

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

12 June 2002, 0930 Hours

Mr. Allen Brickeen, Travis Air Force Base (AFB), conducted the Remedial Program Managers (RPM) meeting held on 12 June 2002 at 0930 in Building 246, Upstairs Conference Room, Travis AFB, California. Attendees included:

- Allen Brickeen Travis AFB
- Glenn Anderson Travis AFB
- Dale Malsberger Travis AFB
- Tom Sreenivasan Travis AFB
- Wilford Day Travis AFB
- Roger Johnson Air Force Center for Environmental Excellence (AFCEE)
- Elizabeth Allen TechLaw
- Jose Salcedo Department of Toxic Substances Control (DTSC)
- Sarah Raker Regional Water Quality Control Board (RWQCB)
- Wayne Williams CH2M Hill
- Deena Stanley URS
- Elise Willmeth URS
- Steve Herrera URS
- Brian Garber Shaw Engineering and Infrastructure (SE&I)
- Kevin Spala Environmental Chemical Corporation (ECC)
- Keith Anderson ECC

Handouts distributed throughout the meeting included:

- Attachment 1 Meeting Agenda
- Attachment 2 Master Meeting, Teleconference, and Document Schedules
- Attachment 3 Selected Remedies for Four Soil Sites and Related Revised Summary Sheets
- Attachment 4 Selected Remedies for SS015, SS016, and ST032
SS015 Summary Sheet
- Attachment 5 SS016 Summary Sheet
- Attachment 6 ST032 Summary Sheet
- Attachment 7 SBBGWTP Monthly Data Sheet

- Attachment 8 CGWTP Monthly Data Sheet
- Attachment 9 NGWTP Monthly Data Sheet
- Attachment 10 CH2M Hill Field Activities, June 2002
- Attachment 11 GTI Field Activities, June - July 2002

1. ADMINISTRATIVE

A. Previous Meeting Minutes

The 8 May 2002 meeting minutes were approved and finalized.

B. Four-Month Calendar of Upcoming Milestones and Meeting Dates

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

Annual Meeting and Teleconference Schedule

- Page 1, the July RPM meeting was changed to 10 July 2002 and the August RPM meeting was changed to 7 August 2002.
- Page 1, the July Suppliers meeting was changed to 9 July 2002 and the August Suppliers meeting was changed to 6 August 2002.

Master Meeting and Document Schedule

- Page 2, Central Groundwater Treatment Plant (CGWTP) Operations and Maintenance (O&M) Manual, Revision 1, response to comments and draft final due dates were changed to 29 April 2002 and the final due date was changed to 28 May 2002 to reflect actual dates.
- Page 2, LF008 Groundwater Extraction System O&M Manual draft final and final schedules were revised to read TBD “to be determined”.
- Page 5, the LF008 Soil Remedial Design agency comments due date was changed to 17 June 2002.
- Page 6, LF008 Site-Specific Remedial Action (RA) Work Plan schedule will be established by the next RPM meeting.
- Page 6, RW013/LF044 Site-Specific RA Work Plan schedule was established. (Currently the schedule reads TBD; however, the dates will be reflected in the July document schedule.) Mr. Brickeen gave the following dates:

Scoping Meeting	NA
Predraft to AF/Service Center	6-19-02
AF/Service Center Comments Due	6-26-02
Draft to Agencies	7-10-02
Draft to RAB	7-10-02

Agency Comments Due	8-9-02
Response to Comments Meeting	TBD
Response to Comments Due	8-28-02
Draft Final Due	8-28-02
Final Due	9-27-02
Public Comment Period	NA
Public Meeting	NA

