

May 20, 1997

*Via Federal Express*

Ms. Jo Jean Mullen (QAE)  
AFCEE\ERD  
3207 North Road  
Brooks AFB, TX 78235-5363

Reference: Contract F41624-94-D-8136, Delivery Order 0023, Environmental Services for Groundwater Evaluation, Monitoring, and Well Installation in Support of Compliance Activities at Camp Stanley Storage Activity, Texas

Technical Interchange Meeting Minutes (CDRL B002A)

Dear Ms. Mullen:

Per the Contract Data Requirements List (CDRL) Data Item Number B002A, Parsons Engineering Science, Inc. is pleased to submit the meeting minutes and sign-in sheet for Technical Interchange Meeting 1. Enclosed is one copy of the meeting minutes. We are transmitting one hard copy and one copy on diskette to Mr. Brian Murphy, CSSA/RRAD. A copy of this transmittal letter is also being sent to Mr. Thomas McLean, HSC/PKVBB, and to AFCEE/ERS per CDRL B002A.

Please call me at (512) 719-6000 if you have any questions or comments.

Sincerely,



Susan V. Roberts  
Project Manager

Enclosure

xc: Thomas McLean, HSC/PKVBB, letter only  
AFCEE/ERS, letter only  
Brian Murphy, CSSA  
Rick Brettin, Parsons ES, letter only  
J.K. Yu, Parsons ES, letter only  
Keith Tischler, Parsons ES

# TECHNICAL INTERCHANGE MEETING (TIM) 1

## MEETING MINUTES

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Reference: Contract F41624-94-D-8136, Delivery Order 0023  
SOW Para 4.2.2.2: Kick-Off Meeting  
Environmental Services for Groundwater Evaluation, Monitoring, and Well  
Installation in Support of Compliance Activities at Camp Stanley Storage  
Activity (CSSA), Texas  
TIMS Conference Minutes (CDRL No. B002A)

Meeting: November 12, 1996  
CSSA, Boerne, Texas

Subject: Technical Interchange Meeting (TIM) Number 1

The meeting was held in the CSSA building 1 conference room, beginning at 1300 hours on 12 November 96. The following were in attendance (see attached sign-in sheet):

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Name	Organization
Jo Jean Mullen	AFCEE/ERD, Restoration Team Chief
Rene G. Hefner	AFCEE/ERC, Hydrogeologist
Beth Garland	AFCEE/ERC, Chemist
Rod Chatham	CSSA, Director of Special Projects
Brian Murphy	CSSA, Environmental Officer
Farrukh Ahmad	Booz Allen & Hamilton, San Antonio
Rick Brettin	Parsons ES, Austin, Program Manager
Susan Roberts	Parsons ES, Austin, Project Manager
Keith Tischler	Parsons ES, Austin, Task Manager

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The TIM had two objectives. The first was to provide a review of the project status to date. The second was to discuss and finalize specific modifications to the existing scope of work (SOW) and assess their impacts upon the budget and schedule.

The TIM agenda included a review of the project status to date, summary of proposed revisions to the August 1996 budget, SOW clarification, and discussion and resolution of the budget.

### **Discussions**

The meeting began with a review of the project status to date. Jo Mullen requested a copy of the ACO approval to sole source three sub-contracts. Ms. Mullen also mentioned that AFCEE had no comments to add to the draft kick-off meeting notes and the current draft could be considered final. Brian Murphy concurred.

In response to AFCEE's request for clarification as to discrepancies in the original budget review of August 1996, attending personnel reviewed copies of the August letter noting budget insufficiencies and the accompanying budget package. Parsons ES noted that modifications to the August budget were not complete as several tasks that would impact the budget had yet to be fully defined and were to be resolved at meeting. These tasks involved the number of water wells to be upgraded, the specific upgrade actions to be performed at each well, and the use of low flow purging and sampling to perform quarterly monitoring.

Discussion of water well upgrades followed. Brian Murphy stated that CSSA had been operating with a single water supply well for close to a year and that CSSA needed to make another well(s) available as soon as possible. One well offers no safety margin should any problems arise. He asked as to whether he should concentrate on upgrading the wells adjacent one another (9, 10, and 11) or look for a more distant source. Susan Roberts said that if CSSA's goal was an increase in volume pumped, a more distant source would be most effective. However, if CSSA's goal is to have alternate wells available without significantly increased pumping then the upgrade of wells 9 and 11 would prove beneficial. It was noted that any water well production or capacity increase of greater than 10% would require notification and approval by the state.

