FINAL

ENVIRONMENTAL CONDITION OF PROPERTY REPORT

BONNY OAKS - VAAP
U.S. ARMY RESERVE CENTER (TN107)
6703 BONNY OAKS DRIVE, BUILDINGS 228 AND 229
CHATTANOOGA, TENNESSEE 37421

Prepared For:

U.S. Army Corps of Engineers – Louisville District
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2232

MARCH 2007

CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the property. This Environmental Condition of Property (ECP) Report is in general accordance with the U.S. Department of Defense (DoD) requirements for completion of an ECP Report.

STEVEN FRANCIS **DATE**
Chief, Environmental Division
Deputy Chief of Staff
Installation Management
81st Regional Readiness Command

The undersigned certifies the contents of this report are in general accordance with DoD policies for the completion of an ECP.

March 2007

LENARD GUNNELL, P.G. **DATE**
Project Geologist
U.S. Army Corps of Engineers

EXECUTIVE SUMMARY

Fuller, Mossbarger, Scott and May Engineers, Inc. (FMSM), under contract to the U.S. Army Corps of Engineers (USACE), Louisville District, has prepared this ECP Report for the Bonny Oaks – VAAP U.S. Army Reserve (USAR) Center (Facility ID TN107), hereafter referred to as the "Site" or "USAR Center." The Site is located at 6703 Bonny Oaks Drive, Chattanooga, Tennessee and encompasses approximately one acre. The Site is located on the former Volunteer Army Ammunition Plant (VAAP).

This ECP Report was conducted in conformance with primary Department of Defense and Army guidance, the Department of Defense's Base Redevelopment and Realignment Manual, DoD 4165.77-M (BRRM), Army regulations and the American Society for Testing and Materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys,* as secondary guidance when it was not inconsistent with the primary guidance.

This ECP Report details the history of the property, including the U.S. Army Reserve and any prior tenant uses of the Site and the resulting environmental condition of the property.

The USAR Center facility is situated on approximately one acre of land with two permanent buildings: a 5,822 square-foot administration building (Building 228) and a 4,775 square-foot training building (Building 229). The Site is currently occupied by the 591st Transportation Detachment and the 212th Transportation Company.

Based on a review of aerial photographs and U.S. Geological Survey (USGS) topographic maps dating back to 1958, the Site has been part of a military facility since before 1958. Buildings 228 and 229 were reported to be constructed in the 1970s.

Areas of potential environmental concern were reviewed and FMSM identified a potential impact relating to the TNT contaminant migration from properties surrounding the USAR Center. A remediation plan has been implemented for the former VAAP manufacturing areas and no further remedial action is necessary.

In accordance with Department of Defense policy defining the classifications (See Deputy Under Secretary of Defense Goodman Memorandum dated 21 October 1996), the Property has been classified as Category 4. This classification does not include categorizing the property based on *de minimis* conditions that generally do not present material risk of harm to the public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

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LIST OF ACRONYMS

ACM	asbestos-containing material
AMSA	area maintenance support activity
AR	army regulation
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
BRAC	Base Realignment and Closure
BRRM	Base Redevelopment and Realignment Manual
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CONEX	Container Express
DoD	Department of Defense
ECP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
FEMA	Federal Emergency Management Agency
FMSM	Fuller, Mossbarger, Scott, and May Engineers, Inc.
LBP	lead-based paint
LUST	leaking underground storage tank
MEC	munitions and explosives of concern
NBC	Nuclear, Biological and Chemical
NPL	National Priorities List
NWI	National Wetlands Inventory
PCBs	polychlorinated biphenyls
pCi/l	picoCuries per liter
POL	petroleum, oil, and lubricant
RCRA	Resource Conservation and Recovery Act
RQ	reportable quantity
RRC	Regional Readiness Command
RSC	Regional Support Command
Site	U.S. Army Reserve Center (TN107)

TDEC	Tennessee Department for Environment and Conservation
TNT	Trinitrotoluene
TSD	treatment, storage, or disposal
USACE	United States Army Corps of Engineers
USAR	United States Army Reserve
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UXO	unexploded ordnance
VAAP	Volunteer Army Ammunition Plant

1.0 INTRODUCTION

FMSM was contracted by the USACE – Louisville District, to prepare an ECP Report for the Bonny Oaks – VAAP USAR Center (TN107). The facility is located at 6703 Bonny Oaks Drive, Chattanooga, Tennessee, hereafter referred to as the "Site" or "USAR Center". In support of the ECP Report, a visual reconnaissance of the Site was conducted on 14 August 2006. The purpose of the visit was to visually obtain information indicating the environmental condition of property at the Site.

1.1 PURPOSE OF ENVIRONMENTAL CONDITION OF PROPERTY REPORT

The Military Department with real property accountability shall assess, determine and document the environmental condition of all transferable property in an ECP Report. This ECP Report is based on readily available information. Pursuant to the Department of Defense's policy, set forth in the Base Redevelopment and Realignment Manual (DoD 4165.66-M, March 1, 2006) Section C8.3 (BRRM), the primary purposes of the ECP Report include the following:

- Provide the Army with information it may use to make disposal decisions;
- Provide the public with information relative to the environmental condition of the property;
- Assist in community planning for the reuse of Base Realignment and Closure (BRAC) property;
- Assist Federal agencies during the property screening process;
- Provide information for prospective buyers;
- Assist prospective new owners in meeting the requirements under EPA's "All Appropriate Inquiry" regulations;
- Provide information about completed remedial and corrective actions at the property;
- Assist in determining appropriate responsibilities, asset valuation, and liabilities with other parties to a transaction.

The ECP Report contains the information required to comply with the provisions of 40 Code of Federal Regulations (CFR) Part 373, which require that a notice accompany contracts for the sale of, and deeds entered into, for the transfer of federal property on which any hazardous substance was stored, released or disposed of. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),

Section 120(h) stipulates that a notice is required if certain quantities of designated hazardous substances have been stored on the property for 1 year or more – specifically, quantities exceeding 1,000 kilograms or the reportable quantity, whichever is greater, of the substances specified in 40 CFR 302.4 or 1 kilogram of acutely hazardous waste as defined in 40 CFR 261.30. A notice is also required if hazardous substances have been disposed of or released on the property in an amount greater than or equal to the reportable quantity. Army Regulation (AR) 200-1 requires that the ECP Report address asbestos, lead-based paint, radon and other substances potentially hazardous to human health.

This ECP Report used the American Society for Testing and materials (ASTM) Designation D 6008-96 (2005), *Standard Practice for Conducting Environmental Baseline Surveys* as a guideline when not inconsistent with the BRRM, CERCLA § 120, Army regulations and other applicable Army guidance.

1.2 SCOPE OF SERVICES

The ECP Report encompasses Buildings 228 and 229 of the USAR Center located at 6703 Bonny Oaks Drive, Chattanooga, Tennessee, and covers approximately one acre. The property is bordered on the north by the Area Maintenance Support Activity (AMSA) facility and to the south, east and west by property owned by the Hamilton County Board of Education. Site maps are provided in Appendix A. Appendix B provides photographs taken during the August 2006 site visit. Appendix C provides an environmental lien search and historical chain of title information. Historical environmental documents and reports are provided in Appendix D, while Appendix E contains the Environmental Data Resources, Inc. (EDR) reports and agency letters.

This ECP Report classifies the property into one of seven DoD Environmental ECP categories as defined by Deputy Under Secretary of Defense S. Goodman Memorandum, “Clarification of ‘Uncontaminated’ Environmental Condition of Property at BRAC Installations” (21 October 1996). The property classification categories are as follows:

- Category 1 – Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2 – Areas where only the release or disposal of petroleum products has occurred.
- Category 3 – Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

- Category 4 – Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.
- Category 5 – Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are under way, but all required remedial actions have not yet been taken.
- Category 6 – Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.
- Category 7 – Areas that are not evaluated or require additional evaluation.

2.0 SITE LOCATION AND PHYSICAL DESCRIPTION

2.1 SITE LOCATION

The USAR Center is located in the southeast portion of Hamilton County, Tennessee, within the city limits of Chattanooga, Tennessee. The Site is located in a primarily residential and commercial area. Figure 1 in Appendix A shows a general site location map.

2.2 ASSET INFORMATION

Facility Name and Address:	Bonny Oaks – VAAP USAR Center (TN107) 6703 Bonny Oaks Drive, Buildings 228 and 229 Chattanooga, Tennessee 37421
Property Owner:	United States Government
Date of Ownership:	23 October 1941
Current Occupant:	212th Transportation Company 591st Transportation Detachment
Zoning:	M-1 Manufacturing
County, State:	Hamilton, Tennessee
USGS Quadrangle(s):	East Chattanooga, Tennessee
Section/Township/Range:	Not Applicable
Latitude/Longitude:	35° 4’ 17.0” N 85° 9’ 21.6” W
Property Description:	The USAR Center consists of one parcel of land. A copy of the deed, which includes a legal description, is provided in Appendix C.

2.3 PHYSICAL DESCRIPTION

The USAR Center is situated on approximately one acre of land with two permanent structures: Building 228 is a 5,822 square-foot administration building and Building 229 is a 4,775 square-foot reserve training building. A third building, designated as Building 202, is located east of Building 228, but is not part of the USAR Center. Only buildings 228 and 229 and approximately one acre of associated land are part of the BRAC transfer. Six container express (CONEX) storage units were located on the north side

of Building 228. These CONEX units are shown in Photograph 1 in Appendix B. The construction date of Building 228 is unknown but is believed to be in the mid-1970s. Building 229 was reportedly constructed in 1972. Both structures consist of concrete block walls covered with a brick veneer. Both buildings rest upon concrete foundations. A parking area is also contained within the Site. Photograph 2 in Appendix B shows a view of the parking area. Approximately two-thirds of the Site is covered by impervious surface features (e.g., asphalt parking areas, driveways, concrete walkways, building footprints, etc.). The remaining ground surface is covered by lawn area and a sparse population of deciduous trees and bushes. Topographically, the Site is relatively flat with gradual relief to the west and steeper slopes on the south and west sides of the Site. Figure 2 in Appendix A shows a current plan view layout of the Site.

Building 228 consists of a one-story, rectangular-shaped structure. Photographs 3 and 4 in Appendix B show views of the building's exterior. The interior of Building 228 consists of office space, classrooms, restrooms, storage, and an arms vault. Photographs 5 through 9 in Appendix B provide interior views of the storage areas in the Building 228. Figure 3 in Appendix A shows a layout of the interior of Building 228.

Building 229 is a one-story, rectangular-shaped structure. According to information provided by the Unit Administrator for the 591st Transportation Detachment, this building was formerly used as a training and orientation facility for employees of the VAAP while it was in operation. The building contains classrooms, storage rooms, restrooms, and office space. One of the storage rooms was used for nuclear, biological, and chemical (NBC) materials; however, no NBC materials were present at the time of the August 2006 site visit. Photograph 10 in Appendix B shows the front (south) view of Building 229. Photographs 11 through 20 in Appendix B show the interior storage areas of Building 229. Figure 4 in Appendix A shows a layout of the interior of Building 229.

The CONEX units were reported to contain unused equipment and supplies slated for disposal or shipment to other facilities. The CONEX units were locked and the keys were not available at the time of the 14 August 2006 site visit. The CONEX units are shown in Photograph No. 1 in Appendix B.

2.4 SITE HYDROLOGY AND GEOLOGY

Figure 5 in Appendix A shows a portion of the East Chattanooga, Tennessee, USGS topographic map which includes the Site. As shown, the Site is situated at an elevation of approximately 735 feet above mean sea level and is relatively flat.

Stormwater sheet flows to storm drains and grassed drainage ditches on the south and west sides of the Site. No surface water features are located in the immediate vicinity of the Site. An unnamed tributary of Friar Branch, located approximately ¼ mile west of the Site, and Poe Branch, located approximately ¼ mile east of the Site, drain the western portion of the VAAP. The general surface water flow in the site vicinity would

likely be to the west-southwest toward the tributary of Friar Branch. General surface water flow for the western portion of the VAAP, which includes the former manufacturing and disposal areas and the USAR Center, is south-southwest. Chickamauga Lake, an impoundment of the Tennessee River, is the closest major surface water feature.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map 47065C0359F, Panel 359, the Site is not included in the 100-year floodplain elevation or the 500-year floodplain elevation. Figure 6 in Appendix A provides a map depicting the extent of the nearest 100-year and 500-year floodplain in relation to the Site.

The Site is situated on the western flank of the Valley and Ridge physiographic region in Tennessee. Bedrock generally consists of limestone, dolomitic limestone, and dolomite belonging to the Chickamauga Limestone and Knox Dolomite Formations, which represent the Silurian and Ordovician geologic periods. The underlying bedrock is complexly folded and faulted. Groundwater in the area generally migrates through the secondary porosity features such as fractures and bedding plane partings in the bedrock and via primary porosity in the alluvial deposits and deeper soils in the valleys. Groundwater flow typically mirrors the natural surface drainage patterns in the area. The groundwater flow direction at the Site would likely be to the south-southwest similar to the general surface water drainage of the western portion of the VAAP. Some karst drainage exists in the general area. Karst drainage features such as dissolution channels and cavities and may affect the groundwater flow patterns and the transport of documented contaminants in the site area.

The Soil Conservation Service mapped the specific types of soil at the Site as the Fullerton Group, which do not meet the requirements for hydric soils. The Fullerton Group soils are generally cherty, silt loams. These soil types have moderate infiltration rates and are characterized as moderately deep to deep, moderately well to well drained soils with moderately coarse textures. In a typical profile, the surface layer varies from 0 to 15 inches thick while the subsoil is approximately 4 inches or more in thickness and is a cherty – silty clay loam to a cherty clay.

2.5 SITE UTILITIES

Water Service – The American Water Company provides potable water service to the Site.

Sanitary Sewer System – The City of Chattanooga provides sanitary sewer service to the Site.

Electric Service – The Chattanooga Electrical Power Board provides electric service to the Site.

Natural Gas Service – The City of Chattanooga provides natural gas service to the Site.

2.6 WATER SUPPLY WELLS & SEPTIC SYSTEMS

Based upon a review of available historical site and agency records and interviews with site personnel, neither a water supply well nor a septic system is or was located at the Site.

3.0 SITE HISTORY

3.1 HISTORY OF OWNERSHIP

Land titles for the Site were reviewed back to 1937. Appendix C contains a historical chain of title report that was completed for the Site. The United States Government acquired the property in 1941 for the VAAP. However, the chain of title for 6703 Bonny Oaks Drive covered the adjacent property that was transferred to Hamilton County. The Site is a portion of a 15-acre tract that was transferred from the Army Materiel Command to the USAR in 1999. This portion of the 15-acre tract, currently owned by the USAR, includes buildings 228 and 229 and approximately one acre of associated land.

3.2 PAST USES AND OPERATIONS

The Site occupies a small portion of the former VAAP. The VAAP was a government-owned, contractor-operated facility built for the production of trinitrotoluene (TNT). The original plant was constructed on 5,410 acres of land by the USACE between 1941 and 1943, where it operated until 1945. It was relocated between 1952 and 1957 and again between 1969 and 1975. The 81st Regional Readiness Command (RRC) reportedly owns an approximately 15-acre tract of the former VAAP that includes the subject site, as well as the AMSA facility located to the north of the Site. This ECP report includes buildings 228 and 229 and the associated one acre of land. Buildings 228 and 229 were reportedly built in the 1970s and used for storage and administration activities.

Aerial photographs dated 1977, 1985, and 1999 (Figures 7, 9, and 10 in Appendix A) were reviewed as part of the site history research. No significant changes in the Site or the immediately adjacent area were observed from the photographs over that time period.

U.S. Geological Survey 7.5 Minute topographic maps for the East Chattanooga quadrangle for the years 1958 and 1969 (Figures 8 and 5 in Appendix A) were also reviewed. No significant changes in the Site or the immediately adjacent area were observed from the topographic maps over that time period.

3.3 PAST USE, STORAGE, DISPOSAL AND RELEASE OF HAZARDOUS SUBSTANCES

3.3.1 Past Use and Storage of Hazardous Substances

Information pertaining to the past use and storage of hazardous substances at the USARC was compiled through review of available site records, searches of Federal and State environmental database and interviews with Army Reserve personnel.

Based on available information, it appears that chemical usage at the Site was limited to building maintenance products. There is no evidence that hazardous substances above reportable quantities were stored for 1 year or more at the Site.

3.3.2 Past Disposal and Release of Hazardous Substances

Information pertaining to past disposal and release of hazardous substances at the Site was compiled through review of available site records, search of Federal and State environmental databases and interviews with Army Reserve personnel. According to the Army Reserve personnel and limited site records, there is no evidence that hazardous substances above reportable quantities were released or disposed at the Site. No stained soil, stressed vegetation or other visible indications of on-site disposal or releases were observed during the 14 August 2006 site visit.

3.4 PAST PRESENCE OF BULK PETROLEUM STORAGE TANKS

FMSM did not encounter documentation or indications that underground storage tanks (UST) or above ground storage tanks (AST) are present or have historically been present on the Site.

3.5 REVIEW OF PREVIOUS ENVIRONMENTAL REPORTS

A review of site records produced several reports pertaining to the Site. The following subsections provide a brief summary of these reports. Copies of the reports, unless otherwise specified, are provided in Appendix D.

3.5.1 2000 Installation Action Plan for Volunteer Army Ammunition Plant

This report provided general information on the VAAP and specific information on the manufacturing and disposal areas requiring remediation. The former manufacturing areas are located approximately 3/4 mile north of the Site, and the former disposal area is located approximately 2.5 miles north-northeast of the Site. Surface water runoff from the former manufacturing and disposal areas flows to the unnamed tributary of Friar Branch and to Poe Branch, which are the nearest surface water features to the USAR Center. Since the Site was located outside the manufacturing and disposal areas, no site-specific information was found. Because of its large volume and marginal relevance to the Site, this report has not been included in Appendix D.

3.5.2 2001 Site Visit Report – 110 Acre Site, Army Reserve Property, Bonny Oaks Drive, Chattanooga, Tennessee

This report dealt with a 110-acre area approximately 1/8 mile west of the USAR Center. The report concluded that the documented contamination by TNT compounds in this area was due to contaminated groundwater that had migrated from the former

manufacturing areas of the VAAP, which are located approximately 3/4 mile north of the report study area and the USAR Center. Because of its large volume and marginal relevance to the Site, this report has not been included in Appendix D.

3.5.3 1999 Environmental Baseline Study

This report deals with the 15-acre tract that contains the USAR Center and concluded that "There is no evidence of environmental liabilities such as a release of petroleum or hazardous substances on-site. In addition, there appears to be no evidence of release in the site vicinity". The study did not examine potential groundwater contamination from off-site sources.

3.5.4 2001 Radon Test Results

The results of radon tests conducted in 2001 showed the radon concentration in Buildings 228 and 229 to be 0.7 and 2.0 picoCuries per liter (pCi/l), respectively. These values are below the U.S. Environmental Protection Agency (USEPA) recommended action level of 4 pCi/l.

3.5.5 2001 Asbestos Report

This report identified friable asbestos-containing material (ACM) in the form of thermal system insulation (TSI) rope packing and non-friable ACM in the form of sheetrock mud, floor tile and mastic, and vent duct mastic in Building 228. The report identified non-friable ACM in the form of sheetrock mud, floor tile and mastic, and vent duct mastic in Building 229. The report indicated that the non-friable ACM in both buildings was in good condition, however the friable ACM in Building 228 was damaged and removal was recommended.

3.5.6 2002 Air Quality Memorandum

A 2002 air quality survey by the 81st Regional Support Command (RSC) concluded that there were no stationary or mobile air pollution sources that would require a permit under Title V of the Clean Air Act.

3.5.7 2001 UST Closure Report

A 2001 UST closure report shows that the closure of the USTs and associated piping adjacent to the Site met the Tennessee requirements for a "non-contaminated closure". The report and conclusions were accepted by the Tennessee Department of Environment and Conservation in a letter dated 31 May 2001.

3.5.8 2004 Lead-Based Paint (LBP) Survey Report

A March 2004 LBP survey included Buildings 228 and 229. LBP was identified in both buildings on interior and exterior doors and casings, door and window lintels, and structural steel components. The condition of the painted surfaces was not noted in the report.

4.0 ADJACENT PROPERTIES

Figure 10 in Appendix A provides the most recent available aerial view of the Site and adjacent properties. Table 1 provides a list of adjacent properties with their directional location in regards to the Site. The zoning of the adjacent parcels is also listed in Table 1.

TABLE 1
LIST OF ADJACENT PROPERTIES

Direction From Site	Name/Type of Property	Address	Zoning
North	Military – AMSA	Hickory Valley Drive	M-1
South	Municipal – Hamilton Co. Board of Education	Hickory Valley Drive	M-1
East	Municipal – Hamilton Co. Board of Education, Bus Compound	Hickory Valley Drive	M-1
West	Undeveloped	Hickory Valley Drive	M-1

Appendix A and Appendix E provide historical aerial photographs, topographic maps, and EDR Reports, which were used to evaluate potential environmental impacts on adjacent properties that may have also impacted the environmental condition at the Site. Land use at the adjacent properties does not appear to have changed significantly over the past twenty years and does not appear to have had an adverse effect on the environmental conditions of the USAR Center.

Some of the land at the former VAAP was utilized for the manufacture of TNT from the 1940s through the 1970s. Groundwater investigations have been conducted mainly in the western area of the former VAAP, where the TNT manufacturing facilities were located. A remedy, institutional controls and monitored natural attenuation, has been implemented for the south TNT area groundwater basin, which is located 3/4 mile north of the USAR Center. FMSM did not encounter documentation of groundwater sampling and testing at the Site.

5.0 REVIEW OF REGULATORY INFORMATION

A component of the ECP is the review of reasonably obtainable Federal, State and local government records for the Site and surrounding properties, where there has been a release or likely release of a hazardous substance or a petroleum product, and which is likely to cause or contribute to a release or threatened release of a hazardous substance or a petroleum product on the Federal real property. A regulatory database summary was acquired from EDR on 25 July 2006. The regulatory database summary consolidates standard Federal, State, local and tribal environmental records sources based on ASTM recommended minimum search distances from the Site. A copy of the complete EDR Report is included in Appendix E.

5.1 FEDERAL ENVIRONMENTAL RECORDS

The regulatory information presented in Table 2 was obtained from the EDR Federal regulatory database report.

TABLE 2
FEDERAL DATABASE SEARCH

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total Plotted
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
Delisted NPL	1.000		0	0	0	0	NR	0
NPL Recovery	TP		NR	NR	NR	NR	NR	0
CERCLIS	0.500	**X**	0	0	0	NR	NR	0
CERC-NFRAP	0.500		0	0	0	NR	NR	0
CORRACTS	1.000		0	0	0	0	NR	0
RCRA TSD	0.500		0	0	0	NR	NR	0
RCRA SM Quantity Gen	0.250	**X**	0	0	NR	NR	NR	0
ERNS	TP		0	0	0	NR	NR	0

TABLE 2
FEDERAL DATABASE SEARCH

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total Plotted
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
DoD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
US Brownfields	0.500		0	0	0	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP	**X**	NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	**X**	NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	0	0

TP = Target Property, NR = Not Required

The Site appears on the CERCLIS, RCRA Small Quality Generator, PADS and FINDS database. However, it appears that it is listed on these databases due to past actions at the manufacturing and waste disposal areas on the former Volunteer Army Ammunition Plant and not due to activities on or adjacent to the Site.

5.2 STATE AND LOCAL ENVIRONMENTAL RECORDS

The regulatory information presented in Table 3 was obtained from the EDR State and local regulatory database search report. The facilities identified by this database search are discussed in the following subsections.

TABLE 3
STATE DATABASE SEARCH

Database	Search Distance (miles)	Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total Plotted
State Haz. Waste	1.000		0	0	0	0	NR	0
State Landfill	0.500		0	0	0	NR	NR	0
LUST	0.500		0	0	0	NR	NR	0
LUST – JO	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	0	NR	0
UST	0.250	X	0	0	NR	NR	NR	0
HIST – LUSTCO	0.500		0	0	0	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
ENG CONTROLS	0.500		NR	NR	NR	NR	NR	0
INST CONTROL	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
BROWNFIELDS	0.500		0	0	0	NR	NR	0
CDL	Site		NR	NR	NR	NR	NR	0
Dry Cleaners	0.250		NR	NR	NR	NR	NR	0

NR = Not Required

5.2.1 Registered USTs Site Within 1/4 mile

The UST database contains registered USTs that are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The search identified 12 USTs formerly owned by the 81st RSC at Building 232 on the AMSA facility north of the Site. A review of other available reports showed that these tanks were removed in 2001 and all USTs received "Non-Contaminated Closure" status from the Tennessee Department of Environment and Conservation (TDEC).

5.2.2 Inquiries to State and Local Agencies

Letters of inquiry were sent to the TDEC and Hamilton County, Tennessee, environmental agencies. The only response received at the time of this report was from Chattanooga Hamilton County Air Pollution Bureau, which had no records, permits, or enforcement issues with the Site.

5.3 TRIBAL RECORDS

The regulatory information presented in Table 4 was obtained from the EDR Tribal database search report.

TABLE 4
TRIBAL DATABASE SEARCH

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total Plotted
Indian Reservation	1.000		0	0	0	0	NR	0
Indian LUST	0.500		0	0	0	NR	NR	0
Indian UST	0.250		0	0	NR	NR	NR	0

NR = Not Required

The database search did not identify any sites within the designated search radius.

5.4 EDR PROPRIETARY RECORDS

The regulatory information presented in Table 5 was obtained from the EDR's Proprietary Records database search report.

TABLE 5
EDR PROPRIETARY DATABASE SEARCH

Database	Search Distance (miles)	Target Site	<1/8	1/8 – 1/4	1/4 – 1/2	1/2 – 1	>1	Total Plotted
Manufactured Gas Plants	1.000		0	0	0	0	NR	0
EDR Historical Auto Stations	0.250		0	0	NR	NR	NR	0
EDR Historical Cleaners	0.250		0	0	NR	NR	NR	0

NR = Not Required

The database search did not identify any sites within the designated search radius.

5.5 UNMAPPED SITES

The EDR database search listed thirty-nine unmapped sites. Unmapped sites are facilities with insufficient address information to enable them to be located and mapped, and they can only be identified as within the zip code of the Site. None of the unmapped sites were observed within 1/4 mile of the USAR Center during a reconnaissance drive of the site vicinity and were not located on the former VAAP property. Based on the local geology and hydrology, facilities located greater than 1/4 mile from the Site to the east, south and west should not have an adverse impact on the environmental condition of the USAR Center.

5.6 SUMMARY OF PROPERTIES EVALUATED TO DETERMINE RISK TO THE SITE

Based on an evaluation of available site information and details concerning the properties listed in the database searches, none of the facilities evaluated are believed to be “High Risk”. “High Risk” properties are those that exhibit significant environmental conditions that have the probability of adversely affecting the environmental conditions at another site. Adjacent properties were not identified as “High Risk.” The former VAAP manufacturing facilities were not identified or mapped by the databases in the EDR report.

6.0 SITE VISIT AND REVIEW OF ENVIRONMENTAL CONDITIONS

Findings documented in the following subsections are based on the 14 August 2006 site visit and area reconnaissance, a review of available site records, and information obtained from U.S. Army Reserve personnel.

6.1 UNDERGROUND/ABOVEGROUND STORAGE TANKS

FMSM did not encounter documentation or indications that underground storage tanks or above ground storage tanks are present or have historically been present on the Site.

6.2 INVENTORY OF CHEMICALS / HAZARDOUS SUBSTANCES

At the time of the site visit, the Building 228 contained a small amount of petroleum, oil and lubricants (POL) used in building maintenance activities. A small quantity of POL, which is used in the maintenance of small arms, was observed in the arms vault. Janitorial cleaning supplies were used and stored in both buildings. There is no evidence that hazardous substances above reportable quantities were stored for 1 year or more, released or disposed at the Site.

6.3 WASTE DISPOSAL SITES

There were no signs of landfilling or illegal waste disposal activities at the Site during the August 2006 site visit.

6.4 PITS, SUMPS, DRYWELLS, AND CATCH BASINS

No sumps were observed during the August 2006 site visit. Floor drains were present in the mechanical room of the administration building. No grease trap was observed during the August 2006 site visit. The sanitary wastewater collection and conveyance structures appear to merge so that all sources of sanitary wastewater exit the Site at one location. Stormwater sheet flows drain towards the south and west.

Standing water was observed in the grassy areas at the north end of buildings 228 and 229. The standing water has a sheen and has somewhat of a musty odor. Army personnel at the Site stated that this area was constantly wet year round. The odor and sheen appear to be the result of natural processes rather than VAAP impact. Nitroaromatics, the organic compounds of concern at the VAAP are characterized by yellow, orange, and red colors.

6.5 ASBESTOS-CONTAINING MATERIAL

An asbestos survey was conducted in December 2001. The survey confirmed that ACM are located in both buildings. The survey noted the occurrence of ACM in the

following materials in Building 228: non-friable ACM in the form of sheetrock joint compound, floor tile mastic and vent duct mastic and friable ACM in the form of TSI rope packing. The survey noted the occurrence of ACM in Building 229 in the form of non-friable sheetrock joint compound, floor tile, floor tile mastic and vent duct mastic. The report noted the ACM was in good condition except for the friable TSI rope packing, which was damaged. During the site visit floor tiles, sheetrock mud and vent ducts were observed to be in good condition. The TSI rope packing was not observed during the August 2006 site visit.

6.6 POLYCHLORINATED BIPHENYL (PCB) CONTAINING EQUIPMENT

During the August 2006 site visit, older-style fluorescent light fixtures were observed in the administration and training buildings. Older fixtures, especially those that are original to the Site, could potentially contain PCBs. Ballasts that are not marked "No PCBs" should be assumed to contain PCBs and should be managed in accordance with applicable local, State, and Federal regulations.

A total of nine pole-mounted electrical transformers were observed on the Site. One set of three transformers is located on a pole on the north end of Building 229, one set of three transformers is located on a pole on the north end and slightly east of Building 229, and one set of three transformers is located on a pole in the southeast corner of the Site. The transformers did not have stickers indicating their PCB status. The transformers were observed to be in good condition with no apparent indications of leakage or staining. The electric service provider, the Chattanooga Electric Power Board, is the owner of the transformers and would be responsible for the maintenance and remediation of the transformers.

6.7 LEAD-BASED PAINT

A 2004 survey report indicated that LBP was identified in both buildings on interior and exterior doors and casings, door and window lintels, and structural steel components. These painted surfaces were observed to be in good condition at the time of the site visit.

6.8 RADON

The results of radon tests conducted in 2001 showed the radon concentration in Buildings 228 and 229 to be 0.7 and 2.0 picoCuries per liter (pCi/l), respectively. These values are below the USEPA recommended action level of 4.0 pCi/l.

6.9 MUNITIONS AND EXPLOSIVES OF CONCERN

No indications were found during the August 2006 site visit or during the review of records to indicate the current or past presence of munitions and explosives of concern

(MEC), including unexploded ordnance (UXO), at the Site. Only small arms ammunition, which is not considered MEC, has been reported to be stored at the Site in the arms vault.

6.10 RADIOLOGICAL MATERIALS

A radioactive materials sign was noted in the eastside supply room in Building 229 during the site reconnaissance. The 212th Transportation Company has hand-held radiation detectors stored in this supply room. These units reportedly have a small radioactive source. Site personnel reported that the source does not require a Nuclear Regulatory Commission radioactive materials license or permit. There is no evidence to suggest that any radiological commodities were improperly managed at the Site or that any radionuclides were released.

7.0 REVIEW OF SPECIAL RESOURCES

7.1 LAND USE

Figure 10 in Appendix A provides the most recent aerial view of the USAR Center and surrounding properties and depicts current land use. The Site is zoned for manufacturing (M-1).

7.2 COSTAL ZONE MANAGEMENT

According to the National Oceanic and Atmospheric Administration webpage, there is no coastal boundary in Tennessee. Due to the distance between the Site and the coast, activities at the Site would not impact sensitive coastal resources.

7.3 WETLANDS

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map shows that no jurisdictional wetlands are identified on the Site or its adjacent properties. The nearest wetland is located approximately 150 feet west of the Site. In addition, according to the EDR Report, soils at the Site are classified as Fullerton cherty-silt loam; these soils do not meet the requirements of a hydric soil. Based on a review of the NWI map and soils information, it is not likely that any jurisdictional wetlands occur on the Site. Figure 11 in Appendix A provides an NWI map illustrating wetlands in the immediate vicinity.

7.4 100-YEAR FLOODPLAIN

A review of the Federal Emergency Management Agency digital Flood Hazard Area map indicates that the Site lies outside the 100-year floodplain, with the nearest floodplain boundary located approximately 1/2 mile south of the Site. This floodplain is associated with the Poe Branch. Figure 6 in Appendix A shows the most recently updated Flood Insurance Rate Map of the site location.

7.5 NATURAL RESOURCES

According to the USFWS, the species listed in Table 6 are known to occur in Hamilton County, Tennessee. No determination concerning the occurrences of these species or their potential habitat is rendered here.

TABLE 6
FEDERALLY THREATENED AND ENDANGERED SPECIES
KNOWN TO OCCUR IN HAMILTON COUNTY, TENNESSEE

Common Name	Scientific Name	Federal Status
Gray Bat	*Myotis grisescens*	Endangered
Cumberland monkeyface Pearly mussel	*Quadrula intermedia*	Endangered
Dromedary pearly mussel	*Dromus dromas*	Endangered
Fine-rayed pigtoe	*Fusconaia cunelous*	Endangered
Orangefoot pimpleback	*Plethobasus cooperianus*	Endangered
Pink mucket pearly mussel	*Lampsillis orbiculata*	Endangered
Rough pigtoe	*Pleurobema plenum*	Endangered
Tuberculed-blossom pearly mussel	*Epioblasma torulosa torulosa*	Endangered
Large-flowered skullcap	*Scutellaria Montana*	Endangered
Small-whorled pogonia	*Isotria medeoloides*	Threatened
Virginia spirea	*Spiraea virginiana*	Threatened
Snail darter	*Percina tanasi*	Threatened
Bald Eagle	*Haliaeetus leucocephalus*	Threatened

7.6 CULTURAL RESOURCES

There are no available site-specific cultural resources reports. The Site does not appear on the National Register of Historic Places. Because of the age of the buildings on-site, they do not appear to be eligible for listing at this time.

7.7 OTHER SPECIAL RESOURCES

A review of other special resources was conducted, which included a search for various federally managed and protected lands within or near the Site. The Site is not within an Officially Designated Wilderness Area according to wilderness.net. It is not within a

National Wetlands Management District according to the USFWS. The National Park Service does not include the Site on the Wild and Scenic Rivers list.

8.0 CONCLUSIONS

FMSM was contracted by the USACE Louisville District to prepare an ECP Report for the Bonny Oaks – VAAP USAR Center located at 6703 Bonny Oaks Drive in Chattanooga, Tennessee. The USAR consists of two permanent structures. The 591st Transportation Detachment and the 212th Transportation Company currently occupy the Site.

Findings of this ECP are based on existing environmental information, including visual observations, site records, interviews with USAR personnel, Federal, State and local databases and file information, related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives on the property. The following paragraphs present the findings related to the environmental conditions of property that were evaluated during the ECP process.

- **Use and Storage of CERCLA Hazardous Substance**s – Based on available documents, the use and storage of CERCLA hazardous substances was limited to building maintenance chemicals. There is no evidence that hazardous substances above reportable quantities were stored for 1 year or more, released or disposed at the Site.

- **Petroleum Product Storage** – FMSM did not encounter documentation or indications that ASTs or USTs were located on the Site.

- **Wash Water Discharge** – There are no known vehicle wash racks at the Site.

- **Polychlorinated Biphenyl Transformer** – The PCB content of the nine pole-mounted transformers located on the Site is unknown. The transformers were observed to be in good condition with no indications of leakage or staining at the time of the site visit. These transformers are the property of the Chattanooga Electric Power Board and any releases are their responsibility.

- **PCB Equipment** – No specific reports were available for PCB equipment. Given the age of the building, the presence of PCB equipment, such as fluorescent light ballasts, is possible. Fluorescent light ballasts that are not marked “No PCBs” should be assumed to contain PCBs and should be managed in accordance with applicable local, State, and Federal regulations.

- **Asbestos** – Friable and non-friable ACM were identified in Building 228 and non-friable ACM was identified in Building 229 in a 2001 Asbestos Inspection Report. The non-friable ACM in both buildings was observed to be in good condition during the site visit. The friable ACM in Building 228, TSI rope packing, was reported to be damaged. The friable TSI rope packing was not observed during the site reconnaissance.

- **Radon** – Radon testing results from 2001 indicated that the radon concentrations were 0.7 pCi/l and 2.0 pCi/l in Buildings 228 and 229, respectively. The USEPA recommended action level is 4.0 pCi/l.

- **Lead-Based Paint** – A 2004 survey report indicated that LBP was identified in both buildings on interior and exterior doors and casings, door and window lintels, and structural steel components. These painted surfaces were observed to be in good condition at the time of the site visit.