- Page 6, LF007 Work Plan and Construction Quality Control Plan (CQCP) schedule was established.
- Page 6, SD045 Site-Specific RA Work Plan schedule was updated.
- Page 6, SD042 Site-Specific RA Work Plan schedule was established.
- Page 7, DP039 Reactive Wall Treatability Study response to comments due date was changed to 17 June 2002 and the final due date was changed to 28 June 2002.
- Page 7, SS016 Expansion Interim RA Report response to comments and draft final due dates were changed to 14 June 2002, and the final due date was changed to 15 July 2002.
- Page 8, the Quarterly Newsletter schedule was updated.
- Page 8, LF008 CQCP schedule will be established by the next RPM meeting.
- Page 8, LF007/Corrective Action Management Unit (CAMU) CQCP schedule was updated. The final due date was changed to 24 July 2002.
- Page 9, the Groundwater Treatment Plant Quarterly Reports point of contact for CH2M Hill was changed to Rebecca Maco.
- Page 10, the SD042 Soil Remedial Design and SD042 RA CQCP were moved to the historical section.

2. OPERABLE UNIT UPDATE

A. North/East/West/ Industrial Operable Unit

1. NEWIOU ROD Plan of Action and Milestone

ARAR Review

Mr. Malsberger stated that the RWQCB's comments have been resolved. The Air Force has received U.S. EPA's comments. Ms. Lehigh will do the review. Mr. Salcedo stated that DTSC is currently working on their comments.

Cleanup Table

Mr. Malsberger stated that he has not received any comments from the agencies on the cleanup table. Mr. Salcedo and Ms. Raker stated that they do not have any comments.

Sections 1 – 4 Review of the Draft ROD

Mr. Malsberger stated that he received comments from RWQCB on Sections 1 through 4 of the draft record of decision (ROD). Ms. Allen stated that she had questions on Section 3 and would discuss the comments with Mr. Malsberger after today's meeting.

Mr. Salcedo stated that he would forward his comments.

Set 1 Sites

A revised summary of Site SS035 (Facility 818/819) was distributed (see Attachment 3). Mr. Malsberger requested the agencies review this summary for concurrence on the language supporting no further action (NFA) for the site. (The RWQCB is deferring to DTSC.) If it is not possible for SS035 to be an NFA site, then the selected remedial action will be land use controls.

A revised handout titled Selected Remedies for Four Soil Sites was distributed (see Attachment 3). This table addresses the agreed upon selected remedies for miscellaneous TPH locations. Mr. Malsberger requested the agencies review this table for accuracy.

Set 2 Sites

SS015 (Solvent Spill Area and Facilities 550 and 552 [also includes area at Facility 1832])

Ms. Stanley (URS) gave a presentation on SS015 (see Attachment 4).

Site SS015 is located in an active area of the base and is a former paint stripping area. The first area of SS015 is located near Facility 1832. The PAH-contaminated soil is located in an area that is adjacent to a road in a grassy area. The contamination extends a depth of 1 foot and requires a surface scrape to remove PAHs (excavation for lead and chromium for human health).

The second area discussed for SS015 is near Facility 552 and is mostly paved parking lots. Soil contamination in this area is lead and chromium that pose potential risks to human health. Antimony is also identified as a COEC; however, because of site conditions and activities, there is no habitat. Excavation of areas contaminated with lead and chromium will also remove most of the antimony.

Selected Alternative and Rationale – Excavation for PAH and metals-contaminated soil (human health risk). NFA for ecological risk from antimony in soils because no habitat (i.e., no ecological receptors) exists. Human health cleanup levels for these elements are also protective of ecological habitat.

Ms. Raker asked what is going on with the groundwater. Ms. Stanley stated that vegetable oil has been injected beneath the grassy area to enhanced natural attenuation as part of an AFCEE project.

Ms. Raker inquired about the status of the vegetable oil study. Mr. Sreenivasan stated that the study is ongoing. More injection wells will be installed. Samples have been collected with no results yet. Mr. Sreenivasan stated that he will give an update on this study at the next Restoration Advisory Board meeting.

Ms. Raker asked if there was soil gas in this area. Mr. Brickeen stated that GoreSorber sampling was conducted by CH2M Hill as part of the natural attenuation assessment. Ms. Stanley stated that for the EIOU remedial investigation, soil gas samples were not collected.