CSSA, AFCEE, and Parsons ES agreed that a downhole camera survey of well 1 would be useful to determine casing and well condition in addition to probable replacement of pump piping (based on the well 11's pipe condition observed during removal on 14 December 1995), and CO<sub>2</sub> treatment. Rod Chatham stated that CSSA did not have the 1997 fiscal year budget in place. Brian Murphy suggested Parsons ES cost upgrading a third well to aid CSSA in determining if upgrading a third well was feasible once their budget was established. Keith Tischler mentioned that in the original budget well upgrades were coordinated with monitor well installation to permit pump and piping removal as ECO<sub>2</sub> did not provide the latter service. Susan Roberts stated that Layne Texas might be able to perform pump and piping removal in addition to the downhole camera survey.

Discussion concerning monitoring well installation confirmed that the task would begin in calendar year 1997. The possibility exists that perched water could be encountered during drilling. If so, the hole would need temporary casing to isolate the

perched water. Susan Roberts stated this was listed as an additional task in the budget insufficiency letter. However, prior monitor well installation had not encountered any perched water. Occurrence seems to be dependent on seasonal rainfall. CSSA and AFCEE noted that the additional action could be stated as an unfunded contingency in the modified SOW. Additional funds would be requested immediately if protective casing proved necessary during technical direction and drilling. Susan Roberts also recommended the monitor wells be drilled to 350 feet due to recent groundwater levels. AFCEE and CSSA agreed.

A brief discussion addressed the attempt by Parsons ES, at the request of AFCEE, to find equipment that could measure groundwater flow in an open borehole to determine aquifer flow velocities. The equipment proved impractical.

Low flow purging and sampling were then addressed. Rene Hefner described the advantages of low flow purging and sampling with regard to obtaining more representative samples and the future defensibility of the groundwater monitoring program data. Mr. Hefner conveyed to Mr. Murphy that the low flow purging had to be maintained throughout future monitoring events to ensure data consistency. It was pointed out that in the long term a dedicated low purge pump for each well without a pump would be more cost effective. Mr. Murphy then asked if dedicated pumps would be a better option. Susan Roberts suggested the recommended equipment be evaluated for at least one quarter prior to executing the purchase of more than one pump. All attending personnel agreed. Ms. Roberts also stated that all purge water volumes were estimated as these quantities were dependent upon the stabilization of groundwater parameters. The volume of purge water generated would impact storage and disposal costs.

AFCEE, CSSA, and Parsons discussed coordinating AFCEE monthly reporting requirements with Parsons ES invoicing. Rick Brettin indicated to Jo Jean Mullen that Parsons ES will work with the HSC/PKV to find solutions.

AFCEE and CSSA agreed to add language to modify the SOW to better reflect the tasks discussed. CSSA requested that Parsons ES re-cost the budget to account for changes in items A-I listed in the Additional Task table of the August 20 budget insufficiency letter to AFCEE HSC/PKV. Costs would be addressed as contingencies in the SOW for items D and G. Parsons ES would also estimate additional costs associated with low flow purging, sampling, waste handling, and disposal.

## **ACTION ITEMS**

### **Parsons ES**

1. Send a copy of the ACO letter to Jo Mullen.
2. Add language to modify SOW to meet expanded task requirements.
3. Revise the budget to address the following changes: drilling depth, coring, geophysical logging, survey of well locations, submittal of report on well installation, submittal of report on well upgrades, estimate waste disposal.

4. Revise budget to reflect all costs, direct and associated with, low flow purging and sampling.
5. Revise budget for additional delivery order management as necessary to meet SOW requirements.
6. Send cost estimates for downhole camera surveys to AFCEE and CSSA.
7. Submit kickoff meeting minutes and project plan addenda to AFCEE and CSSA per SOW CRDLs.