- **Munitions and Explosives of Concern** – No indications were found during the August 2006 site visit or the records review process of the past or current presence of MEC, including UXO, at the Site.

- **Radiological Materials** – Hand-held radiation detectors are stored in the eastside supply room in Building 229. These units reportedly have a small radioactive source. Site personnel reported that the source does not require a Nuclear Regulatory Commission radioactive materials license or permit. There is no evidence to suggest that any radiological commodities were improperly managed at the Site or that any radionuclides were released.

- **Surrounding Properties** – While the Site was outside of the former manufacturing and waste disposal areas at the VAAP, there is a possibility that contaminated groundwater has migrated to the Site from these areas. The nearest former manufacturing area is located approximately ¾ mile north of the Site and groundwater contamination from TNT compounds has been documented on another USAR-owned parcel approximately 1/8 mile west of the Site. The local surface water drainage flows to the south-southwest on the western portion of the former VAAP, which includes the former manufacturing and disposal areas and the USAR Center. The groundwater flow direction in the site area would likely be to the south-southwest similar to the general surface water drainage of the western portion of the VAAP. Some karst drainage exists in the general area and may affect the groundwater flow patterns in the site area. Based on review of published information, groundwater investigations have been conducted for the former manufacturing areas and a remediation plan, based on institutional controls and monitored natural attenuation, is in effect for the southern portion of the south TNT area groundwater basin. However, no specific information could be found regarding the groundwater conditions at the Site.

ENVIRONMENTAL CONDITION OF PROPERTY

In accordance with Department of Defense policy defining the classifications (See Deputy Under Secretary of Defense Goodman Memorandum dated 21 October 1996), the Property has been classified as Category 4, an area where release, disposal, and/or

migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken. This classification is based on the possible TNT contaminant migration to the Site from the former VAAP manufacturing areas. A remediation plan has been implemented for the southern portion of the south TNT area groundwater basin and no further remedial action is necessary.

9.0 LIMITATIONS

This ECP Report was prepared to review certain elements of the environmental condition of property related to the storage, release, treatment, or disposal of hazardous substances or petroleum products. It documents efforts to determine or discover the presence or likely presence of a release or threatened release of these materials. Project activities were performed in general conformance with the BRRM, ASTM D6008 guidance, the project prescribed scope of work, and generally accepted practices in the consulting industry. The degree of care and skill is consistent with that generally exercised in the industry under similar conditions.

FMSM has relied on certain information provided by the USACE, USAR, and other parties referenced in the report. This information was assumed to be accurate and complete unless information to the contrary arose during the course of the investigation. Historic documentation (e.g., information on past environmental practices, environmental records, USARC operational changes, unit and equipment changes, chemical/substance inventories and storage, current as-built drawings, etc.) and facility personnel knowledge regarding chemicals used or stored on the Site and the quantities stored, was often limited or non-existent. Therefore, statements regarding storage of chemicals or presence of hazardous substances reflect best available data and are not warranted for either completeness or accuracy over the history of the facility.

In preparing this report, FMSM was required to review previous documents from other sources (collectively referred to herein as the Prior Reports). The Prior Reports may present findings regarding the abatement or remediation of known concerns at the time of their preparation or within the limit of the project scope of work. The Prior Reports may include statements or opinions of the original authors of the Prior Reports as to the satisfactory completion of work. FMSM notes that environmental laws and regulations, including abatement or remedial action levels, are periodically reviewed and updated by the various regulatory agencies and may have changed since the respective dates of the Prior Reports.

FMSM has summarized Prior Reports in fulfilling the prescribed scope of work for the project. This summarization may include statements or opinions as to the satisfactory completion of work. These statements or opinions are those of the original report authors. FMSM neither warrants nor certifies the accuracy or completeness of these statements. The summarization of previous documents has not reviewed or updated those conclusions with regards to actions from the time of that document to date, current regulatory agency abatement, or remedial standards. Rather, this summary provides the original author's conclusions at the time the report was prepared. Evaluation of the completeness of previous documents or statements of abatement or remediation is beyond the current scope of service included in this contract.

A limited site reconnaissance was performed to visually identify materials or conditions representing recognized adverse environmental conditions. Identification of hidden conditions, observation of the effects of activities or incidents occurring after completion of the reconnaissance, buried conditions, conditions obscured by dense foliage, conditions beneath buildings, other structures, or covered by building/paving materials, or conditions otherwise obscured, is beyond the scope of this work. The conditions described in this report are valid only for the time that the observations were made. Some conditions may change with time.

The findings and conclusions contained in this report are based in part on the information available at the time of the study. The findings and conclusions should be considered not as scientific certainties, but as probabilities based on professional judgment of the significance of the limited data gathered in the course of the site evaluation, interviews and literature review. If additional or corrected information becomes available, FMSM requests the opportunity to review/modify conclusions, as warranted.

10.0 REFERENCES

Persons Contacted

- Mr. Steven Francis, USAR, 81st RRC, Chief Environmental Division.
- Ms. Kristie Welch, USAR, 81st RRC, Area 1 Environmental Manager.
- Sgt. Melvin Barrett, Bonny Oaks USAR, Truckmaster.
- Ms. Pat Canerdy, Bonny Oaks USAR, Unit Administrator.

Resources Consulted

- Aerial Photographs from the U.S. Geological Survey dated 1977, 1985, 1999.
- FEMA Flood Insurance Rate Map, 47065L0359F, Panel 359.
- National Wild and Scenic Rivers website, www.nps.gov/rivers/wildriverslist.html
- Tennessee Division of Geology, 1933, Geologic Map of Tennessee.
- National Oceanic and Atmospheric Administration website, www.noaa.gov
- National Wetlands Inventory Map Chattanooga East (TN) Quadrangle.
- USEPA Map of Radon Zones website, www.epa.gov/radon/zonemap.html
- U.S. Regulatory Databases
  - Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), 1 February 2006.
  - CERCLIS No Further Remedial Action Planned (CERCLIS – NFRAP), 1 February 2006.
  - Corrective Action Report (CORRACTS), 15 March 2006.
  - Resource Conservation and Recovery Act Information (RCRA), 9 March 2006.

- Emergency Response Notification System (ERNS), 31 December 2005.
- Hazardous Materials Information System (HMIRS), 31 December 2005.
- Engineering Controls Sites List (US ENG CONTROLS), 21 March 2006.
- Sites with Institutional Controls (US INST CONTROL), 21 March 2006.
- Department of Defense Sites (DoD), 31 December 2004.
- Formerly used Defense Sites (FUDS), 5 December 2005.
- Brownfields Sites (US BROWNFIELDS), 5 December 2005.
- Superfund (CERCLA) Consent Decrees (CONSENT), 14 December 2004.
- Records of Decision (ROD), 13 April 2006.
- Uranium Mill Tailing Sites (UMTRA), 4 November 2005.
- Open Dump Inventory (ODI), 30 June 1985.
- Toxic Chemical Release Inventory System (TRIS), 31 December 2003.
- Toxic Substances Control Act (TSCA), 31 December 2002.
- FIFRA/TSCA Tracking System (FTTS INSP), 31 March 2006.
- Section 7 Tracking Systems (SSTS), 31 December 2004.
- Integrated Compliance Information System (ICIS), 13 February 2006.
- PCB Activity Database System (PADS), 27 December 2005.
- Material Licensing Tracking System (MLTS), 12 April 2006.
- Mines Master Index File (MINES), 9 February 2006.

- Facility Index System (FINDS), 27 April 2006.
- RCRA Administrative Action Tracking System (RAATS), 17 April 1995.
- Biennial Reporting System (BRS), 31 December 2003.

- **State Databases**
  - Promulgated Sites (SHWS), 2 May 2006.
  - Solid Waste Disposal Facilities (SWF/LF), 19 April 2006.
  - LUST TRUST Fund (LUST TRUST), 29 December 2004.
  - Fund Eligible Leaking Underground Storage Tank Listing (LUST).
  - Superfund VOAP List (BROWNFIELDS), 1 May 2006.
  - Facility and Tank Report (UST), 4 March 2005.
  - Registered Above Ground Storage Tanks (AST), 10 October 1999.
  - Institutional Control Sites (INST CONTROLS), 2 February 2006.
  - Engineering Control Sites (ENG CONTROLS), 2 February 2006.
  - Voluntary Cleanup Sites (VCP), 1 May 2006.
  - Historic Leaking Underground Storage Tanks (HIST_LUSTCO), 18 October 1994.
  - Leaking Underground Storage Tanks (LUST_JO), 2 August 2005.
  - Registered Facilities List (DRYCLEANERS), 1 January 2006.
  - Registry of Contaminated Properties (CDL), February.

- **Tribal Records**
  - Indian Reservations (INDIAN RESERV), 31 December 2004.
  - Indian Leaking Underground Storage Tanks (INDIAN LUST).

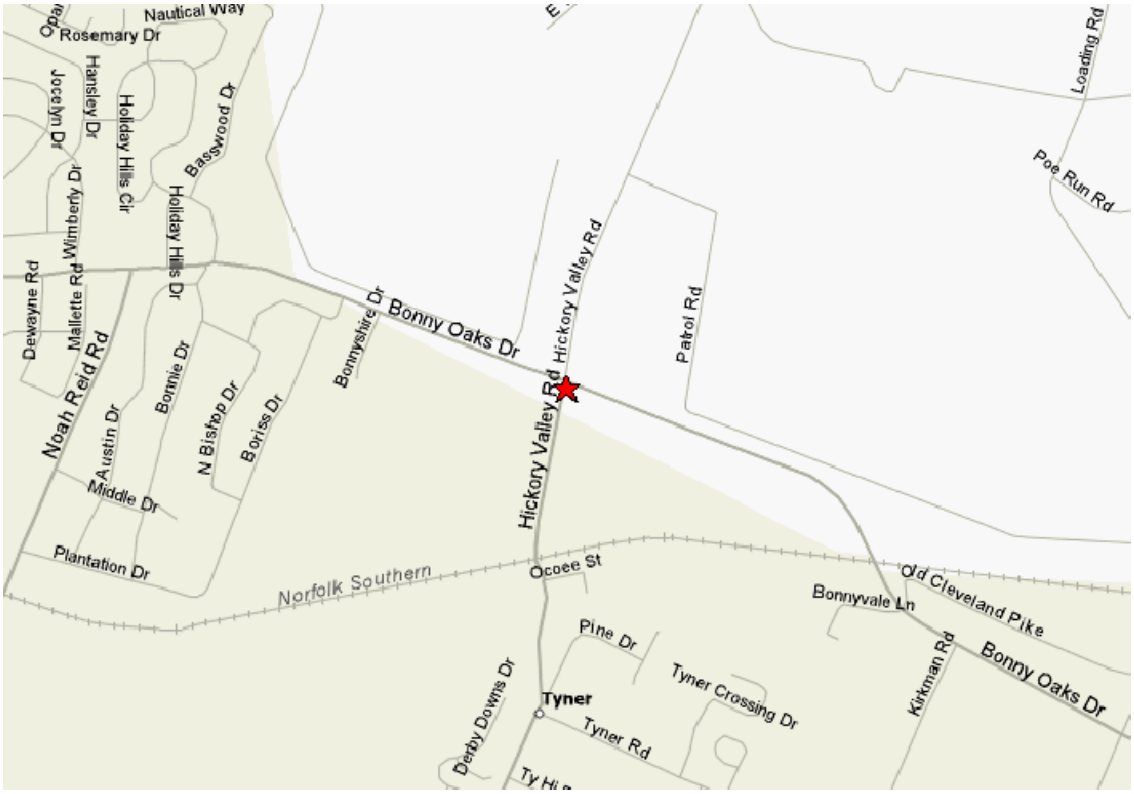
- **EDR Proprietary Records**
  - Manufactured Gas Plants
  - EDR Historical Auto Stations
  - EDR Historical Cleaners

Agencies Contacted

- Tennessee Department of Environment and Conservation.
- Chattanooga – Hamilton County Health Department.

APPENDIX A

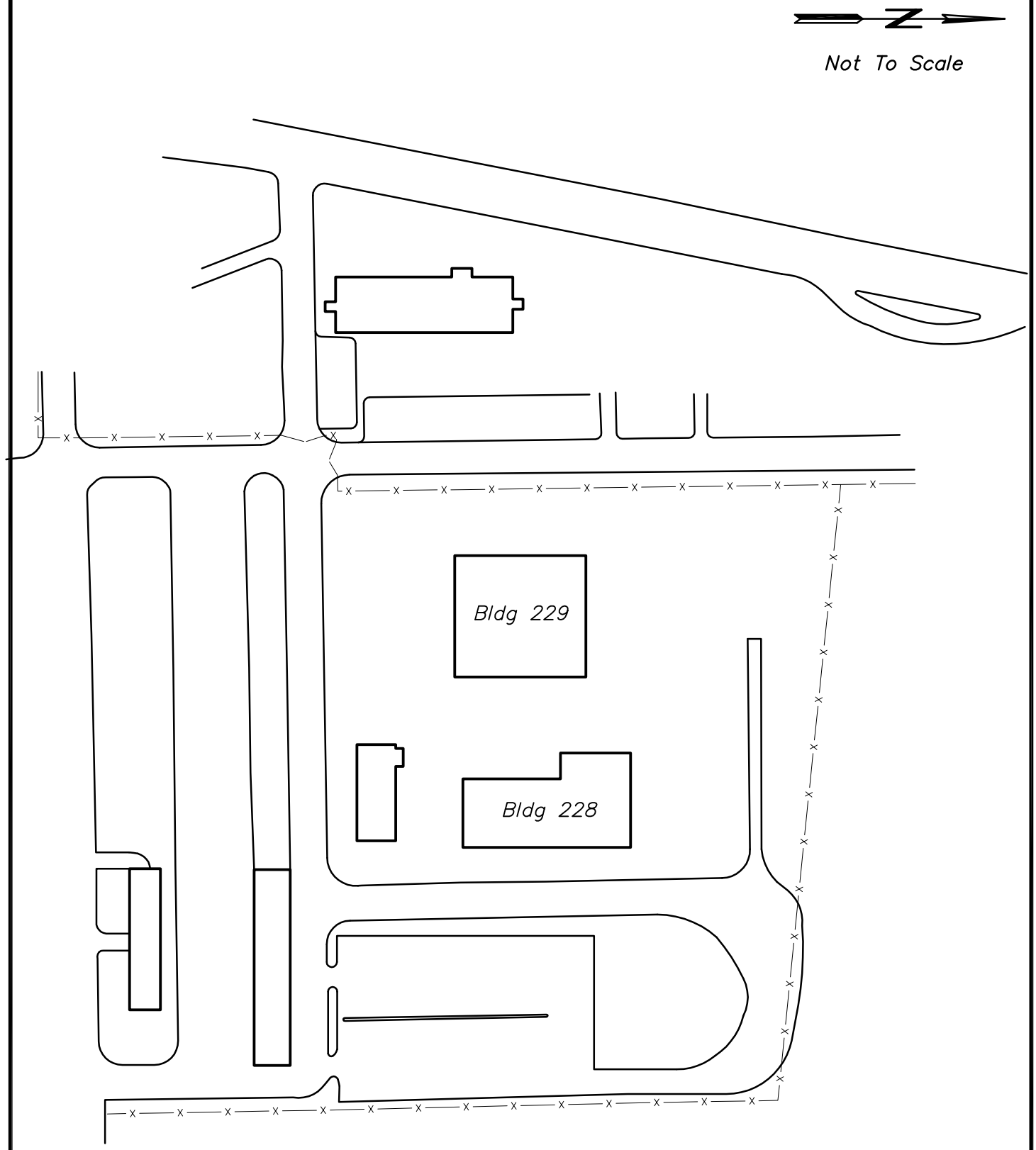
FIGURES



ENGINEERS

FIGURE 1
GENERAL SITE LOCATION MAP
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038-BRAC_ECPs\TN107\TN107VAAP-GenLoc.Dwg

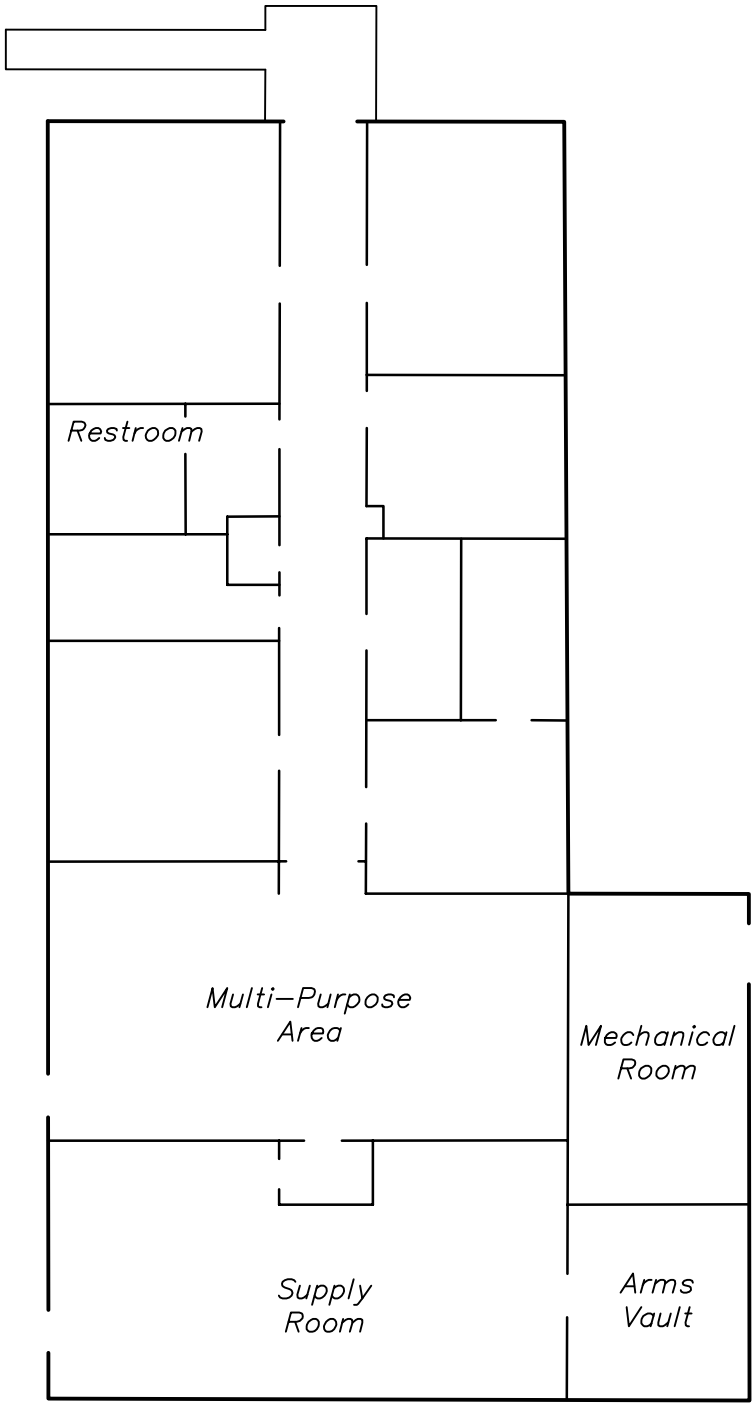


Adapted from Water & Sewage Distribution Plan Drawing (Jun 1968) prepared by Atlas Chemical Industries, Inc.

EMSM ENGINEERS

FIGURE 2
PLAN VIEW LAYOUT OF SITE
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAP-Site.dwg



Note:
Unlabeled rooms are offices, storage or classrooms.

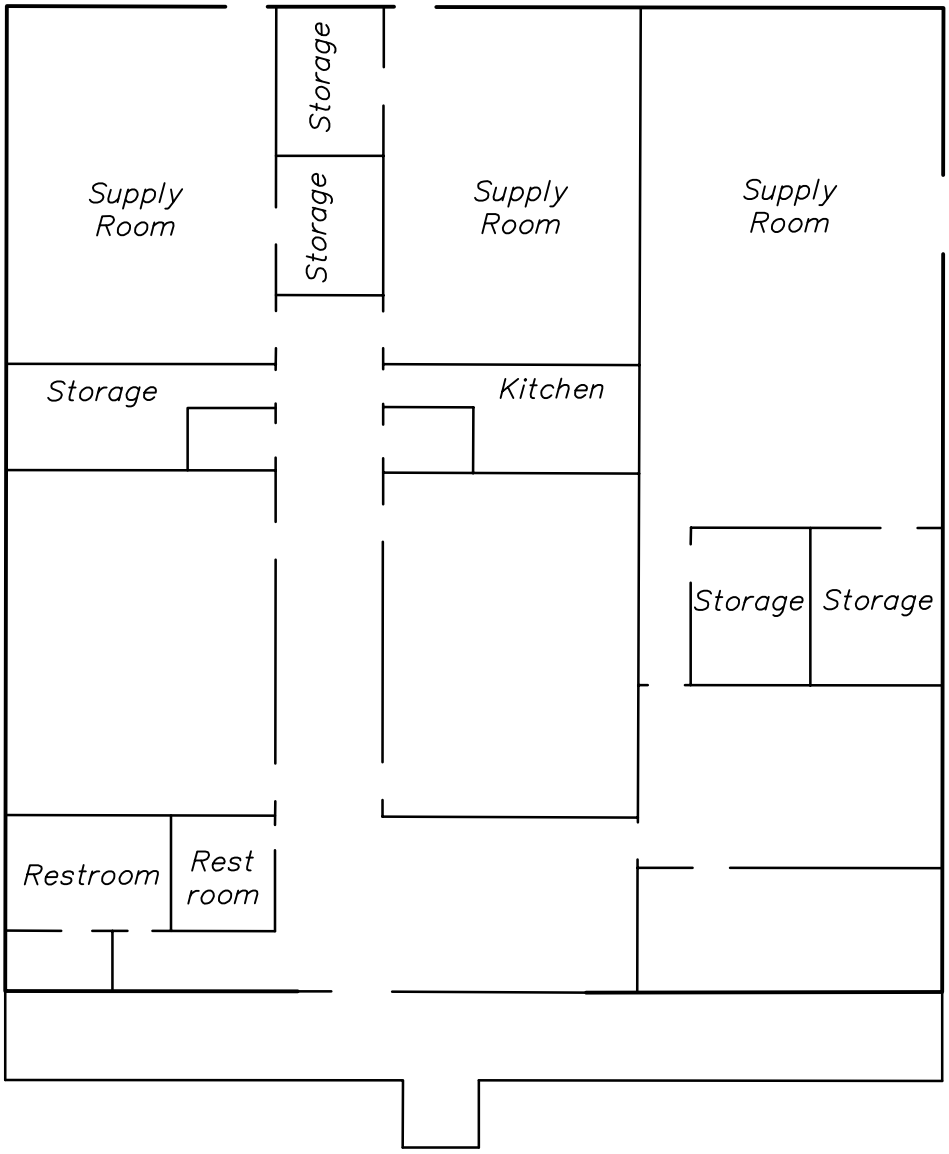
Adapted from AUTODIN/ADPE Facility Floor Plan Drawing (Feb 1971) prepared by Omaha District, U.S. Army Corps of Engineers, for Bonny Oaks VAAP USARC, 81st RRC

EMSM ENGINEERS

FIGURE 3
INTERIOR LAYOUT, BUILDING 228
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAP–Bldg228.Dwg

Not To Scale



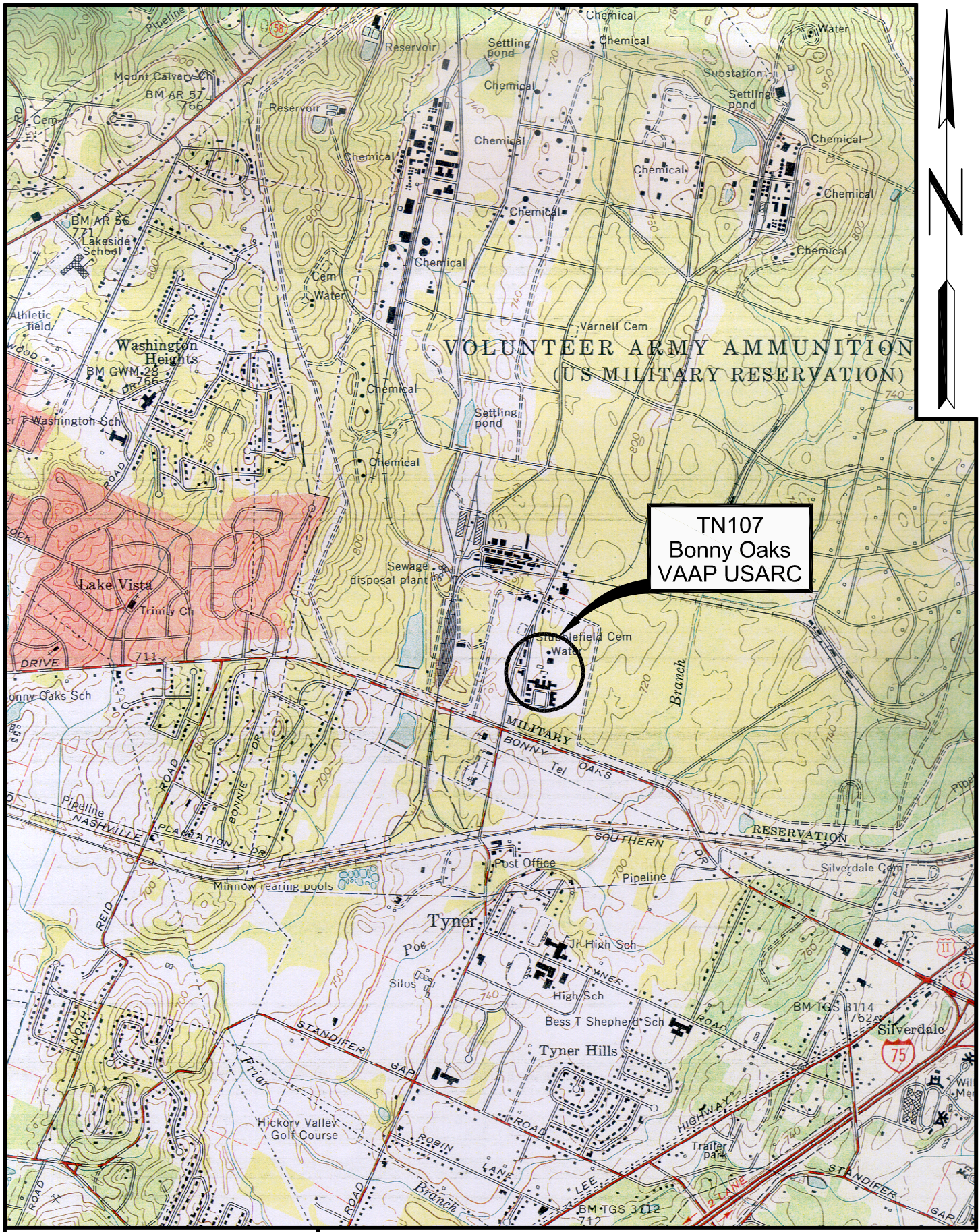
Note:
Unlabeled rooms are offices, storage or classrooms.

Adapted from Training Classroom Floor Plan Drawing (Nov 1971) prepared by by Mobile District, U.S. Army Corps of Engineers, for Bonny Oaks VAAP USARC, 81st RRC

EMSM ENGINEERS

FIGURE 4
INTERIOR LAYOUT, BUILDING 229
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAP-Bldg229.dwg

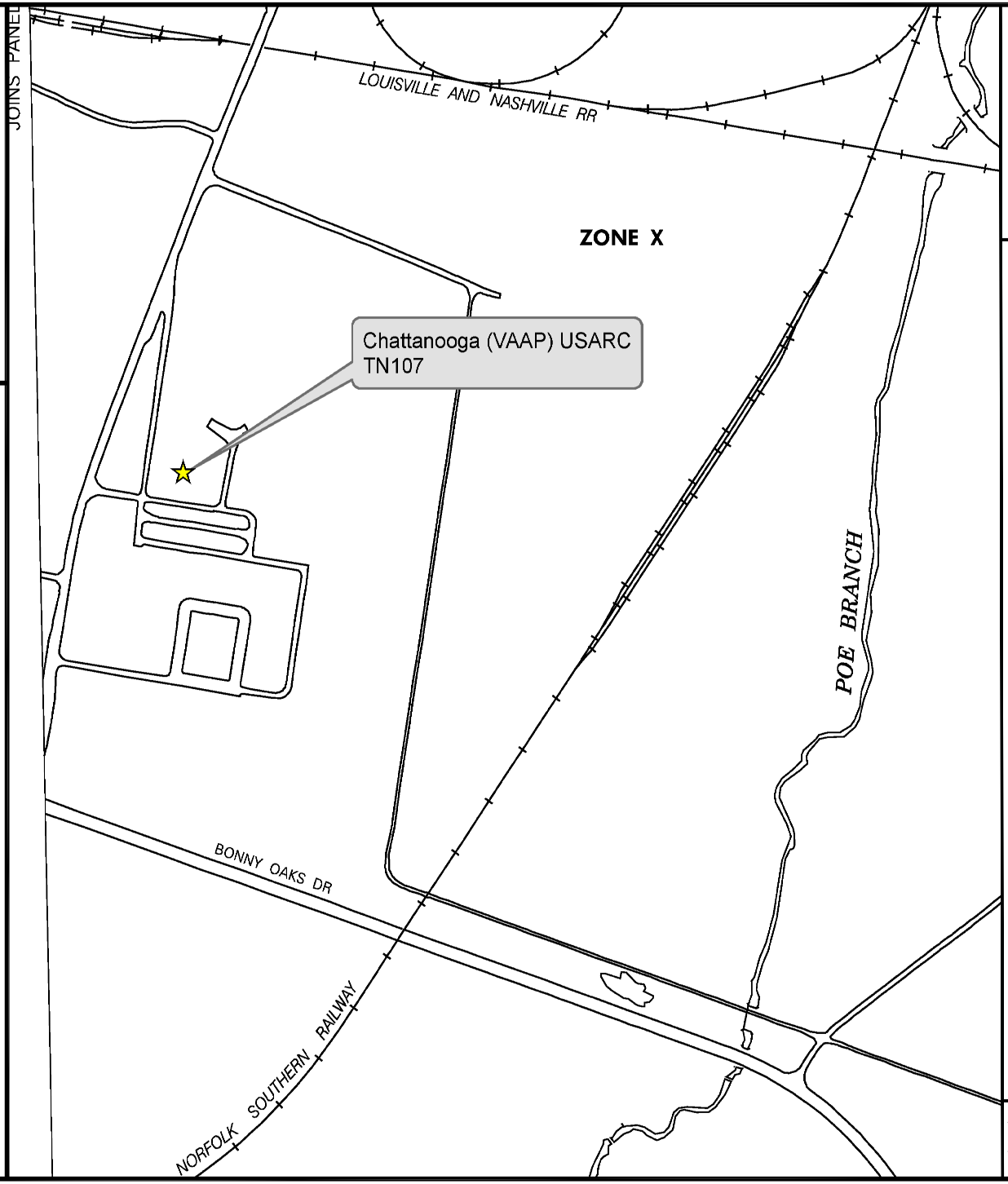


ENGINEERS

FIGURE 5
1969 USGS TOPOGRAPHIC MAP, CHATTANOOGA, TENNESSEE
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Scale: 1" = 2000'
Chattanooga, Hamilton County, Tennessee

LV2006038\USGSTN107-1969.Dwg

LV2006038\TN107VAAP–DFirm.Dwg



APPROXIMATE SCALE

500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

HAMILTON COUNTY, TENNESSEE

AND INCORPORATED AREAS

PANEL 359 OF 530

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CHATTANOOGA, CITY OF	470072	0359	F
HAMILTON COUNTY	470071	0359	F

Notice to User: The MAP NUMBER shown below should be used when placing map orders; the COMMUNITY NUMBER shown above should be used on insurance applications for the subject community.

