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

28 December 2004

U-012-05

Mr. Sonny Rayos
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Section
PO Box 13087 (MC-127)
Austin, TX 78711-3087

Subject: Response to Texas Commission on Environmental Quality (TCEQ) Request for Additional Information on Area of Concern (AOC)-55, Camp Stanley Storage Activity, Boerne, Texas, TCEQ Industrial Solid Waste Registration #69026 EPA Identification Number TX2210020739

Dear Mr. Rayos:

The Camp Stanley Storage Activity (CSSA), Red River Army Depot, Tank-Automotive and Armaments Command, Army Materiel Command, U.S. Army is providing additional information in response to your letter dated November 18, 2004.

Your November 18, 2004 letter provided a list of information, which the TCEQ requires CSSA to submit. CSSA is responding to your letter to provide all laboratory analysis, field notes, and a chain of custody pertaining to the sampling and analysis of the ash-impacted media generated at AOC-55 as an attachment. Information regarding the location and depths of the characterization samples are provided below. Figures and photos are provided as attachments.

Background

AOC-55 consists of potential contaminated source areas associated with landfilling of non-hazardous waste. These areas have been identified by the presence of trash exposed during a previous (July, 2002) flooding event.

The site was used as a landfill and is located south of Tenberg Drive and east of Salado Creek. It is approximately 3.6 acres in size and contained approximately 35,000 cubic yards of impacted media/waste material. Initial site surveys indicated that the waste consisted of ash material and a minor amount of metal debris. CSSA conducted a removal action at the unit, which involved the excavation and disposal of the waste material.

Test Trenches

Test trenches were excavated on October 29 to 31, 2002 to confirm the results of the geophysical survey, characterize the waste thickness, and evaluate the material present. A total of 6 trenches were excavated in areas of geophysical anomalies identified in the EM data. The locations of the trenches are depicted on Figure 1.

Trenching subcontract services were provided by Eagle Construction and Environmental Services of Cibolo, Texas. Kyle Caskey, Senior Construction Manager for Parsons, provided contractor oversight during the test trenching operations. Additionally, A UXO Site Supervisor and technician were available to perform UXO avoidance and identification efforts.

The test trenches were excavated using a trackhoe. The trenches were oriented east to west across the suspected disposal area identified in the geophysical results. Trenches were excavated until bedrock was encountered resulting in trenches that were approximately seven to ten feet deep. Following completion of the trenching activities, samples for soil characterization were collected and the excavated material was placed back into the trenches.

The material encountered in the test trenches included ash that appeared to been generated from an incinerator operation within the AOC-55 area. The landfill also contained bottles that appeared to be waste from the on base cafeteria. These bottles included numerous ketchup bottles, Worcestershire Sauce bottles, discarded coke bottles and other types of bottles that were unidentifiable. Also found were several metal water pitchers and broken China plates. One of the broken China plates found was dated 1915. The time of the landfill operation is unknown, but is thought to be between 1920 till 1950 based on dates found on bottles, plates and aerial photos.

In addition, one 155mm projectile casing and two 75mm projectile casings were encountered on the surface. All rounds were identified by the on-site EOD personnel and were moved to a safe area and flagged for future destruction. It appears these items were placed in this area after the AOC-55 landfill was no longer in use.

Photos of the trenching operation are attached.

Waste Characterization Sampling

Waste characterization in the trenches was based on a composite soil sample from the top to the bottom of each trench (approximately 2 feet in depth). This composite sample was analyzed for VOCs, SVOCs, and explosives.

Soil Characterization Sampling

On October 30, 2002 six samples collected from the material excavated from the test trenches. The samples were submitted to APPL in Fresno, California, and analyzed for totals analysis VOCs, SVOCs, total metals, and Toxicity Characteristics Leaching Procedure (TCLP) metals (Laboratory Package ID # 39832). The sample results were used to determine the appropriate contaminants of concern for the site and to establish a waste profile to determine landfill requirements in preparation for the removal actions. Analytical requirements for the post-excavation confirmation samples will be based on the contaminants of concern identified for AOC-55.

