



DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, MCAAP
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

24 August 2007

U-105-07

Mr. Thomas Haberle
Texas Commission on Environmental Quality
Region 13 San Antonio Office
Water Section Manager
14250 Judson Road
San Antonio, TX 78233-4480

Subject: Response to Comprehensive Compliance Investigation #556833
Findings for Camp Stanley Storage Activity, Bexar County,
Texas, TCEQ Permit Number WQ0003849, U.S. EPA Permit Number
TX0064505

Dear Mr. Haberle:

In May 2007, Mr. Chris Dzuik of the Texas Commission on Environmental Quality (TCEQ) Region 13 Office conducted an investigation of Camp Stanley Storage Activity's (CSSA's) wastewater treatment plant to evaluate compliance with applicable requirements. During the investigation, Mr. Dzuik recommended that CSSA evaluate the collection system and any potential sources of infiltration/inflow (I/I) to minimize future I/I events. He further requested that CSSA submit written documentation to TCEQ stating what actions are being taken to address the I/I into the facilities collection system. This letter provides the requested documentation.

CSSA's recent exceedances of the maximum allowable daily flow typically occurred for up to 1-2 days after significant rainfall events. CSSA has conducted a smoke test survey and a closed-circuit television (CCTV) survey to help identify locations along its wastewater collection system where I/I may be occurring. In addition, CSSA conducts routine inspections to identify potential sources of I/I. A brief summary of these methods and the findings from each is provided below.

Smoke Test Survey: A smoke test survey was conducted on over 22,000 feet of sanitary sewer and septic tank lines in July 2006. Smoke testing is a common diagnostic method used to locate and identify inflow sources within a wastewater collection system. During each smoke test, a special non-toxic, non-staining smoke was blown into a selected portion of the collection system. Potential inflow sources were identified by visible smoke. The smoke test determined that I/I was potentially occurring at one, improperly installed manhole cover, six broken cleanouts, and a number of drains. The cleanouts have been repaired. The detailed written report on the smoke test can be provided at TCEQ's request.

CCTV Survey: A camera survey was conducted on 2,682 feet of the wastewater collection system in July 2007. The CCTV locations were determined by visual observations of flow rates through manholes during rain events. This survey identified several locations where I/I could be occurring and the following repairs are anticipated to be complete within the next six months:

- An inflow leak was identified in CSSA's 8-inch main sewer line, near CSSA's W Tank (earthen pond for wildlife). Parts to repair this line have just been received and the hole will be repaired.
- Two abandoned service line inlets were identified. These inlets will be excavated and capped.
- A leaking cleanout identified in CSSA's W Tank will be assessed to determine the best course of action to prevent water in the tank from entering the sewer.
- Two additional leaking manholes have been identified and are scheduled to be replaced.
- A new manhole in the housing area that wasn't sealed properly will be repaired.

Routine inspections: CSSA conducts visual inspections of the wastewater collection system for potential sources of I/I during major rain events. The visual inspections prompted the CCTV survey.

As you know, central Texas has experienced record rainfalls this year. San Antonio logged 21.58 inches of rain between May 1 and July 31; whereas, the 30-year (1971 - 2000) normal for the same 3-month period is only 11.05 inches (<http://www.srh.noaa.gov/ewx/html/cli/sat/satmonpcpn.htm>). Despite these circumstances beyond CSSA's control, CSSA has taken measures, such as those described above, to reduce I/I into its collection system. CSSA should see decreased I/I amounts in the future as more defects are identified and repaired. It is anticipated that implementation of additional measures, including replacing all of the brick manholes, will take approximately five years due to funding and operational constraints.

In addition, CSSA is in the process of installing an extensive SCADA system which will provide real-time and totalized flow data and help to more effectively track outflow rates at the wastewater treatment plant. The data can be used to judge the effectiveness of repairs to the wastewater collection system. An ultrasonic flow meter, pH monitor, residual chlorine analyzer, and dissolved oxygen meter have recently been installed at the CSSA's wastewater treatment plant.

If you have any questions or comments, please feel free to contact Ms. Glare Sanchez, CSSA Environmental Program Manager, at (210) 698-5208.

Sincerely,


JASON D. SHIRLEY
Installation Manager

cc: Glare Sanchez
CSSA Environmental Office

Julie Burdey
Parsons