**AFCEE**

1. Review the revised budget and schedule after submittal.

**CSSA**

1. CSSA will review the facility's needs for additional well upgrades.

**TIM No. 1: Sign-in**

Person	Representing	Phone Number
Susan Roberts	Parsons ES	512/719-6051
Rick Brettin	Parsons ES	512/719-6012
Rod Chatham	CSSA/DSP	210/698-0210
Rene G. Hefner	ERC-AFCEE	210/536-4763
Beth Garland	ERC-AFCEE	210/536-5658
Jo Jean Mullen	AFCEE/ERD	210/536-5940
Farrukh Ahmad	BA&H	210/244-4256
Brian Murphy	CSSA	210/698-5208
Keith Tischler	Parsons ES	512/719-6053



May 20, 1997

*Via Federal Express*

Jo Jean Mullen  
AFCEE\ERD  
3207 North Road  
Brooks AFB, Texas 78235-5363

RE: Contract F41624-94-D-8136, Order 0023, Environmental Services for Groundwater Evaluation, Monitoring, and Well Installation in Support of Compliance Activities at Camp Stanley Storage Activity, Texas,

Submittal of CDRL Data Item No. A007 and A009  
January 1997 Quarterly Groundwater Monitoring Report and  
Quarterly Informal Technical Data Report (ITIR)

Dear Ms. Mullen,

Per the Contract Data Requirements List (CDRL) Data Item Number A007, Parsons Engineering Science, Inc. is pleased to submit the quarterly groundwater monitoring report for the January-March 1997 quarter. Enclosed is one copy of the report. We are transmitting ten hard copies and two copies on diskette to Mr. Brian Murphy, CSSA/RRAD. A copy of this transmittal letter is also being sent to Mr. Thomas McLean, HSC/PKVB, and to AFCEE/ERS per CDRLs A007 and A009.

Also enclosed per CDRL Data Item Number A009 is the ITIR as an appendix to the January quarterly summary report. The ITIR is submitted here as a final copy. Future submittals will consist of draft and final versions submitted with the draft and final quarterly summary reports as discussed by AFCEE, CSSA, and Parsons ES.

Sincerely,



Susan V. Roberts  
Project Manager

xc: **Brian K. Murphy, CSSA**  
Rene Hefner, AFCEE/ERC  
Thomas Mclean, HSC/PKVB, letter only  
AFCEE/ERS, letter only  
Rick Brettin, Parsons ES, letter only  
J.K. Yu, Parsons ES  
Karuna Mirchandani, Parsons ES  
Keith Tischler, Parsons ES

**AFCEE Contract Number F41624-94-D-8136/Delivery Order 0023**  
**Groundwater Evaluation, Monitoring and Well Installation**

**Technical Interchange Meeting 1**  
**Agenda**

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Date: Tuesday, 12 Nov 96  
Time: 1300 hrs  
Place: Camp Stanley Storage Activity, TX  
Building 1

Parsons ES:

- Project status to date
- Summary of proposed August 1996 revisions to budget
  - ⇒ Budget shortfalls
  - ⇒ Proposed additional work and justification

CSSA, AFCEE, Parsons ES:

- SOW clarifications
- Discussion of budget issue resolutions



**AFCEE Contract Number F41624-94-D-8136/Delivery Order 0023**  
**Groundwater Evaluation, Monitoring and Well Installation**

**Technical Interchange Meeting 1**  
**Project Status**

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**PROJECT STATUS TO DATE**

•**Deliverables Submitted**

Draft Kick-Off Meeting Notes  
Final Work Plan Addenda  
Final Sampling and Analysis Plan Addenda  
Final Health and Safety Plan Addenda

•Approval given by ACO for analytical services (Inchcape Testing Services), monitoring well installation (GeoProjects International), and water well upgrade (ECO<sub>2</sub> Solutions, Inc.).

•The sub-contract for analytical services is in place.

•At the request of AFCEE Parsons ES evaluated the use of commercially available flow meters capable of measuring groundwater flow in open borehole monitoring wells. The use of flow meters at CSSA was determined to be impractical by AFCEE and Parsons ES.

•Parsons ES researched low flow purging and sampling equipment in order to locate equipment capable of meeting the depth and portability requirements of CSSA groundwater monitoring.

•CSSA, AFCEE, and Parsons ES evaluated and selected low flow purging and sampling equipment to be used at CSSA.

**ISSUES TO BE RESOLVED**

•CSSA water well upgrades are scheduled under the groundwater program. Selection of wells and upgrade tasks to be performed at each well need to be identified by CSSA (*Task 05000*) prior to commencing work.

•Budget and schedule impacts are associated with revised quarterly sampling procedures.