass Removed Since July 1998: 277 pounds
Rolling 12-Month Cost per Pound of Mass Removed ^b : \$3,193	
Monthly Cost per Pound of Mass Removed ^b : \$3,602	

^a = Calculated using May 2005 EPA Method SW8260B analytical results.

^b = Costs include operations and maintenance, reporting, analytical laboratory, project management, and utility costs related to operation of the system.

^c = Volume of water used for irrigation during May 2005 was 7 gallons.

Flow Rates

Average Groundwater Total Flow Rate: 146.6 gpm

Average Flow Rate (gpm)							
FT005				SS029		SS030	
EW01x05	18.5	EW736x05	2.9	EW01x29	0.1	EW01x30	10.1
EW02x05	1	EW737x05	4.6	EW02x29	0.2	EW02x30	1.1
EW03x05	3.7	EW742x05	4	EW03x29 ^a	Off line	EW03x30 ^a	Off line
EW731x05 ^a	Off line	EW743x05	8	EW04x29	4.7	EW04x30 ^a	Off line
EW732x05	1.3	EW744x05	3	EW05x29	11.6	EW05x30	21.2
EW733x05	0.7	EW745x05	7	EW06x29	19.3	EW06x30 ^b	0.1

**Travis AFB Master Document Schedule
(Continued)**

EW734x05	3.5	EW746x05	4	EW07x29 ^a	Off line	EW711x30 ^a	Off line
EW735x05	1.1						
		FT005 Total:	63.3	SS029 Total:	35.9	SS030 Total	32.5

^a Extraction wells shut down on 18 February 2004 due to low TCE concentrations.

^b Extraction well EW06x30 (interceptor trench sump) went off line 13 May 2005. Pump and motor failed and were replaced. Further troubleshooting indicated the low-level shutoff for the pump was not functioning properly. Troubleshooting and repair of this function is in progress. Water level in the interceptor trench sump is below the level that the pump should start.

gpm = gallons per minute

Note: Flow rates are from flow meter readings from individual wells and/or SCADA readings or estimated based on historical data.

**Travis AFB Master Document Schedule
(Continued)**

Shutdown/Restart Summary

Location	Shutdown		Restart		Cause
	Date	Time	Date	Time	
SBBGWTP	NA	NA	NA	NA	No shutdowns during the month of May 2005.
NA = not applicable SBBGWTP = South Base Boundary Groundwater Treatment Plant					

Summary of O&M Activities

Monthly groundwater sampling at the SBBGWTP was performed on 4 May 2005. Sample results are summarized on Table 1.

Optimization Activities

The table below summarizes current optimization activities associated with the SBBGWTP.

Activity	Status	Comments
Recommendations in the First Quarter 2005 Quarterly Report will be reviewed and considered.	Recommendations under review by the Air Force.	None.
A review of extraction wells and their associated average flow rates and recent total VOC concentrations will be conducted. This will allow an overall efficiency evaluation to be performed, leading to focused optimization of inefficient extraction wells.	Awaiting final data from 2Q05 GSAP sampling.	None.

Travis AFB Master Document Schedule (Continued)

Table 1
Summary of Groundwater Analytical Data for May 2005 – South Base Boundary Groundwater Treatment Plant

Constituent	Instantaneous Maximum ^a (µg/L)	Detection Limit (µg/L)	N/C	4 May 2005 (µg/L)	
				Influent	Effluent
Halogenated Volatile Organics					
Carbon Tetrachloride	0.5	0.17	0	ND	ND
Chloroform	5.0	0.12	0	ND	ND
1,1-Dichloroethane	5.0	0.12	0	ND	ND
1,2-Dichloroethane	0.5	0.17	0	0.86	ND
1,1-Dichloroethene	5.0	0.15	0	ND	ND
cis-1,2-Dichloroethene	5.0	0.13	0	1.4	ND
trans-1,2-Dichloroethene	5.0	0.15	0	ND	ND
Methylene Chloride	5.0	0.12	0	ND	ND
Tetrachloroethene	5.0	0.18	0	ND	ND
1,1,1-Trichloroethane	5.0	0.13	0	ND	ND
1,1,2-Trichloroethane	5.0	0.23	0	ND	ND
Trichloroethene	5.0	0.15	0	37	ND
Vinyl Chloride	0.5	0.25	0	ND	ND
Non-Halogenated Volatile Organics					
Benzene	1.0	0.18	0	ND	ND
Ethylbenzene	5.0	0.11	0	ND	ND
Toluene	5.0	0.12	0	ND	ND
Xylenes	5.0	0.36	0	ND	ND
Other					
Total Petroleum Hydrocarbons – Gasoline	50	5	0	NM	ND
Total Petroleum Hydrocarbons – Diesel	50	23	0	NM	ND ^b

**Travis AFB Master Document Schedule
(Continued)**

Total Suspended Solids	NE	5,000	0	ND	NM
------------------------	----	-------	---	----	----

^a In accordance with Appendix B of the *Travis AFB South Base Boundary Groundwater Treatment Plant Operations and Maintenance Manual* (CH2M HILL, 2004).

^b There was no detectable diesel present based on the pattern of the TPH chromatogram. Trace amount of TPH in a non-diesel pattern was present in the diesel calibration range.

N/C = Number of samples out of compliance with discharge limits.

ND = not detected

NE = not established

NM = not measured

TPH = total petroleum hydrocarbons

µg/L = micrograms per liter