MAP NUMBER
47065C0359F

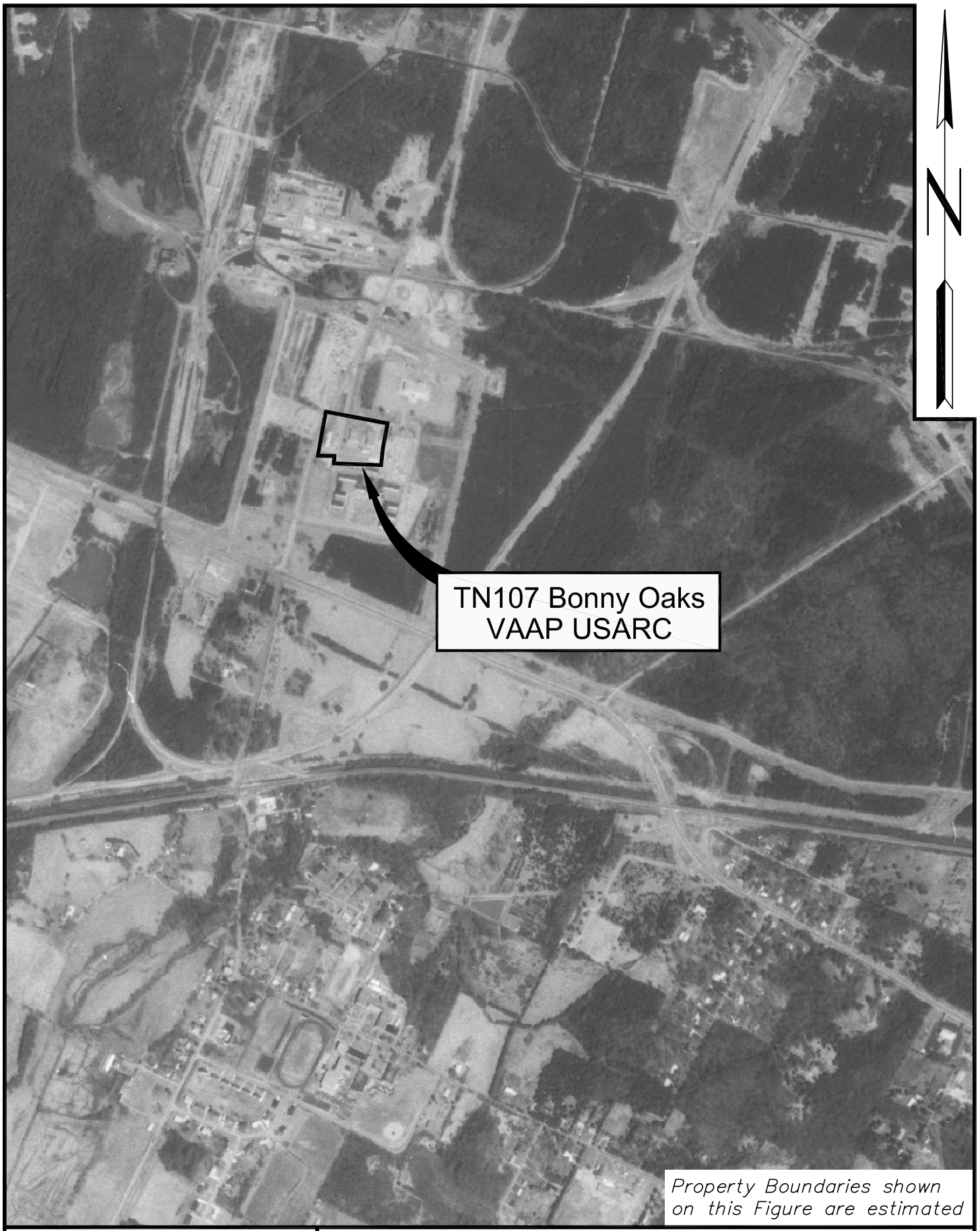
EFFECTIVE DATE:
NOVEMBER 7, 2002

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

FSM ENGINEERS

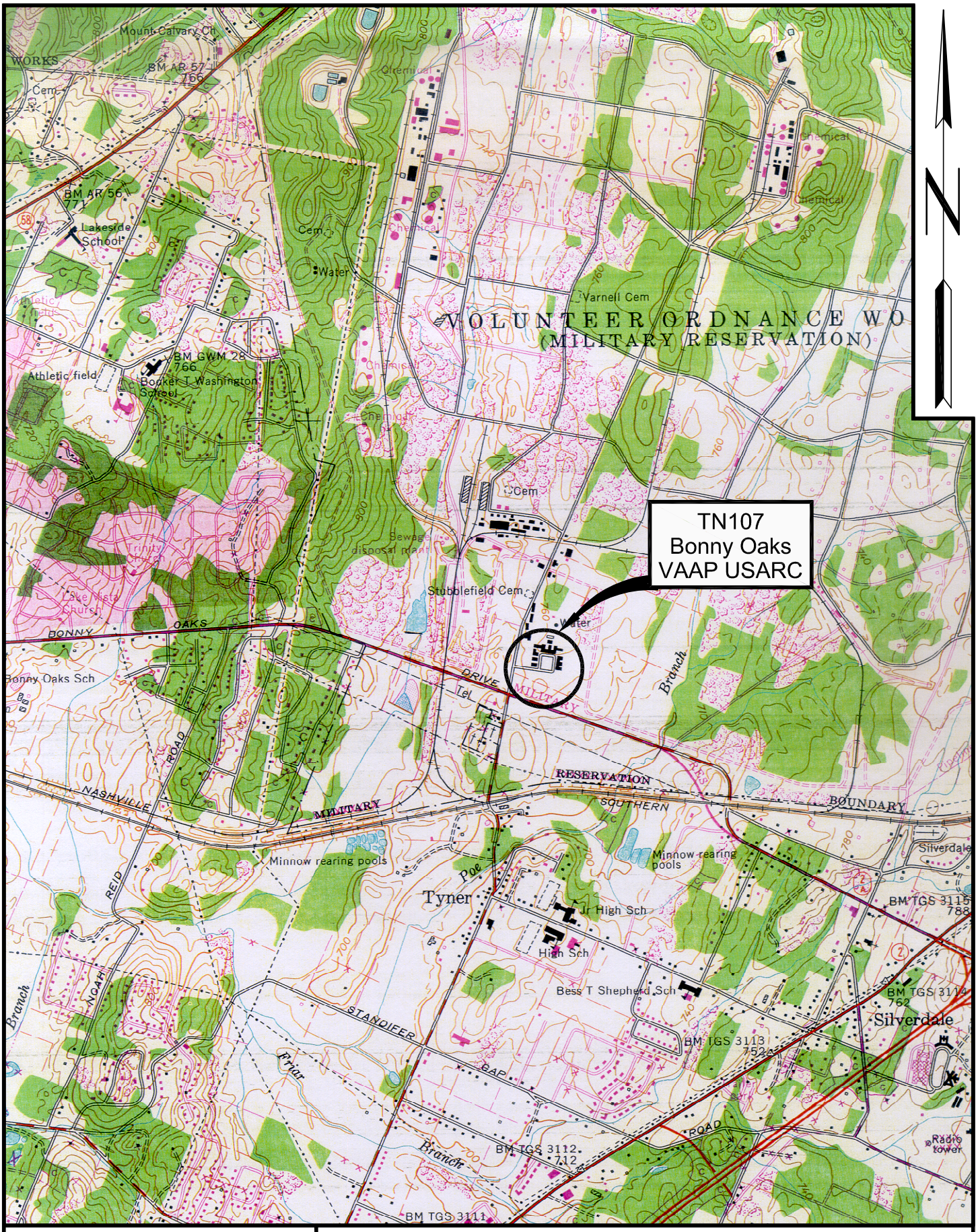
FIGURE 6
FLOOD INSURANCE RATE MAP
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee



EMSM ENGINEERS

FIGURE 7
1977 AERIAL PHOTOGRAPH
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAPAerial1977.Dwg

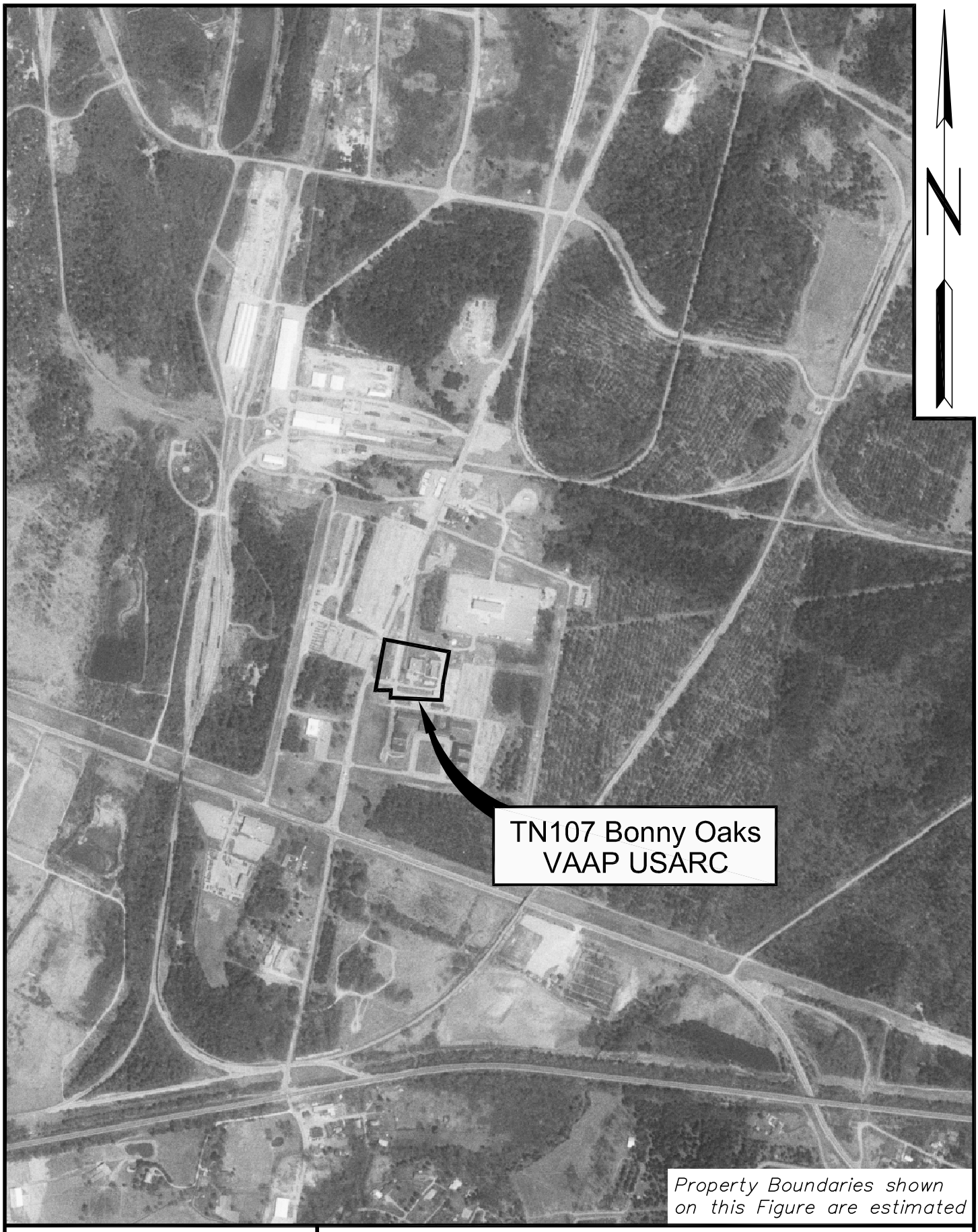


ENGINEERS

FIGURE 8
1958 USGS TOPOGRAPHIC MAP, CHATTANOOGA, TENNESSEE
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

Scale: 1" = 2000'

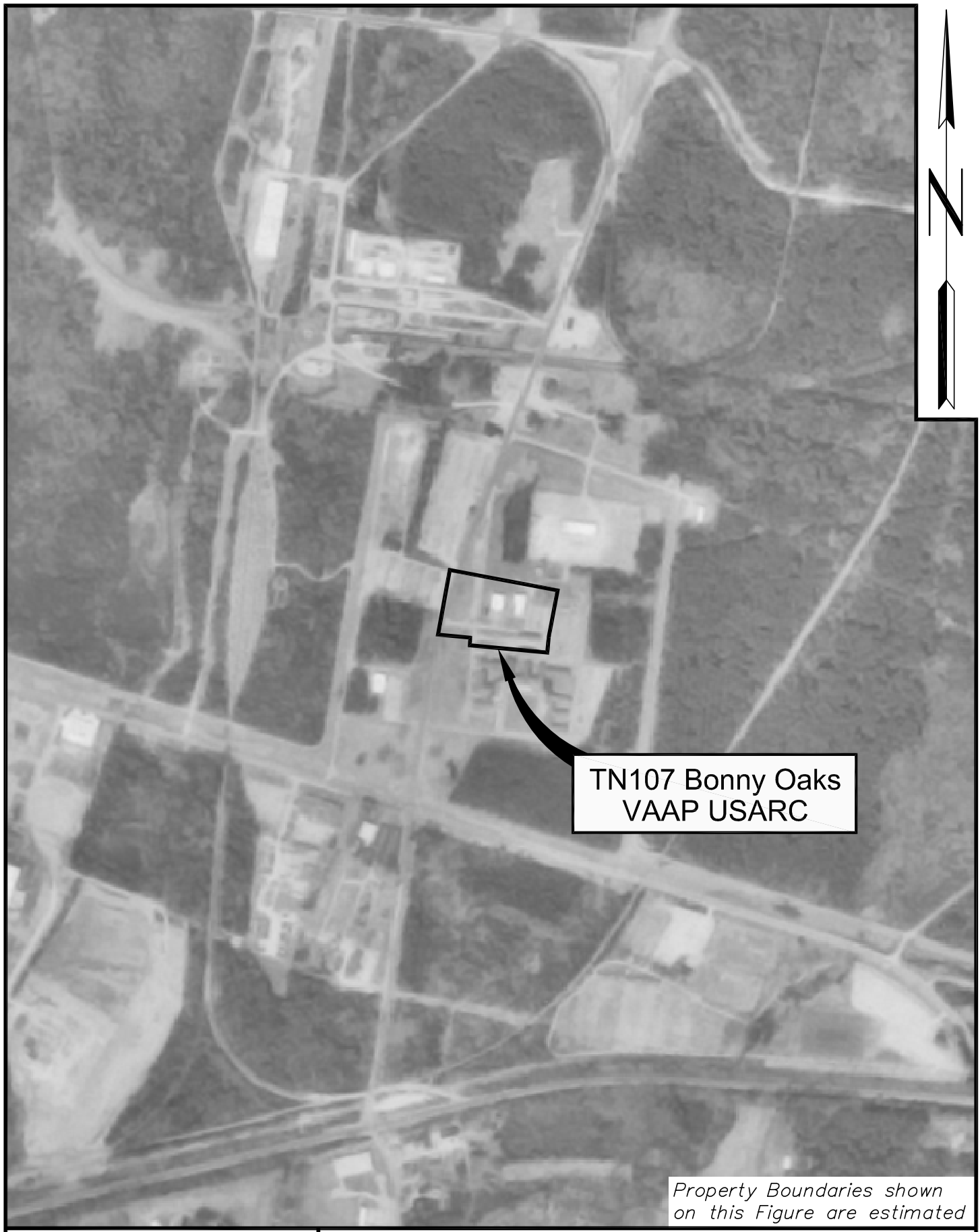
LV2006038\USGSTN107-1958.Dwg



EMSM ENGINEERS

FIGURE 9
1985 AERIAL PHOTOGRAPH
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAPAerial1985.Dwg



EMSM ENGINEERS

FIGURE 10
1999 AERIAL PHOTOGRAPH
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAPAerial1999.Dwg

EMSM ENGINEERS

FIGURE 11
NATIONAL WETLANDS INVENTORY MAP
TN107 BONNY OAKS VAAP USARC
6703 Bonny Oaks Drive
Chattanooga, Hamilton County, Tennessee

LV2006038\TN107VAAP-NWI.Dwg

APPENDIX B

SITE RECONNAISSANCE PHOTOGRAPHS

Photo 1: CONEX Units on North Side of Site

Photo 2: East Portion of the Site Looking North from the Southeast Corner

Photo 3: South Side of Building 228 Looking North

Photo 4: East Side of Building 228

Photo 5: Supply Room in Building 228

Photo 6: Supply Room in Building 228

Photo 7: Arms Vault in Building 228

Photo 8: Entrance to Arms Vault in Building 228

Photo 9: Data/Communications Storage Room in Building 228

Photo 10: South Side of Building 229 Looking Northwest

Photo 11: East Side Projection Booth in Building 229

Photo 12: Janitorial Closet in Building 229

Photo 13: West Side Supply Room Building 229 (591st)

Photo 14: West Side Supply Room in Building 229 (591st)

Photo 15: East Side Supply Room in Building 229 (212th)

Photo 16: NBC Room in East Side Supply Room in Building 229 (212th)

Photo 17: East Side Supply Room in Building 229 (212th)

Photo 18: East Side Supply Room in Building 229 (212th)

Photo 19: East Side Supply Room in Building 229 (212th)

Photo 20: East Side Supply Room in Building 229 (212th)

APPENDIX C

PROPERTY ACQUISITION DOCUMENTS AND CHAIN OF TITLE

The EDR Environmental Lien Search Report

CHATTANOOGA (VAAP) USARC
6703 BONNY OAKS DRIVE
CHATTANOOGA, TENNESSEE

Wednesday, August 30, 2006

Project Number: L06-4829

EDR® Environmental Data Resources Inc

netr Real Estate Research & Information

The Standard In Environmental Risk Management Information

440 Wheelers Farm Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802

ENVIRONMENTAL LIEN REPORT

The EDR Environmental Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

TARGET PROPERTY INFORMATION

ADDRESS

CHATTANOOGA (VAAP) USARC
6703 BONNY OAKS DRIVE
CHATTANOOGA, TENNESSEE

DEED INFORMATION

Type of Deed: WD ☐ QCD ☒ Other ☐

Title is vested in: City of Chattanooga and Hamilton County, Tennessee

Title received from: United States of America

Deed Dated: 03-28-2005
Deed Recorded: 03-29-2005
Book: 7476
Page: 1

LEGAL DESCRIPTION

Description: Being that parcel or tract of land, situated and lying in a portion of the Volunteer Army Ammunition Plant, City of Chattanooga, Hamilton County, State of Tennessee

Assessor's Parcel Number: Map 130, Parcel 001

ENVIRONMENTAL LIEN

Environmental Lien: **Found** ☐ **Not Found** ☒

1st Party:

2nd Party:

Recorded:
Book:
Page:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: **Found** ☒ **Not Found** ☐

The vesting deed between the United States of America and the City of Chattanooga and Hamilton County, Tennessee, filed as Book 7476, Page 1 on 03-29-2005 references the storage, release and disposal of hazardous substances on the property. Restrictions and covenants restrict the property from the use of the property for residential purposes. A copy of the document is attached herein.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

RETURN ATAI

QUITCLAIM DEED

The UNITED STATES OF AMERICA, acting by and through the Secretary of the Interior, acting by and through the Southeast Regional Director, National Park Service, under and pursuant to the power and authority contained in the provisions of the Federal Property and Administrative Services Act of 1949 (63 Stat. 377), as amended, and particularly as amended by Public Law 485, 91st Congress, and regulations and orders promulgated thereunder (hereinafter designated "Grantor"), for and in consideration of the perpetual use of the hereinafter described premises for public park and public recreation area purposes by the City of Chattanooga, Tennessee and Hamilton County, Tennessee (hereinafter designated "Grantee"), does hereby release and quitclaim to Grantee, and to its successors and assigns, subject to the reservations, exceptions, restrictions, conditions and covenants hereinafter expressed and set forth, all Grantor's right, title and interest in and to the following approximately 2,757 acres of described property (Property), known as a portion of the Volunteer Army Ammunition Plant, Chattanooga, Hamilton County, Tennessee, more particularly described in Enclosure A, attached hereto and made a part hereof.

CE (015)

SUBJECT TO any and all existing rights-of-way for public roads, highways, utilities, pipelines and easements and covenants affecting the above-described premises, whether or not the same now appear of record, including but not limited to an easement with Tennessee Valley Authority for two (2) transmission lines, an easement with Colonial Pipeline Company for a pipeline, and a water line easement with Eastside Utility District.

TO HAVE AND TO HOLD the hereinbefore described Property, subject to the reservations, exceptions, restrictions, conditions and covenants herein expressed and set forth unto the Grantee, its successors and assigns, forever.

On September 24, 2003 the United States Department of the Army determined the Property to be excess to its needs and therefore pursuant to authority contained in the Federal Property and Administrative Services Act of 1949, as amended, and applicable rules, regulations and orders promulgated thereunder, the General Services Administration assigned the Property to the Department of the Interior for further conveyance to the City of Chattanooga, Tennessee and Hamilton County, Tennessee.

Instrument: 200503290026
Book and Page: GI 7476 1
Deed Recording Fe $260.00
Data Processing F $2.00
Probate Fee $1.00 XMPT
Total Fees: $262.00
User: AJOHNSON
Date: 29-MAR-2005
Time: 01:27:42 P
Contact: Pam Hurst, Register
Hamilton County Tennessee

It is agreed and understood by and between the Grantor and Grantee, and the Grantee, by its acceptance of this deed, does acknowledge its understanding of the agreement, and does covenant and agree to itself, and its successors and assigns, forever, as follows:

1. The Property shall be used and maintained for the public purposes for which it was conveyed in perpetuity as set forth in the Program of Utilization and plan contained in the application, submitted by the Grantee on October 20, 1999, which program and plan may be amended from time to time at the request of either the Grantor or Grantee, with the written concurrence of the other party, and such amendments shall be added to and become a part of the original application.

2. The Grantee shall, within 6 months of the date of this deed of conveyance, erect and maintain a permanent sign or marker near the point of principal access to the Property which says:

> This park land was acquired through the FEDERAL LANDS TO PARKS PROGRAM of the United States Department of the Interior, National Park Service, for the public's recreational use and enjoyment.

3. The Property shall not be sold, leased, assigned, or otherwise disposed of except to another eligible governmental agency that the Secretary of the Interior agrees in writing can assure the continued use and maintenance of the Property for public park or public recreational purposes subject to the same terms and conditions in the original instrument of conveyance. Any mortgage, lien, or any other encumbrance not wholly subordinate to the reverter interest of the Grantor shall constitute an impermissible disposal. However, this provision shall not preclude the Grantee and its successors or assigns from issuing revenue or other bonds related to the use of the Property to the extent that such bond shall not in any way restrict, encumber, or constitute a lien on the property. Further, nothing in this provision shall preclude the Grantee from providing related recreational facilities and services compatible with the approved application, through concession agreements entered into with third parties, provided prior concurrence to such agreements is obtained in writing from the Secretary of the Interior.

4. From the date of this conveyance, the Grantee, its successors and assigns, shall submit biennial reports to the Secretary of the Interior, setting forth the use made of the Property during the preceding 2-year period, and other pertinent data establishing its continuous use for the purposes set forth

above, for ten consecutive reports and as further determined by the Secretary of the Interior.

5. All revenue received by the Grantee through concession agreements, use permits, or other fees generated by activities on the Property shall be used only for the implementation of an approved Program of Utilization or the operation of park and recreation facilities and programs on the Property. After the Program of Utilization is completed, and as long as the Property is properly and sufficiently operated and maintained, the revenue may be used for other public park and recreational purposes by the Grantee. Any revenue received by the Grantee which is generated on or by the operation of the Property shall not be used for non-recreational purposes. Any revenue received by the Grantee which is generated through the operation of the Property shall be listed and accounted for in its biennial reports to the National Park Service.

6. The Grantor, and any representative it may so delegate, shall have the right of entry upon the Property at any time to conduct inspections of the Property for the purpose of evaluating the Grantee's compliance with the terms and conditions of this deed.

7. As part of the consideration for the Deed, the Grantee covenants and agrees for itself, its successors and assigns, that (1) the program for or in connection with which this Deed is made will be conducted in compliance with, and the Grantee, its successors and assigns, will comply with all requirements imposed by or pursuant to the regulations of the Department of the Interior in effect on the date of this Deed (43 C.F.R. Part 17) issued under the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d-1); (2) this covenant shall be subject in all respects to the provisions of said regulations; (3) the Grantee, its successors and assigns, will promptly take and continue to take such action as may be necessary to effectuate this covenant; (4) the United States shall have the right to seek judicial enforcement of this covenant, and (5) the Grantee, its successors and assigns, will (a) obtain from each other person (any legal entity) who, through contractual or other arrangements with the Grantee, its successors and assigns, is authorized to provide services or benefits under said program, a written agreement pursuant to which such other person shall, with respect to the services or benefits which he is authorized to provide, undertake for himself the same obligations as those imposed upon the Grantee, its successors and assigns, by this covenant, and (b) furnish a copy of such agreement to the Secretary of the Interior, or his successor; and that this covenant shall run with the land hereby conveyed, and shall in any event, without regard to technical

classification or designation, legal or otherwise, be binding to the fullest extent permitted by law and equity for the benefit of, and in favor of the Grantor and enforceable by the Grantor against the Grantee, its successors and assigns.

8. The Grantee agrees to comply with the requirements of Public Law 90-480 (82 Stat. 718), the Architectural Barriers Act of 1968, as amended by Public Law 91-205 of 1970 (84 Stat. 49), and the Americans with Disabilities Act of 1990 (104 Stat. 337) to assure that development of facilities on the Property are accessible to the physically handicapped; and, further assure in accordance with Public Law 93-112, the Rehabilitation Act of 1973 (87 Stat. 394), that no otherwise qualified handicapped individual shall solely by reasons of his handicap be excluded from the participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

9. The Grantee shall be on the lookout for archeological artifacts during any construction activities on the Property and shall take appropriate action should any artifacts be discovered. Grantee shall comply with the provisions of 36 C.F.R. Part 800, regarding protection of historic and cultural properties. Grantee's development plans shall avoid sites identified by a Cultural Resources Assessment of the Property, and, prior to any alteration or construction on the Property, Grantee shall consult with the Tennessee State Historic Preservation Office. Further, Grantee agrees and covenants for itself, its successors, and assigns and every successor in interest to the Property, or any part thereof, that the Property is subject to the conditions, restrictions, and limitations set forth in the document entitled "Preservation Covenant For the Conveyance of Volunteer Army Ammunition Plant Historical Properties" (2 pages), which is attached as Enclosure D and incorporated by reference, and agrees to comply with the restrictive covenants and restrictions enumerated in Enclosure D.

10. The Grantee covenants and agrees to comply with the National Environmental Policy Act of 1969, as amended, the 1977 Amendments to the Federal Water Pollution Control Act (Clean Water Act of 1977), the Federal Disaster Protection Act of 1973 (87 Stat. 975), Executive Order 11288, relating to the evaluation of flood hazards, Executive Order 11990 (May 24, 1977) for Protection of Wetlands and Executive Order 11988 (May 24, 1977) for Floodplain Management, and Grantee shall be subject to any use restrictions issued under said Amendments and Orders.

11. The document entitled "Finding of Suitability to Transfer (FOST) for the 2800 Acres for Conveyance to the City of

Chattanooga/Hamilton County, and the University of Tennessee at Chattanooga" dated September 9, 2003, which is attached hereto as Enclosure B, is incorporated by reference and the Grantee acknowledges receipt of this document by its executed acceptance of this deed.

12. The Grantee acknowledges that the Property contains a sanitary landfill which has been closed. Grantee agrees that the Department of the Army will continue to be responsible for post-closure activities at the landfill, including maintenance, inspection, and monitoring the post-closure plan. The Grantee agrees to allow the Department of the Army continued access to the landfill to conduct post-closure activities.

13. The Grantee acknowledges that the Property contains numerous Corbetta-type storage magazines which were used for storing packaged boxes of TNT. The Grantee acknowledges receipt of the Department of the Army's report entitled "Decontamination of Storage Magazine" which was prepared by Tecumseh Professional Associates in August 2003. The Grantee agrees that it will be responsible for, and will report the discovery of any ordinance or environmental hazard on the Property to the Department of the Army.

14. In connection with CERCLA Section 120(h), Grantor advises the Grantee that hazardous materials were stored on the Property. The Grantee acknowledges receipt of the document entitled "Environmental Restrictions" (4 pages), which is attached as Enclosure C and incorporated by reference, and agrees to comply with the restrictive covenants and restrictions enumerated in Enclosure C. Enclosure C includes required CERCLA deed provisions.

15. CERCLA COVENANTS AND NOTICE: Pursuant to Section120(h)(3) of the Comprehensive Environmental Response, compensation, and Liability Act, as amended, 42 U.S.C. Section 9601, et seq. ("CERCLA):

A. Notification and Covenants

1. The Grantor hereby notifies the Grantee of the storage, release and disposal fo hazardous substances on the Property. For the purpose of this Deed, "hazardous substances" shall have the meaning attributed to such term under Section 101(14) of CERCLA, 42 U.S.C. 9601(14). Available information regarding the type, quantity, and location of such hazardous substances and action taken to address such hazardous substances is described at Table 2 of the Finding of Suitability to Transfer.

2. The Grantor hereby covenants that:

a. All remedial action necessary to protect human health and the environment with respect to any such hazardous substances remaining on the Property has been taken before the date of conveyance hereunder; and

b. Any additional remedial action found to be necessary with regard to such hazardous substances remaining on the Property after the date of this Deed that resulted from past activities of the Grantor shall be conducted by the Grantor. This covenant shall not apply to the extent such remedial actions are caused by activities of the Grantee, its successors or assigns.

B. Access Rights and Easement

The Grantor, the Environmental Protection Agency (EPA), Region IV, and Tennessee Department of Environmental and Conservation and their officers, agents, employees, contractors, and subcontractors have the right to enter upon the Property in any case in which remedial action or corrective action is found to be necessary after the date of this Deed, or such access is necessary to carry out a response action on adjoining property, including, without limitation, the following purposes:

- To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;

- To inspect field activities of the government and its contractors and subcontractors;

- To conduct any test or survey related to the environmental conditions at the Property or to verify any data submitted to the EPA or TDEC by the government relating to such conditions;

- To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, cut not limited to monitoring wells, pumping wells and treatment facilities.

In exercising these rights of access, except in case of imminent endangerment to human health or the environment, the Grantor shall give the Grantee, or the then record owner, reasonable notice of actions to be taken in remediation of the Property.

16. Lead-Based Paint. (A) The Grantor represents after diligent inquiry, and the Grantee, and each of its successors and assigns, acknowledges, that all portions of the improvements on the Property subject to this Quitclaim Deed may include lead-based paint ("LBP") as of the date of this Quitclaim Deed. Every purchaser of any interest in real property on which a building was built prior to 1978, is notified that such property may present exposure to lead from LBP that may place young children as risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotients, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on LBP hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known LBP hazards. "Residential real Property" means dwelling unites, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, available for use by residents but not including land used for agricultural, commercial, industrial, or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways and buildings visited regularly by the same child, 6 years of age or under, on at least two different days within any week, including day-care centers, preschools and kindergarten classrooms.

(B) Available information concerning known LBP and/or LBP hazards, the location of LBP and/or LBP hazards, and the condition of painted surfaces, contained in the Environmental Baseline Survey (Final Revised Report dated 09 October 1998 and updated 12 November 1999) have been provided to the Grantee. All purchasers must receive the federally approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

(C) A risk assessment or inspection for possible LBP hazards is recommended prior to converting the Property to a residential dwelling. The Grantee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of LBP and/or LBP hazards prior to execution of this document.

(D) The Grantee covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on the Property as Residential Real Property, as defined in subparagraph (a), above, without complying with this paragraph and all applicable federal, state, and local laws and regulations pertaining to LBP and/or LBP hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992)(hereinafter Title X).

The Grantee shall, after consideration of the guidelines and regulations established pursuant to Title X: (1) Perform a re-evaluation of the Risk Assessment if more than 12 months have elapsed since the date of the last Risk Assessment; (2) Comply with the joint HUD and EPA Disclosure Rule (24 C.F.R. 35, Subpart H, 40 C.F.R. 745, Subpart F), when applicable, by disclosing to prospective purchasers the known presence of LBP and/or LBP hazards as determined by previous risk assessments; (3) Abate lead dust and LBP hazards in pre-1960 residential real property, as defined in subparagraph (A), above, in accordance with the procedures in 24 C.F.R. 35; (4) Abate soil-lead hazards in pre-1978 residential real property, as defined in subparagraph (A), above, in accordance with the procedures in 24 C.F.R. 35; (5) Abate lead-soil hazards following demolition and redevelopment of structures in areas that will be developed as residential real property; (6) Comply with the EPA LBP work standards when conducting LBP activities (40 C.F.R. 745, Subpart L); (7) Perform the activities described in this paragraph within 12 months of the date of the LBP risk assessment and prior to occupancy or use of the residential real property; and (8) Send a copy of the clearance documentation to the Grantor.

In complying with these requirements, the Grantee covenants and agrees to be responsible for any abatement or remediation of LBP or LBP hazards on the Property found to be necessary as a result of the subsequent use of the Property for residential purposes. The Grantee covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of LBP abatement activities.

(E) The Grantor assumes no liability for damages for personal injury, illness, disability, or death to the Grantee, or to Grantee's successors, assigns, employees, invitees, or any other person, including members of the general public, arising from or incident to the future purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact

of any kind whatsoever with LBP on the Property after the date of this Quitclaim Deed, whether the Grantee, its successors or assigns, has properly warned or failed to properly warn the individual(s) injured. Consistent with the foregoing, Grantee and its successors and assigns shall not have liability for (I) any violations of laws or regulations relating to LBP occurring prior to the date of this Quitclaim Deed, or (ii) any releases of or exposure to LBP occurring before the date of this Quitclaim Deed. Further, the Grantee shall be responsible for abating all LBP hazards prior to occupancy of the Property by children six (6) years of age and under, as described in 24 C.F.R. § 35.24.

(F) The covenants, restrictions and requirements of this paragraph shall be binding upon the Grantee, it successors and assigns and all future owners and shall be deemed to run with the land. The Grantee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this paragraph, in all subsequent transfers, leases or conveyance documents.

17. Groundwater. (A) Restrictions and conditions: In order to ensure current groundwater quality conditions are maintained, the Grantee covenants for itself, it successors, and assigns not to access or use groundwater underlying the Property. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of CERCLA. The Grantee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are enforceable by the Tennessee Department of Environment and conservation (TDEC), or successor agencies. Any approval granted by TDEC to allow a restricted use or to amend or lift these restrictions and covenants shall be in writing, must contain a reference to this instrument, and shall be filed with the Hamilton County Register of Deeds. Until such time as all remediation on the Property is complete, to include long term monitoring, the Army will receive written notice of any such requests to allow a restricted use or amend or lift these restrictions and covenants and the Army shall be given reasonable opportunity to review and provide comment to the regulatory agencies on such requests.

(B) Enforcement: The restrictions and conditions stated in subsection (A) benefit the public in general and the territory surrounding the Property, including lands retained by the United States, and therefore, are enforceable by the State of Tennessee. The Grantee covenants for itself, its successors, and assigns that it shall include and otherwise make legally binding, the

restrictions in all subsequent lease, transfer or conveyance documents relating to the Property.

(C) Army Access: Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the dates of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States of America, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable advance written notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to the environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation and operation of monitoring wells, pumping wells, and treatment facilities. The property owner shall allow ingress and egress of all equipment necessary to accomplish the same.

18. Restricted to Recreational/Educational Use: The Department of the Army has undertaken careful environmental study of the Property and concluded, to which the Grantee agrees, that the highest and best use of the Property is for nonresidential use. In order to further the common objectives and land use plans of the United States, State of Tennessee, and Grantee, the Grantee agrees with the following restrictions and conditions.

(A) Restrictions and Conditions: The Grantee covenants for itself, its successors, and assigns not to use the Property for residential purposes. The Grantee, for itself, its successors or assigns, covenants that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional investigation or remediation necessary to allow for residential use of the Property. Upon completion of such investigation or remediation required to allow residential use of the Property and upon the grantee's obtaining the approval of the TDEC and, if required, any other regulatory agency (i.e., the

Environmental Protection Agency), the Grantor agrees, without cost to the United States to release or, if appropriate, modify this restriction by recordation of an amendment hereto (however, release from this restriction does not release the Grantee from the requirement to use the Property for public park and public recreation area purposes in perpetuity).

(B) Enforcement: The restrictions and conditions benefit the public in general and the territory surrounding the Property, including lands retained by the United States, and, therefore, are enforceable by the State of Tennessee. The Grantee covenants for itself, its successors, and assigns that it shall include and otherwise make legally binding, the restrictions in all subsequent lease, transfer or conveyance documents relating to the Property.

19. Notice of unexploded ordnance (UXO) Clearance: Based upon a review of existing records and available information, none of the buildings and/or land transferred is known to contain UXO. In the event Grantee, its successors and assigns, should discover any ordnance on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and competent Grantor, or Grantor designated explosive ordnance personnel will be dispatched promptly to dispose of such ordnance at no expense to the Grantee.

20. Inclusion of Environmental Provisions: The Grantee acknowledges, agrees and covenants for itself, its successors and assigns and every successor in interest to the Property that it shall neither transfer, lease, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of paragraphs 11, 12, 13, 14, 15, 16, 17, 18 and 19 of this Deed, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

21. The Grantee shall comply with all applicable Federal, State, and local laws, regulations and standards that are or may become applicable to the Grantee's activities on the property being conveyed.

22. The Grantee acknowledges and covenants for itself, its successors and assigns and every successor in interest to the Property that there is a cemetery located on the Property and it agrees that pursuant to Tennessee law and this covenant to allow public access to the cemetery at reasonable times; to not disturb the cemetery; to not permit dismemberment of any entombment without the express consent of the heirs or unless as a result of court action; and to maintain the cemetery grounds, including

at a minimum biannual mowing.

23. The Grantee covenants for itself, its successors and assigns, and every successor in interest to the property herein described, or any part thereof, that any construction or alteration is prohibited unless a determination of no hazard to air navigation is issued by the Federal Aviation Administration in accordance with Title 14, Code of Federal Regulation, Part 77, entitled "Objects Affecting Navigable Airspace", or under authority of the Federal Aviation Act of 1958, as amended.

24. The Grantee agrees to provide the University of Tennessee suitable access to approximately 200 acres of adjacent property located east of the Property. The University of Tennessee property located east of the Property was formerly a portion of the Volunteer Army Ammunition Plant.

25. In the event there is a breach of any of the conditions and covenants herein contained by the Grantee, its successors and assigns, whether caused by the legal or other inability of the Grantee, its successors and assigns, to perform said conditions and covenants, or otherwise, all right, title and interest in and to said premises shall revert to and become the property of the Grantor at its option, which in addition to all other remedies for such breach shall have the right of entry upon said premises, and the Grantee, its successors and assigns, shall forfeit all right, title and interest in said premises and in any and all of the tenements, hereditaments and appurtenances thereunto belonging; provided, however, that the failure of the Secretary of the Department of the Interior to require in any one or more instances complete performance of any of the conditions or covenants shall not be construed as a waiver or relinquishment of such future performance, but the obligation of the Grantee, its successors and assigns, with respect to such future performance shall continue in full force and effect. The Grantee, by its acceptance of this deed, covenants and agrees for itself, and its successors and assigns, that in the event the Grantor exercises its option to revert all right, title, and interest in the property to the Grantor, or the Grantee voluntarily returns title to the property in lieu of a reverter, then the Grantee shall provide protection to and maintenance of said property at all times until such time as the title is actually reverted or returned to and accepted by the Grantor, including the period of any notice of intent to revert. Such protection and maintenance shall, at a minimum, conform to the standards prescribed by the General Services Administration in its Federal Property Management Regulations, 41 C.F.R. 101 - 47.402, in effect at the time of the reversion.

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed in its name and on its behalf this the 13TH day of JULY, 2004.

UNITED STATES OF AMERICA
acting by and through the
Secretary of the Interior

Through:

Regional Director
Southeast Region
National Park Service

By: Wallace C. Brittain
Wallace C. Brittain
Chief, Recreation and
Conservation Division

WITNESSES:

STATE OF GEORGIA)
)ss
COUNTY OF FULTON)

On this 13TH day of JULY, 2004, before me, the subscriber, personally appeared Wallace C. Brittain, Chief, Recreation and Conservation Division, Southeast Region, National Park Service, of the United States Department of the Interior, a governmental agency of the United States of America, and known to me to be the same person described in and who executed the foregoing instrument, as the act and deed of the United States of America, for and on behalf of the Secretary of the Interior, duly designated, empowered and authorized so to do by said Secretary and he acknowledges that he executed the foregoing instrument for and on behalf of the United States of America for the purposes and uses therein described.

William Lamar Hill
NOTARY PUBLIC

My commission expires:
MAY 25, 2006

The foregoing conveyance is hereby accepted and the undersigned agrees, by this acceptance, to assume and be bound by all the obligations, conditions, covenants and agreements therein contained.

CITY OF CHATTANOOGA
TENNESSEE

By: _____
Bob Corker
Mayor

STATE OF TENNESSEE)
)ss
COUNTY OF HAMILTON)

On this 28th day of March, 2005, before me, the undersigned Officer, personally appeared Bob Corker, to me known and known to me to be the same person whose name is subscribed to the foregoing acceptance, who being by me duly sworn, did depose and say that he is the Mayor, City of Chattanooga, Tennessee, that he is duly designated, empowered and authorized by Resolution 22277 of the City Council of the City of Chattanooga, Tennessee, dated October 5, 1999 to execute the foregoing acceptance and sign his name thereto; and that he signed his name thereto and acknowledges that he executed the forgoing instrument for and on behalf of the City of Chattanooga, Tennessee, for the purposes and uses therein described.

_____
NOTARY PUBLIC

REBECCA F. BROWDER NOTARY PUBLIC AT LARGE HAMILTON CO., TN

My Commission expires:
December 10, 2006

The foregoing conveyance is hereby accepted and the undersigned agrees, by this acceptance, to assume and be bound by all

the obligations, conditions, covenants and agreements therein contained.