Mr. Salcedo stated that the DTSC recommends that the Air Force use DTSC Lead Spread (located on the web) to determine cleanup levels.

Mr. Malsberger asked if this will change requirements for the WABOU ROD. Mr. Salcedo stated no, that he will not go back to require it. Mr. Salcedo stated that SS015 is an industrial setting, so they require it. Mr. Malsberger stated that the Air Force would consider use of DTSC Lead Spread.

Mr. Salcedo stated that the sample 05-0945 location is adjacent to the solvent spill area, and asked if this is a boring. Ms. Willmeth stated she will check.

SS016 (Oil Spill Area [OSA], Facilities 11, 13/14, 20, 42/1941, and 139/144

Mr. Malsberger gave a presentation on SS016 (see Attachment 5).

Approximately 100% of the area is covered by pavement and buildings. The site is located in an active area of Travis AFB (maintenance facilities and aircraft parking apron). COCs include PAHs. TPH was also detected in several areas within SS016.

PAH contamination that poses a potential risk to human health is located in the OSA area. However, the area is paved or has gravel or broken asphalt; therefore; currently there is not a pathway for exposure.

Underground storage tanks (USTs) were removed from various locations throughout SS016. TPH contamination was detected at various locations during the remedial investigation.

Ms. Raker asked if UST 1394 is on the list for closure. Ms. Willmeth stated that according to the EIOU remedial investigation, it was removed. The UST should be labeled 139A.

Selected Alternative and Rationale – The area of the OSA with PAH contamination is partially covered with asphalt or residual asphalt. The Air Force proposes initiating land use controls instead of excavation because there is no pathway for exposure and no current risk.

For the TPH contamination at OSA (Facilities 11, 13/14, 20, 42/1941, 139/144), the Air Force proposes NFA, with possible confirmation sampling at Facilities 13/14 and 20.

Ms. Raker asked if any TPH-contaminated groundwater is being extracted. Ms. Willmeth stated TPH sampling has not taken place since the remedial investigation; however, the benzene levels have decreased to non-detect. Ms. Stanley commented that the benzene levels started out low and have decreased even more (less than 1).

Ms. Raker asked what is the concentration of TCE in these areas. Mr. Malsberger stated that most of the plume starts at the industrial area and runs south. The OSA is the main source area.

Ms. Raker stated that it will be hard to close tanks that are in the same area. The main question is if the source of groundwater contamination has been dealt with through removal or degradation. In the areas where there are high concentrations in the groundwater, her concern will be if there is still a source (primary or residual); she is mostly concerned with Facility 13/14.

Ms. Raker asked the following questions:

- What is the source of gasoline?
- Was a soil gas survey conducted at this site?
- Will monitoring for TPH in the groundwater be needed?
- What is the groundwater contamination and is there still a source?
- Has there been adequate characterization?
- Have the tanks been closed or removed? (Ms. Raker stated that she would check into this.)

- What were the results of TPH samples collected in 1988 and what is the most current sample available?

Ms. Raker stated that there may be a closure report for USTs 139A and 600 ABC, which may have borings.

Ms. Raker asked if Travis AFB has the historical groundwater data in order to prepare a hydrograph of wells for TPH. Mr. Brickeen stated that historical data are in GSAP reports. Mr. Brickeen gave Ms. Raker a list of all related documents.

Ms. Raker asked if Mr. Salcedo has concerns about PAHs. Mr. Salcedo stated no. The only concern he has is the depth of samples collected at Facility 13/14. Ms. Willmeth checked the sample depths and confirmed that at location 71-1143 only a 2-foot deep sample was collected as indicated on the figure.

Ms. Raker will review the UST issues, maps, and determine if it is necessary to collect additional samples.

ST032 (Areas MW-107 and MW-246)

Ms. Willmeth (URS) gave a presentation on ST032 (see Attachment 6).