Soil samples AOC55-SW1 through AOC55-SW5 were collected from the material excavated from trenches SW1 through SW5 in the southwestern

quadrant. Composite samples of the excavated material were collected for the SVOC and metals analysis. The composite sampling procedure consisted of collecting aliquots of soil material at 4 to 5 locations from the trench location, combining and mixing the aliquots, then filing a sample jar with the soil mixture. A grab sample was collected for VOC analysis and was collected at the approximate middle of each trench alignment and at a depth of approximately 2 foot into the soil material.

Sample AOC55-SE1 was collected from the three smaller trenches excavated in the southeast quadrant. The SVOC and metals samples were collected by compositing equal amounts of material from the soil material at the three trenches. The VOC grab sample was collected from at Trench SE1a.

The soil samples were initially analyzed for VOCs, SVOCs, and total metals. These soil sample results were compared to the USEPA's hazardous waste criteria and the TCEQ's Class 1 waste criteria to assess possible waste classification. To compare the totals-basis VOCs, SVOCs, and metals results to the TCLP-basis waste criteria, a screening value of 20 times the TCLP waste criteria was used to identify areas where the waste criteria may be exceeded. Samples that exceeded this conservative screening value for a particular analyte were then analyzed for that analyte using the TCLP extraction procedure. Following this screening technique, all soil samples except AOC55-SW1 were found to contain total lead concentration above the screening level, and as a result, all soil samples were analyzed for TCLP lead. In addition, sample AOC55-SE1 exhibited an elevated cadmium concentration that was well below the 20 times screening level, however, the sample was analyzed for TCLP cadmium to verify that the waste criteria were not exceeded for this parameter.

Laboratory results of the sample indicate that lead is present at elevated concentrations in all samples. Cadmium was detected in the sample from Trench SE1 at an elevated concentration. Three VOC constituents and eight SVOC constituents were detected in the samples at concentrations below the laboratory reporting limits. The VOC constituents present were methylene chloride, naphthalene, and toluene. The SVOC constituents detected in the samples includes: benzo (a) anthracene; benzo (a) pyrene; benzo (b) fluoranthene; benzo (g,h,i) perylene; chrysene; fluoranthene; indeno (1,2,3-cd) pyrene; phenanthrene; and, pyrene.

The TCLP analysis for lead in all collected sampled and cadmium in AOC55-SE1 indicated the material meets Class 2 non-hazardous waste criteria as specified in State of Texas 30 Texas Administrative Code (TAC) Chapter 335, Subchapter R (30 TAC 335.506).

Twenty additional waste characterization samples were collected from AOC-55 on February 27, 2003 at locations show on Figure 1. Samples AOC 55-SW6 through AOC 55-SW25 were collected in the same manner as the previous waste characterization samples. The samples were submitted to APPL, Inc. (Laboratory Package ID # 40846) for analysis of TCLP lead, cadmium in order to provide proper waste

characterization of the remaining soils within AOC-55. Additionally, ten of the samples collected for waste classification on February 27, 2003 were submitted to DHL, Inc. (Laboratory Package ID # 0302145) for explosives analysis (USEPA method 8330). Results of analysis indicate that the material met State of Texas non-hazardous Class 2 criteria.

Summary

AOC-55 contained approximately 35,000 cubic yards of class 2 non-hazardous impacted media/waste materials. The waste characterization analysis indicated that there were no explosives, SVOCs, or VOCs noted as chemicals of concern.

If you have any questions regarding this information, please feel free to contact me at (210) 295-7416 or Mr. Rod Hudson at (210) 221-2373.

Sincerely,

Jason D. Shirley
Installation Manager

Attachments

cc: Mr. Greg Lyssy
EPA Region 6

Mr. Sonny Rayos
TCEQ, Corrective Action

Mr. Richard Garcia
TCEQ, Region 13

Mr. Stan Citron
U.S. Army, Army Materiel Command, Command Counsel, General Law Division (AMCCC-G)

Mr. Rod Hudson
U.S. Army, Army Medical Command, Fort Sam Houston, Staff Judge Advocate

Mr. Teresa DuPriest
Air Force Center for Environmental Excellence

Ms. Julie Burdey
Parsons