STATEMENT OF BASIS

Liberty University Annex (Former Ericsson Facility)
Lynchburg, Virginia

EPA ID No. VAD 003132255

I. Introduction

This Statement of Basis is for the Liberty University Annex (former Ericsson facility) located in Lynchburg, Virginia. After reviewing the results of recent site inspections, past environmental practices, historical investigations and remedial activities, the United States Environmental Protection Agency (EPA) believes that no further corrective action is necessary at the Liberty University Annex at this time, and is proposing a final decision of Corrective Action Complete Without Controls. This proposal is consistent with current EPA guidance entitled *Final Guidance on Completion of Corrective Action at RCRA Facilities* (February 25, 2003). The purpose of this document is to solicit public comment on the proposal that no further corrective action is required at the facility at this time.

The Liberty University Annex is subject to the Corrective Action Program under the Resource Conservation and Recovery Act (RCRA). (For more information on RCRA Corrective Action, please visit the Region III web site at www.epa.gov/reg3wcmd/correctiveaction.htm). The Corrective Action program is designed to ensure that facilities have investigated and cleaned up any releases of hazardous waste or constituents that may have occurred at their property. Region III is using the administrative procedures found in 40 CFR Part 270 to solicit public comment prior to making its final corrective action decision for the Liberty University Annex.

II. Facility Background

The Liberty University Annex is located at 100 Mountain View Road Lynchburg, Virginia. The facility is owned by Thomas Road Baptist Church, Inc. and occupied by Liberty University for storage and school functions. The property itself encompasses 117 acres of land, approximately 20 of which are under the roof of the main structure. Surrounding properties are comprised of educational (Liberty University) and commercial facilities.

In November of 1980 General Electric (purchased by Ericsson Inc) applied for a Part B RCRA permit. In the course of developing the Part B application, amendments to RCRA mandated that information be provided regarding past and present Solid Waste Management Units (SWMUs). In response to these corrective action amendments General Electric identified two (2) such units that had previously been used at the Mountain View Road facility. The first of these units is referred to as the Chemical Burial Area, which has been properly closed with supporting documentation available to verify closure. The second area is referred to as the Radio Scrap Burial Area.

III. Release History and Follow-up Activities

The Radio Scrap Burial Area is described from available documentation as follows: "Mobile Communications Business Division accumulated and buried on-site radio scrap materials generated in the process of manufacturing mobile communications equipment. This scrap consisted mainly of printed circuit boards, nickel/cadmium battery packs and metal chassis. In January 1981, Mobile Communications Business Division suspended this practice. Subsequent tests performed by Environmental Analysis and Design, Inc. revealed that the circuit boards and battery packs are not hazardous under either Federal or Virginia environmental laws. Both items were submitted to structural integrity procedures as described in the Federal Register, Volume 45, No. 93, May 19, 1980, pages 33128-29 before the extraction procedure was begun. Both samples were found to be below the EPA-RCRA maximum concentrations EP toxicity standards. Approximately 3,500 cubic feet of radio scrap is buried at this site."

On September 30, 1985 the U.S. EPA provided a draft copy of the full RCRA permit to General Electric for comment. Within the draft permit were corrective active provisions (page 8 of permit) addressing the issues of the two (2) identified SWMUs. The corrective actions mandated that a study proposal be submitted for determining if hazardous waste or hazardous waste constituents had been or were currently being released to the environment. Requirements were further stipulated that the study proposal be approved and implemented.

On August 7, 1986 the U.S. EPA responded to the study proposal as follows: "Thank you for your letter of March 27, 1986 regarding corrective action for solid waste disposal sites at your facility. As discussed by phone with Mr. A.L. Wheaton, your plans are satisfactory as outlined."

The only documentation found to support that the approved corrective actions were conducted on the Radio Burial Area is the following statement obtained from the Manufacturing Technical Services, October, 1987 Monthly Report. "Radio Scrap Burial Site was smoothed out and seeded. Will plant trees in spring to prevent erosion."

IV. Summary of Investigation

In May of 2002, Ericsson contracted Facility Management Consultants to conduct an exploratory excavation of the Radio Scrap Burial Area and initiate remediation activities in response to a future real estate transaction involving the portion of property containing the alleged SWMU. Virginia Department of Environmental Quality (VADEQ) representatives were made aware of these activities.

On May 8, 2002 W.E.L., Inc. was subcontracted to perform the excavation of the Radio Scrap Burial Area in order to identify actual location, volume, and content of the site. A series of eleven (11) trenches were excavated across the full extent of the suspected burial area encompassing an area approximately 135' X 75'. Radio scrap was identified in two (2) of these trenches (side by side) with an estimated vertical and lateral extent of approximately 45 cubic feet of scrap material. The remaining trenches did not uncover any buried scrap material and were terminated at either shallow bedrock or obvious signs of undisturbed soil (structural integrity of soil/saprolite).

Material identified during excavation was predominantly metal chassis components for use in private radio system base stations, circuit board components in original cardboard and plastic packaging, plastic microphones, wire, miscellaneous electronic components and two (2) batteries measuring approximately 2"x3"x8". The majority of the exposed materials appeared to be relatively un-weathered with cardboard packaging still intact and legible. Following the exploratory investigation the trenches were back-filled and graded with silt fencing placed around the down gradient side of the excavated area.