ST032 is a grassy, open area between a runway and an abandoned taxiway. The location of this site restricts land use and remediation options. This site contains groundwater contamination. Underground fuel line leaks may have contributed to soil and groundwater contamination. Currently, there is a free product interim RA for groundwater.

Ms. Raker asked what the most recent report is for ST032. The most recent report for ST032 is the technical memorandum to closeout the ST032 groundwater plume and incorporates the groundwater contamination with SS016 for remediation purposes.

Selected Alternative and Rational – The Air Force proposes NFA for TPH (human health risk) because the area of contamination is small, less than 20% of the samples are above screening levels, and TPH will naturally attenuate. The Air Force also proposes NFA for VOCs and for metals.

B. West/Annexes/Basewide Operable Unit

1. ROD Dispute Status

Mr. Anderson reported that the dispute resolution committee (DRC) was unable to reach resolution; therefore, the ROD dispute has been elevated to the Senior Executive Committee (SEC).

Mr. Salcedo stated that his agency is in support of elevating the dispute to the SEC. Mr. Salcedo also stated that it is the U.S. EPA's view to push forward and not wait for resolution of Langley AFB's dispute since the conditions at Travis AFB are narrower.

Mr. Brickeen stated that the Air Force is considering proposing that Travis AFB continue with Phase 2 of the CAMU.

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 5.9 million gallons of groundwater extracted and treated during the month of May 2002. The average flow was 133 gallons per minute (gpm). Approximately 2.5 pounds of volatile organic compounds (VOCs) were removed during this period. The total mass of VOCs removed since startup of the system is 177.9 pounds (see Attachment 7).

The SS029 communications system failures, which occurred during last fall, started to show up again. The majority of the problems experienced have been related to the modems, which do not appear to function well in the Travis AFB environment.

Travis AFB is convinced that the equipment should be replaced with a different type of I/O interface, and recommends a "Flex" I/O unit. The proposed equipment change will be tested first at one well site (EW07x29), and if all goes well, the remaining well sites would be modified. This transition should be completed by the end of June.

B. Central Groundwater Treatment Plant

Mr. Sreenivasan reported that the Central Groundwater Treatment Plant (CGWTP) performed at 99.8% uptime with approximately 3.8 million gallons of groundwater extracted and treated. The average flow for the CGWTP was 84.2 gpm during May 2002. Approximately 41 pounds of VOCs were removed during May 2002. The total mass of VOCs removed since startup of the system is 2,102 pounds (see Attachment 8).

Significant downtime during the month of May was seen for the Thermal Oxidation System. The recurrent failing of the temperature controller caused the downtime. Despite being replaced on 13 May 2002, the temperature controller continued to fail throughout the month. Per the manufacturer's direction, the thermocouple wire was also replaced. The Thermal Oxidation System shut down for a fifth time in May on 30 May 2002 and the system would not reset. The manufacturer was contacted and will bench test a new thermocouple, high temperature controller, and high water indicator prior to shipping. These items will be shipped and will be installed during the first week of June 2002. URS

will continue to work with the manufacturer to ensure the Thermal Oxidation System downtime is minimized in the future.

Mr. Sreenivasan reported that the CGWTP O&M Manual went final on 28 May 2002.

SS016 Groundwater IRA

Mr. Sreenivasan stated that the SS016 Groundwater Interim RA Report will go final on 17 June 2002.

C. North Groundwater Treatment Plant

Mr. Sreenivasan reported that the North Groundwater Treatment Plant (NGWTP) performed at 89.7% uptime with approximately 896,000 gallons of groundwater extracted and treated. The average flow for the NGWTP was 28.9 gpm during May 2002. Approximately 1.9 pounds of VOCs were removed during May 2002. The total mass of VOCs removed since startup of the system is 154.3 pounds (see Attachment 9).

URS officially took over operations of the NGWTP on 9 May 2002.