HAMILTON COUNTY
TENNESSEE

By: _____
Claude Ramsey
County Mayor

STATE OF TENNESSEE)
)ss
COUNTY OF HAMILTON)

On this 28th day of March, 2005, before me, the undersigned Officer, personally appeared Claude Ramsey, to me known and known to me to be the same person whose name is subscribed to the foregoing acceptance, who being by me duly sworn, did depose and say that he is the County Mayor, Hamilton County, Tennessee, that he is duly designated, empowered and authorized by Resolution 1099-12 of the Hamilton County Board of Commissioners, dated October 6, 1999 to execute the foregoing acceptance and sign his name thereto; and that he signed his name thereto and acknowledges that he executed the forgoing instrument for and on behalf of Hamilton County, Tennessee, for the purposes and uses therein described.

_____
NOTARY PUBLIC

My Commission expires:
December 10, 2006

REBECCA F. BROWDER
NOTARY PUBLIC AT LARGE
HAMILTON CO. TN

Prepared by: United States of America
Secretary of the Interior
Recreation and Conservation Division
Atlanta, Georgia

Name and Address of New Owner:	Send tax bills to:	Tax Map No.:
City of Chattanooga Hamilton County, Tennessee Real Property Office 4th Floor Mayfield Annex 123 East 7th Street Chattanooga, TN 37402	same	pt 130-001

The source of grantor's interest is found in part in Deed Book 827, Page 29, in the Register's Office of Hamilton County, Tennessee.

STATE OF TENNESSEE
COUNTY OF HAMILTON

I hereby swear or affirm that the actual consideration for this transfer or value of the property transferred, whichever is greater, is $exempt entity, which amount is equal to or greater than the amount which the property transferred would command at a fair and voluntary sale.

Affiant

Subscribed and sworn to before me on this the 29th day of March, 2005.

Notary Public

My Commission Expires: 10-07-06

SANDY JOLLEY
STATE OF TENNESSEE
NOTARY PUBLIC
HAMILTON COUNTY

ENCLOSURE "A"

A portion of a tract of land known as the Volunteer Army Ammunition Plant property located in the City of Chattanooga, Hamilton County, Tennessee, being more particularly described as follows.

COMMENCING at an aluminum marker located near the Southeastern margin of Tennessee State Highway #58, said marker stamped AGM 170 with coordinates North= 283,668.139 and East=2,225,176.728, said coordinates based on NAD 83 Tennessee Grid Coordinate System and referenced to the Chattanooga-Hamilton County Monument Network (CHAM System). All bearings and distances described herein are on said system.

THENCE South 29 degrees, 27 minutes, 34 seconds West a distance of 153.20 feet to a point;

THENCE South 28 degrees, 57 minutes, 34 seconds East a distance of 118.09 feet to a point;

THENCE South 77 degrees, 13 minutes, 13 seconds East a distance of 2194.17 feet to a point;

THENCE South 22 degrees, 55 minutes, 31 seconds East a distance of 1384.25 feet to the POINT OF BEGINNING;

THENCE South 68 degrees, 02 minutes, 60 seconds East a distance of 814.17 feet to a point;

THENCE North 79 degrees, 04 minutes, 29 seconds East a distance of 1236.20 feet to a point;

THENCE North 16 degrees, 04 minutes, 29 seconds East a distance of 1350.00 feet to a point;

THENCE North 24 degrees, 55 minutes, 31 seconds West a distance of 800.00 feet to a point;

THENCE North 65 degrees, 47 minutes, 20 seconds East a distance of 129.81 feet to a point;

THENCE North 65 degrees, 22 minutes, 07 seconds East a distance of 699.61 feet to a point;

THENCE North 65 degrees, 41 minutes, 27 seconds East a distance of 289.76 feet to a point;

THENCE North 65 degrees, 34 minutes, 25 seconds East a distance of 305.92 feet to a point;

THENCE North 64 degrees, 49 minutes, 58 seconds East a distance of 304.53 feet to a point;

THENCE North 64 degrees, 49 minutes, 54 seconds East a distance of 23.30 feet to a point;

THENCE South 79 degrees, 06 minutes, 42 seconds East a distance of 273.86 feet to a point;

THENCE South 79 degrees, 15 minutes, 25 seconds East a distance of 1734.28 feet to a point;

THENCE South 42 degrees, 38 minutes, 51 seconds East a distance of 469.22 feet to a point;

THENCE South 42 degrees, 44 minutes, 53 seconds East a distance of 279.79 feet to a point;

THENCE South 42 degrees, 48 minutes, 03 seconds East a distance of 20.03 feet to a point;

THENCE South 42 degrees, 54 minutes, 07 seconds East a distance of 162.42 feet to a point;

THENCE South 42 degrees, 52 minutes, 33 seconds East a distance of 109.77 feet to a point;

THENCE South 42 degrees, 53 minutes, 07 seconds East a distance of 144.28 feet to a point;

THENCE South 43 degrees, 18 minutes, 38 seconds East a distance of 118.93 feet to a point;

THENCE South 20 degrees, 29 minutes, 20 seconds East a distance of 34.12 feet to a point;

THENCE South 22 degrees, 09 minutes, 55 seconds East a distance of 100.03 feet to a point;

THENCE South 22 degrees, 08 minutes, 38 seconds East a distance of 100.00 feet to a point;

THENCE South 22 degrees, 10 minutes, 17 seconds East a distance of 100.03 feet to a point;

THENCE South 22 degrees, 08 minutes, 35 seconds East a distance of 109.99 feet to a point;

THENCE South 22 degrees, 09 minutes, 29 seconds East a distance of 100.04 feet to a point;

THENCE South 22 degrees, 09 minutes, 35 seconds East a distance of 99.94 feet to a point;

THENCE South 22 degrees, 19 minutes, 57 seconds East a distance of 100.08 feet to a point;

THENCE South 22 degrees, 07 minutes, 09 seconds East a distance of 95.05 feet to a point;

THENCE South 22 degrees, 07 minutes, 27 seconds East a distance of 144.98 feet to a point;

THENCE South 22 degrees, 01 minutes, 45 seconds East a distance of 159.92 feet to a point;

THENCE North 72 degrees, 05 minutes, 41 seconds East a distance of 110.99 feet to a point;

THENCE North 72 degrees, 10 minutes, 14 seconds East a distance of 219.97 feet to a point;

THENCE North 72 degrees, 11 minutes, 06 seconds East a distance of 90.05 feet to a point;

THENCE North 72 degrees, 09 minutes, 53 seconds East a distance of 140.01 feet to a point;

THENCE North 72 degrees, 09 minutes, 53 seconds East a distance of 99.97 feet to a point;

THENCE North 72 degrees, 15 minutes, 38 seconds East a distance of 8.34 feet to a point;

THENCE North 72 degrees, 03 minutes, 48 seconds East a distance of 283.56 feet to a point;

THENCE North 72 degrees, 07 minutes, 24 seconds East a distance of 286.57 feet to a point;

THENCE North 89 degrees, 01 minutes, 20 seconds East a distance of 135.00 feet to a point;

THENCE North 89 degrees, 14 minutes, 48 seconds East a distance of 300.63 feet to a point;

THENCE North 88 degrees, 46 minutes, 25 seconds East a distance of 150.04 feet to a point;

THENCE North 88 degrees, 27 minutes, 45 seconds East a distance of 124.85 feet to a point;

THENCE North 89 degrees, 07 minutes, 31 seconds East a distance of 100.04 feet to a point;

THENCE North 89 degrees, 09 minutes, 32 seconds East a distance of 99.92 feet to a point;

THENCE North 89 degrees, 05 minutes, 55 seconds East a distance of 100.04 feet to a point;

THENCE North 89 degrees, 12 minutes, 18 seconds East a distance of 89.66 feet to a point;

THENCE North 89 degrees, 05 minutes, 06 seconds East a distance of 77.95 feet to a point;

THENCE North 88 degrees, 54 minutes, 55 seconds East a distance of 32.07 feet to a point;

THENCE South 71 degrees, 43 minutes, 04 seconds East a distance of 382.74 feet to a point;

THENCE South 71 degrees, 43 minutes, 25 seconds East a distance of 115.20 feet to a point;

THENCE South 71 degrees, 43 minutes, 41 seconds East a distance of 520.73 feet to a point;

THENCE South 71 degrees, 42 minutes, 57 seconds East a distance of 155.23 feet to a point;

THENCE South 71 degrees, 06 minutes, 44 seconds East a distance of 70.60 feet to a point;

THENCE South 56 degrees, 07 minutes, 08 seconds East a distance of 96.24 feet to a point;

THENCE South 55 degrees, 58 minutes, 01 seconds East a distance of 265.74 feet to a point;

THENCE South 55 degrees, 56 minutes, 44 seconds East a distance of 216.32 feet to a point;

THENCE South 55 degrees, 58 minutes, 02 seconds East a distance of 110.44 feet to a point;

THENCE South 55 degrees, 45 minutes, 29 seconds East a distance of 110.47 feet to a point;

THENCE South 55 degrees, 55 minutes, 07 seconds East a distance of 110.45 feet to a point;

THENCE South 55 degrees, 57 minutes, 06 seconds East a distance of 100.09 feet to a point;

THENCE South 55 degrees, 56 minutes, 32 seconds East a distance of 93.93 feet to a point;

THENCE South 65 degrees, 30 minutes, 13 seconds West a distance of 1140.78 feet to a point;

THENCE South 78 degrees, 56 minutes, 47 seconds West a distance of 2314.69 feet to a point;

THENCE South 15 degrees, 56 minutes, 37 seconds East a distance of 44.01 feet to a point;

THENCE South 41 degrees, 11 minutes, 15 seconds East a distance of 177.17 feet to a point;

THENCE South 74 degrees, 34 minutes, 36 seconds East a distance of 250.69 feet to a point;

THENCE South 77 degrees, 44 minutes, 12 seconds East a distance of 196.14 feet to a point;

THENCE South 82 degrees, 30 minutes, 13 seconds East a distance of 319.40 feet to a point;

THENCE South 79 degrees, 22 minutes, 57 seconds East a distance of 271.31 feet to a point;

THENCE South 82 degrees, 13 minutes, 54 seconds East a distance of 185.03 feet to a point;

THENCE South 37 degrees, 51 minutes, 53 seconds East a distance of 152.17 feet to a point;

THENCE South 36 degrees, 52 minutes, 07 seconds East a distance of 166.67 feet to a point;

THENCE South 09 degrees, 21 minutes, 06 seconds East a distance of 675.42 feet to a point;

THENCE South 07 degrees, 52 minutes, 48 seconds East a distance of 597.53 feet to a point;

THENCE South 51 degrees, 08 minutes, 57 seconds East a distance of 672.00 feet to a point;

THENCE North 82 degrees, 34 minutes, 00 seconds East a distance of 2486.96 feet to a point;

THENCE South 12 degrees, 24 minutes, 55 seconds East a distance of 52.54 feet to a point;

THENCE South 02 degrees, 42 minutes, 36 seconds East a distance of 159.91 feet to a point;

THENCE South 02 degrees, 43 minutes, 05 seconds East a distance of 1111.59 feet to a point;

THENCE South 10 degrees, 26 minutes, 23 seconds West a distance of 565.37 feet to a point;

THENCE South 10 degrees, 27 minutes, 10 seconds West a distance of 456.50 feet to a point;

THENCE South 28 degrees, 12 minutes, 27 seconds West a distance of 135.05 feet to a point;

THENCE South 28 degrees, 17 minutes, 40 seconds West a distance of 92.48 feet to a point;

THENCE South 28 degrees, 13 minutes, 41 seconds West a distance of 158.75 feet to a point;

THENCE South 28 degrees, 14 minutes, 55 seconds West a distance of 600.96 feet to a point;

THENCE South 28 degrees, 07 minutes, 36 seconds West a distance of 177.51 feet to a point;

THENCE South 28 degrees, 18 minutes, 32 seconds West a distance of 94.94 feet to a point;

THENCE South 28 degrees, 14 minutes, 42 seconds West a distance of 94 89 feet to a point;

THENCE South 28 degrees, 19 minutes, 12 seconds West a distance of 92.96 feet to a point;

THENCE South 49 degrees, 39 minutes, 54 seconds West a distance of 382.13 feet to a point;

THENCE South 49 degrees, 42 minutes, 20 seconds West a distance of 189.89 feet to a point;

THENCE South 49 degrees, 40 minutes, 53 seconds West a distance of 90.04 feet to a point;

THENCE South 49 degrees, 38 minutes, 36 seconds West a distance of 90.03 feet to a point;

THENCE South 49 degrees, 42 minutes, 18 seconds West a distance of 90.01 feet to a point;

THENCE South 49 degrees, 42 minutes, 26 seconds West a distance of 89.97 feet to a point;

THENCE South 49 degrees, 37 minutes, 17 seconds West a distance of 89.97 feet to a point;

THENCE South 49 degrees, 39 minutes, 00 seconds West a distance of 89.96 feet to a point;

THENCE South 49 degrees, 43 minutes, 41 seconds West a distance of 89.95 feet to a point;

THENCE South 49 degrees, 41 minutes, 59 seconds West a distance of 90.02 feet to a point;

THENCE South 45 degrees, 48 minutes, 13 seconds West a distance of 20.32 feet to a point;

THENCE South 35 degrees, 26 minutes, 18 seconds West a distance of 110.43 feet to a point;

THENCE South 35 degrees, 46 minutes, 29 seconds West a distance of 200.02 feet to a point;

THENCE South 36 degrees, 08 minutes, 19 seconds West a distance of 190.03 feet to a point;

THENCE South 35 degrees, 44 minutes, 09 seconds West a distance of 497.38 feet to a point;

THENCE South 36 degrees, 06 minutes, 49 seconds West a distance of 91.05 feet to a point;

THENCE South 35 degrees, 42 minutes, 55 seconds West a distance of 107.25 feet to a point;

THENCE South 53 degrees, 31 minutes, 00 seconds West a distance of 98.90 feet to a point;

THENCE South 53 degrees, 21 minutes, 53 seconds West a distance of 95.00 feet to a point;

THENCE South 53 degrees, 33 minutes, 59 seconds West a distance of 303.20 feet to a point;

THENCE South 53 degrees, 23 minutes, 29 seconds West a distance of 996.89 feet to a point;

THENCE South 79 degrees, 12 minutes, 00 seconds West a distance of 500.43 feet to a point;

THENCE South 79 degrees, 10 minutes, 36 seconds West a distance of 495.39 feet to a point;

THENCE South 79 degrees, 15 minutes, 06 seconds West a distance of 500.55 feet to a point;

THENCE South 63 degrees, 45 minutes, 57 seconds West a distance of 495.81 feet to a point;

THENCE South 63 degrees, 51 minutes, 07 seconds West a distance of 502.08 feet to a point;

THENCE South 63 degrees, 45 minutes, 14 seconds West a distance of 428.87 feet to a point,

THENCE South 53 degrees, 28 minutes, 05 seconds West a distance of 500.92 feet to a point;

THENCE South 53 degrees, 25 minutes, 35 seconds West a distance of 893.28 feet to a point;

THENCE South 65 degrees, 39 minutes, 32 seconds West a distance of 499.74 feet to a point;

THENCE South 65 degrees, 42 minutes, 15 seconds West a distance of 400.14 feet to a point;

THENCE South 78 degrees, 25 minutes, 01 seconds West a distance of 508.09 feet to a point;

THENCE South 78 degrees, 28 minutes, 58 seconds West a distance of 441.32 feet to a point;

THENCE North 86 degrees, 17 minutes, 29 seconds West a distance of 460.91 feet to a point;

THENCE South 51 degrees, 21 minutes, 25 seconds West a distance of 512.34 feet to a point;

THENCE South 51 degrees, 33 minutes, 21 seconds West a distance of 369.87 feet to a point,

THENCE South 89 degrees, 58 minutes, 24 seconds East a distance of 686.53 feet to the point of curvature;

THENCE with a curve the left (counter clockwise) an arc distance of 642.49 feet, having a radius of 3456.25 feet, a central angle of 10 degrees, 39 minutes, 03 seconds and a chord of South 65 degrees, 56 minutes, 46 seconds West for a distance of 641.56 feet to the point of tangent,

THENCE South 60 degrees, 37 minutes, 15 seconds West a distance of 1835.54 feet to a point;

THENCE North 00 degrees, 56 minutes, 21 seconds East a distance of 907.22 feet to a point;

THENCE North 24 degrees, 48 minutes, 16 seconds West a distance of 756.94 feet to a point;

THENCE North 67 degrees, 01 minutes, 58 seconds East a distance of 424.50 feet to a point;

THENCE North 24 degrees, 14 minutes, 01 seconds West a distance of 1047.32 feet to a point;

THENCE North 47 degrees, 29 minutes, 19 seconds East a distance of 1179.14 feet to a point;

THENCE North 63 degrees, 19 minutes, 53 seconds East a distance of 150.02 feet to a point;

THENCE North 34 degrees, 03 minutes, 52 seconds East a distance of 614.65 feet to a point;

THENCE North 36 degrees, 24 minutes, 00 seconds West a distance of 714.58 feet to a point;

THENCE North 00 degrees, 19 minutes, 29 seconds East a distance of 679.75 feet to the point of curvature;

THENCE with a curve to the left (counter clockwise) an arc distance of 251.91 feet, having a radius of 324.50 feet, a central angle of 44 degrees, 28 minutes, 41 seconds, and a chord of North 21 degrees, 54 minutes, 48 seconds West, for a distance of 245.63 feet to the point of tangent;

THENCE North 44 degrees, 09 minutes, 12 seconds West a distance of 681.98 feet to the point of curvature;

THENCE with a curve to the right (clockwise) an arc distance of 258.80 feet, having a radius of 273.39 feet, a central angle of 54 degrees, 14 minutes, 14 seconds, and a chord of North 17 degrees, 02 minutes, 05 seconds West, for a distance of 249.25 feet to the point of tangent;

THENCE North 10 degrees, 05 minutes, 02 seconds East a distance of 152.26 feet to a point;

THENCE North 58 degrees, 03 minutes, 05 seconds East a distance of 1472.82 feet to a point;

THENCE North 04 degrees, 09 minutes, 17 seconds West a distance of 733.65 feet to a point;

THENCE North 67 degrees, 58 minutes, 06 seconds West a distance of 929.02 feet to a point;

THENCE North 09 degrees, 51 minutes, 53 seconds East a distance of 4114.33 feet to a point;

THENCE North 68 degrees, 08 minutes, 38 seconds West a distance of 1281.03 feet to a point;

THENCE South 14 degrees, 52 minutes, 55 seconds West a distance of 2559.01 feet to a point;

THENCE South 30 degrees, 59 minutes, 37 seconds West a distance of 530.61 feet to a point;

THENCE North 17 degrees, 51 minutes, 22 seconds West a distance of 688.30 feet to the point of curvature;

THENCE with a curve to the left (counter clockwise) an arc distance of 557.17 feet, having a radius of 854.93 feet, a central angle of 37 degrees, 20 minutes, 25 seconds, and a chord of North 36 degrees, 31 minutes, 35 seconds West, for a distance 547.36 feet to the point of tangent;

THENCE North 55 degrees, 11 minutes, 47 seconds West a distance of 400.75 feet to the point of curvature;

THENCE with a curve to the right (clockwise) an arc distance of 680.83 feet, having a radius of 1054.93 feet, a central angle of 36 degrees, 58 minutes, 38 seconds, and a chord of North 36 degrees, 42 minutes, 28 seconds West, for a distance of 669.07 feet to the point of tangent;

THENCE North 18 degrees, 13 minutes, 09 seconds West a distance of 1221.89 feet to the point of curvature;

THENCE with a curve to the left (counter clockwise) an arc distance of 847.01 feet, having a radius of 1045.95 feet, a central angle of 46 degrees, 23 minutes, 54 seconds, and a chord of North 41 degrees, 26 minutes, 06 seconds West, for a distance of 824.04 feet to the point of tangent;

THENCE North 64 degrees, 37 minutes, 03 seconds West a distance of 1481.60 feet to the point of curvature;

THENCE with a curve to the right (clockwise) an arc distance of 514.53 feet, having a radius of 689.76 feet, and a central angle of 42 degrees, 44 minutes, 24 seconds, and a chord of North 43 degrees, 14 minutes, 51 seconds West, for a distance of 502.68 feet to the point of tangent;

THENCE North 21 degrees, 52 minutes, 39 seconds West a distance of 391.37 feet to a point located on the Southeastern margin of Tennessee State Highway #58;

THENCE with a curve to the right (clockwise) along the Southeastern margin of Highway 58 an arc distance of 200.12 feet, having a radius of 5872.58 feet, a central angle of 01 degrees, 57 minutes, 09 seconds, and a chord of North 66 degrees, 13 minutes, 42 seconds East, for a distance of 200.11 feet to a point;

THENCE South 21 degrees, 52 minutes, 39 seconds East a distance of 397.98 feet to the point of curvature;

THENCE with a curve to the left (counter clockwise) an arc distance of 365.34 feet, having a radius of 489.76 feet, a central angle of 42 degrees, 44 minutes, 24 seconds, and a chord of South 43 degrees, 14 minutes, 51 seconds East, for a distance of 356.93 feet to the point of tangent;

THENCE South 64 degrees, 37 minutes, 03 seconds East a distance of 1481.60 feet to the point of curvature;

THENCE with a curve to the right (clockwise) an arc distance of 1008.98 feet, having a radius of 1246.95 feet, a central angle of 46 degrees, 23 minutes, 54 seconds and a chord of South 41 degrees, 25 minutes, 04 seconds East, for a distance of 981.60 feet to the point of tangent;

THENCE South 18 degrees, 13 minutes, 09 seconds East a distance of 390.47 feet to a point;

THENCE North 56 degrees, 20 minutes, 42 seconds East a distance of 1306.96 feet to a point;

THENCE North 22 degrees, 55 minutes, 30 seconds West a distance of 210.42 feet to the POINT OF BEGINNING.

Said property herein described contains 2,666.75 Acres, more or less.

T.D.O.T. ACQUISITION TRACT

Subject to a road way easement known as the T.D.O.T. Acquisition Tract being more particularly described as follows:

BEGINNING at a concrete monument marked B-102-2 in the Southeastern boundary of Tract "E" of the Volunteer Army Ammunition Plant (VAAP) Boundary Survey as prepared by Arcadis, Geraghty, and Miller, dated September 15, 1999, said concrete monument is also located on the current Northwestern road right-of-way of U.S. Interstate Highway 75 at centerline highway station 408+54.50, 440.74 feet left of centerline highway, monument B-102-2 has coordinates of North=271,201.65 and East=2,234,157.91, coordinates, bearings, and distances are based on NAD 83 Tennessee Grid Coordinate System and referenced to the Chattanooga-Hamilton County Monument Network (CHAM System);

THENCE South 53 degrees, 28 minutes, 05 seconds West for a distance of 500.92 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point;

THENCE South 53 degrees, 25 minutes, 35 seconds West for a distance of 602.29 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point, said point is located at centerline highway station 398+24.19, 289.77 feet left of centerline highway;

THENCE North 38 degrees, 59 minutes, 34 seconds East for a distance of 475.06 feet to a point;

THENCE North 18 degrees, 42 minutes, 57 seconds West for a distance of 93.02 feet to the point of curvature;

THENCE with a non-tangential curve to the left (counter clockwise) having an arc length of 165.51 feet, a radius of 1,100.00 feet, a central angle of 08 degrees, 37 minutes, 15 seconds, and a chord of North 68 degrees, 33 minutes, 07 seconds West for a distance of 165.35 feet to a point on curve;

THENCE with a non-tangential curve to the left (counter clockwise) having an arc length of 1,111.20 feet, a radius of 1,100.00 feet, a central angle of 57 degrees, 52 minutes, 45 seconds, a chord of South 78 degrees, 08 minutes, 01 seconds West for a distance of 1,064.55 feet to a point located at the end of curve;

THENCE South 49 degrees, 11 minutes, 42 seconds West for a distance 16.01 feet to a point;

THENCE North 35 degrees, 23 minutes, 38 seconds West for a distance of 519.46 feet to a point;

THENCE North 47 degrees, 16 minutes, 38 seconds East for a distance of 16.08 feet to the point of curvature;

THENCE with a non-tangential curve to the right (clockwise) having an arc length of 1,666.10, a radius of 1,500.00 feet, a central angle of 63 degrees, 38 minutes, 25 seconds, and a chord of North 79 degrees, 06 minutes, 01 seconds East for a distance of 1,581.77 feet to a point on curve;

THENCE with a non-tangential curve to the right (clockwise) having an arc length of 247.20 feet, a radius of 1,500.00 feet, a central angle of 09 degrees, 26 minutes, 32 seconds, and a chord of South 64 degrees, 18 minutes, 50 seconds East for a distance of 246.92 feet to a point located at the end of curve;

THENCE North 57 degrees, 43 minutes, 18 seconds East for a distance of 148.00 feet to a point;

THENCE North 57 degrees, 43 minutes, 35 seconds East for a distance of 195.58 feet to the point of curvature;

THENCE with a non-tangential curve to the right (clockwise) having an arc length of 757.25 feet, a radius of 871.31 feet, a central angle of 49 degrees, 47 minutes, 43 seconds, and a chord of North 82 degrees, 36 minutes, 39 seconds East for a distance of 733.64 feet to a point located at the end of curve;

THENCE South 73 degrees, 24 minutes, 26 seconds East for a distance of 285.71 feet to a point located on the existing Northwestern road right-of-way of U.S. interstate Highway 75;

THENCE South 63 degrees, 45 minutes, 57 seconds West for a distance of 110.48 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point;

THENCE South 63 degrees, 51 minutes, 07 seconds West for a distance of 502.08 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point;

THENCE South 63 degrees, 45 minutes, 14 seconds West for a distance of 428.87 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to the POINT OF BEGINNING.

Said T.D.O.T. Acquired Right-of-Way herein described contains 33.295 acres, more or less.

VOLUNTEER ORDNANCE CONNECTOR ROAD
LOCATION ONE

Subject to a road way easement for the Volunteer Ordnance Connector Road, 200.00 feet in width being more particularly described as follows:

COMMENCING at a concrete monument marked B-102-2 in the Southeastern boundary of Tract "E" of the Volunteer Army Ammunition Plant (VAAP) Boundary Survey as prepared by Arcadis, Geraghty, and Miller, dated September 15, 1999, said concrete monument is also located on the current Northwestern road right-of-way of U.S. Interstate Highway 75 at centerline highway station 408+54.50, 440.74 feet left of centerline highway, monument B-102-2 has coordinates of North=271,201.65 and East=2,234,157.91, coordinates, bearings, and distances are based on NAD 83 Tennessee Grid Coordinate System and referenced to the Chattanooga-Hamilton County Monument Network (CHAM System);

THENCE South 53 degrees, 28 minutes, 05 seconds West for a distance of 500.92 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point;

THENCE South 53 degrees, 25 minutes, 35 seconds West for a distance of 602.29 feet along the existing Northwestern road right-of-way of U.S. Interstate Highway 75 to a point, said point is located at centerline highway station 398+24.19, 289.77 feet left of centerline highway;

THENCE North 38 degrees, 59 minutes, 34 seconds East for a distance of 475.06 feet to a point;

THENCE North 18 degrees, 42 minutes, 57 seconds West for a distance of 93.02 feet to the point of curvature;

THENCE with a non-tangential curve to the left (counter clockwise) having an arc length of 165.51 feet, a radius of 1,100.00 feet, a central angle of 08 degrees, 37 minutes, 15 seconds, and a chord of North 68 degrees, 33 minutes, 07 seconds West for a distance of 165.35 feet to a point on curve;

THENCE with a non-tangential curve to the left (counter clockwise) having an arc length of 1,111.20 feet, a radius of 1,100.00 feet, a central angle of 57 degrees, 52 minutes, 45 seconds, a chord of South 78 degrees, 08 minutes, 01 seconds West for a distance of 1,064.55 feet to a point located at the end of curve;

THENCE South 49 degrees, 11 minutes, 42 seconds West for a distance 16.01 feet to a point;

THENCE North 35 degrees, 23 minutes, 38 seconds West for a distance of 161.51 feet to the POINT OF BEGINNING, said POINT OF BEGINNING having coordinates of North=270,965.42 and East= 2,232,239.03;

THENCE South 54 degrees, 36 minutes, 22 seconds West for a distance of 679.95 feet to the beginning point of a spiral curve,

THENCE with a spiral curve to the right (clockwise) having a beginning radius of 1,258.80 feet, a total central angle of 100 degrees, 45 minutes, 03 seconds, a central angle of spiral of 14 degrees, 05 minutes, 56 seconds, spiral tangent of 169.94 feet, and a chord of South 59 degrees, 25 minutes, 14 seconds West for a distance of 493.26 feet to the point of transition from spiral curve to equal radius curve;

THENCE with equal radius curve to the right (clockwise) having an arc length of 1,335.94 feet, a radius of 1,055.00 feet, a central angle of 72 degrees, 33 minutes, 11 seconds, and a chord of North 75 degrees, 01 minutes, 06 seconds West for a distance of 1,248.45 feet to the point of transition from equal radius curve to spiral curve;

THENCE with a spiral curve to the right (clockwise) having an ending radius of 1,258.80 feet, a total central angle of 100 degrees, 45 minutes, 03 seconds, a central angle of spiral of 14 degrees, 05 minutes, 56 seconds, spiral tangent of 169.94 feet, and a chord of North 29 degrees, 27 minutes, 25 seconds West for a distance of 493.26 feet to the end point of spiral curve;

THENCE North 24 degrees, 38 minutes, 34 seconds West for a distance of 447.21 feet to a point located on the Southeastern boundary line of the Volunteer Army Ammunition Plant property known as Area "A";

THENCE North 47 degrees, 26 minutes, 19 seconds East for a distance of 210.20 feet along the Southeastern boundary line of the Volunteer Army Ammunition Plant property known as Area "A";

THENCE South 24 degrees, 38 minutes, 34 seconds East for a distance of 511.88 feet to the point of spiral curve;

THENCE with a spiral curve to the left (counter clockwise) having a beginning radius 1,058.80 feet, a total central angle of 100 degrees, 45 minutes, 03 seconds, central spiral angle 14 degrees, 05 minutes, 56 seconds, spiral tangent of 145.21 feet, and a chord of South 29 degrees, 12 minutes, 38 seconds East for a distance of 444.21 feet to the point of transition from spiral curve to equal radius curve;

THENCE with a curve to the left (counter clockwise) an arc distance of 1,082.68 feet, an equal radius of 855.00 feet, a central angle of 72 degrees, 33 minutes, 11 seconds, and a chord of South 75 degrees, 01 minutes, 06 seconds East for a distance of 1,011.78 feet to the point of transition from equal radius curve to spiral curve;

THENCE with a spiral curve to the left (counter clockwise) having an ending radius 1,058.80 feet, a total central angle of 100 degrees, 45 minutes, 03 seconds, central spiral angle 14 degrees, 05 minutes, 56 seconds, spiral tangent of 145.21 feet, and a chord of North 59 degrees, 10 minutes, 25 seconds East for a distance of 444.21 feet to the end point of spiral curve;

THENCE North 54 degrees, 36 minutes, 22 seconds East for a distance of 679.95 feet to a point;

THENCE South 35 degrees, 23 minutes, 38 seconds East for a distance of 200.00 feet to the POINT OF BEGINNING.

Said portion of road way easement for the Volunteer Ordnance Connector Road herein described contains 15.192 acres, more or less.

VOLUNTEER ORDNANCE CONNECTOR ROAD
LOCATION TWO

Subject to a road way easement for the Volunteer Ordnance Connector Road, 200.00 feet in width being more particularly described as follows:

COMMENCING at a corner which is the point of beginning of the property described as ENCLOSURE "A";

THENCE South 22 degrees, 55 minutes, 30 seconds East for a distance of 210.42 feet along the boundary line of the ENCLOSURE "A" property to a point;

THENCE South 56 degrees, 20 minutes, 42 seconds West for a distance of 1306.96 feet along the boundary line of the ENCLOSURE "A" property to a point located on the Eastern margin of the Volunteer Ordnance Connector Road, said point marks the POINT OF BEGINNING;

THENCE South 18 degrees, 13 minutes, 09 seconds East for a distance of 831.42 feet along the Eastern margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the left (counter clockwise) along the Eastern margin of the Volunteer Ordnance Connector Road an arc distance of 551.75 feet, a radius of 854.93 feet, a central angle of 36 degrees, 58 minutes, 39 seconds, and a chord of South 36 degrees, 42 minutes, 28 seconds East for a distance of 542.23 feet to the point of tangent;

THENCE South 55 degrees, 11 minutes, 47 seconds East for a distance of 400.75 feet along the Eastern margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the right (clockwise) along the Eastern margin of the Volunteer Ordnance Connector Road an arc distance of 687.51 feet, a radius of 1,054.93 feet, a central angle of 37 degrees, 20 minutes, 25 seconds, and a chord of South 36 degrees, 31 minutes, 35 seconds East for a distance of 675.41 feet to the point of tangent;

THENCE South 17 degrees, 51 minutes, 22 seconds East for a distance of 513.52 feet along the Eastern margin of the Volunteer Ordnance Connector Road to the point located on the ENCLOSURE "A" boundary line;

THENCE South 30 degrees, 59 minutes, 37 seconds West for a distance of 265.61 feet along the ENCLOSURE "A" boundary line to a point located on the Western margin of the Volunteer Ordnance Connector Road;

THENCE North 17 degrees, 51 minutes, 22 seconds West a distance of 688.30 feet along the Western margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the left (counter clockwise) along the Western margin of the Volunteer Ordnance Connector Road an arc distance of 557.17 feet, having a radius of 854.93 feet, a central angle of 37 degrees, 20 minutes, 25 seconds, and a chord of North 36 degrees, 31 minutes, 35 seconds West, for a distance 547.36 feet to the point of tangent;

THENCE North 55 degrees, 11 minutes, 47 seconds West a distance of 400.75 feet along the Western margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the right (clockwise) along the Western margin of the Volunteer Ordnance Connector Road an arc distance of 680.83 feet, having a radius of 1054.93 feet, a central angle of 36 degrees, 58 minutes, 38 seconds, and a chord of North 36 degrees, 42 minutes, 28 seconds West, for a distance of 669.07 feet to the point of tangent;

THENCE North 18 degrees, 13 minutes, 09 seconds West a distance of 1221.89 feet along the Western margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the left (counter clockwise) along the Western margin of the Volunteer Ordnance Connector Road an arc distance of 847.01 feet, having a radius of 1045.95 feet, a central angle of 46 degrees, 23 minutes, 54 seconds, and a chord of North 41 degrees, 25 minutes, 06 seconds West, for a distance of 824.04 feet to the point of tangent;

THENCE North 64 degrees, 37 minutes, 03 seconds West a distance of 1481.60 feet along the Western margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the right (clockwise) along the Western margin of the Volunteer Ordnance Connector Road an arc distance of 514.53 feet, having a radius of 689.76 feet, and a central angle of 42 degrees, 44 minutes, 24 seconds, and a chord of North 43 degrees, 14 minutes, 51 seconds West, for a distance of 502.68 feet to the point of tangent;

THENCE North 21 degrees, 52 minutes, 39 seconds West a distance of 391.37 feet along the Western margin of the Volunteer Ordnance Connector Road to a point located on the Southeastern margin of Tennessee State Highway #58;

THENCE with a curve to the right (clockwise) along the Southeastern margin of Highway 58 an arc distance of 200.12 feet, having a radius of 5872.58 feet, a central angle of 01 degrees, 57 minutes, 09 seconds, and a chord of North 66 degrees, 13 minutes, 42 seconds East, for a distance of 200.11 feet to a point located on the Eastern margin of the Volunteer Ordnance Connector Road;

THENCE South 21 degrees, 52 minutes, 39 seconds East a distance of 397.98 feet along the Eastern margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the left (counter clockwise) along the Eastern margin of the Volunteer Ordnance Connector Road an arc distance of 365.34 feet, having a radius of 489.76 feet, a central angle of 42 degrees, 44 minutes, 24 seconds, and a chord of South 43 degrees, 14 minutes, 51 seconds East, for a distance of 356.93 feet to the point of tangent;

THENCE South 64 degrees, 37 minutes, 03 seconds East a distance of 1481.60 feet along the Eastern margin of the Volunteer Ordnance Connector Road to the point of curvature;

THENCE with a curve to the right (clockwise) along the Eastern margin of the Volunteer Ordnance Connector Road an arc distance of 1008.98 feet, having a radius of 1245.95 feet, a central angle of 46 degrees, 23 minutes, 54 seconds and a chord of South 41 degrees, 25 minutes, 04 seconds East, for a distance of 981.60 feet to the point of tangent;

THENCE South 18 degrees, 13 minutes, 09 seconds East a distance of 390.47 feet along the Eastern margin of the Volunteer Ordnance Connector Road to POINT OF BEGINNING;

Said portion of road way easement for the Volunteer Ordnance Connector Road herein described contains 30.805 acres, more or less.