On July 19, 2003 W.E.L. Inc. mobilized equipment and personnel to the scrap burial area identified in the previous exploratory investigation and initiated excavation activities. All activities were conducted in presence of the Project Manager, Quality Assurance Director and Field Sampling Director. The resulting excavation measured approximately 20 feet by 20 feet by 9 foot deep and was excavated to a relatively solid layer of surrounding saprolite. Following sampling activities construction fencing was used to enclose the area and signs were posted warning of the potential danger.

The excavation walls and floor were divided into four equal area grids with a single sample being collected from each grid. Duplicate samples were collected from SW lower corner and NE floor sample grid. Spring seepage (standing water) into the excavation was also sampled. A single background sample was obtained from the field 100' west of the excavation. Three samples were collected from the overburden stockpile. The samples were analyzed for arsenic, barium, cadmium, chromium, copper, mercury, nickel, lead, selenium, and silver.

Results of the soil samples taken from the pit during the excavation were analyzed and then sent to the Virginia Department of Environmental Quality (VADEQ) and EPA for review. Official EPA response to the results requested more sampling be performed for the presence of cadmium and arsenic in both the pit soil and the groundwater conveyance located approximately 200 yards to the north and running east to west.

On June 2, 2004, CVLC, Inc. and W.E.L.. Inc. mobilized equipment and personnel to the scrap burial area identified in the previous exploratory investigation and initiated excavation and sampling activities. Soil was removed from the bottom of the pit to ensure that samples obtained were from undisturbed soil and not fallen debris. Removed soil was placed on the existing excavated soil pile remaining from the previous excavation in 2003.

The excavation southeast wall was divided into nine equal area grids with a single sample being collected from the top row right and left, center row center, and bottom row right and left to form an “x” pattern. Samples were taken from the pit floor in the southeast side where the soil was dry and the northwest corner where stormwater had previously accumulated. Samples were analyzed for arsenic and cadmium. No groundwater was seen in the pit at the time of sampling. A background sample and duplicate were obtained from the field approximately 30 yards west of the excavation and analyzed for the above listed constituents. Liquids generated in the decontamination of sampling equipment were combined and stored by W.E.L. until analysis.

V. Sample Results

The analytical results of soil samples collected during the July 2003 investigation were compared to EPA's Region III residential soil Risk Based Concentrations (RBCs). The analytical results indicated that concentrations of barium, chromium, copper, mercury, nickel, lead, selenium, and silver were below the RBCs for all samples. Cadmium was detected above the RBC of 78 mg/kg in the Pit Water sample, which had a cadmium concentration of 180 mg/kg. The remaining samples contained cadmium at concentrations ranging from 2.0 mg/kg to 63 mg/kg, which are below the RBC of 78 mg/kg. Arsenic was detected above the RBC in the S.E. Upper sample, which had an arsenic concentration of 370 mg/kg. The remaining samples contained arsenic concentrations ranging from 13 mg/kg to 24 mg/kg. While these numbers are higher than the RBC of 0.43 mg/kg for arsenic, they still fall well within native soil ranges for arsenic, which are typically anywhere from 1 to 40 mg/kg.

The analytical results of soil samples collected during the June 2004 investigation were also compared to EPA's Region III RBCs. Arsenic concentrations ranged from 1.4 mg/kg to 2.3 mg/kg. While these concentrations are still higher than the arsenic RBC of 0.43 mg/kg, it should be noted that the two background samples contained arsenic concentrations of 2.6 mg/kg and 3.6 mg/kg, respectively. Cadmium concentrations were all below the RBC of 78 mg/kg, ranging from 2.0 mg/kg to 55 mg/kg.

VI. Risk Analysis

Based on the most recent soil sampling results, EPA has concluded that the Liberty University Annex does not pose a risk to human health or the environment. The analytical data indicate that the pit burial area soil is at or below the background sample for arsenic and equal to or at acceptable levels for cadmium. While arsenic concentrations are still above the RBC, they are well within typical native soil concentration ranges for arsenic. The June 2004 analytical data add further support to the possibility that the arsenic concentration of 370 mg/kg in the S.E. Upper sample from July 2003 and the cadmium concentration of 180 mg/kg in the Pit Water sample from July 2003 were anomalous measurements.

VII. Public Participation

EPA is requesting comments from the public on its tentative decision of Corrective Action Complete without Controls. The public comment period will last forty-five (45) calendar days from the date that this matter is publicly noticed in a local newspaper (December 10, 2004 to January 26, 2005). Comments should be sent to EPA in writing at the EPA address listed below, and all commentors will receive a copy of the final decision and a copy of the response to comments.

A public meeting will be held upon request. Requests for a public meeting should be directed to Mr. Mike Jacobi of the EPA Regional Office at the address below or at (215) 814-3435.

The Administrative Record contains all information considered by EPA when making this proposal. The Administrative Record is available at the following locations:

U.S. Environmental Protection Agency - Region III
1650 Arch Street - 3WC23
Philadelphia, PA 19103-2029
Contact: Mr. Mike Jacobi
Voice: (215) 814-3226
Fax: (215) 814-3435
Hours: Monday - Friday, 8:00 A.M - 5:00 P.M.
E-mail: jacobi.mike@epa.gov

LYNCHBURG PUBLIC LIBRARY
2315 MEMORIAL AVENUE
LYNCHBUGH,VA 24501
434-847-1565

Following the forty-five (45) calendar day public comment period, EPA will prepare a final decision which will address all written comments and any substantive comments presented verbally at a public meeting. This final decision will be incorporated into the Administrative Record. If the comments are such that significant changes are made to this proposal, EPA will seek public comments on the revised proposal.