The sampling frequency table found in the NGWTP O&M Manual was found to be unclear; URS requires clarification for steady state operations. To determine the extent of sampling necessary, samples will be collected and analyzed for TPH in the gas and diesel range in both the influent and effluent of the plant for this and the following two months. This month, the initial lab analysis for TPH in the diesel range using U.S. EPA Method 8015 resulted in a concentration of 67 µg/L, exceeding the discharge limit of 50 µg/L. The results were received on 4 June 2002 and Travis AFB was immediately informed. Mr. Sreenivasan checked the treated water outfall at the duck pond and no visible sheen or free product was observed.

The chromatograph of the sample showed that while diesel was non-detect, it appeared that the hydrocarbons present in the sample were in the motor oil range, so the sample was analyzed again for TPH in the motor oil range. The new results were received on 6 June 2002 showing hydrocarbons in the motor oil and diesel ranges as non-detect, but an unknown group of lighter hydrocarbons consisting of discrete peaks and without a typical fuel pattern being present in the effluent sample. The concentration of unknown hydrocarbons was quantified using a diesel factor, resulting in a concentration of 47 µg/L, which is below the discharge limit of 50 µg/L. The inefficiency of the air stripper to treat the unknown hydrocarbons and the hydrocarbons in the gas range is currently being investigated. The influent concentrations were 87 µg/L.

Ms. Raker asked for a summary of the meeting that took place to discuss treatment system performance evaluations, recommendations for shutting down wells, and what the procedures would be used to do that.

Ms. Stanley stated that if there were recommendations made in the quarterly reports about turning off wells, then it would be followed up with a technical memorandum or white paper that would include the rationale and backup data to shut down the wells. It would then be reviewed as a draft by the agencies for their concurrence and go final for actual implementation by the Air Force.

Ms. Raker stated that the report should include capture zone analysis, the type of monitoring proposed after shut down, and the effect on monitored natural attenuation sites versus sites that are being extracted for capture zone evaluation. (It should provide capture-zone-specific information for the rationale.)

Ms. Allen provided an example of the document from Castle AFB, a memorandum presenting the rationale for shutting down wells.

Ms. Raker commented that the meeting on the GWTP quarterly report held after the May RPM meeting was very productive. The report incorporated the GSAP data and the O&M treatment plant quarterly report.

D. FT005 Interim Remedial Action

Mr. Sreenivasan stated that the CPT work at FT005 off base was completed as planned. Samples were collected from eight locations and sent to the laboratory. Travis AFB has received the analysis, which indicated that additional step outs are necessary to fully identify the area to be remediated.

The plume boundary extended approximately 200 feet to the south with hits showing four times the MCL for 1,2-DCA. Additional drilling at four locations will take place 12 June 2002. Mr. Sreenivasan gave the agencies a map indicating the locations of the additional drilling.

E. LF007 Soil Design

Mr. Malsberger stated that Travis AFB is completing the draft final LF007 Soil Design, which will be submitted on 21 June 2002.

F. LF007 Mitigation and CAMU Phase I Remedial Action

Mr. Malsberger stated that the mitigation was completed a couple of weeks ago (completed the last vernal pool). The seeding will be delayed until the rainy season in order to avoid seeds being blown away by the wind or eaten by birds. The construction portion is complete.

Phase I of the CAMU is underway. Mr. Brian Garber stated that groundbreaking has begun, wetland delineation fencing was set last week, grubbing was completed on Monday, two compaction tests were conducted yesterday and passed. They are now moving as much dirt as possible. The current schedule is to be complete by 6 August 2002. If the CAMU were operational, the site would be ready to accept excavated soil. Construction of the interceptor trench is scheduled the second week of July 2002.

The Air Force will keep the agencies updated on the trench schedule.

Mr. Malsberger stated that water is being obtained from the base fire hydrant for compacting and dust suppression. Travis AFB is attempting to use the NGWTP water instead, which has a fire hose hookup on the backside of the tank.