CEMETERY "5"

Subject to any existing cemetery known as Cemetery "5" as per survey by Arcadis, Geraghty, & Miller entitled Volunteer Army Ammunition Plant Boundary Surveys, dated September 15, 1999, said cemetery being more particularly described as follows:

COMMENCING at a concrete monument stamped AGM 173 at Tennessee State Grid Coordinates of North=276,958.188 and East=2,223,747.951;

THENCE North 62 degrees, 09 minutes, 19 seconds East for a distance of 9,209.01 feet to the POINT OF BEGINNING;

THENCE North 03 degrees, 10 minutes, 49 seconds West for a distance of 84.38 feet to a point;

THENCE South 86 degrees, 10 minutes, 18 seconds East for a distance of 59.83 feet to a point;

THENCE South 03 degrees, 06 minutes, 58 seconds East for a distance of 68.42 feet to a point;

THENCE South 78 degrees, 30 minutes, 46 seconds West for a distance of 59.94 feet to the POINT OF BEGINNING;

Said Cemetery "5" herein described contains 0.104 acres or 4,534 square feet, more or less.

RIGHT OF ACCESS TO CEMETERY "5"

Right of Access to Cemetery "5" as per survey by Arcadis, Geraghty, & Miller entitled Volunteer Army Ammunition Plant Boundary Surveys, dated September 15, 1999, being more particularly described as follows:

COMMENCING at a concrete monument stamped AGM 173 at Tennessee State Grid Coordinates of North=276,958.188 and East=2,223,747.951;

THENCE North 61 degrees, 21 minutes, 57 seconds East for a distance of 9,323.34 feet to the POINT OF BEGINNING;

THENCE North 03 degrees, 06 minutes, 58 seconds West for a distance of 85.78 feet to a point;

THENCE North 65 degrees, 27 minutes, 41 seconds East for a distance of 10.74 feet to a point;

THENCE South 03 degrees, 06 minutes, 58 seconds East for a distance of 90.93 feet to a point;

THENCE North 86 degrees, 10 minutes, 18 seconds West for a distance of 10.07 feet to the POINT OF BEGINNING.

TVA EASEMENT, LOCATION ONE

Subject to a TVA Electrical Transmission Line Easement, 150.00 feet in width known as the TVA Main Line Easement being more particularly described as follows:

COMMENCING at a point where the Southeastern margin of Tennessee State Highway 58 and the Northeastern margin of the Volunteer Ordnance Connector Road intersect;

THENCE South 21 degrees, 52 minutes, 39 seconds East for a distance of 107.39 feet along the Northeastern margin of the Volunteer Ordnance Connector Road to a point located on the Northwestern margin of the TVA Main Line Easement, said point marks the POINT OF BEGINNING;

THENCE South 21 degrees, 52 minutes, 39 seconds East for a distance of 150.37 feet along the Northeastern margin of the Volunteer Ordnance Connector Road to a point located on the Southeastern margin of the TVA Main Line Easement;

THENCE South 73 degrees, 05 minutes, 51 seconds West for a distance of 200.77 feet along the Southeastern margin of the TVA Main Line Easement to a point located on the Southwestern margin of the Volunteer Ordnance Connector Road;

THENCE North 21 degrees, 52 minutes, 39 seconds West for a distance of 150.57 feet along the Southwestern margin of the Volunteer Ordnance Connector Road to a point located on the Northwestern margin of the TVA Main Line Easement;

THENCE North 73 degrees, 06 minutes, 51 seconds East for a distance of 200.77 feet along the Northwestern margin of the TVA Main Line Easement to the POINT OF BEGINNING.

Said portion of the TVA Main Line Easement herein described contains 0.691 acres or 30,113 square feet, more or less.

TVA EASEMENT, LOCATION TWO

Subject to a TVA Electrical Transmission Line Easement, 150.00 feet in width known as the TVA Main Line Easement being more particularly described as follows:

BEGINNING at the same POINT OF BEGINNING as stated in the above ENCLOSURE "A" description, said point is located on the Northern margin of the TVA Main Line Easement:

THENCE South 68 degrees, 02 minutes, 50 seconds East for a distance of 4,787.15 feet along the Northern margin of the Northern margin of the TVA Main Line Easement to a point;

THENCE North 78 degrees, 56 minutes, 47 seconds East for a distance of 5,960.60 feet along the Northern margin of the Northern margin of the TVA Main Line Easement to a point;

THENCE North 65 degrees, 30 minutes, 13 seconds East for a distance of 1,031.38 feet along the Northern margin of the Northern margin of the TVA Main Line Easement to a point located on the Northeastern boundary line of the property described above as ENCLOSURE "A";

THENCE South 55 degrees, 57 minutes, 06 seconds East for a distance of 81.91 feet along the Northeastern boundary line of the ENCLOSURE "A" property to a point;

THENCE South 55 degrees, 56 minutes, 32 seconds East for a distance of 93.92 feet along the Northeastern boundary line of the ENCLOSURE "A" property to a point located on the Northern boundary line of Tract 11, U.T.C. Parcel and the Southern margin of the TVA Main Line Easement;

THENCE South 65 degrees, 30 minutes, 13 seconds West for a distance of 1,140.78 feet along the Southern margin of the TVA Main Line Easement to a point;

THENCE South 78 degrees, 56 minutes, 47 seconds West for a distance of 6,022.72 feet along the Southern margin of the TVA Main Line Easement to a point;

THENCE North 68 degrees, 02 minutes, 50 seconds West for a distance of 4,683.82 feet along the Southern margin of the TVA Main Line Easement to a point located on the Northwestern boundary line of the ENCLOSURE "A" property;

THENCE North 57 degrees, 20 minutes, 42 seconds East for a distance of 0.95 feet along the Northwestern boundary line of the ENCLOSURE "A" property to a point;

THENCE North 22 degrees, 55 minutes, 30 seconds West for a distance of 210.42 feet along the Northwestern boundary line of the ENCLOSURE "A" property to the POINT OF BEGINNING.

Said portion of the TVA Main Line Easement herein described contains 40.675 acres, more or less.

TVA EASEMENT, LOCATION THREE

Subject to a TVA Electrical Transmission Line Easement, 200.00 feet in width known as the TVA Eastern Line Easement being more particularly described as follows:

COMMENCING at a point located on the Eastern boundary line of the property described as ENCLOSURE "A" said point is also the Southeast corner of Tract 11, U.T.C. Parcel;

THENCE South 82 degrees, 34 minutes, 00 seconds West for a distance of 524.52 feet along the Southern boundary line of Tract 11, U.T.C. Parcel to a point located on the Eastern margin of the TVA Eastern Line Easement, said point marks the POINT OF BEGINNING;

THENCE South 08 degrees, 12 minutes, 45 seconds East for a distance of 2,401.30 feet along the Eastern margin of the TVA Eastern Line Easement to a point located on the Southeastern boundary line of the ENCLOSURE "A" property;

THENCE South 28 degrees, 12 minutes, 27 seconds West for a distance of 0.90 feet along the Southeastern boundary line of the ENCLOSURE "A" property to a point;

THENCE South 28 degrees, 17 minutes, 40 seconds West for a distance of 92.48 feet along the Southeastern boundary line of the ENCLOSURE "A" property to a point;

THENCE South 28 degrees, 13 minutes, 41 seconds West for a distance of 158.75 feet along the Southeastern boundary line of the ENCLOSURE "A" property to a point;

THENCE South 28 degrees, 14 minutes, 55 seconds West for a distance of 84.39 feet along the Southeastern boundary line of the ENCLOSURE "A" property to a point located on the Western margin of the TVA Eastern Line Easement;

THENCE North 08 degrees, 12 minutes, 45 seconds West for a distance of 2,674.66 feet along the Western margin of the TVA Eastern Line Easement to a point located on the Southern boundary line of Tract 11, U.T.C. Parcel;

THENCE North 82 degrees, 34 minutes, 00 seconds East for a distance of 200.02 feet along the Southern boundary line of Tract 11, U.T.C. Parcel to the POINT OF BEGINNING.

Said portion of the TVA Eastern Line Easement herein described contains 11.653 acres, more or less.

EASTSIDE UTILITY DISTRICT
WATERLINE EASEMENT

Subject to an Eastside Utility District Waterline Easement 30.00 feet in width being more particularly described as follows:

BEGINNING at a point in the Eastern boundary line of the Volunteer Army Ammunition Plat (VAAP) Area "A", said point having coordinates of North=272,201.04 and East=2,230,268.31, coordinates based on NAD 83, Tennessee State Grid Coordinate System and referenced to the Chattanooga-Hamilton County Monument Network (CHAM) System. All bearings and distances described herein are based on said system.

THENCE South 39 degrees, 56 minutes, 45 seconds East for a distance of 83.10 feet to a point;

THENCE South 32 degrees, 55 minutes, 51 seconds East for a distance of 126.95 feet to a point;

THENCE South 13 degrees, 14 minutes, 36 seconds East for a distance of 59.69 feet to a point;

THENCE South 07 degrees, 57 minutes, 20 seconds West for a distance of 122.71 feet to a point;

THENCE South 14 degrees, 35 minutes, 06 seconds West for a distance of 112.63 feet to a point;

THENCE South 21 degrees, 05 minutes, 26 seconds West for a distance of 141.29 feet to a point;

THENCE South 05 degrees, 18 minutes, 44 seconds West for a distance of 50.79 feet to a point;

THENCE South 03 degrees, 49 minutes, 16 seconds East for a distance of 375.70 feet to a point;

THENCE South 04 degrees, 51 minutes, 03 seconds East for a distance of 160.92 feet to a point;

THENCE South 02 degrees, 59 minutes, 42 seconds East for a distance of 84.74 feet to a point;

THENCE South 06 degrees, 36 minutes, 44 seconds East for a distance of 99.02 feet to a point;

THENCE South 09 degrees, 02 minutes, 46 seconds East for a distance of 73.67 feet to a point;

THENCE South 63 degrees, 55 minutes, 53 seconds East for a distance of 57.33 feet to a point;

THENCE South 38 degrees, 43 minutes, 12 seconds East for a distance of 36.85 feet to a point;

THENCE South 46 degrees, 41 minutes, 34 seconds East for a distance of 100.80 feet to a point;

THENCE South 60 degrees, 01 minutes, 38 seconds East for a distance of 167.18 feet to a point;

THENCE South 50 degrees, 21 minutes, 44 seconds East for a distance of 224.99 feet to a point;

THENCE South 47 degrees, 41 minutes, 21 seconds East for a distance of 376.42 feet to a point;

THENCE South 49 degrees, 25 minutes, 58 seconds East for a distance of 228.47 feet to a point;

THENCE South 47 degrees, 26 minutes, 48 seconds East for a distance of 248.68 feet to the POINT OF ENDING, said point of ending located North 78 degrees, 28 minutes, 58 seconds East for a distance of 186.96 feet from an existing concrete monument stamped VO-195, said concrete monument is located on the Southeast boundary line of the Volunteer Army Ammunition Plant (VAAP) property.

Said Eastside Utility District Waterline Easement herein described contains 2.019 acres, more or less.

ELECTRIC POWER BOARD EASEMENT

Subject to a portion of an Electric Power Board Easement 75.00 feet in width, being more particularly described as follows:

BEGINNING at the Southwest corner of the ENCLOSURE "A" property;

THENCE North 00 degrees, 58 minutes, 21 seconds East for a distance of 132.67 feet along the Southwestern boundary line of the ENCLOSURE "A" property to a point located on the Northern margin of the Electric Power Board Easement;

THENCE North 80 degrees, 33 minutes, 01 seconds East for a distance of 15.41 feet along the Northern margin of the Electric Power Board Easement to a point located on the Eastern margin of the Electric Power Board Easement;

THENCE South 13 degrees, 49 minutes, 23 seconds East for a distance of 113.39 feet along the Eastern margin of the Electric Power Board Easement to a point located on the Southern boundary line of the ENCLOSURE "A" property;

THENCE South 60 degrees, 37 minutes, 15 seconds West for a distance of 51.12 feet along the Southern boundary line of the ENCLOSURE "A" property to the POINT OF BEGINNING.

Said portion of the Electric Power Board Easement herein described contains 3,798 square feet, more or less.

COLONIAL PIPELINE EASEMENT

Subject to a Colonial Pipeline Easement, 30.00 feet in width, being more particularly described as follows.

COMMENCING at a point marking the Southwest corner of the property described as ENCLOSURE "A" ;

THENCE North 00 degrees, 58 minutes, 21 seconds East for a distance of 907.22 feet along the Southwestern boundary of the ENCLOSURE "A" property to a point,
THENCE North 24 degrees, 48 minutes, 16 seconds East for a distance of 249.57 feet along the Southwestern boundary of the ENCLOSURE "A" property to a point located on the Southern margin of the Colonial Pipe Easement, said point marks the POINT OF BEGINNING,

THENCE North 24 degrees, 48 minutes, 16 seconds East for a distance of 57.91 feet along the Southwestern boundary of the ENCLOSURE "A" property to a point located on the Northern margin of the Colonial Pipe Easement;

THENCE North 56 degrees, 00 minutes, 27 seconds East for a distance of 3,381.00 feet along the Northern margin of the Colonial Pipe Easement to a point,

THENCE North 57 degrees, 53 minutes, 26 seconds East for a distance of 4,411.86 feet along the Northern margin of the Colonial Pipe Easement to a point;

THENCE North 70 degrees, 11 minutes, 21 seconds East for a distance of 5,007.70 feet along the Northern margin of the Colonial Pipe Easement to a point located on the Eastern boundary line of the ENCLOSURE "A" property;

THENCE South 28 degrees, 14 minutes, 55 seconds West for a distance of 21.60 feet along the Eastern boundary line of the ENCLOSURE "A" property to a point;

THENCE South 28 degrees, 07 minutes, 36 seconds West for a distance of 23.23 feet along the Eastern boundary line of the ENCLOSURE "A" property to a point located on the Southern margin of the Colonial Pipe Easement;

THENCE South 70 degrees, 11 minutes, 21 seconds West for a distance of 4,971.15 feet along the Southern margin of the Colonial Pipe Easement to a point,

THENCE South 57 degrees, 53 minutes, 26 seconds West for a distance of 4, 408.14 feet along the Southern margin of the Colonial Pipe Easement to a point;

THENCE South 56 degrees, 00 minutes, 27 seconds West for a distance of 3,430.03 feet along the Southern margin of the Colonial Pipe Easement to the POINT OF BEGINNING.

Said Colonial Pipeline Easement herein described contains 8.819 acres, more or less.

FINDING OF SUITABILITY TO TRANSFER

Approximately 2800 Acres for Conveyance to the City of Chattanooga/Hamilton County and the University of Tennessee at Chattanooga

VOLUNTEER ARMY AMMUNITION PLANT

CHATTANOOGA, TENNESSEE

9 September 2003

Environmental Management Office
Volunteer Army Ammunition Plant
Chattanooga, Tennessee

Buildings/Features for the 100-Acre Parcel G

- There are no buildings/facilities currently located on this parcel.

Buildings/Features for the 200-Acre Parcel F

- There are no buildings/facilities currently located on this parcel.

3. ENVIRONMENTAL CONDITION OF THE PROPERTY

A determination of the environmental condition of the three parcels referenced above has been made based on the Final Confirmatory Sampling (CS) Report for the Eastern Magazine Area and Surrounding Property (Shaw Environmental and Infrastructure, Inc., 2003) and the final Corrective Measures Study (CMS) Report for the New Landfill Burning Ground Area (Tetra Tech/MACTEC, 2003). Sections of the CS Report also contain preliminary findings of the Environmental Baseline Survey (EBS) as they pertain to the Eastern Magazine Area and surrounding property (Plexus Scientific, 2003). The information provided in the reports is a result of a complete search of agency files; an assessment of adjacent facilities; environmental sites; buildings in and around the parcels; compilation of previous visual site inspections and historical interviews documenting site use; an investigation specific to the determination of the nature and extent of groundwater contamination, if any, under the parcels that included sampling of and compilation of historical data from existing groundwater monitoring wells, as well as new data from 11 new bedrock wells in the vicinity of the 2500-acre parcel. Soil along the drainage ditches outside the magazines and in various sites at the New Landfill/ Burning Ground and Parcel G were also sampled. A removal action was completed previously (1999) at the burning ground and is documented in the CMS Report.

All environmental concerns addressed in the final CS Report for the Eastern Magazine Area and surrounding area have been resolved by additional reviews, interviews, and by interim actions to remove contaminated sources (TNT and lead products from burning cage).

Areas of Interest Within the Approximately 2500 Acres

Grey Pond – Approximately 2.5 Acres: Identified as barren area on 1999 aerial photograph. EPA and TDEC concurred with no further action as recommended in Draft RCRA Facility Assessment Report Redwater Ash Handling and Miscellaneous Areas of Concern (July 2002).

Commander's Garden – Approximately 2 Acres: Identified as barren area with surface disturbance on 1999 photograph. EPA and TDEC concurred with no further action as recommended in Final RCRA Facility Report Areas of Concern 9, 10, 10b and Salvage Yard (June 2002).

Sanitary Landfill – Approximately 3.2 Acres: This Sanitary Landfill is not required to be addressed under the EPA RCRA Order or the State Superfund (CERCLA) program because of its sanitary nature. The landfill was constructed in 1969 and 1970 for disposal of onsite office and kitchen waste material as well as noncontaminated/nonhazardous industrial waste material. In 1991 the facility was designated as a Class II landfill by Tennessee Department of Environment and Conservation. Landfill was closed with a cap in 1996 and a certificate of closure submitted to TDEC director of the Division of Solid Waste Management. Final inspection and acceptance occurred in 1996. The

maintenance, inspection and monitoring per post-closure plan (Consolidated Technologies, Inc., 1994) is being performed by the Army.

Redwater Ash Landfill – Approximately 2.5 Acres: Suspected area of high PAH and lead were sampled. Recommendation for no further action in the Final Confirmatory Sampling (CS) Report for the Eastern Magazine Area and surrounding property (Shaw E&I, 2003) was concurred with by EPA and TDEC.

Parcel F – Approximately 200 Acres: The parcel is located in a wooded buffer area in the eastern section of the Eastern Magazine Area. There was no previous production or burial occurred in this area. The preliminary finding of the EBS and CS Report did not identify any environmental concerns and therefore no action is required in this parcel.

Parcel G – Approximately 100 Acres: The parcel is located in a wooded buffer area in the northern section of VOAAP. There was no previous production or burial occurred in this area. The preliminary finding of the EBS and CS Report did not identify any environmental concerns and therefore no action is required in this parcel.

3.1 Environmental Condition of Property Categories

The Department of Defense (DOD) Environmental Condition of Property (ECP) category for the Property is as follows: (See Paragraph 2 for list of buildings/facilities associated with the Property.)

ECP Category 4: 2500-acre parcel – ECP Category 4: Area where release, disposal, and/or migration of hazardous material have occurred and all removal or remedial action to protect human health and the environment have been taken.

ECP Category 1: 100-acre parcel – ECP Category 1: Areas where no release, disposal of hazardous substances or petroleum products has occurred. (Including no migration of these substances from adjacent areas.)

ECP Category 1: 200-acre parcel - ECP Category 1: Areas where no release, disposal of hazardous substances or petroleum products has occurred. (Including no migration of these substances from adjacent areas.)

A description of the Property and a definition of the DOD ECP Categories are provided at Enclosure 2.

3.2 Storage, Release, or Disposal of Hazardous Substances

Hazardous substances were stored for one year or more in excess of the 40 CFR Part 373 reportable quantities on the 2500-acre Property proposed for transfer. All hazardous substance storage operations have been terminated on the property. Removal actions were completed in 1999 and 2003 and are documented in final CMS Report. No further action is required for these releases. Notification is reported in Table 2 – Notification of Hazardous Substance Storage, Release or Disposal (Enclosure 3).

3.3 Petroleum and Petroleum Products

3.3.1 Storage, Release, or Disposal of Petroleum Products (not in underground or aboveground storage tanks)

There is no evidence that any petroleum or petroleum products in excess of 55 gallons at one time were stored, released or disposed of on the Property as a result of non-UST/AST petroleum activities. Accordingly, there is no need for any notification of non-UST/AST petroleum product storage, release, or disposal.

3.3.2 Current Underground and Aboveground Storage Tanks (UST/AST)

There is no evidence that petroleum products were stored in underground or aboveground storage tanks on the Property. Accordingly, there is no need for any notification of any UST/AST petroleum product storage, release, or disposal.

3.4 Polychlorinated Biphenyls (PCB) Equipment

There are no PCB containing transformers or other PCB containing equipment remaining on the Property and no evidence of unremediated releases from PCB equipment.

3.5 Asbestos

There are no remaining buildings or structures with asbestos-containing materials on the Property. Asbestos on piping in Building 767 was removed in 2002 in accordance with regulatory requirements.

3.6 Lead-Based Paint (LBP)

Based on the age of the buildings (constructed prior to 1978), the following buildings located on the Property are presumed to contained lead-based paint: Buildings (Magazines) 101 through 200; Building 767, Burning Ground Office; and Building 770, Steam Jenny Building. The deed will include the lead-based paint warning and covenant provided in Environmental Protection Provisions (Enclosure 6). The samples collected outside the magazines did not detect lead.

3.7 Radiological Materials

There is no evidence that the radioactive material or sources were used or stored on the Property.

3.8 Radon

A radon survey was conducted at VOAAP from October 1990 to October 1991. The survey was accomplished under U.S. Army protocol as prescribed by the U.S. Army Environmental Hygiene Agency (USAEHA). No buildings on the Property were part of the USAEHA radon survey.

3.9 Unexploded Ordnance

Based on a review of existing records and available information, no land on the 2800-acre parcel proposed for transfer is known to contain unexploded ordnance.

3.10 Groundwater

The overburden and upper bedrock water-bearing zones characterized by the new and existing wells in the vicinity of the three parcels do not constitute an "aquifer" and are not adequate as a drinking water supply in Tennessee due to the critically low yield. Yields are considerably lower than the minimum requirements of the State of Tennessee for classification as a drinking water supply, which stipulates that yields shall be at a minimum of 1.0 gallon per minute and sustainable for a 24 hour period (TDEC, Division of Water Pollution Control, Chapter 1200-4-3).

There is a potential for contaminated groundwater to migrate from adjacent Army property to the parcels; therefore, ground water use restrictions will be placed on the property consistent with other property transfers at Volunteer. The deed will include a groundwater restriction provided in the Environmental Protection Provisions (Enclosure 6).

4. ADJACENT HAZARDOUS CONDITIONS

There are no buildings/facilities adjacent to the 2500-acre parcel. The New Acid Facility with all of its buildings and facilities are located within approximately 150 yards of the 100-acre parcel (G). Drainage features located on the north and east side of the New Acid Facility drains north onto the 100-acre parcel (Parcel G). These facilities should have no adverse effect on the transfer of the subject property. Groundwater issues on adjacent properties are discussed in Section 3.10.

5. REMEDIATION

There is an EPA, Region IV, RCRA Administrative Order, effective December 2001, applicable to the entire VOAAP site including the properties being transferred. Additionally, TDEC has a Defense State Memorandum of Agreement to provide oversight activities and ensure remediation is conducted according to State Superfund regulations. All necessary remediation activities on the properties required by the Order and applicable State regulations are complete.

6. REGULATORY/PUBLIC COORDINATION

The Environmental Protection Agency, Region IV and Tennessee Department of Environmental and Conservation were provided a copy of the Draft FOST on July 10, 2003. The public was notified of the initiation of this FOST through a Public Notice for Comment that was placed in three local newspapers 18 and 21 July 2003 for three days. There was a public comment period that began on 21 July 2003 and ended at the close of business on 19 August 2003. All comments received are incorporated in Enclosure 4. The Army's response to comments received for this FOST are incorporated in Enclosure 5.

7. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE AND CONSISTENCY WITH LOCAL REUSE PLAN

The environmental impacts associated with proposed transfer of the property have been analyzed in accordance with the NEPA. The results of this analysis are documented in the Final Proposed

Disposal, Environmental Impact Statement (FEIS) prepared by the General Services Administration (GSA) dated July 1999, and the EIS Record of Decision (ROD) dated 30 August 1999. Any encumbrances or conditions identified in such analysis as necessary to protect human health or the environment have been incorporated into the FOST. In addition, the proposed transfer is consistent with the intended reuse of the property as set forth in the Hamilton County/City of Chattanooga Reuse Plan (Preferred Alternatives) May 19, 2000.

8. ENVIRONMENTAL PROTECTION PROVISIONS

On the basis of the above results from the EBS and other environmental studies and in consideration of the intended use of the property, certain terms and conditions are required for the proposed transfer. These terms and conditions are set forth in the attached Environmental Protection Provisions and will included in the deed (Enclosure 6).

9. FINDINGS OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that Department of Defense requirements to reach a finding of suitability to transfer the Property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions (Enclosure 6). All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA Section 120(h)(3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain:

- The covenant under CERCLA § 120(h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substance remaining on the Property has been taken before the date of transfer.
- The covenant under CERCLA § 120(h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the Property shall be conducted by the United States.
- The clause as required by CERCLA § 120(h)(3)(A)(iii) granting the United States access to the Property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under the CERCLA Section (120(h) and DOD FOST Guidance, notification of hazardous substance activities and petroleum product activities shall be provided in the deed. See Table 2, Notification of Hazardous Substance Storage, Release, or Disposal (Enclosure 3).

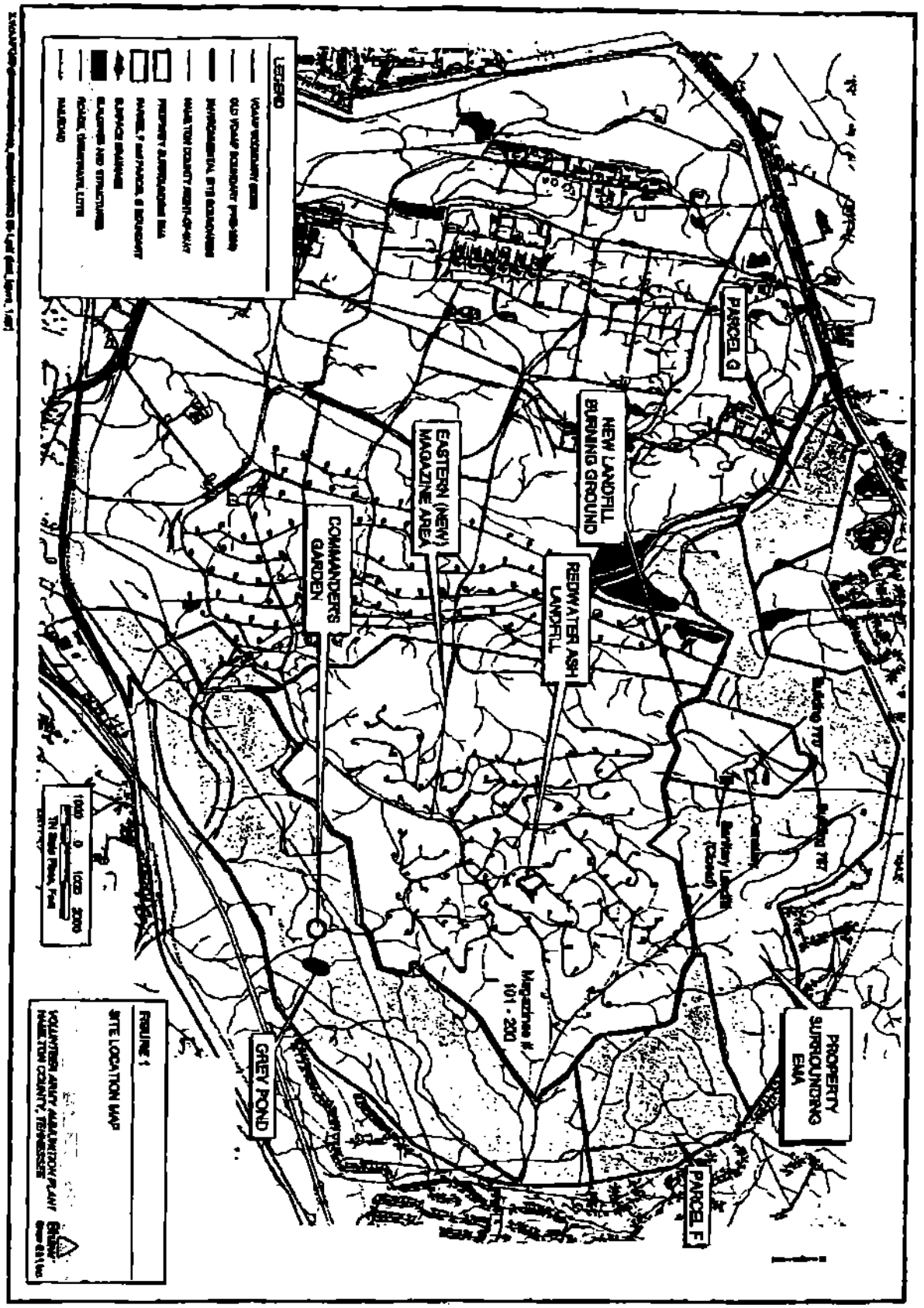
Arnold L Bohannon

for GLYNN D. RYAN
Chief, Atlanta Field Office
Department of the Army
Base Realignment and Closure

6 Enclosures
Encl 1 – Site Maps of Property
Encl 2 – Table 1, Description of Property
Encl 3 – Table 2, Notification of Hazardous Substance Storage, Release, or Disposal
Encl 4 – Regulatory/Public Comments
Encl 5 – Army Response to Comments
Encl 6 – Environmental Protection Provisions

Enclosure 1

SITE MAP OF PROPERTY


LEGEND
PARCEL G
NEW LANDFILL BURNING GROUND
EASTERN (NEW) MAGAZINE AREA
COMMANDERS GARDEN
REDWATER ASH LANDFILL
GREY POND
PARCEL F
PROPERTY SURROUNDING EMA
Magazines # 101 - 200
Burning Ground (Closed)
1000 0 1000 2000
FIGURE 1
SITE LOCATION MAP
VOLUNTEER ARMY AMMUNITION PLANT
HAMILTON COUNTY, TENNESSEE

Enclosure 2

TABLE 1 – DESCRIPTION OF PROPERTY

Building Number and Property Description	EBS Parcel Designation	Condition Category	Remedial Actions
Buildings 101 thru 200, Developed and Wooded Tract of Land	2500 Acres for the City of Chattanooga/Hamilton County	ECP CAT 4	Interim removal action at burning cage. RCRA closure of soils at burning ground.
Wooded Tract of Land (Safety Buffer Area)	100 Acres (Safety buffer area along northern boundary of VOAAP) for Hamilton County	ECP Cat 1	None.
Wooded Tract of Land (Safety Buffer Area)	200 Acres (Safety buffer area along eastern boundary of VOAAP) for the University of Tennessee at Chattanooga	ECP Cat 1	None.

Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred. (Including no migration of these substances from adjacent areas.)

Category 4: Area where release, disposal, and/or migration of hazardous substance have occurred, and all removal or remedial actions to protect human health and the environment have been taken.

Enclosure 3

TABLE 2 – NOTIFICATION OF HAZARDOUS SUBSTANCE STORAGE, RELEASE, OR DISPOSAL

Building Number and Property Description	Name of Hazardous Materials	Date of Storage, Release, or Disposal	Remedial Actions
Magazines 101 thru 200	DOD 1.1 High Explosive [Primarily Trinitrotoluene (TNT)] Chemical Abstracts Service Registry No. (CASRN) 118-96-7 Chemical Abstracts Service Registry No. (CASRN) 7790-98-9 (Ammonium Perchlorate)	Storage 1942-1945: 205,903 Tons 1951-1957: 71,092 Tons 1965-1977: 460,610 Tons 1987-1999: Missiles	Removal of all TNT material from all magazines. 1988) Missiles (1999)
Burning Ground	DOD 1.1 High Explosive [Primarily Trinitrotoluene (TNT)] Chemical Abstracts Service Registry No. (CASRN) 118-96-7	Disposal 1999 Unknown Quantity	RCRA closure of burning ground, 1999. 1,030 tons of contaminated soils removed.
Burning Cage Located on Burning Ground.	DOD 1.1 High Explosive [Primarily Trinitrotoluene (TNT)] Chemical abstracts Service Registry No.(CASRN) 118-96-7 Lead – Chemical Abstracts Service Registry No. 7439-92-1	Disposal 2003 Unknown Quantity	Interim corrective action, 2003. Approximately 30 tons of contaminated soils removed.

NOTE: The information contained in this notice is required under the authority of regulations promulgated under Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) 42 U.S.C. Section 9620(h).

ENCLOSURE C

ENVIRONMENTAL RESTRICTIONS

The Grantor has determined that the portion of the Volunteer Army Ammunition Plant described in Exhibit A is environmentally suitable for transfer to the Grantees and has informed the Grantees of the environmental condition of the property hereby conveyed ("Property"), all as more fully set forth in the Finding of Suitability To Transfer ("FOST"), Exhibit B, which is attached hereto, made a part hereof and consists of 12 pages of text.

(A) NOTICE Regarding Hazardous Substance Activity. Pursuant to 40 CFR 373.2 and Section 120(h) (3) (A) (i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA) (42 U.S.C. §9620(h) (3) (A)(i)), and based upon a complete search of agency files, the United States gives notice that hazardous substances were known to have been stored for one year or more on the Property.

(B) CERCLA Covenant. Grantor warrants that all remedial action necessary to protect human health and the environment has been taken before the date of this conveyance. Grantor warrants that it shall take any additional response action found to be necessary after the date of this conveyance regarding hazardous substances located on the Property on the date of this conveyance.

(1) This covenant shall not apply:

(a) in any case in which Grantees, their successor(s)or assign(s), or any successor in interest to the Property or part thereof is a Potentially Responsible Party (PRP) with respect to the Property immediately prior to the date of this conveyance; or

(b) to the extent but only to the extent that such additional response action or part thereof found to be necessary is the result of an act or failure to act of the Grantees, their successor(s) or assign(s), or any party in possession after the date of this conveyance that either:

(I) results in a release or threatened release of a hazardous substance that was not located on the Property on the date of this conveyance; or

(ii) causes or exacerbates the release or threatened release of a hazardous substance the existence and location of which was known and identified to the applicable regulatory authority as of the date of this conveyance.

(2) In the event Grantees, their successor(s) or assign(s), seek to have Grantor conduct or pay for any additional response action, and, as a condition precedent to Grantor incurring any additional cleanup obligation or related expenses, the Grantees, their successor(s) or assign(s), shall provide Grantor at least 45 days written notice of such a claim and provide credible evidence that:

(a) the associated contamination existed prior to the date of this conveyance; and

(b) the need to conduct any additional response action or part thereof was not the result of any act or failure to act by the Grantees, their successor(s) or assign(s), or any party in possession.

(C) ACCESS. Grantor reserves a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States of America, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable advance written notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation and operation of monitoring wells, pumping wells, and treatment facilities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants.

RESTRICTIVE COVENANTS:

Further, by agreement between the Grantor and Grantees, and consistent with current land use planning, the intended use of the property is for park and recreational use and purposes. Therefore, the Property is conveyed subject to the following restrictive covenants which shall run with the land and shall be binding on all parties having any right, title, or interest in the Property or any part thereof, their heirs, successors-in-title, and assigns, and shall inure to the benefit of each owner thereof, the general public, and the State of Tennessee, the City of Chattanooga, Tennessee and Hamilton County, Tennessee and the respective successors and assigns of such parties. Further, nothing herein in this section shall be interpreted as imposing an obligation or requirement on the Grantor to monitor Grantees or their successors or assignees, use of the property to ensure compliance with the non-residential use and groundwater restrictions herein. If the Grantees, their successors, or assignees wish to change the land use of the Property, then the Grantor and Grantees agree that all costs associated with the change in land use will be borne by the Grantees, their successors and assigns and not the Grantor.

Prior to any part of the Property being used for residential use, such as and including, a residence, domicile, daycare, school, or church, etc., the Grantees, their successors and/or assigns must notify the TDEC and the Army and must demonstrate to the satisfaction of TDEC that any such proposed use will not pose a danger to public health, safety or the environment. Any approval granted by TDEC for the restricted uses shall be in writing, must contain a

reference to this instrument and shall be maintained in TDEC's files and will be effective upon the Grantees' filing such approval at Grantees' expense, at the Register's Office for Hamilton County, Tennessee. The restrictions and conditions benefit the public in general and the area surrounding the property, including lands retained by the Grantor, and are enforceable by the State of Tennessee. The Grantee covenants for itself, its successors and assigns that it shall include and otherwise make legally binding these restrictions in all subsequent lease, transfer or conveyance documents relating to the property.

Restrictions and Conditions: In order to ensure current groundwater quality conditions are maintained, the Grantee covenants for itself, its successors, and assigns not to access or use groundwater underlying the Property. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of CERCLA. The Grantee, for itself, its successors and assigns covenants that it will not undertake nor allow any activity or use of the property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are enforceable by the TDEC, or successor agencies. Any approval granted by TDEC to allow a restricted use or to amend or lift these restrictions and covenants shall be in writing, must contain a reference to this instrument, and shall be filed with the Hamilton County Register of Deeds. Until such time as all Army remediation on Volunteer is complete, to include long-term monitoring, the Army will receive written notice of any such requests to allow a restricted use or amend or lift these restrictions and covenants and the Army shall be given reasonable opportunity to review and provide comment to the regulatory agencies on such requests.

