TECHNICAL INTERCHANGE MEETING NO. 2 MEETING MINUTES

WATER AND WASTEWATER EVALUATION AND WATER SYSTEM REHABILITATION AT

CAMP STANLEY STORAGE ACTIVITY, TEXAS FA8903-04-D-8675/DELIVERY ORDER 0022 PARSONS 745006-01000

Date:

Friday, 01 September 2006

Time:

12:30 pm - 2:30 pm.

Place:

Camp Stanley Storage Activity (CSSA)

Subject:

Progress Meeting for Discussing Defects Report from Smoke Testing

performed on the Wastewater System at CSSA.

Attendees:

Attendee	Organization	Phone
Glare Sanchez	CSSA ENV	(210) 698-5208
Tom Tijerina	CSSA Engineering	(210) 295-7473
Marcel Dulay	Parsons	(512) 471-6202
BrianVanderglas	Parsons	(512) 719-6059

^{*}Minutes prepared by Marcel Dulay and Brian Vanderglas, Parsons

Draft Smoke Testing Defects Report

The meeting was started by discussing the draft Smoke Testing Defects Report. Brian Vanderglas indicated that the Defects Report, when final, would be included as an appendix to an engineering report prepared at the completion of the water system modeling. CSSA did not have specific comments on the report, but requested if we could review some of the various locations. Tom Tijerina asked if the smoke test investigation would actually show all of the defects, and Marcel Dulay responded that not all major defects would be shown, but that all defects that were contributing to inflow and spikes would be identified by the smoke test.

CSSA also asked if Parsons could categorize the defects and add a cost component to repair each of them. Marcel indicated that we could categorize the defects by type to provide a more general idea of lump sum estimates for performing the repairs. The cost information would be added to the final report that will be submitted as an appendix to the draft Engineering Report for the Water System Evaluation. Mr. Tijerina stated that he would like to be able to sit down with Joe

Ovalle and the completed report to decide which defects he would like to repair and which ones would probably require a contract to a mechanical/construction company to repair. CSSA requested the cost estimate information for repair by the end of September if the Water System Evaluation Engineering Report was not ready for submittal until October.

Data Collection Efforts

Marcel Dulay reported that data collection activities were essentially complete although ADS Environmental Services has not yet recovered the meter installed at the WWTP. CSSA asked if meters pulled from CS-Wells 9 & 10 were ever calibrated. An action item was noted for Parsons to check on the status of the meters and to check their accuracy. There was also lots of discussion regarding collection of data from the WWTP outfall for comparison to ADS Services inflow data. Parsons agreed to check with Eli Wright, Scott Pearson (SCADA task manager) and ADS Services to see if there was any effluent data that might be available for comparison.

Tom Tijerina reported that reservoir flow was cut off on August 26, 2006, and that public works played with the flows ahead of the shutdown, so he was concerned about a huge variance in readings. Mr. Dulay noted the shutdown, and said that there were several events during the monitoring period where large variances will likely be noted, but that is common and can be addressed as long as the cause for the variance can be explained.

Operational Issues for Model Calibration

Marcel reported Parsons was still compiling the data inputs for the modeling efforts, but needed additional information provided by CSSA, including:

- (1) rain data from the two weather stations. Parsons will download the data;
- (2) identify locations of pressure reducing valves (PRVs) or other things that may affect the pressures, particularly in the area around the warehouses. Marcel Dulay indicated some of the preliminary model calibration runs are indicating high pressures south of Building 98, which does not match with what Parsons meastured. Tom Tijerina indicated that he is unaware of any PRVs except possibly at Building 20, and that he would need to visit with Joe Ovalle to figure it out. Marcel Dulay suggested that he meet with CSSA representatives to determine if there are pressure reducing components of the network and report back to CSSA after Parsons has received data from ADS Environmental Services..
- (3) obtain more water consumption data from CSSA. Tom Tijerina already provided Parsons with data from 2004-2006 to date, but Marcel indicated that a spike in the 2004 data makes it more critical to get additional years of water consumption data. Tom indicated that he could provide the additional data as it was in a spreadsheet that could be forwarded by e-mail.