Ms. Raker asked if the pond will suffer; Mr. Sreenivasan stated no.

G. US F&WS Review of Draft LF007C Remedial Design

Mr. Malsberger stated that he is still working with the U.S. Fish and Wildlife Service (US F&WS). Last discussion was that Mr. Ken Fuller would provide comments this week.

H. Final SD042 Remedial Design Package

Mr. Anderson stated that the SD042 Soil Remedial Design Package is complete and final.

I. Draft SD045 Remedial Design Package

Mr. Anderson stated that the draft SD045 Soil Remedial Design Package is in agency review. The Air Force received a letter from Ms. Raker stating that she has no comments. Mr. Anderson believes that Mr. Lucey sent an email stating that he had no comments. Mr. Salcedo stated DTSC will have no comments. This draft SD045 Soil Remedial Design Package will go to final.

J. Draft LF008 Remedial Design Package

Mr. Anderson stated that the draft LF008 Soil Remedial Design Package comments are due. Ms. Raker stated that she has submitted a letter stating she did not have comments; Mr. Salcedo will submit a no comment letter next week; and Mr. Anderson will check with Mr. Lucey to see if he has any comments.

K. Draft LF044 Remedial Design Package

Mr. Anderson stated that the draft LF044 Remedial Design Package was submitted on 29 April 2002. This is a design package for the construction of a fence and a berm, the physical aspects of land use controls. Ms. Raker has provided her comments, Mr. Salcedo will submit comments next week, and Mr. Anderson will check with Mr. Lucey for comments.

L. RW013 Remedial Action Preparation

Mr. Anderson stated that the schedule for the work plan will be provided by the next RPM meeting. Discussions with ECC and various Air Force agencies have begun concerning the work plan and coordination of where to ship and how to ship the excavated soil. The final destination at this time appears to be at an Envirocare facility in Utah. Travis AFB is working out the contractual details. Work is scheduled to begin 19 August 2002.

M. LF008 O&M Manual

Mr. Anderson stated that the Air Force is responding to U.S. EPA's comments.

N. DP039 Treatability Study Report

Mr. Anderson stated that approximately two weeks ago the Air Force proposed removing the discussion concerning the rebound study in order to close out the document. This proposal was emailed to the U. S. EPA and is pending a response from Mr. Lucey.

O. Reactive Wall Report

Mr. Anderson stated that the Reactive Wall Report will be submitted on 17 June 2002; Mr. Anderson requested that DTSC push for a quick review in order to finalize the document because of the limits on the contractor's period of performance.

P. Draft Final Basewide Soil RD/RA Plan

Mr. Malsberger stated that this document will go final on 14 June 2002.

Q. Pre-Draft July 2002 Guardian Newsletter Publication

Mr. Sreenivasan stated that the pre-draft July 2002 Guardian Newsletter was distributed to the authors; comments have been received, which were forwarded to CH2M Hill, and will be emailed as a PDF file for review on 14 June 2002.

4. PROGRAM ISSUES UPDATE

A. CQCP as Informational Document

The agencies concur that the CQCP for the soil designs should be an informational document.

B. Funding FY02

Mr. Brickeen reported Travis AFB now has funding for all its projects, which will now be contracted. Travis AFB is attempting to obtain additional funding to complete FT005.

Mr. Brickeen stated that he met with the AFCEE contracting officer, who is starting performance-based contracting for next year for treatment plant operations, free product removal, and GSAP monitoring. Mr. Brickeen will keep the agencies updated.

C. Field Activity Reports

Mr. Brickeen distributed the field activity reports from CH2M Hill and GTI (see Attachments 10 and 11).

ACTION ITEM LIST

(Action Items Open)

AGENDA	RESPONSIBLE	ACTION ITEM	DUE DATE	STATUS
1.	RWQCB	Follow up on the letter from the Air Force in response to the notice of violation for the NGWTP.	Open	Pending. The O&M Manual for the NGWTP is being revised to match with the CGWTP O&M Manual.