The Grantor reserves for the United States Army and the TDEC a right of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and uses of, to the extent permitted by law, available utilities at reasonable cost to the Grantor or its successors and assigns. Pursuant to this reservation, the United States Army, the TDEC and their officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable notice to the owner and any authorized occupant of the Property) to enter upon the Property and conduct investigations and surveys, to include drillings, test-pitting, borings, data and record compilation, and other activities related to environmental investigation and to carry out remedial or removal actions as required or necessary under applicable authorities, including but not limited to monitoring wells, pumping wells, and treatment. Any such entry, including such activities, responses or remedial actions, shall be coordinated with the Grantees or their successors and assigns and shall be performed in a manner which minimizes interruption with Grantees' activities on the Property. Nothing herein shall be construed as limiting DEC's right of entry, pursuant to any applicable statute, regulation or permit.

The Grantees or their successors and assigns shall not hinder or prevent the United States Army from properly constructing, upgrading, operating, maintaining and monitoring any groundwater treatment facilities or groundwater monitoring network or engage in any activity that will disrupt or hinder required environmental investigation, response action, including remediation, or corrective action or oversight activities. Any such entry, including such activities, responses or remedial actions, shall be coordinated with the Grantees or their successors and assigns and shall

ENCLOSURE D

PRESERVATION COVENANT FOR THE CONVEYANCE OF VOLUNTEER ARMY AMMNUITION PLANT HISTORICAL PROPERTIES

The Grantee covenants for itself, its successors, and assigns and every successor in interest to the property hereby conveyed, or any part thereof, that the real property above described is hereby conveyed subject to the conditions, restrictions, and limitations hereinafter set forth which are covenants running with the land; that the Grantee, its successors, and assigns, covenants and agrees, that in the event that the property is sold or otherwise disposed of, these covenants and restrictions shall be inserted in the instruments of conveyance.

Site 40HA484 and Site 40HA499 at the Volunteer Army Ammunition Plant have been identified as subject to the protection provisions under the National Historic Preservation Act (NHPA) (16 U.S.C. 470). Any ground disturbing activity with the potential to directly or indirectly impact cultural deposits shall be restricted. No disturbance of the ground surface or any other thing shall be undertaken or permitted to be undertaken on these properties that would affect their integrity without the express prior written permission by the Tennessee State Historic Preservation Officer (SHPO), Tennessee Historical Commission, Department of Environment and Conservation, 2941 Lebanon Road, Nashville, Tennessee 37243-0442.

1. The Grantee shall provide boundary identification, with appropriate buffer areas and barriers, to protect the sites from visitors, potential disturbance or any accidental disturbance.

2. Each site will be identified on all project plans for the park as "sensitive areas."

3. No activity will be allowed which by disturbing, altering or otherwise affecting the existing surface or subsurface of the historic sites would be detrimental to the appropriate preservation of the archeological resources therein.

4. The Grantee shall monitor the historic sites and make every reasonable effort to prevent any person from vandalizing or otherwise disturbing these historic properties. The Grantee will follow any recommendation by the SHPO to protect these historic properties. Any such vandalism shall be promptly reported to the SHPO.

5. Representatives of the SHPO shall have the right to inspect the premises from time to time, upon reasonable notice, to determine whether the Grantee is in compliance with the terms of the conveyance documents.

6. These restrictions shall be binding on the Parties hereto, their successors, and assignees in perpetuity; the SHPO may, for good cause, modify or cancel any or all of the foregoing restrictions upon written application of the Grantee, its successors or assignees.

7. The acceptance of the delivery of a Deed conveying title to the property shall constitute conclusive evidence of the agreement of the Grantee to be bound by the conditions, restrictions, and limitations, and to perform the obligations herein set forth.

8. In the event of violation of the above restrictions, the United States of America (USA) or the SHPO may institute a suit to enjoin such violation or for damages by reason of any breach thereof.

9. The failure of the SHPO to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any right or remedy or the use of such right or remedy at any other time. This covenant shall be a binding servitude upon the real property and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that the Grantee agrees to be bound by the foregoing conditions and restrictions and to perform to obligations herein set forth.

10. If proposed protection measures or potential impact of a proposed activity are in question, the SHPO should be contacted for comment. Should the SHPO require, as a condition of granting such permission, the Grantee shall conduct archeological data recovery operations or other activities designed to mitigate the adverse effect of the proposed activity on an historic property that is eligible to be listed on the National Register. The Grantee shall, at its own expense, conduct such an activity in accordance with the Secretary of Interior's Standards and Guidelines for Archeological Documentation and such standards and guidelines as the SHPO may specify. The Grantee will be responsible for the curation activities and associated fees.

11. If the Grantee, its successors or assigns and the SHPO are unable to agree on the proposed protection measures for these sites, the Grantee, its successors or assigns, shall forward all documents relevant to the dispute to the Advisory Council on Historic Preservation (ACHP). The Grantee, its successors or assigns, SHPO, and ACHP shall reach agreement regarding the proposed measures. If such an agreement cannot be reached, the ACHP shall forward all relevant project materials with comments to the General Services Administration (GSA). GSA will consider such comments, and if necessary take action in accordance with the terms and conditions of these covenants.

The Grantee is encouraged to preserve in place and apply these protective provisions to any additional Civil War earthworks sites identified on the property.

2055 East Rio Salado Parkway, Suite 201
Tempe, Arizona 85281
Phone: (480) 967-6752
Fax Number: (480) 966-9422
Web Site: www.netronline.com

HISTORICAL CHAIN OF TITLE REPORT

CHATTANOOGA (VAAP) USARC
6703 BONNY OAKS DRIVE
CHATTANOOGA, TENNESSEE

Submitted to:

ENVIRONMENTAL DATA RESOURCES, INC.
C/O
FMSM ENGINEERS, INC.
1901 Nelson Miller Parkway
Louisville, Kentucky 40223
(502) 212-5000

Attention: Robert Newman

Project No. N06-4830

Tuesday, August 29, 2006

NETR- Real Estate Research & Information hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

CITY OF CHATTANOOGA AND HAMILTON COUNTY, TENNESSEE

The following is the current property legal description:

Being that parcel or tract of land, situated and lying in a portion of the Volunteer Army Ammunition Plant, City of Chattanooga, Hamilton County, State of Tennessee

Assessor's Parcel No: Map 130, Parcel 001

1. HISTORICAL CHAIN OF TITLE

1. WARRANTY DEED:
   - RECORDED: 08-21-1937
   - GRANTOR: Joe A. Chambers
   - GRANTEE: Clara Miller
   - INSTRUMENT: Bk X29, Pg 563

2. WARRANTY DEED:
   - RECORDED: 10-23-1941
   - GRANTOR: Clara Miller
   - GRANTEE: United States of America
   - INSTRUMENT: Bk 827, Pg 29

3. QUIT CLAIM DEED:
   - RECORDED: 03-29-2005
   - GRANTOR: United States of America
   - GRANTEE: City of Chattanooga and Hamilton County, Tennessee
   - INSTRUMENT: Bk 7476, Pg 1

2. LEASES AND MISCELLANEOUS

The following Notification, Restrictions and CERCLA Covenants are filed of record:

1. The property contains a sanitary landfill which has been closed. The Department of the Army is responsible for post closure activities at the landfill, including maintenance, inspection, and monitoring the post-closure plan. It is agreed that the Department of the Army will have continued access to the landfill to conduct post-closure activities.

2. Property contains numerous Corbetta-type storage magazines which were used for storing packaged boxes of TNT

3 Notification of the storage, release and disposal of hazardous substances on the property. Restrictions and covenants restrict the property from the use of the property for residential purposes.

3. LIMITATION

This report was prepared for the use of Environmental Data Resources, Inc., and FMSM Engineers, Inc., exclusively. This report is neither a guarantee of title, a commitment to insure, or a policy of title insurance. NETR- Real Estate Research & Information does not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information included in this report since this information is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

APPENDIX D

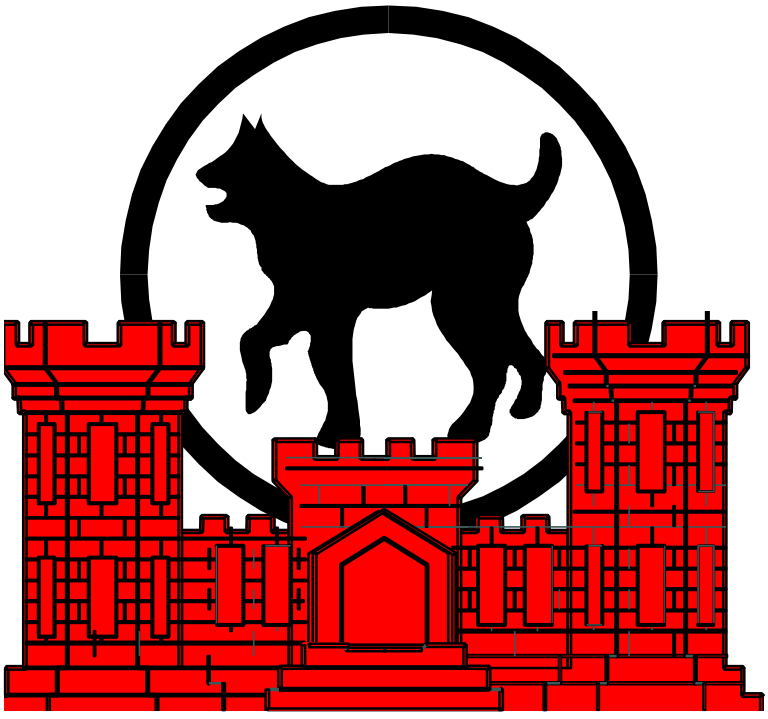
PREVIOUS ENVIRONMENTAL SITE ASSESSMENT REPORTS

- 1999 EBS
- 2001 Radon Test Results
- 2001 Asbestos Report
- 2002 Air Quality Memo
- 2001 UST Closure Report
- 2004 LBP Survey Report

ENVIRONMENTAL BASELINE STUDY

FOR

ACQUISITION OF THE
VOLUNTEER ARMY AMMUNITION PLANT (VAAP)
CHATTANOOGA, TENNESSEE



CERTIFICATIONS

Certified by Steven Francis Date: 2/3/99

Steven Francis
Environmental Manager, DTC

Approved by David E. Walker Date: 2/3/99

David Walker
81st RSC Environmental Manager

EXECUTIVE SUMMARY

The U.S. Army Reserves proposes to acquire approximately 15-acres, to include three buildings and associated parking areas, from the Army Material Command (AMC). The site was obtained by AMC in 1941 for a Volunteer Army Ammunition Plant (VAAP). The VAAP is currently excess to the needs of the AMC. The Army Reserve responded in 1998 to the Department of Defense (DOD) screening request for reassignment of Buildings 228, 229, 756, and the associated underlying land.

Records searches and site investigations have revealed no evidence of environmental liabilities such as a release or potential of a release of petroleum or hazardous substances on site or on nearby properties. Sufficient investigations and studies have been conducted to identify all potential environmental hazards. Two Underground Storage Tanks (USTs) were identified in the investigation. One 10,000 gallons gasoline tank and one 500 gallon used oil tank was identified. Both tanks currently meet or exceed December 22, 1998 standards. In addition to the existing tanks, three USTs were removed and received clean/closed reports in September 1995. Site investigation revealed no indications of threatened or endangered species or cultural resources on these sites.

Since this property will be transferred to another Federal agency for use as administration, maintenance, and storage. There will be no change in land use for this site. The proposed land use is also compatible with land use in the surrounding area, since the area is zoned for light industrial activity.

TABLE OF CONTENTS

1.0 INTRODUCTION

The proposed real estate transaction is a transfer of approximately 15-acres of property including three buildings and associated parking areas from the Army Material Command (AMC) to the Army Reserve. The property would be utilized for administrative and maintenance operations. The property was originally utilized as a Volunteer Army Ammunition Plant. The tract is located at 6511 Bonny Oaks Drive, Hamilton County, Tennessee. The primary author of this report is Mr. Steven Francis, DTC, for the 81st Regional Support Command. Site inspections of the property were conducted on April 2, 1998 by CPT Daniel George and on January 26, 1999 by CPT Scott Vick.

The purpose of this Environmental Baseline Study (EBS) is to: 1) Identify the presence, release, or threat of release, of any hazardous substance or petroleum products affecting the Property; 2) gather preliminary information regarding the level of compliance with current environmental standards, laws, regulations, and permits (if any) with respect to the property and special resources; 3) Establish a baseline of environmental conditions for historic and comparative purposes; 4) Identify whether any hazardous substance has been stored, released or disposed of on the Property; 5) Reduce uncertainty regarding recognized environmental conditions; and 6) Identify the need for additional testing to evaluate the scope, locations, source, and nature of any releases or threat of releases of hazardous substances affecting the property.

This EBS is in accordance with Army Regulation (AR) 200-1, paragraph 15-6, for proposed real property transactions and follows the requirements detailed in the draft Department of the Army (DA) PAM 200-1, 16 July 1997.

2.0 SITE LOCATION AND PHYSICAL DESCRIPTION

The 15-acre property is located at 6511 Bonny Oaks Drive, approximately 7.5 miles northeast of Chattanooga, Hamilton County, Tennessee. The site is located on the SE ¼ of the SE ¼ of the SE ¼ of Section 26, Township5, Range 3, West of the basis of the Ocoee. The AMC acquired the property in 1941 through a combination of purchases and condemnation. A list of the previous owners can be seen in the Historical Chain of Custody in Appendix A. The Army has owned this property continuously since the acquisition in 1941 to present and has utilized it as a VAAP. The site point of contact is Mr. Richard Twitchel, who can be contacted at (423) 855-7105.

The tract is located within the city limits of Chattanooga. The zoning is categorized as Industrial/Commercial

3.0 CURRENT AREA CHARACTERISTICS

3.1 Adjacent Properties

Table 1 lists the properties which are located adjacent to the subject property. Surrounding properties are primarily made up of open fields and office buildings.

Table 1

Adjacent Property	Site
North side of property	
Road (Plant Lane)/Open Field Open Field Building 229	Building 229 Building 756 Building 228
West side	
Open Field. Open Field Open Field	Building 229 Building 756 Building 228
South side	
Building 228 (VAAP) Open Field Parking lot	Building 229 Building 756 Building 228
East side	
School Trailers Open Field School Trailers	Building 229 Building 756 Building 228

4.0 SITE HISTORY

The site was obtained by AMC in 1941 for a Volunteer Army Ammunition Plant (VAAP). The VAAP is currently excess to the needs of the AMC. The Army Reserve responded in 1998 to the Department of Defense (DOD) screening request for reassignment of Buildings 228, 229, 756, and the associated underlying land.. Prior to ownership by the Army, the VAPP site was primarily used for agriculture. A list of previous owners can be seen in (Appendix A).

5.0 SITE REGULATORY INFORMATION FOR PROPERTIES WITHIN .5 MILES

To conduct task related to environmental database searches the services of Environmental Data Resources (EDR) were secured to identify, obtain, and review federal, state, and local databases and records to determine if the site, or any adjacent sites, have or may posed an environmental hazard.

A copy of the environmental database report can be found in Appendix B. The databases and information researched included the following:

National Priority List (NPL)
Comprehensive Environmental Resource, Compensation, and Liability Information System (CERCLIS)
Comprehensive Environmental Resource, Compensation, and Liability Information System (CERC-NFRAP)
Corrective Action Report (CORRACTS)
Sanitary, Industrial, Demolition, Solid Waste Processing Facilities and Closed Landfills (SWF/LF)
Resource Conservation/Recovery Information System TSD (RCRIS-TSD)
Resource Conservation/Recovery Information System LQG (RCRIS-LQG)
Resource Conservation/Recovery Information System SQG (RCRIS-SG)
Emergency Response Notification System (ERNS)
Leaking Underground Storage Tank (LUST)
Facility Storage Tanks (UST)
Aboveground Storage Tanks (AST)
RCRA Administrative Action Tracking System (RAATS)
Hazardous Materials Information Reporting System (HMIRS)

PCB Activity Database System (PADS)
Facility Index System (FINDS)
Toxic Chemical Release Inventory System (TRIS)
Federal Superfund Liens (NPL Lien)
Toxic Substances Control Act (TSCA)
Material Licensing Tracking System (MLTS)
Record of Decision (ROD)
Superfund (CERCLA) Consent Decrees (CONSENT)
Former Manufactured gas (Coal Gas) Sites (Coal Gas)

Research of the regulatory databases (Appendix B) revealed one Small Quantity Generator (SQG) within 1/8 mile of the site. The site revealed is an OMS owned by the Army Reserve. This site has no history of contamination.

6.0 SITE INVESTIGATION AND REVIEW OF HAZARDS

6.1 *Surface Water Characteristics:*

This 15 acre-site is relatively level and is situated on relatively high ground. There are no surface water bodies on this site and the topography is flat with very little change in elevation across the site.

6.2 UST/ASTs

Based on search of all available records, site inspections, and interviews, two USTs currently exist on the site. There is One 10,000-gallon fiberglass UST, used for storage of gasoline and one 500-gallon fiberglass UST, used for used oil. As per, Mr. Eastburn, Tennessee Division of Underground Storage Tanks, during an inspection, the UST's both meet the December 22, 1998 upgrade requirements. The 10,000-gallon tank is continuously monitored for leaks by a Veeder Root Monitoring System. The 500-gallon UST does not have a leak detecting system or any other surface spillage control device. Leak detection on this tank is accomplished by utilizing a dipstick and tracking the volume indicated. Due to the small volume of material added daily (less than 25 gallons) no spill or overfill protection is required.

In addition to the UST's, one 500 gallon diesel above ground storage tank was identified. It appeared to be in good shape and no stains were located in its vicinity

6.3 Chemicals/Hazardous Substances

Since the acquisition by the AMC the only portion of the property that has utilized and/or stored hazardous materials is building 756. Building 756 was used as a vehicle maintenance shop and typically stored various oil products. Minor oil stains were identified on the asphalt.

6.4 Landfills

Review of aerial photography, available records, and interviews revealed no evidence that this site was ever subject to any landfill activities.

6.5 Pits, Sumps, Drywells, and Catchbasins

Review of available records, site reconnaissance, and interviews revealed no evidence of these facilities ever being present on site.

6.6 Polychlorinated Biphenyls (PCBs)

Pole-mounted and ground based electrical transformers are located on the property. No leaks or stains were identified around the transformers.

6.7 Asbestos Containing Material (ACM)

Asbestos surveys were completed for these sites. All asbestos appeared to be in good condition and contained.

6.8 Lead

It can be assumed that the buildings likely contain lead paint due to the age of the buildings (1942). However, the paint appears to be in good condition.

7.0 REVIEW OF SPECIAL RESOURCES

7.1 Land Use

These sites have been used for administrative and motor pool operations since acquisition by AMC. The zoning for this site is commercial/industrial.

7.2 Wetlands

Based on a site inspection no jurisdictional wetlands of significant size are apparent on the subject property or adjoining properties

7.3 Threatened/Endangered Species

The site investigation concluded that there is no potential for occurrence of threatened or endangered species or their critical habitat on site of the proposed action.

7.4 Archeological/Historic Sites

Research conducted during this EBS indicates that project area revealed no properties of architectural, historic, or archeological significance, which would be affected by the proposed project.

8.0 CONCLUSIONS

There is no evidence of environmental liabilities such as a release of petroleum or hazardous substances on-site. In addition, there appears to be no evidence of a release or threatened release in the site vicinity. Therefore, there is no need for a phase II for this land transfer.

9.0 REFERENCES

George, Daniel, 81st Regional Support Command, FAST 1 Environmental Staff Officer, 1998, Site Investigation and Personal interviews with VAAP staff.

Vick, Scott, 81st Regional Support Command, January 1999, Environmental Staff Officer Underground Storage Tank site assessment.

Twichell, Richard, VAAP Site Manager, personal interview, January 1999.

Eastburn, Ed, Tennessee Division of Underground Storage Tanks, tank inspection and personal interview, January 1999.

McNutt, Vicki, 81st RSC, Real Estate Division, personal interview, December 1998.

Environmental Data Resources, Inc. Environmental Record Search and Historical Chain of Title, December 1998.

APPENDIX A

HISTORICAL CHAIN OF CUSTODY

APPENDIX B

REGULATORY DATABASE SEARCH

APPENDIX C

BLDG 228 USARC FORM 71-R, SITE MAPS AND TOPOGRAPHIC MAPS

APPENDIX D

BLDG 229 USARC FORM 71-R, SITE MAPS AND TOPOGRAPHIC MAPS

APPENDIX E

BLDG 756 USARC FORM 71-R, SITE MAPS AND TOPOGRAPHIC MAPS

APPENDIX F

UST INSPECTION REPORT

APPENDIX G

RECORD OF ENVIRONMENTAL CONSIDERATION (ALL BUILDINGS)

TN107

RSSI

6312 West Oakton Street
Morton Grove, IL 60053-2723
847-965-1999
Fax 847-965-1991

September 27, 2001

BRENT RADER
81ST RSC
443 DONELSON PIKE
NASHVILLE, TN 37214

RE: Radon Monitor Test Results

This report lists the average radon concentration your radon monitor has been exposed to for the period between the reported start and end dates. The result is rounded to the nearest 0.1 picocuries per liter (pCi/l), the unit in which the radon concentration is expressed. Before making a decision about radon reduction actions, you may wish to retest for a longer period if the result is close to 4 pCi/l. If testing instructions were not followed, the result may not be accurate. Additional information is printed on both sides of this form.

Monitor Number	pCi/l	Test Location	Exposure Start	Exposure End Date
112381	1.1	TN002	06/06/01	09/18/01
112382	0.5	TN111 BLDG 756	06/06/01	09/18/01
112383	0.8	SUITE 109 TN015	06/18/01	09/19/01
112407	0.7	TN107 BUILDING 228	06/06/01	09/18/01

WHAT YOUR TEST RESULTS MEAN

The average indoor radon level in homes is estimated by the US EPA to be below 2 pCi/l. About 0.4 pCi/l is normally found in outside air. Congress has set a long-term goal that indoor radon levels be no more than outdoor levels. While this goal is not yet technologically achievable in all cases, the radon concentration in most homes with elevated concentrations *can* be reduced to below 2 pCi/l. However, US EPA believes that any radon exposure carries some risk. No level of radon is safe and you can reduce your risk of lung cancer by lowering your radon exposure. If your living patterns change and you begin occupying a level of your home lower than the level on which you have tested, you should retest your home on that lower level. Also, radon concentrations fluctuate daily, seasonally, and with weather conditions. This alpha track monitor provides the best averaging for these fluctuations. Therefore, you may wish to test again for a full year to average seasonal fluctuations or if exposure was for less than 90 days.

RSSI

6312 West Oakton Street
Morton Grove, IL 60053-2723
847-965-1999
Fax 847-965-1991

October 5, 2001

BRENT RADER
443 DONELSON PIKE
NASHVILLE, TN 37214

RE: Radon Monitor Test Results

This report lists the average radon concentration your radon monitor has been exposed to for the period between the reported start and end dates. The result is rounded to the nearest 0.1 picocuries per liter (pCi/l), the unit in which the radon concentration is expressed. Before making a decision about radon reduction actions, you may wish to retest for a longer period if the result is close to 4 pCi/l. If testing instructions were not followed, the result may not be accurate. Additional information is printed on both sides of this form.

Monitor Number	pCi/l	Test Location	Exposure Start	Exposure End Date
112385	2.0	TN107 BLGD 229	06/06/01	09/26/01

WHAT YOUR TEST RESULTS MEAN

The average indoor radon level in homes is estimated by the US EPA to be below 2 pCi/l. About 0.4 pCi/l is normally found in outside air. Congress has set a long-term goal that indoor radon levels be no more than outdoor levels. While this goal is not yet technologically achievable in all cases, the radon concentration in most homes with elevated concentrations *can* be reduced to below 2 pCi/l. However, US EPA believes that any radon exposure carries some risk. No level of radon is safe and you can reduce your risk of lung cancer by lowering your radon exposure. If your living patterns change and you begin occupying a level of your home lower than the level on which you have tested, you should retest your home on that lower level. Also, radon concentrations fluctuate daily, seasonally, and with weather conditions. This alpha track monitor provides the best averaging for these fluctuations. Therefore, you may wish to test again for a full year to average seasonal fluctuations or if exposure was for less than 90 days.

WHAT SHOULD YOU DO

Since there is no known safe level of radon, there is always some risk. The risk can be reduced by lowering the radon level in your home. A variety of methods are used to reduce radon in a home. In some cases, sealing cracks and openings in floors and walls may help to prevent radon infiltration. In other cases, simple systems using pipes and fans may be used to reduce radon. These systems are called sub-slab depressurization and remove radon gas from below the basement floor or slab and the foundation before it enters the home. Their installation does not require major changes in the home. Similar systems can also be installed in houses with crawl spaces. Radon contractors may also have other methods that may work in your home. The right system depends on the design of your home and other factors. Ways to reduce radon in your home are in literature provided by the US EPA supported CONSUMER FEDERATION OF AMERICA RADON FIX-IT LINE at 1-800-644-6999 or your state radon office at the number listed below. If you have any specific questions regarding your alpha track radon monitor results, please write RSSI.

REAL ESTATE TRANSACTIONS

Buyers and renters frequently ask about radon levels before they buy or rent a home. Some states require disclosure of your radon measurement results. Real estate transactions may happen quickly and there is often not enough time to measure radon concentrations with a long term device. The best thing to do is to save these results where you will be able to locate them in case a buyer or renter is interested in them. If necessary, take radon reduction steps now and retest so radon will not complicate a real estate transaction.

Some states including Delaware, Nebraska, New Jersey, New York, Pennsylvania, and others require that all radon measurement data be sent to the state. Notice to Pennsylvania Residents: The Radon Certification Act requires that anyone who provides any radon-related service or product to the general public must be certified by the Pennsylvania Department of Environmental Protection. You are entitled to evidence of certification from any person who provides such services or products. You are also entitled to a price list for services or products offered. All radon measurement data will be sent to the Department as required in the Act and will be kept confidential. If you have any questions, comments or complaints concerning persons who provide radon-related services, please contact the Department at the Bureau of Radiation Protection, Department of Environmental Protection, P.O. Box 2063, Harrisburg, PA 17105-2063 (717-783-3594).

STATE RADON OFFICES:

Alabama: 334-206-5391, 1-800-862-1866; Alaska: 907-474-7201, 1-800-478-8324; Arizona: 602-255-4845; Arkansas: 501-661-2301; California: 916-324-2208, (CA) 1-800-745-7236; Colorado: 303-692-3057, 1-800-846-3986; Connecticut: 860-509-7367; Delaware: 302-739-4731; DC: 202-535-2337; Florida: 850-488-1525, 1-800-543-8279; Georgia: 404-651-5120, 1-800-745-0037; Hawaii: 808-586-4700; Idaho: 208-334-2235, 1-800-632-8000; Illinois: 217-524-5641, 1-800-325-1245; Indiana: 317-233-7563, 1-800-272-9723; Iowa: 515-281-6549, 1-800-383-5922; Kansas: 785-296-1561;, 1-800-693-5343;

Kentucky: 502-564-4856; Louisiana: 225-925-7042, 1-800-256-2494; Maine: 207-287-5676, 1-800-232-0842; Maryland: NA, call EPA Region 3 (215)566-2086; Massachusetts: 413-586-7525; Michigan: 517-335-8194, 1-800-723-6642; Minnesota: 651-215-0911, 1-800-627-3529; Mississippi: 601-987-6893, (MS) 1-800--626-7739; Missouri: 573-751-6160, 1-800-669-7236; Montana: 406-444-5266; Nebraska: 402-471-0594, 1-800-334-9491;

Nevada: 775-687-5394 x275; New Hampshire: 603-271-4674; New Jersey: 609-984-5543, 1-800-648-0394; New Mexico: 505-827-1558;

New York: 518-402-7556, 1-800-458-1158; North Carolina: 919-571-4141; North Dakota: 701-328-5188; Ohio: 614-644-2727, 1-800-523-4439;

Oklahoma: 918-461-7409; Oregon: 503-731-4014; Pennsylvania: 717-783-3594, 1-800-237-2366; Puerto Rico: 787-274-7816; Rhode Island: 401-222-2438;

South Carolina: 803-898-3893, 1-800-768-0362; South Dakota: 605-773-3351; Tennessee: 615-299-9725, 1-800-232-1139; Texas: 512-834-6688;

Utah: 801-536-4263, 1-800-458-0145; Vermont: 802-863-7220, 1-800-640-0601; Virginia: 804-786-1864, 1-800-468-0138; Washington: 360-664-4536;

West Virginia: 304-558-3526, 1-800-922-1255; Wisconsin: 608-267-4796, 1-888-569-7236; Wyoming: 307-777-6015, 1-800-458-5347.

United states army reserve center
Chattanooga-2, tennessee

ASBESTOS INSPECTION
REPORT

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1. INTRODUCTION

Asbestos Building Inspectors from the Environmental Enterprise Group, Inc. (EEG) of Charleston, SC conducted an inspection to identify asbestos containing building materials (ACBM) at the US Army Reserve Center located on the Volunteer Army Ammunition Plant in Chattanooga Tennessee. For the purpose of this inspection, this facility is referred to as Chattanooga-2. The inspections were conducted on 3 December 2001 and the results of the inspections provide an inventory of ACBM in three (3) buildings. Temporary/portable buildings were not inspected for this project.

All inspectors were certified by an EPA accredited training center under the Asbestos Hazard Emergency Response Act (AHERA), as Building Inspectors. All inspectors and management planners are employees of EEG, Inc. Copies of training certificates are located in the **TRAINING** section of this report.

Suspect ACBM was identified and sampled in accordance with AHERA style guidelines (See Paragraph 7 for sampling strategy). Some materials suspected of being ACBM were assumed to be ACBM and not sampled. Assumed materials may include floor tile and ventilation transition boots. Some materials weren't identified as ACBM because they were portable and removable (e.g. blackboards, fire hoses,), were not safe to sample (e.g. electrical insulation), or sampling would have damaged the material and impaired the normal system operation/integrity (e.g. heating/ventilation/AC systems, furnace, boiler door and pipe gaskets).

Bulk samples were analyzed by the Environmental Hazards Services (EHS) laboratory of Richmond, Virginia. EHS is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the American Industrial Hygiene Association (AIHA) for asbestos analysis. Polarized Light Microscopy (PLM) was used to analyze samples.

Materials identified as ACBM and either sampled or assumed were designated a homogeneous area by similarity of color, texture and date of application. Each homogeneous area was assessed in accordance with the "Asbestos Facility Inventory/Assessment Protocol," NEESA 70.2-010, Developed by the Naval Facilities Engineering Service Center (NFESC).

The NFESC protocol establishes an algorithm rating for each homogeneous area based on condition, quantity, friability, exposure potential, number of persons exposed, building significance and percentage of asbestos present in the material. The **BUILDING SUMMARY TABLES** lists the ratings for each homogeneous area. The rating is heavily weighted by condition, friability, exposure potential and building significance. For the purposes of this inspection, all buildings were listed as occupied during the inspection.

2. FINDINGS SUMMARY

BUILDING 228 (Administrative Building): Confirmed highly friable ACBM in the form of rope packing and non-friable ACBM in the form of sheetrock mud, floor tile, floor tile mastic and vent duct mastic are located in the building.

BUILDING 229 (Training Building): Confirmed non-friable ACBM in the form of sheetrock mud, floor tile, floor tile mastic and vent duct mastic are located in the building.

BUILDING 756 (Maintenance Shop): Confirmed non-friable ACBM in the form of sheetrock mud, floor tile, floor tile mastic and vent duct mastic are located in the building.

See individual Building Summaries for detailed information on these materials. Buildings containing asbestos are required to be included in an Operations and Maintenance (O&M) Program. Any identified asbestos containing material not removed must be maintained following the guidelines of an O&M Plan.

3. ACCESSABILITY

There were times during the inspection process when all rooms were not accessible for inspection due to several reasons, including security. The rooms that were not inspected at this site were Rooms 109 & 114 in Building 228 and Room 112 in Building 229. Unique room numbers were assigned by the inspectors during the inspection visit (see attached floor plan for room numbers).

4. RENOVATION/DEMOLITION

The National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 requires written notification to the local Air Quality Management District at least ten working days prior to renovation or demolition of ACBM in quantities of 260 linear feet, 160 square feet, 35 cubic feet, or greater, except in cases of emergencies.

Contractors are advised to verify most current regulations with the Local Air Quality Management District prior to start of any work.

5. REPORT ORGANIZATION

Specific, detailed information on each inspected building is noted in the *BUILDING SUMMARIES* section of this report and include the following:

- Photos of existing buildings
- Narrative description of the building with findings and recommendations
- Building Summary Table
- Laboratory Test Results Table
- Operations and Maintenance Table
- CADD drawing showing sample and asbestos locations
- Laboratory Chain of Custody and results forms

Following the *BUILDING SUMMARIES* is a tabbed section for *TRAINING.* Copies of each Inspector's appropriate certificates are included there.

6. ABATEMENT COSTS

EEG, Inc. inspectors found friable ACBM in Building 228 and non-friable ACBM in all three buildings inspected at this site. We recommend that the facilities Asbestos Program Manager initially focus their resources on all ACBM assessed as friable (H-9 in Bldg. 228). Abatement cost estimates for each building will be provided by a separate document, if requested, and will include labor, material, equipment, and disposal cost. The extent to which other costs will be covered must be negotiated separately and are beyond the scope of this report.

7. SAMPLING STRATEGY

The sampling and analysis of bulk samples was conducted in accordance with established AHERA guidelines. Unless otherwise stated, the following sampling scheme was utilized during the survey:

Thermal System Insulation (TSI)

1) A minimum of 1 sample was taken of each homogenous area <6ft or <6 sq. ft.
2) A minimum of 3 samples was taken of each homogenous area >6FT or > 6 SQ FT.

Surfacing Materials

1) A minimum of 3 samples were taken of each homogeneous area of material 1000 square feet (SF) or less.

2) A minimum of 5 samples were taken of each homogenous area of material greater than 1000 SF but less than 5000 SF.

3) A minimum of 7 samples were taken of each homogenous area of material greater than 5000 SF.

Miscellaneous Materials (Including floor tiles, ceiling tiles and mastics)
A minimum of 2 samples

A comprehensive and thorough asbestos inspection was conducted on these facilities by certified and experienced Environmental Enterprise Group inspectors. Every effort was made to identify all asbestos containing building material (ACBM) in the facility, but due to random sampling techniques mandated by EPA regulations, the non-destructive sampling policy for this project and accessibility constraints, the possibility always exists that some ACBM remains undetected.

BUILDING SUMMARIES

The following pages report observations noted and suggest actions required as a result of an asbestos inspection conducted by Environmental Enterprise Group, Inc. in December of 2001. Three (3) buildings at US Army Reserve Center located in Chattanooga, Tennessee, were inspected for possible presence of suspect/assumed asbestos. This section provides *Description, Findings, Observations, Recommended Abatement Action, and Recommendations for Operations and Maintenance* for each building inspected.

The room numbers shown on the CAD drawings and referenced in the report were assigned by the inspectors at the time of inspection. Some room numbers are prefixed by a letter to indicate the type of room. **E** indicates an entry to the building, **H** indicates a hallway, **R** is a roof, **S** is a stairwell, **A** is an attic area and **B** indicates basement rooms.

BUILDING 228: Reserve Center Admin Building

1. DESCRIPTION:

Building 228 is a 4,640 square-foot building. It is a concrete block building with brick exterior and a flat rubber roof. The following information was identified during the survey and from the analysis of the samples taken:

- Nine homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Nine of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- Four of the suspected homogenous areas did not contain asbestos.

2. FINDINGS:

Nine homogeneous areas with suspected ACM were identified. Twenty samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in one of the homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-1: MISC, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks, was Non-friable and Not Damaged.
- H-2: MISC, MASTIC, VENT DUCT, Silver/gold, was Non-friable and Not Damaged.
- H-5: MISC, SHEETROCK/MUD, White, was Non-friable and Not Damaged.
- H-8: MISC, MASTIC, VENT DUCT, Black, was Non-friable and Not Damaged.
- H-9: TSI, ROPE PACKING, White, was Highly-friable and Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-3: MISC, MASTIC, VENT DUCT, White
- H-4: TSI, FITTING, MUDDED, Gray
- H-6: TSI, PIPE, CLOTH WRAPPED, Beige
- H-7: MISC, FLOOR TILE & MASTIC, 12", Cream w/brown & white marbling

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS: Sheetrock joint compound (mud) contained 2% asbestos but total asbestos content of sheetrock and mud was <1%. Review State/local regulations prior to disturbing sheetrock in the building.

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks: O&M
- H-2: MISC, MASTIC, Silver/gold: O&M
- H-5: MISC, SHEETROCK/MUD, White: O&M
- H-8: MISC, MASTIC, Black: O&M
- H-9: TSI, ROPE PACKING, White: Remove

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines of an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE & MASTIC is Confirmed, Non-friable ACM.

H-1 (FLOOR TILE & MASTIC, 12", Tan w/light brown streaks) is located in Rooms 100, 101, 102, 103, 104, 105, 107, 108, 110 & Hallway H-100.

MISC MASTIC is Confirmed, Non-friable ACM.

H-2 (MASTIC, Silver/gold) is located in R00ms 100, 101, 102, 108, 113 & H-100.