- (4) Population data for CSSA and more specifically, population by building. Marcel Dulay indicated that only 30% of the buildings had returned their surveys (we now know that several of the buildings missing are not inhabited or are not actual buildings, but are indicated as such on the maps that Mr. Dulay was provided). Apparently, the surveys for Building 90, 98, and 01 were submitted, and those buildings comprise a significant portion of the CSSA population. Tom Tijerina reported that the residential area population currently totals 19 individuals, which is an increase from the numbers reported with the initial surveys. Parsons will review the existing population data from the surveys and if there is a small number of individuals not represented, will continue to work with CSSA to finalize a base population and distribute the population along the normally occupied buildings. CSSA indicated that the population at CSSA is between 130-140 with occasional spikes of an additional 20-40 people.
- (5) On whether any future land use needed to be considered, CSSA mentioned that a new building is being constructed at the top of the hill near the reservoir, with a 10-inch line, and some additional structures are also planned for the East Pasture. Water use at these buildings will primarily be limited to restrooms.

Modeling Status and Schedule

Parsons discussed the three modeling scenarios that it was planning and obtained concurrence from CSSA for the three scenarios. The scenarios include:

- (1) Calibration run of existing system and diagnosis of deficiencies;
- (2) Repairs of existing system with no new wells (or optimize the existing system for future land use);
- (3) New distribution line improvements with future land use considerations including installation/tie in of new groundwater production well located in the North Pasture.

The location of the new production well was discussed in depth during the meeting. Parsons had originally identified a location in the Southeast quandrant of CSSA in the general vicinity of the WWTP, but after reviewing well locations with Scott Pearson, determined that an existing agricultural well located in the North Pasture was free of contamination, outside the area that might directly influence the contaminant plume, and was known to be a large water volume producer. CSSA liked the location and agreed that the third modeling scenario should include a new production well located in the North Pasture. They also indicated that CSSA was considering a new building in the North Pasture, too, which would also make the proposed well's location more beneficial.

The schedule for completing the modeling efforts and the engineering report were discussed with CSSA. Parsons indicated that it would be difficult to have the

engineering report completed by the end of September, but was hopeful that there would be sufficient data and results to share with CSSA by the end of the month. Much of the schedule remains dependent on timely acquisition of remaining data from ADS Environmental Services and CSSA.

FOLLOW-UP ISSUES AND ACTION ITEMS

- 1. Parsons will revise the smoke test report to include cost estimates for repair of the wastewater system defects.
- 2.Parsons will obtain more flow data from CSSA for years 2001-2003, if possible..
- 3. .Parsons will complete the model calibration and visit with Joe Ovalle, as appropriate, to determine locations of PRVs, confirm pipe sizes, pipe materials, and other factors that may be affecting the pressures.
- 4. Parsons will compile information from North Pasture agricultural well related to capacity, elevation, distance from existing distribution system, and other design parameters. In addition to the design parameters, Parsons will also discuss the possible requirements for converting the existing agricultural well into a groundwater production well..
- 5. CSSA will provide engineering details for new construction planned at CSSA, including the new warehouse facility near the reservoir and a possible new facility in the North Pasture.
- 6. Parsons will research the tools or data resources that might be available to compare influent data at the WWTP to effluent volumes. Parsons will also download the weather station data.
- 7. Parsons will check the calibration of the meters removed from CS Wells 9 & 10, and return the meters to CSSA for possible re-use.

FINAL TO22 TIM #2 MEETING MINUTES.DOC



DEPARTMENT OF THE ARMY

CAMP STANLEY STORAGE ACTIVITY, RRAD 25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

Agenda for TIM#2 Topics include Water System Modeling Inputs & Progress & Waste Water Smoke Test Report at CSSA Water & Wastewater System Evaluation and Water System Rehabilitation CDRL B006

AFCEE WERC, Task Order 22

Time: Friday, September 1, 2006; 12:30 am to 2:00 pm

Place: Camp Stanley Storage Activity, Boerne, Texas, Environmental Office

Proposed Order of Discussion

Date & Time	Topic
12:30 pm- 1:00 pm	Smoke Testing Defects Report
	Overview
	CSSA Comments & Questions
1:00 pm – 1:30 pm	Operational Issues for Model Calibration
	Locations of Pressure Reducing Valves and Other Operational Valves
	Total Water Consumption per day Records
	Building Sheets & Model Assumptions for those not received.
	Land Use and future Modeling Scenarios
1:30 pm – 1:45 pm	Modeling Status and Schedule
	Overview
	Schedule discussion
1:45 pm – 2:00 pm	Other TO-22 Discussion Topics and Action Items