H-8 (MASTIC, Black) is located in Room 111.

TSI ROPE PACKING is Confirmed, Highly-friable ACM.

H-9 (ROPE PACKING, White) is located in Room 115 (Mechanical Room).

MISC SHEETROCK/MUD is Confirmed, Non-friable ACM.

H-5 (SHEETROCK/MUD, White) is located in Rooms 103, 104, 105, 106, 112, 113 & H-100.

BUILDING SUMMARY TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

Building No. 229

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Friability	Cond	% D	Recommended Action	Cost Estimate	Comments
1	Y	**Misc, FLOOR TILE & MASTIC, 12", Lime green w/white streaks**	**3,716 SF**	**10**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 103, 104, 109, 110, 113, 114, 115, 116, E-001, H-100, H-101								
2	Y	**Misc, MASTIC, VENT DUCT, Gray**	**256 SF**	**3**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 103, 104, 107, 108, 109, 110, 113, 114, 115, 116, 117, E-001, H-100, H-101								
3	N	**Misc, GROUT, Gray**	**433 SF**	**0**						
		Rooms 100, 102								
4	Y	**Misc, SHEETROCK/MUD, White**	**361 SF**	**3**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 100, 101, 102, 105, 106, 111								
5	Y	**Misc, FLOOR TILE & MASTIC, 12", White w/black streaks**	**640 SF**	**10**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 107, 108, 117, H-102								
6	Y	**Misc, FLOOR TILE MASTIC ONLY, Black**	**484 SF**	**3**	**Non**	**PD**	**0.0**	**O&M**		**Floor tile does not contain asbestos, mastic does.**
		Rooms 117								

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY
INDUSTRIAL LABORATORY TEST REPORT

Building No. 229

Homo. Area	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	YES	Chatt2-001	H-100	Misc, FLOOR TILE & MASTIC, 12", Lime green w/white streaks	12/03/01	12/12/01	Chrysotile	5%
1	YES	Chatt2-002	104	Misc, FLOOR TILE & MASTIC, 12", Lime green w/white streaks	12/03/01	12/12/01	Chrysotile	5%
2	YES	Chatt2-003	E-001	Misc, MASTIC, Gray	12/03/01	12/12/01	Chrysotile	3%
2	YES	Chatt2-004	113	Misc, MASTIC, Gray	12/03/01	12/12/01	Chrysotile	3%
3	NO	Chatt2-005	100	Misc, GROUT, Gray	12/03/01	12/12/01	No Asbestos Detected	0%
3	NO	Chatt2-006	102	Misc, GROUT, Gray	12/03/01	12/12/01	No Asbestos Detected	0%
4	YES	Chatt2-007	106	Misc, SHEETROCK/MUD, White	12/03/01	12/12/01	Chrysotile	2%
4	NO	Chatt2-008	102	Misc, SHEETROCK/MUD, White	12/03/01	12/12/01	No Asbestos Detected	0%
5	YES	Chatt2-009	117	Misc, FLOOR TILE & MASTIC, 12", White w/black streaks	12/03/01	12/12/01	Chrysotile	5%
5	YES	Chatt2-010	107	Misc, FLOOR TILE & MASTIC, 12", White w/black streaks	12/03/01	12/12/01	Chrysotile	5%
6	YES	Chatt2-011	117	Misc, FLOOR TILE MASTIC ONLY, Black	12/03/01	12/12/01	Chrysotile	5%
6	YES	Chatt2-012	117	Misc, FLOOR TILE MASTIC ONLY, Black	12/03/01	12/12/01	Chrysotile	3%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

OPERATIONS AND MAINTENANCE TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat-ing	Fria-bility	Condition	% D	Recommended Action
229	1	Misc, FLOOR TILE & MASTIC, 12", Lime green w/white streaks	3,716 SF	10	Non	Not Damaged	0.00	O&M
Locations:		Rooms 103, 104, 109, 110, 113, 114, 115, 116, E-001, H-100, H-101						
229	2	Misc, MASTIC, VENT DUCT, Gray	256 SF	3	Non	Not Damaged	0.00	O&M
Locations:		Rooms 103, 104, 107, 108, 109, 110, 113, 114, 115, 116, 117, E-001, H-100, H-101						
229	4	Misc, SHEETROCK/MUD, White	361 SF	3	Non	Not Damaged	0.00	O&M
Locations:		Rooms 100, 101, 102, 105, 106, 111						
229	5	Misc, FLOOR TILE & MASTIC, 12", White w/black streaks	640 SF	10	Non	Not Damaged	0.00	O&M
Locations:		Rooms 107, 108, 117, H-102						
229	6	Misc, FLOOR TILE MASTIC ONLY, Black	484 SF	3	Non	Not Damaged	0.00	O&M
Locations:		Rooms 117						

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.

BUILDING 228 – ADMINISTRATIVE BUILDING – CHATTANOOGA-2, TN

BUILDING 229: Reserve Training Building

1. DESCRIPTION:

Building 229 is a 5,775 square-foot building. It is a concrete block building with brick exterior and a flat rubber roof. It was constructed in 1972. The following information was identified during the survey and from the analysis of the samples taken:

- Six homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Six of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- One of the suspected homogenous areas did not contain asbestos.

2. FINDINGS:

Six homogeneous areas with suspected ACM were identified. Twelve samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was not found in any homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-1: MISC, FLOOR TILE & MASTIC, 12", Lime green w/white streaks, was Non-friable and Not Damaged.
- H-2: MISC, MASTIC, VENT DUCT, Gray, was Non-friable and Not Damaged.
- H-4: MISC, SHEETROCK/MUD, White, was Non-friable and Not Damaged.
- H-5: MISC, FLOOR TILE & MASTIC, 12", White w/black streaks, was Non-friable and Not Damaged.
- H-6: MISC, FLOOR TILE MASTIC ONLY, Black, was Non-friable and Not Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-3: MISC, GROUT, Gray

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS: NONE

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, FLOOR TILE & MASTIC, 12", Lime green w/white streaks: **O&M**
- H-2: MISC, MASTIC, Gray: **O&M**
- H-4: MISC, SHEETROCK/MUD, White: **O&M**
- H-5: MISC, FLOOR TILE & MASTIC, 12", White w/black streaks: **O&M**
- H-6: MISC, FLOOR TILE MASTIC ONLY, Black: **O&M**

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines of an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE & MASTIC is Confirmed, Non-friable ACM.

> H-1 (FLOOR TILE & MASTIC, 12", Lime green w/white streaks) is located in Rooms 103, 104, 109, 110, 113, 114, 115, 116, Entry E-001 and Hallways H-100 & H-101.

H-5 (FLOOR TILE & MASTIC, 12", White w/black streaks) is located in R00ms 107, 108, 117 & H-102.

MISC FLOOR TILE MASTIC ONLY is Confirmed, Non-friable ACM.

> H-6 (FLOOR TILE MASTIC ONLY, Black) is located in Room 117.

MISC MASTIC is Confirmed, Non-friable ACM.

> H-2 (MASTIC, Gray) is located in Rooms 103, 104, 107, 108, 109, 110, 113, 114, 115, 116, 117, E-001, H-100 & H-101.

MISC SHEETROCK/MUD is Confirmed, Non-friable ACM.

> H-4 (SHEETROCK/MUD, White) is located in Rooms 100, 101, 102, 105, 106 & 111.

BUILDING SUMMARY TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

Building No. 228

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Friability	Cond	% D	Recommended Action	Cost Estimate	Comments
1	Y	**Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks**	**2,023 SF**	**11**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 100, 101, 102, 103, 104, 105, 107, 108, 110, H-100								
2	Y	**Misc, MASTIC, VENT DUCT, Silver/gold**	**186 SF**	**4**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 100, 101, 102, 108, 113, H-100								
3	N	**Misc, MASTIC, VENT DUCT, White**	**21 SF**	**0**						
		Rooms 100, 101, 108, H-100								
4	N	**TSI, FITTING, MUDDED, Gray**	**33 SF**	**0**						
		Rooms 101, 106, 107, 108, 110, 111, 115, H-100								
5	Y	**Misc, SHEETROCK/MUD, White**	**1,156 SF**	**11**	**Non**	**PD**	**0.0**	**O&M**		**Joint compound (mud) contains asbestos.**
		Rooms 103, 104, 105, 106, 112, 113, H-100								
6	N	**TSI, PIPE, CLOTH WRAPPED, Beige**	**219 SF**	**0**						
		Rooms 101, 107, 108, 110, 111								
7	N	**Misc, FLOOR TILE & MASTIC, 12", Cream w/brown & white marbling**	**741 SF**	**0**						
		Rooms 110, 111, 112								
8	Y	**Misc, MASTIC, VENT DUCT, Black**	**22 SF**	**4**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 111								
9	Y	**TSI, ROPE PACKING, White**	**9 LF**	**36**	**High**	**D**	**5.0**	**Remove**		
		Rooms 115								

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY
INDUSTRIAL LABORATORY TEST REPORT

Building No. 228

Homo. Area	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	YES	Chatt2-013	107	Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks	12/03/01	12/13/01	Chrysotile	3%
1	YES	Chatt2-013	107	Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks	12/03/01	12/13/01	Chrysotile	5%
1	YES	Chatt2-014	H-100	Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks	12/03/01	12/13/01	Chrysotile	5%
1	YES	Chatt2-014	H-100	Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks	12/03/01	12/13/01	Chrysotile	3%
2	YES	Chatt2-015	H-100	Misc, MASTIC, Silver/gold	12/03/01	12/13/01	Chrysotile	3%
2	YES	Chatt2-016	H-100	Misc, MASTIC, Silver/gold	12/03/01	12/13/01	Chrysotile	3%
3	NO	Chatt2-017	H-100	Misc, MASTIC, White	12/03/01	12/13/01	No Asbestos Detected	0%
3	NO	Chatt2-018	108	Misc, MASTIC, White	12/03/01	12/13/01	No Asbestos Detected	0%
4	NO	Chatt2-019	H-100	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
4	NO	Chatt2-020	108	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
4	NO	Chatt2-021	106	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
5	YES	Chatt2-022	H-100	Misc, SHEETROCK/MUD, White	12/03/01	12/13/01	Chrysotile	2%
5	YES	Chatt2-023	105	Misc, SHEETROCK/MUD, White	12/03/01	12/13/01	Chrysotile	2%
6	NO	Chatt2-024	108	TSI, PIPE, Beige	12/03/01	12/13/01	No Asbestos Detected	0%
6	NO	Chatt2-025	108	TSI, PIPE, Beige	12/03/01	12/13/01	No Asbestos Detected	0%
6	NO	Chatt2-026	101	TSI, PIPE, Beige	12/03/01	12/13/01	No Asbestos Detected	0%
7	NO	Chatt2-027	111	Misc, FLOOR TILE & MASTIC, 12", Cream w/brown & white marbli	12/03/01	12/13/01	No Asbestos Detected	0%
7	NO	Chatt2-028	112	Misc, FLOOR TILE & MASTIC, 12", Cream w/brown & white marbli	12/03/01	12/13/01	No Asbestos Detected	0%
8	YES	Chatt2-029	111	Misc, MASTIC, Black	12/03/01	12/13/01	Chrysotile	8%
8	YES	Chatt2-030	111	Misc, MASTIC, Black	12/03/01	12/13/01	Chrysotile	8%
9	YES	Chatt2-031	115	TSI, ROPE PACKING, White	12/03/01	12/13/01	Chrysotile	90%
9	YES	Chatt2-032	115	TSI, ROPE PACKING, White	12/03/01	12/13/01	Chrysotile	90%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

OPERATIONS AND MAINTENANCE TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat-ing	Fria-bility	Condition	% D	Recommended Action
228	1	Misc, FLOOR TILE & MASTIC, 12", Tan w/light brown streaks	2,023 SF	11	Non	Not Damaged	0.00	O&M
Locations:		Rooms 100, 101, 102, 103, 104, 105, 107, 108, 110, H-100						
228	2	Misc, MASTIC, VENT DUCT, Silver/gold	186 SF	4	Non	Not Damaged	0.00	O&M
Locations:		Rooms 100, 101, 102, 108, 113, H-100						
228	5	Misc, SHEETROCK/MUD, White	1,156 SF	11	Non	Not Damaged	0.00	O&M
Locations:		Rooms 103, 104, 105, 106, 112, 113, H-100						
228	8	Misc, MASTIC, VENT DUCT, Black	22 SF	4	Non	Not Damaged	0.00	O&M
Locations:		Rooms 111						
228	9	TSI, ROPE PACKING, White	9 LF	36	High	Damaged	5.00	Remove
Locations:		Rooms 115						

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.

BUILDING 229 – TRAINING BUILDING – CHATTANOOGA-2, TN

BUILDING 756: Maintenance Shop

1. DESCRIPTION:

Building 756 is a 14,340 square-foot building. It is a 7-bay shop constructed of concrete block with a brick and metal exterior and a flat rubber roof. It was constructed in 1974. The following information was identified during the survey and from the analysis of the samples taken:

- Eight homogeneous areas were identified during the initial survey.
- No homogeneous areas were assumed to contain asbestos.
- Eight of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Three of the suspected homogeneous areas were confirmed to contain asbestos.
- Five of the suspected homogenous areas did not contain asbestos.

2. FINDINGS:

Eight homogeneous areas with suspected ACM were identified. Twenty samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was not found in any homogeneous areas.

Confirmed ACM. The following homogeneous areas sampled were confirmed to contain asbestos:

- H-4: MISC, FLOOR TILE & MASTIC, Tan, was Non-friable and Not Damaged.
- H-6: MISC, SHEETROCK/MUD, White, was Non-friable and Not Damaged.
- H-7: MISC, MASTIC, VENT DUCT, White, was Non-friable and Not Damaged.

Asbestos Free. Asbestos was not detected in the following homogeneous areas:

- H-1: TSI, FITTING, MUDDED, Gray
- H-2: TSI, FITTING, MUDDED, Tan
- H-3: TSI, PIPE, METAL JACKETED, White
- H-5: MISC, GROUT, CERAMIC TILE, White
- H-8: SURFACING, PLASTER, White

Assumed ACM. The following homogeneous areas were assumed to contain asbestos: **NONE**

3. OBSERVATIONS: NONE

4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-4: MISC, FLOOR TILE & MASTIC, Tan: **O&M**
- H-6: MISC, SHEETROCK/MUD, White: **O&M**
- H-7: MISC, MASTIC, White: **O&M**

5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines of an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE & MASTIC is Confirmed, Non-friable ACM.

H-4 (FLOOR TILE & MASTIC, Tan) is located in Rooms 105, 106 & 200.

MISC MASTIC is Confirmed, Non-friable ACM.

H-7 (MASTIC, White) is located in Rooms 200, 201, 202, 203, 204 & 207.

MISC SHEETROCK/MUD is Confirmed, Non-friable ACM.

H-6 (SHEETROCK/MUD, White) is located in Rooms 107, 200, 201, 202, 203, 204, 207 & Stairway S-001.

BUILDING SUMMARY TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

Building No. 756

H-No	ACM Y,N,A	Material Description	Quantity	Rating	Friability	Cond	% D	Recommended Action	Cost Estimate	Comments
1	N	**TSI, FITTING, MUDDED, Gray**	**1,525 SF**	**0**						
		Rooms 100, 111, 113, 201, 202, 203, 204, 207, R-100								
2	N	**TSI, FITTING, MUDDED, Tan**	**27 SF**	**0**						
		Rooms 100								
3	N	**TSI, PIPE, METAL JACKETED, White**	**240 SF**	**0**						
		Rooms Exterior, R-100								
4	Y	**Misc, FLOOR TILE & MASTIC, Tan**	**1,578 SF**	**10**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 105, 106, 200								
5	N	**Misc, GROUT, CERAMIC TILE, White**	**754 SF**	**0**						
		Rooms 107, 205, 206								
6	Y	**Misc, SHEETROCK/MUD, White**	**5,144 SF**	**10**	**Non**	**PD**	**0.0**	**O&M**		**Joint compound (mud) contains 4% asbestos.**
		Rooms 107, 200, 201, 202, 203, 204, 207, S-001								
7	Y	**Misc, MASTIC, VENT DUCT, White**	**130 SF**	**3**	**Non**	**PD**	**0.0**	**O&M**		
		Rooms 200, 201, 202, 203, 204, 207								
8	N	**Surfacing, PLASTER, White**	**832 SF**	**0**						
		Rooms 205, 206								

Note: Asbestos abatement cost estimates are not included in this report.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

LABORATORY TEST RESULTS TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY
INDUSTRIAL LABORATORY TEST REPORT

Building No. 756

Homo. Area	ASB Y/N	Sample Number	Room Number	Material Description:	Date Sampled	Date Analyzed	Sample Results	Percent Asbestos
1	NO	Chatt2-033	100	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
1	NO	Chatt2-034	100	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
1	NO	Chatt2-035	113	TSI, FITTING, Gray	12/03/01	12/13/01	No Asbestos Detected	0%
2	NO	Chatt2-036	100	TSI, FITTING, Tan	12/03/01	12/13/01	No Asbestos Detected	0%
2	NO	Chatt2-037	100	TSI, FITTING, Tan	12/03/01	12/13/01	No Asbestos Detected	0%
2	NO	Chatt2-038	100	TSI, FITTING, Tan	12/03/01	12/13/01	No Asbestos Detected	0%
3	NO	Chatt2-039	R-100	TSI, PIPE, White	12/03/01	12/13/01	No Asbestos Detected	0%
3	NO	Chatt2-040	R-100	TSI, PIPE, White	12/03/01	12/13/01	No Asbestos Detected	0%
3	NO	Chatt2-041	R-100	TSI, PIPE, White	12/03/01	12/13/01	No Asbestos Detected	0%
4	YES	Chatt2-042	105	Misc, FLOOR TILE & MASTIC, Tan	12/03/01	12/13/01	Chrysotile	10%
4	YES	Chatt2-042	105	Misc, FLOOR TILE & MASTIC, Tan	12/03/01	12/13/01	Chrysotile	2%
4	YES	Chatt2-043	106	Misc, FLOOR TILE & MASTIC, Tan	12/03/01	12/13/01	Chrysotile	3%
4	YES	Chatt2-043	106	Misc, FLOOR TILE & MASTIC, Tan	12/03/01	12/13/01	Chrysotile	10%
5	NO	Chatt2-044	107	Misc, GROUT, White	12/03/01	12/13/01	No Asbestos Detected	0%
5	NO	Chatt2-045	205	Misc, GROUT, White	12/03/01	12/13/01	No Asbestos Detected	0%
6	YES	Chatt2-046	200	Misc, SHEETROCK/MUD, White	12/03/01	12/11/30	Chrysotile	2%
6	YES	Chatt2-047	201	Misc, SHEETROCK/MUD, White	12/03/01	12/13/01	Chrysotile	2%
7	YES	Chatt2-048	200	Misc, MASTIC, White	12/03/01	12/13/01	Chrysotile	8%
7	YES	Chatt2-049	200	Misc, MASTIC, White	12/03/01	12/13/01	Chrysotile	5%
8	NO	Chatt2-050	205	Surfacing, PLASTER, White	12/03/01	12/13/01	No Asbestos Detected	0%
8	NO	Chatt2-051	206	Surfacing, PLASTER, White	12/03/01	12/13/01	No Asbestos Detected	0%
8	NO	Chatt2-052	206	Surfacing, PLASTER, White	12/03/01	12/13/01	No Asbestos Detected	0%

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

OPERATIONS AND MAINTENANCE TABLE

US ARMY RESERVE CENTER - CHATTANOOGA-2
ASBESTOS BUILDING SURVEY

O&M

Bldg. No.	Homo No.	Material Description	Quantity	Rat-ing	Fria-bility	Condition	% D	Recommended Action
756	4	Misc, FLOOR TILE & MASTIC, Tan	1,578 SF	10	Non	Not Damaged	0.00	O&M
Locations: Rooms 105, 106, 200								
756	6	Misc, SHEETROCK/MUD, White	5,144 SF	10	Non	Not Damaged	0.00	O&M
Locations: Rooms 107, 200, 201, 202, 203, 204, 207, S-001								
756	7	Misc, MASTIC, VENT DUCT, White	130 SF	3	Non	Not Damaged	0.00	O&M
Locations: Rooms 200, 201, 202, 203, 204, 207								

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.

BUILDING 756 – MAINTENANCE SHOP – CHATTANOOGA-2, TN

CHATTANOOGA 2_TN

DWG "1"
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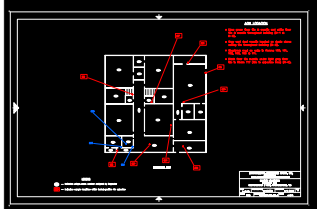
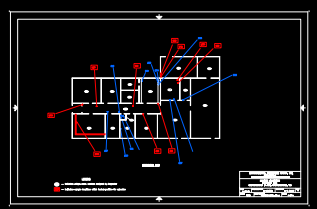
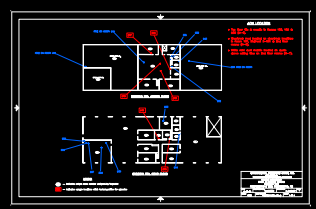


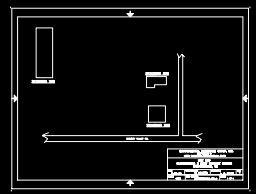
DWG "2"
11x17



DWG "3"
11x17



SITE MAP
8x11



DEPARTMENT OF THE ARMY
HEADQUARTERS, 81ST REGIONAL SUPPORT COMMAND
255 WEST OXMOOR ROAD
BIRMINGHAM, ALABAMA 35209-6383

REPLY TO
ATTENTION OF

AFRC-CAL-EN (200-1)

JUL 29 2002

MEMORANDUM FOR Commander, 81st Regional Support Command (RSC) Facilities

SUBJECT: Air Quality

1. The 81st Regional Support Command (RSC) has completed a command survey to identify sources of air pollution emissions. At this time, there is no stationary or mobile air pollution sources identified, which would constitute the submission of a Title V, Air Pollution Control permit application.

2. This memorandum should be used to avoid negative Environmental Compliance Assessment Army Reserve findings as it relates to Air Quality. This memorandum is to be filed and maintained in the Environmental Records Binder. The point of contact for this action is Deputy Chief of Staff, Installation Management, Chief, Environmental Division at 877-749-9063, ext 1588.

/s/ Steven Edwards

MICHAEL O'STEEN
Facility Management Officer

TN107

ENVIRONMENTAL ASSISTANCE CENTER
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
540 MCCALLIE AVENUE, SUITE 550 - STATE OFFICE BUILDING
CHATTANOOGA, TENNESSEE 37402
(423) 634-5745 STATEWIDE 1-888-891-8332 FAX (423) 634-6389

May 31, 2001

Mr. Steven Francis
US Army Reserves, 81st Regional Support Command
255 West Oxmoor Road
Birmingham, AL 35205

Re: Final Approval of Non-Contaminated Closure
US Army Reserves, 81st Regional Support Command
Volunteer Army Ammunition Site
6703 Bonny Oaks Drive, Building 756
Chattanooga, Tennessee
Facility ID # 0-330776, Hamilton County

Dear Mr. Francis:

The Division of Underground Storage Tanks (Division) has received the May 14, 2001 Permanent Closure Report for the referenced facility. The analytical results do not indicate contamination above the applicable cleanup levels. Based on the information available, the UST's approved for closure on the March 12, 2001 application can be considered closed. At this time no further investigation is required. However, the Division reserves the right to require additional action if necessary.

Rule 1200-1-15-.02(3)(h) states, in part: "Any change in the status of the tanks at a petroleum UST facility shall be reported within thirty (30) days of said change. This includes but is not limited to changes of ownership, upgrading or replacement of tanks, changes in mailing address, and changes in service. Such reports shall be made using an amended notification form."

If an amended notification form has not been submitted, complete and mail the enclosed form to:

Division of Underground Storage Tanks
Tennessee Department of Environment and Conservation
4th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-1541

Information is available at *www.state.tn.us/environment/ust*.

If you have any questions concerning this correspondence, call (423) 634-5722.

Sincerely,

J. David Bukley

J. David Bukley
Division of Underground Storage Tanks

c: Marion Environmental, Inc.
UST Central Office – Fees & Notification File
Chattanooga EAC File # 0-330776

FO-020/JDB/3307765.3101

~~TDOT~~ TN107 WJT

ACTS, Inc. *Astrid Contract Technical Services, Inc.* Nuclear DOE DOD Utilities

1126 Jackson Avenue, Suite 308A, Pascagoula, Mississippi, 39567 Phone 228-762-2100, Fax 228-762-2101

UNDERGROUND STORAGE TANK PERMANENT CLOSURE REPORT

VOLUNTEER ARMY AMMUNITION PLANT
6703 Bonny Oaks Drive, Building 756
Chattanooga, Hamilton County, TN 27421

TN UST FACILITY I.D. 0-330776

Prepared for:

81st Regional Support Command
255 West Oxmoor Road
Birmingham, AL 35205

May 14, 2001

ENVIRONMENTAL ASSISTANCE CENTER
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
540 MCCALLIE AVENUE, SUITE 550 - STATE OFFICE BUILDING
CHATTANOOGA, TENNESSEE 37402
(423) 634-5745 STATEWIDE 1-888-891-8332 FAX (423) 634-6389

May 31, 2001

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US Army Reserves, 81st Regional Support Command
255 West Oxmoor Road
Birmingham, AL 35205

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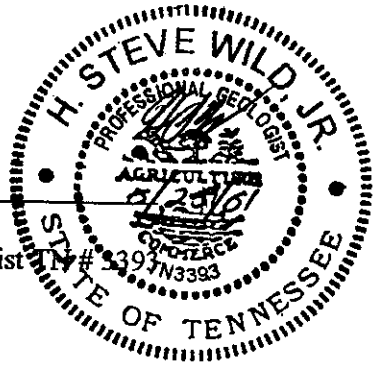
Division of Underground Storage Tanks

c: Marion Environmental, Inc.
UST Central Office – Fees & Notification File
Chattanooga EAC File # 0-330776

FO-020/JDB/3307765.3101

PROFESSIONAL CERTIFICATION

This report has been prepared by the staff of Marion Environmental Inc. under the supervision of the Professional whose seal and signature appear hereon. The findings, recommendations, specifications, or professional opinions are presented within the limits prescribed by the client, after being prepared in accordance with generally accepted professional practice. No other warranty is expressed or implied.



Steve Wild, P.G.
Registered Professional Geologist TN# 3393

TABLE OF CONTENTS

LIST OF APPENDICES

STATE OF TENNESSEE
DIVISION OF UNDERGROUND STORAGE TANKS

PERMANENT CLOSURE REPORT

The Responsible Party (RP) of the underground storage tank (UST) system shall complete and submit the **original** of this report within 45 days of collecting samples during the UST system closure assessment. Tennessee Code Annotated (T.C.A) #68-215-103(16) defines the Responsible Party as the owner and/or operator of a petroleum site or any person who at the time of the release which caused the contamination was the owner and/or operator of a petroleum underground storage tank.

Include the following appendices in the report. Attach extra sheets if necessary.

Appendix A: A table containing the field screening and analytical results. All results shall be reported in parts per million (ppm). The results shall be properly identified and correlated with the sampling locations on the site map. If water was encountered during closure-in-place, include the monitoring well information required in the Environmental Assessment Guidelines.

Appendix B: The original or carbon copy of the laboratory analysis sheets. Photocopies are not acceptable. All laboratory analysis sheets shall include the information specified in the UST System Closure Assessment Guidelines.

Appendix C: Documentation for treatment and/or disposal of soil, sludge, liquid, tanks and piping (i.e. Application to Treat Petroleum Contaminated Soil, Solid Waste Permits, Landfill Disposal Manifests, etc.)

Appendix D: A Copy of the Amended Notification form shall be submitted with this report. Send the original Amended Notification form to the UST Nashville Central Office.

1. UST Facility ID # **0-330776**

2. Facility Name: **Volunteer Army Ammunition Plant**

3. Division personnel with the appropriate field office were notified at least one working day before collecting soil samples for the UST system closure assessment? Yes__ No X
   If yes:
   Person contacted _____
   Field Office _____
   Date _____
   Reported by _____

4. The tank atmosphere and the work zone were regularly tested with a combustible gas indicator in accordance with UST regulations Appendix 6 (2) and (3). Yes X No__

Facility ID# 0-330776

5. Method of purging tank atmosphere: _____
Carbon dioxide gas__ Nitrogen__ Eductor-type air mover_X_ Diffused air blower__
Dry ice(1.5 lb/100gal)__ Other

6. Product piping was drained into the tank. Yes_X_ No__

7. Product piping was: Capped__ Removed_X_

8. All liquid/sludge was removed from the UST system. Yes_X_ No__ None encountered_

9. Method of liquid/sludge storage **N/A**

10. Method of liquid/sludge disposal **Transported off-site by A-1 Shipley's Waste Oil**

Manifests included in Appendix D. Yes_X_ No__ Not applicable__

11. Tank was labeled in accordance with the UST regulations Appendix 6(4)(f).
Yes__ No__ Not applicable_X_

12. Method of UST system storage/disposal:

Cut up for disposal_X_ Stored on site____ Stored off site____
Other **Landfill**

UST systems stored on or off site are subject to Rules 1200-1-15-.07(2)(e), (f) and (g) and Appendix 7.

13. Location of UST system storage/disposal: **Meadow Branch Landfill Chattanooga, TN**
Santek Environmental, Inc. Cleveland , TN
Certificate of disposal included in Appendix C. Yes_X_ No__
If no, explain _____

14. Amount of material excavated during UST system closure: **123** cubic yards
Approximately 100 yd3 of backfill material removed from gasoline UST basin.
Approximately 23 yd3 of backfill material removed from oil UST basin.

15. Total amount of contaminated material overexcavated after removal of the UST system:
__0__ cubic yards
If more than 100 cubic yards of material was overexcavated, Division personnel in the appropriate field office should have been contacted.
Division personnel in the appropriate field office were contacted. Yes__ No__Not Applicable_X_
If yes:
Person contacted _____
Field Office _____
Date _____
Reported by _____

Facility ID# 0-330776

All excavated material remaining on the site of generation or on a site owned by the responsible party or subsidiary of the responsible party shall be placed on and covered with plastic and bermed. Sampling the excavated material in accordance with Technical Guidance Document -005, must be completed prior to proper disposal.

If petroleum contaminated material is managed in accordance with Technical Guidance Document - 009, the appropriate Application to Treat Petroleum Contaminated Soil shall be completed and submitted to the local field office for approval. If the contaminated material is to be treated on a site owned by a Third Party, contact the Tennessee Division of Solid Waste Management.

All excavations shall be backfilled with material containing levels at or below 5 ppm benzene and/or 100 ppm TPH.

16. Mark all that apply regarding the management of the excavated material:
Stockpiled onsite__ Thermal treatment onsite__ Thermal treatment offsite__Landfilled__
Other: **Used to backfill the tank pits**
Documentation is included in Appendix C. Yes_ No__ Not applicable X

17. All sample containers were supplied by a Division approved laboratory. Yes X No__

18. All samples were placed directly into the appropriate containers, immediately after collection. Yes X No__

19. Immediately after collection all samples were placed on ice and maintained at 4^0 C until delivered to a Division approved laboratory. Yes X No__

20. Laboratory confirmation of petroleum contamination or discovery of free product was reported to the Division within 72 hours. Yes__ No__ Not applicable X

Person contacted _____
Field office _____
Date _____
Reported by _____

21. Water was encountered in the soil borings during closure in place.
Yes__ No X Not applicable__
If encountered, was water sampled. Yes__ No__
Monitoring well information is in Appendix A. Yes__ No__
Analytical results are in Appendix B. Yes__ No__

Facility ID# 0-330776

22. Water was encountered during excavation of the UST system. Yes__ No X
Amount of water removed:____gals.
Water recharged within 24 hours. Yes__ No__
Recharge water was sampled. Yes__ No__ Not Applicable X
Analytical results are in Appendix B. Yes__ No__ Not Applicable X
Method of water disposal:_____
Manifests included in Appendix C. Yes__ No__ Not Applicable X

23. If more than 500 gallons of water were removed, Division personnel in the appropriate field office should have been contacted.
Division personnel in the appropriate field office were contacted. Yes_ No__
Not Applicable X
If Yes:
Person Contacted _____
Field Office _____
Date _____
Reported by _____

24. Bedrock was encountered during UST system removal/closure-in-place.
Yes__ No X Not Applicable____
All the contaminated material above the applicable cleanup level was excavated.
Yes__ No__ Not applicable X
Soil was sampled from floor of excavation. Yes X No__
Analytical results are in Appendix B. Yes X No__

25. The original Notification Form reporting the closure of the tank system was submitted to the Nashville Central Office. Yes X No____

26. **Failure to submit a Notification Form may result in the assessment of additional tank fees.**

THIS PERMANENT CLOSURE REPORT WILL NOT BE PROCESSED WITHOUT THE COMPLETION AND SUBMITTAL OF THE APPROPRIATE APPENDICES IN THEIR ENTIRETY.

Facility ID# 0-330776

I certify under penalty of law, including but not limited to penalties for perjury, that the information contained in this form and on any attachments is true, accurate and complete to the best of my knowledge, information and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violations.

Major William Garrison, Jr.
UST System RP or RP's authorized representative (Print name)

William P. Garrison 21 May 01
Signature Date

Authorized Representative US Army Reserves, 81st Regional Support Command
Title (Print)

Steve Wild
Marion Environmental, Inc.
P.E or P.G. (Print name)

Signature

H. STEVE WILD JR. PROFESSIONAL GEOLOGIST 5/25/01 AGRICULTURE COMMERCE TN3393 STATE OF TENNESSEE

Date

P.G./TN3393
TN Registration #

STATE OF _____ COUNTY OF _____

Sworn to and subscribed before me by _____ on this date _____

My commission expires _____.

Notary Public (Print Name)

Signature

Date

Stamp/Seal

STATE OF _____ COUNTY OF _____

Sworn to and subscribed before me by _____ on this date _____

My commission expires _____.

Notary Public (Print Name)

Signature

Date

Stamp/Seal

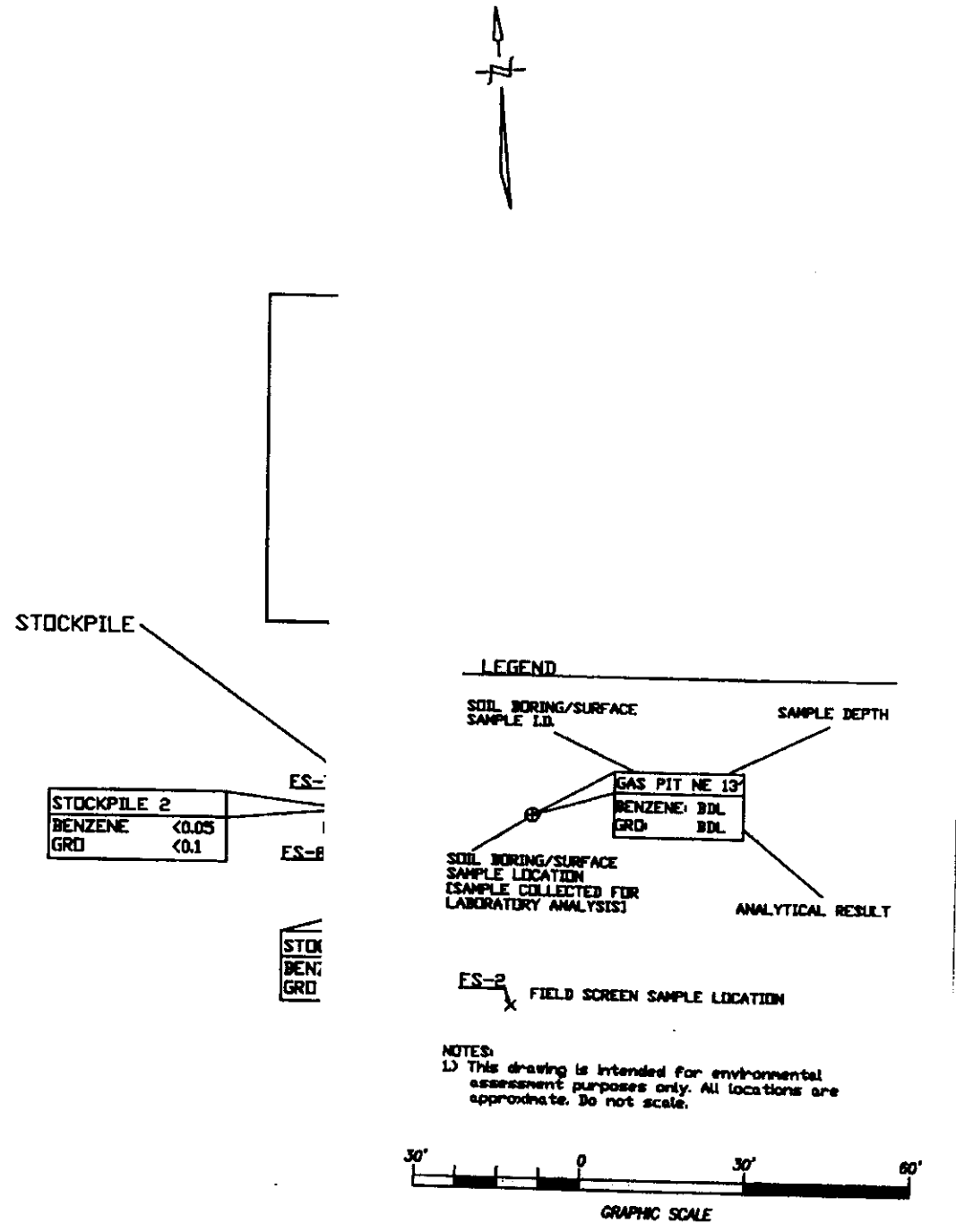


FIGURE NO.
2

Marion Environmental, Inc.
1814 Polymer Drive
Chattanooga, TN 37421-2203
TEL:(423)698-4918 FAX:(423)892-5122
http://www.oasoc-grp.com

SITE MAP
VOLUNTEER ARMY AMMUNITION SITE
6703 BONNY OAKS DRIVE
BUILDING 756
CHATTANOOGA, TN 37421

APPENDIX A
SOIL FIELD SCREENING AND ANALYTICAL RESULTS

TABLE 1
TANK CLOSURE ANALYTICAL SUMMARY

ANALYTICAL SUMMARY
Volunteer Army Ammunition Plant
6703 Bonny Oaks Drive, Building 756
Chattanooga, TN 37421
FACILITY ID# 0-330776

Gasoline UST Basin

Sample Number	Sample Location	Sample Date	Sample Depth (ft)	Field Screening Results (ppm)	Soil Analytical Results Listed in parts per million (ppm)	
					Benzene	GRO
Gasoline UST Basin - Soil Analytical Results in ppm						
Stockpile 1	Stockpile 1	4/18/01		7.0	<0.05	<0.1
Stockpile 2	Stockpile 2	4/18/01		5.0	<0.05	<0.1
Gas Dispenser 4'	Gas Dispenser	4/19/01	4'	110.0	<0.05	0.209
Dispenser Island 1'	Dispenser Island	4/27/01	1'		<0.05	11.5
Piping Trench 6'	Piping Trench	4/19/01	6'	130.0	<0.05	0.242
Trench Stockpile	Trench Stockpile	4/19/01		270.0	0.0584	16.8
NW Pit 13'	Northwest End Tank Pit Floor	4/18/01	13'	2.0	<0.05	<0.1
SW Pit 13'	Southwest End Tank Pit Floor	4/18/01	13'	3.0	<0.05	0.146
SE Pit 13'	Southeast End Tank Pit Floor	4/18/01	13'	13.0	<0.05	<0.1
NE Pit 13'	Northeast End Tank Pit Floor	4/18/01	13'	13.0	<0.05	0.134

Notes: [1]Soil samples were collected from at least 1 foot into undisturbed native soil.
[2]Field screening results in equivalent parts per million.
[3]Samples screened with Heath Tech Porta-FID OVD Flame Ionization Detector

TANK CLOSURE ANALYTICAL SUMMARY

ANALYTICAL SUMMARY
Volunteer Army Ammunition Plant
6703 Bonny Oaks Drive, Building 756
Chattanooga, TN 37421
FACILITY ID# 0-330776

Waste Oil UST Basin

Sample Number	Sample Location	Sample Date	Sample Depth (ft)	Field Screening Results (ppm)	Soil Analytical Results- Listed in parts per million (ppm) EPH
Kerosene UST Basin - Soil Analytical Results in ppm					
Waste Oil Stockpile	Waste Oil Stockpile	4/18/01		0.0	<4
WOPit-NW-8'	Northwest End Tank Pit Floor	4/18/01	8'	35.0	<4
WOPit-SW-8'	Southwest End Tank Pit Floor	4/18/01	8'	40.0	<4
WOPit-SE-8'	Southeast End Tank Pit Floor	4/18/01	8'	6.0	<4
WOPit-NE-8'	Norhteast End Tank Pit Floor	4/18/01	8'	1.0	<4

Notes: [1]Soil samples were collected from at least 1 foot into undisturbed native soil.
[2]Field screening results in equivalent parts per million.
[3]Samples screened with Heath Tech Porta-FID OVD Flame Ionization Detector

APPENDIX B

LABORATORY ANALYTICAL REPORTS

ANALYTICAL INDUSTRIAL
RESEARCH LABORATORIES, INC.
1550 37th Street, NE Cleveland, TN 37312
(423) 476-7768 Tel. / (423) 476-7714 Fax

Report To: MEI
Attn: Steve Wild

Invoice To: Same

Chain of Custody Record

Page 1 of 1

122417

PROJECT SITE	PROJECT #
VAAP Bldg 756	01066

SITE NAME

COLLECTED BY (SIGNATURE)

PO # 01066-10

DATE REPORT DUE Monday 4/30/01

VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	SAMPLE DATE	SAMPLE TIME	# CONTAINERS	Benzene 8260	TPH-GRO	REMARKS	R Cl	Presv.	pH
Dispenser Island A	RUSH	Soil	4/27/01	13:45	1	X	X	40z			

REMARKS TN SOIL. TN UST Facility ID # 0-330776

RELINQUISHED BY:	DATE	TIME
	4/27/01	14:0

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

DISPOSAL BY LABORATORY ☐ RETURN TO ORIGINATOR ☐ ARCHIVE _____ MONTHS ☐

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°	SEAL #	CONDITION:
	4/27/01	1400					<4°C		

REMARKS

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122417

MAY 02 2001

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/27/2001
Date Sampled	4/27/2001
Date Requested	4/30/2001
Rush Status	24 Hour
Phone	(423) 499-4919
☑ ***Fax***	(423) 892-5122
PO#	01066-10

Sample Information

Project # 01066 VAAP Bldg 756
Dispenser Island 1' Soil Facility ID # 0-330776

Lab Report	122417	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	11.5	ppm	0.10000	GRO	4/27/01	21:57	TB
	Benzene							
	Benzene	< 0.05	ppm	0.05000	8260	4/30/01	9:56	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary R Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.
1550 37th Street, NE Cleveland, TN 37312
(423) 476-7766 Tel. / (423) 476-7714 Fax

Report To: MEI
Attn: Steve Wild

Invoice To: Same

Chain of Custody Record

Page 1 of 1

PROJECT SITE: WAAP Bldg 756 | PROJECT #: 01066
SITE NAME:
COLLECTED BY (SIGNATURE): Steve Wild

PO #: 01066-7
DATE REPORT DUE:
VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	SAMPLE DATE	SAMPLE TIME	# CONTAINERS	BTEX 8260	THC	EPH	REMARKS	R Cl	Presv.	pH
WO Pit SE-8'	ASAP	SOIL	4-18-01	12:45	1		X					
WO Pit SW-8'	"	"	"	12:48	1		X					
WO Pit NE-8'	"	"	"	13:02	1		X					
WO Pit NW-8'	"	"	"	13:13	1		X					
Waste Oil/Stockpile	"	"	"	13:25	1		X					

REMARKS: TN UST Facility ID #0-330776

RELINQUISHED BY: Steve Wild DATE 4/18/01 TIME 14:00

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

DISPOSAL BY LABORATORY ☐ RETURN TO ORIGINATOR ☐ ARCHIVE _____ MONTHS ☐

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°	SEAL #	CONDITION:
Loretta	4/18/01	1409					1C		

REMARKS

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121997

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

APR 30 2001

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☐ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
WO Pit SE 8' Soil Facility ID # 0-330776

Lab Report	121997	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	EPH	<4	ppm	4	EPH	4/24/01	17:39	TB

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary B. Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121998

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☐*Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
WO Pit SW 8' Soil Facility ID # 0-330776

Lab Report	121998	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	EPH	<4	ppm	4	EPH	4/24/01	18:11	TB

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary R. Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121999

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
Fax	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
WO Pit NE 8' Soil Facility ID # 0-330776

Lab Report	121999	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
EPH		<4	ppm	4	EPH	4/24/01	18:43	TB

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122000

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☐*Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
WO Pit NW 8' Soil Facility ID # 0-330776

Lab Report	122000	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	EPH	<4	ppm	4	EPH	4/24/01	19:15	TB

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary A. Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122001

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☐ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Waste Oil Stockpile Soil Facility ID # 0-330776

Lab Report	122001	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	EPH	<4	ppm	4	EPH	4/24/01	19:47	TB

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed 

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.
1550 37th Street, NE Cleveland, TN 37312
(423) 476-7766 Tel. / (423) 476-7714 Fax

Report To:
Marion Environmental, Inc.
1914 Polymer Dr.
Cha H., TN 37421
Attn: Steve Wild

Invoice To:
Same

Chain of Custody Record

Page 1 of 1

PROJECT SITE: VAAD Bldg 756
PROJECT #: 01066-7
SITE NAME:
COLLECTED BY (SIGNATURE):

PO #: 01066-7
DATE REPORT DUE:
VERBAL/FAX/HARDCOPY

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	SAMPLE DATE	SAMPLE TIME	# CONTAINERS	Benzene 5260	TPH-GRO	REMARKS	R Cl	Presv.	pH
NE Pit-13'	ASAP	SOIL	4/18/01	9:07	1	X	X				
NW Pit-13'	"	"	"	8:58	1	X	X				
SW Pit-13'	"	"	"	9:35	1	X	X				
SE Pit-13'	"	"	"	9:23	1	X	X				
Stockpile 1	"	"	"	10:56	1	X	X				
Stockpile 2	"	"	"	10:54	1	X	X				

REMARKS: TN UST Facility ID # 0-330776

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

RELINQUISHED BY: DATE 4/19/01 TIME 11:34

DISPOSAL BY LABORATORY ☐ RETURN TO ORIGINATOR ☐ ARCHIVE _____ MONTHS ☐

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°	SEAL #	CONDITION:
	4/19/01	1134							

REMARKS

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121969

APR 26 2001

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received 4/18/2001
Date Sampled 4/18/2001
Date Requested 4/25/2001
Rush Status ASAP
Phone (423) 499-4919
☑ *Fax* (423) 892-5122
PO# 01066-7

Sample Information

Project # 01066 VAAP Bldg 756
NE Pit 13' Soil

Lab Report	121969	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	0.134	ppm	0.10000	GRO	4/20/01	21:21	TB
	Benzene							
	Benzene	<0.05	ppm	0.05000	8260	4/20/01	16:13	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121970

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
NW Pit 13' Soil

Lab Report	121970	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	<0.1	ppm	0.10000	GRO	4/20/01	21:48	TB
	Benzene							
	Benzene	<0.05	ppm	0.05000	8260	4/20/01	16:50	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary R. Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121971

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
SW Pit 13' Soil

Lab Report	121971	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	0.146	ppm	0.10000	GRO	4/20/01	22:14	TB
	Benzene							
	Benzene	< 0.05	ppm	0.05000	8260	4/20/01	17:27	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121972

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
SE Pit 13' Soil

Lab Report	121972	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	<0.1	ppm	0.10000	GRO	4/20/01	22:42	TB
	Benzene							
	Benzene	<0.05	ppm	0.05000	8260	4/20/01	18:03	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121973

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

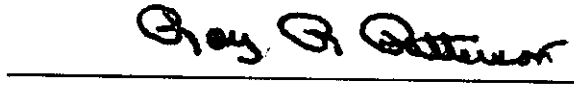
Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Stockpile 1 Soil

Lab Report	121973	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	< 0.1	ppm	0.10000	GRO	4/20/01	23:09	TB
	Benzene							
	Benzene	< 0.05	ppm	0.05000	8260	4/20/01	18:40	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed 

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 121974

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/18/2001
Date Sampled	4/18/2001
Date Requested	4/25/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Stockpile 2 Soil Facility ID # 0-330776

Lab Report	121974	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	<0.1	ppm	0.10000	GRO	4/20/01	23:37	TB
	Benzene							
	Benzene	<0.05	ppm	0.05000	8260	4/23/01	14:17	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.
1550 37th Street, NE Cleveland, TN 37312
(423) 476-7766 Tel. / (423) 476-7714 Fax

Report To:
Marion Environmental, Inc.
1914 Polymer Drive
Chattanooga, TN 37421
Attn: Steve Wild

Invoice To:
Same

Chain of Custody Record

Page 1 of 1

PROJECT SITE: VAAP Bldg 756 | PROJECT #: 01066 | PO #: 01066-7
SITE NAME:
COLLECTED BY (SIGNATURE):
DATE REPORT DUE:
VERBAL/FAX/HARDCOPY:

FIELD SAMPLE ID	RUSH FACTOR	SAMPLE MATRIX	SAMPLE DATE	SAMPLE TIME	# CONTAINERS	Benzene 8260	TPH-GRO	REMARKS	R Cl	Presv.	pH
Gas Dispenser 4'	ASAP	SOIL	4/19/01	16:00	1	X	X				
Piping Trench 6'	"	"	"	14:10	1	X	X				
Trench, Stockpile	"	"	"	16:15	1	X	X				

REMARKS: TN UST Facility ID # 0-330776. TN SOIL

RELINQUISHED BY: _____ DATE: 4/19/01 TIME: 16:35

RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME	RELINQUISHED BY:	DATE	TIME

DISPOSAL BY LABORATORY ☐ RETURN TO ORIGINATOR ☐ ARCHIVE _____ MONTHS ☐

LAB USE ONLY

RECEIVED FOR LAB BY:	DATE	TIME	AIRBILL NO.	OPENED BY:	DATE	TIME	TEMP°	SEAL #	CONDITION:
R Robertson	4/19/01	1635							GOOD

REMARKS

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122060

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received 4/19/2001
Date Sampled 4/19/2001
Date Requested 4/26/2001
Rush Status ASAP
Phone (423) 499-4919
☑ *Fax* (423) 892-5122
PO# 01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Gas Dispenser 4' Soil Facility ID # 0-330776

Lab Report	122060	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	0.209	ppm	0.10000	GRO	4/24/01	17:47	TB
	Benzene Benzene	< 0.05	ppm	0.05000	8260	4/23/01	15:28	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122061

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/19/2001
Date Sampled	4/19/2001
Date Requested	4/26/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Piping Trench 6' Soil Facility ID # 0-330776

Lab Report	122061	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	0.242	ppm	0.10000	GRO	4/24/01	18:14	TB
	Benzene							
	Benzene	<0.05	ppm	0.05000	8260	4/23/01	16:04	SDJ

I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed Gary R. Patterson

ANALYTICAL INDUSTRIAL RESEARCH LABORATORIES, INC.

1550 37TH STREET, NE
CLEVELAND, TENNESSEE 37312
(423) 476 - 7766 Fax: (423) 476-7714

North Carolina Certification# 340
Tennessee Certification# 02034

Lab Report 122062

APR 30 2001

1132
Marion Environmental, Inc./MEI
Attention: Steve Wild
1914 Polymer Drive
Chattanooga, TN 37421

Date Received	4/19/2001
Date Sampled	4/19/2001
Date Requested	4/26/2001
Rush Status	ASAP
Phone	(423) 499-4919
☑ *Fax*	(423) 892-5122
PO#	01066-7

Sample Information

Project # 01066 VAAP Bldg 756
Trench Stockpile Soil Facility ID # 0-330776

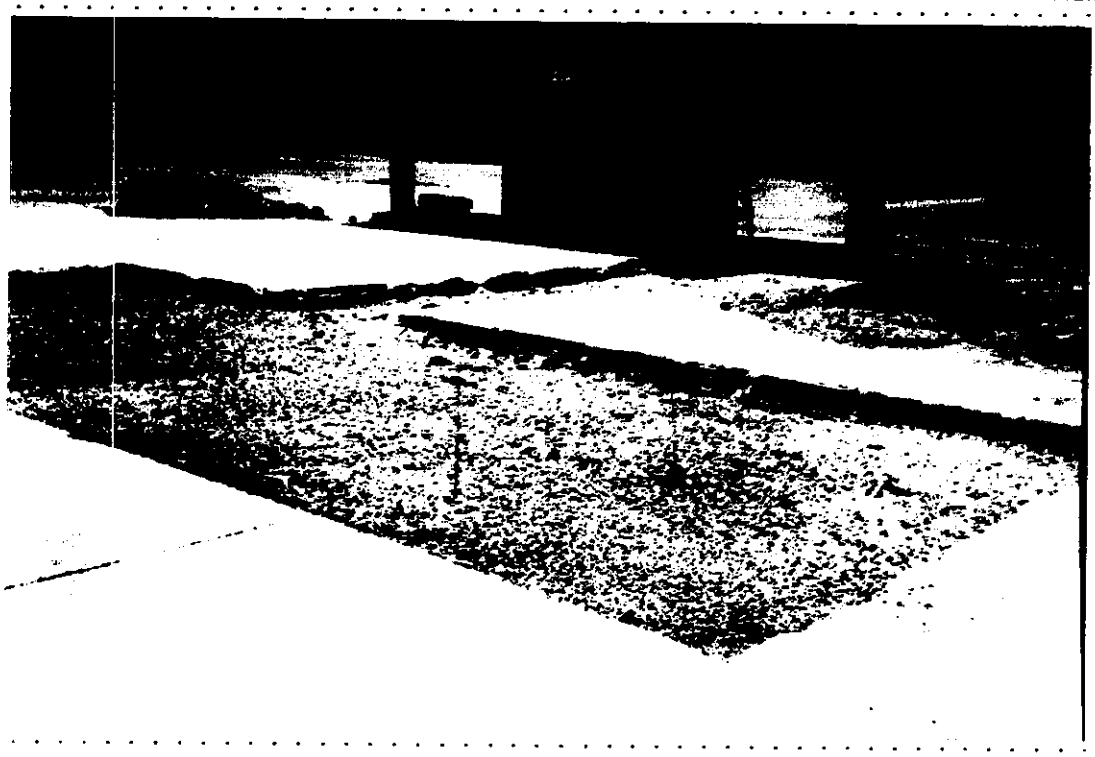
Lab Report	122062	*Result*		*MDL*	*Method*	*Date*	*Time*	*Analyst*
	GRO	16.8	ppm	0.10000	GRO	4/24/01	18:41	TB
	Benzene							
	Benzene	0.0584	ppm	0.05000	8260	4/24/01	12:46	SDJ

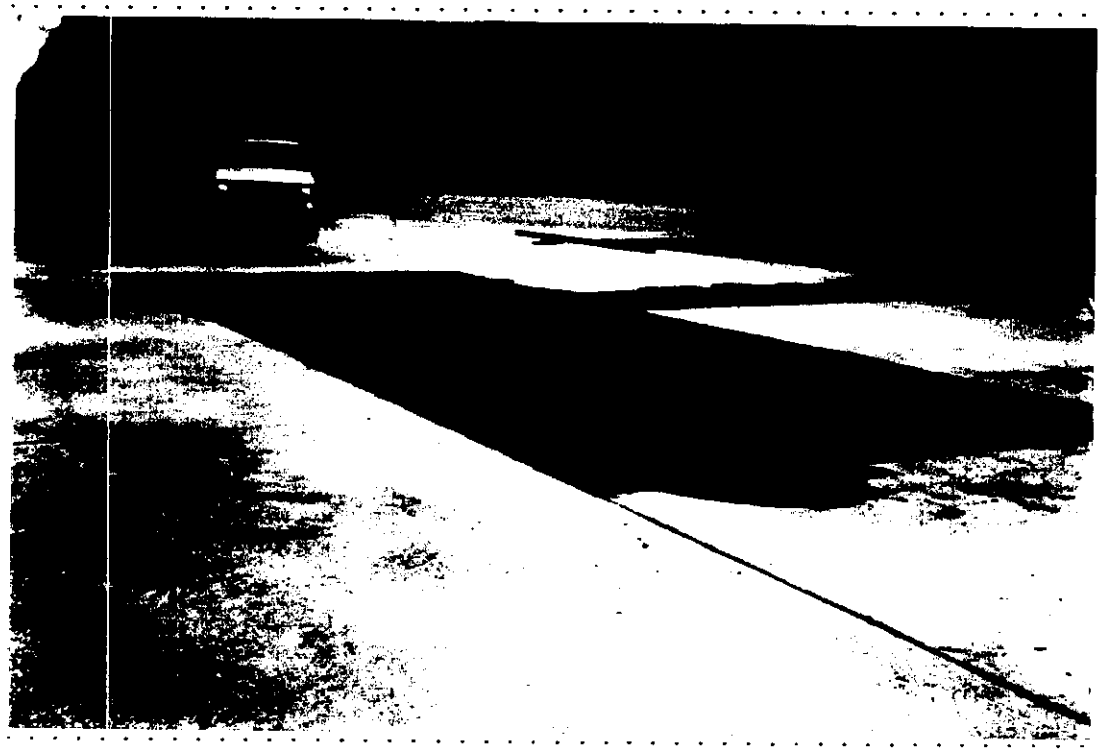
I hereby certify that the analytical procedures employed are those approved by the Environmental Protection Agency or other applicable methods for these analyses.

Signed _____

APPENDIX C

DISPOSAL DOCUMENTATION

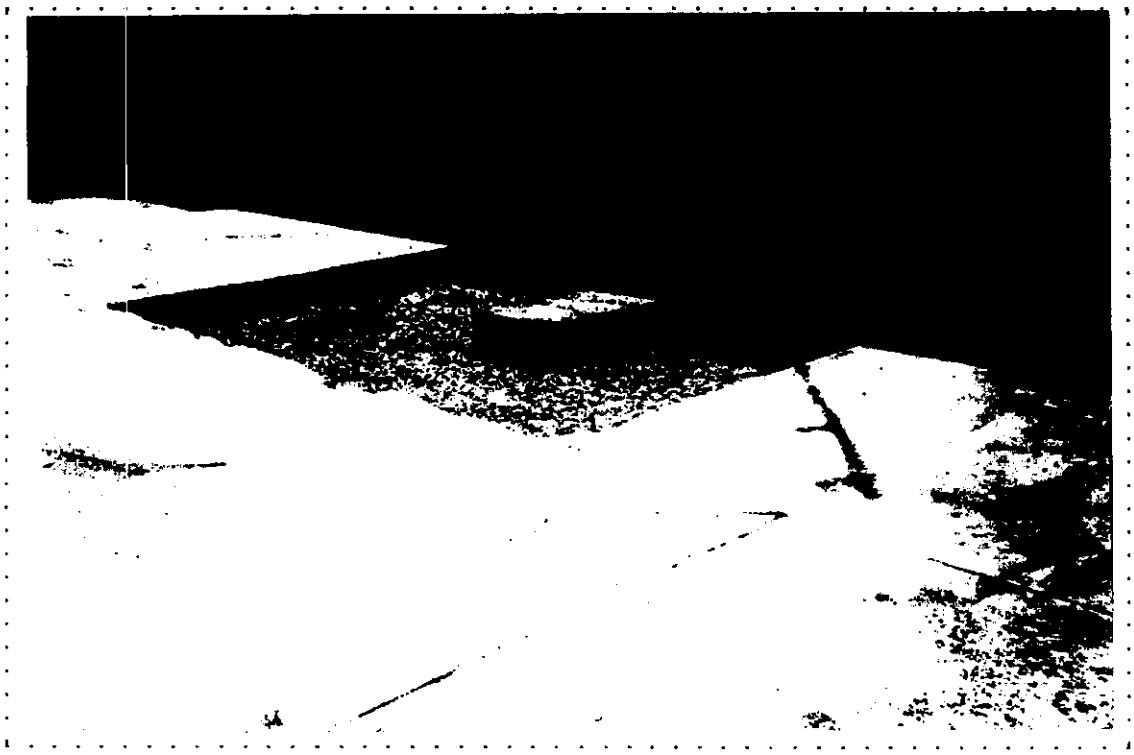


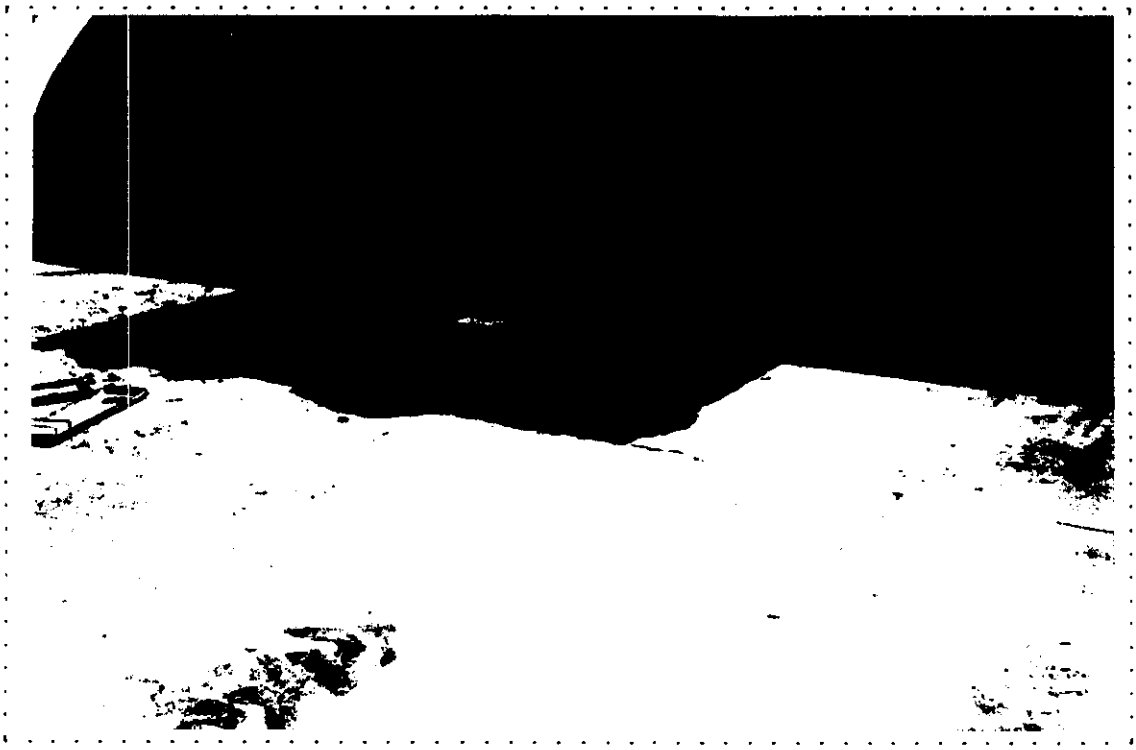


MARION ENVIRONMENTAL, Inc.
1914 POLYMER DRIVE
CHATTANOOGA, TENNESSEE 37421
Phone:(423)499-4919 Fax:(423)892-5122
email: mei@ada.net http://www.eeee-grp.com

SITE PICTURES
VOLUNTEER ARMY AMMUNITION SITE
6703 BONNY OAKS DRIVE
BUILDING 756
CHATTANOOGA, TN 37421

PROJECT: 01068	SUPERVISOR: H.S.W.	TAKEN BY: H.S.W.
FACILITY ID #: 0-330778	DATE TAKEN: SEE PHOTOS	DATE: 5/16/01
SCALE: N/A	APPROVED:	APPENDIX B





MARION ENVIRONMENTAL, Inc.
1914 POLYMER DRIVE
CHATTANOOGA, TENNESSEE 37421
Phone:(423)496-4819 Fax:(423)892-5122
email: mei@odo.net http://www.emec-grp.com

SITE PICTURES
VOLUNTEER army AMMUNITION SITE
6703 BONNY OAKS DRIVE
BUILDING 756
CHATTANOOGA, TN 37421

PROJECT:	SUPERVISOR:	TAKEN BY:
01088	H.S.W.	H.S.W.
FACILITY ID #:	DATE TAKEN:	DATE:
0-330776	SEE PHOTOS	5/16/01
SCALE:	APPROVED:	APPENDIX
N/A		B

A-1 SHIPLEY'S WASTE OIL, INC.
1600 Wilder St. - Chattanooga, TN 37406

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

3. Generator's Name and Mailing Address
MEI INC
1914 POLYMER DR
CHA. TN

4. Generator's Phone ( )

5. Transporter 1 Company Name
A-1 SHIPLEY'S WASTE OIL, INC.

6. US EPA ID Number
T. N. D. 9. 8. 0. 8. 4. 3. 6. 1. 9

A. Transporter's Phone
423-622-7039

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

10. US EPA ID Number

C. Facility's Phone

11. Waste Shipping Name and Description

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. CONTAMINATED FUEL.	1	T	220	gal
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Mike Veazey
Signature: Mike Veazey
Month Day Year: 05 08 01

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Mike Veazey
Signature: Mike Veazey
Month Day Year: 05 08 01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: KENNETH SHIPLEY
Signature: Kenneth Shipley
Month Day Year: 05 08 01

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL – RETURN TO GENERATOR

A-1 SHIPLEY'S WASTE OIL, INC.

1600 Wilder Street
CHATTANOOGA, TN 37406
(423) 622-7039 FAX 624-4793
Digital Beeper 785-9406

14512

CUSTOMER'S ORDER NO.	PHONE	DATE 5-8-01
NAME MEI, Inc.		
ADDRESS 1914 Palymer Ln. Chatt, Tn		

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT

QTY.	DESCRIPTION	PRICE	AMOUNT
220 gal.	Cont. fuel		176 00

I hereby declare that I understand that A-1 Shipley's Waste Oil, Inc. is not responsible for anything except Waste Oil, Kerosene and Diesel Fuel.

No Gasoline, Cleaning Fluids, Solvents or any other type of hazardous waste may be placed in any container serviced by A-1 Shipley's Waste Oil, Inc.

The Customer is liable and can be charged the full amount of any charges or penalties incurred due to the violation of any regulations.

Tank Cleaning • Waste Oil

Oil Spills • Oil Clean Up Service

EPA ID # TND-98-084-3619

NET 30 DAYS
AFTER 30 DAYS, INTEREST WILL BE CHARGED AT 1 1/2% PER MONTH

TAX	
TOTAL	176 00

RECEIVED BY Mike Vess

All claims and returned goods MUST be accompanied by this bill.

Thank You

6 [redacted]

. No. 2. Page 1 of

A. Transporter's Phone 1. 9 423-622-7039

B. Transporter's Phone

C. Facility's Phone

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
	1	T	220 gal	

E. Handling Codes for Wastes Listed Above

ral regulations for reporting proper disposal of Hazardous Waste.

Month Day Year

Vess 05 08 01

Vess 05 08 01

ORTER 18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name Kenneth Shipley | Signature Kenneth Shipley | Month Day Year 05 08 01

ORIGINAL – RETURN TO GENERATOR

[illegible] Rev. 12/98

A-1 SHIPLEY'S WASTE OIL, INC.

1600 Wilder Street
CHATTANOOGA, TN 37406
(423) 622-7039 FAX 624-4793
Digital Beeper 785-9406

14382

CUSTOMER'S ORDER NO.	PHONE	DATE
01066-5	499-4919	4-17 01

NAME MARION ENVIRONMENTAL

ADDRESS 1914 POLYMER DR

CHATT TN 37421

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT

QTY.	DESCRIPTION	PRICE	AMOUNT
150	Used waste oil		

I hereby declare that I understand that A-1 Shipley's Waste Oil, Inc. is not responsible for anything except Waste Oil, Kerosene and Diesel Fuel.

No Gasoline, Cleaning Fluids, Solvents or any other type of hazardous waste may be placed in any container serviced by A-1 Shipley's Waste Oil, Inc.

The Customer is liable and can be charged the full amount of any charges or penalties incurred due to the violation of any regulations.

Tank Cleaning • Waste Oil

Oil Spills • Oil Clean Up Service

EPA ID # TND-98-084-3619

NET 30 DAYS
AFTER 30 DAYS, INTEREST WILL BE CHARGED AT 1 1/2% PER MONTH

TAX

RECEIVED BY X

TOTAL

All claims and returned goods MUST be accompanied by this bill.

Thank You

No. 2. Page 1 of

A. Transporter's Phone 423-622-7039

B. Transporter's Phone

C. Facility's Phone

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
	1	T...	150	Gal

E. Handling Codes for Wastes Listed Above

...ulations for reporting proper disposal of Hazardous Waste.

	Month	Day	Year
	4	17	01
...ng Good	4	17	01

...R Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

FACILITY

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR'S COPY

A-1 SHIPLEY'S WASTE OIL, INC.
1600 Wilder St. - Chattanooga, TN 37406

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address: MARION ENVIRONMENTAL
KIM PALMER DR
CHATT TN 37421

4. Generator's Phone (423) 499 4911

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
A-1 SHIPLEY'S WASTE OIL, INC.	T N D 9 8 0 8 4 3 6 1 9	423-622-7039
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. CONT WASTE OIL	1	TANK	150	GAL
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

MCT PROJECT # 01066

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
X CHRIS MCCORMICK		4	17	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JAMES HAY GOOD		4	17	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR'S COPY

Santek Environmental, Inc.
650 25th ST NW Suite 100
Cleveland, TN 37311

000000 CASH CUSTOMER

SITE	TICKET	GRID	WEIGHMASTER
01	507049		Clyde Payne

DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/19/01	04/19/01	14:03	14:21	0	

REFERENCE	ORIGIN
W 2500	BRADLEY CO.

Scale 1 Gross Wt. 6240 LB
Scale 1 Tare Wt. 5820 LB
Net Weight 420 LB

Inbound - Cash ticket

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
0.21	TON	HOUSEHOLD TRASH	26.25	5.51	0.18	5.69

I certify I am not transporting any hazardous, infectious or regulated waste.

550 GAL TANK

NET AMOUNT	
5.69	TENDERED
5.69	CHANGE
0.00	CHECK NO.

SIGNATURE _____

1

Aqua Treat Incorporated

CERTIFICATE OF TREATMENT, RECYCLING AND DISPOSAL

Aqua Treat Incorporated certifies and assures to its Customer that the transaction described below, including treatment, storage, recycling, and disposal of the waste described herein was completed in compliance with all applicable federal, state, and local regulations and laws.

GENERATOR:

COMPANY: Volunteer Army Ammunition Site

ADDRESS: 6703 Bonny Oaks Drive

CITY, STATE: Chattanooga, TN 37421

DATE RECEIVED: March 19, 2001

MANIFEST DOCUMENT NUMBER: BOL

WASTE MATERIAL QUANTITY: 1 - 550-gal Steel Diesel AST

WASTE PROFILE NUMBER(S): N/A

DATE OF PROCESSING: March 21, 2001

HANDLING CODES: S02, D80, Landfill Disposal

Aqua Treat Incorporated

DECONTAMINATION CERTIFICATE

1. *Seller hereby sells or otherwise conveys to the following material in return for valuable consideration, the receipt and sufficiency of which is hereby acknowledged:*

ONE 10,000 GAL UST (FULL CIRCLE)

2. *Notwithstanding any other warranty or limitation of warranty herein or otherwise, Seller warrants and represents to* MEADOW BRANCH LANDFILL *that the materials delivered hereunder do not contain any "hazardous substance" (which shall be defined as those substances included in Sec. 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act, 42, U.S.C., Sec. 9601 (14), and those substances that are toxic, ignitable, corrosive, and/or reactive, as those terms are defined at 40 CFR 261, Subpart C), except those "hazardous substances" which are integral constituents of the metallic fraction of the scrap metal or which are contained in the electrolytic fluid in a spent lead-acid battery. Seller will indemnify, defend, and hold* MGI *harmless from any and all claims, demands and liabilities, including reasonable attorney's fees, resulting in whole or in part from a breach of the foregoing warranty. "Seller" shall be defined herein as any person, corporation, partnership or other entity that sells, transfers, gives, or otherwise conveys materials to*

SELLER:

MARION ENVIRONMENTAL

Name CHRIS McCORMACK

Title SUPER.

E92 950

Name THOMAS CRISP

Title SCALE MASTER

4-18-01

DECONTAMINATION CERTIFICATE

1. Seller hereby sells or otherwise conveys to the following material in return for valuable consideration, the receipt and sufficiency of which is hereby acknowledged:

One 550 Gal UST 01066 #6

2. Notwithstanding any other warranty or limitation of warranty herein or otherwise, Seller warrants and represents to Santek that the materials delivered hereunder do not contain any "hazardous substance" (which shall be defined as those substances included in Sec. 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act, 42, U.S.C., Sec. 9601 (14), and those substances that are toxic, ignitable, corrosive, and/or reactive, as those terms are defined at 40 CFR 261, Subpart C), except those "hazardous substances" which are integral constituents of the metallic fraction of the scrap metal or which are contained in the electrolytic fluid in a spent lead-acid battery. Seller will indemnify, defend, and hold M.E.I. harmless from any and all claims, demands and liabilities, including reasonable attorney's fees, resulting in whole or in part from a breach of the foregoing warranty. "Seller" shall be defined herein as any person, corporation, partnership or other entity that sells, transfers, gives, or otherwise conveys materials to

SELLER:

Marion Environmental
1914 Polymer Dr. Chatt TN 37421
Name Mike Vaggs
Title Field Tech

SANTEK ENVIRONMENTAL
Name
Title

APPENDIX D

NOTIFICATION FOR USTS FORM

Notification for Underground Storage Tanks

UST Division, 4th Floor L & C Tower, 401 Church St., Nashville, TN 37243-1541

STATE USE ONLY

ID NUMBER

DATE RECEIVED

A. Date Entered Into Computer

B. Data Entry Clerk Initials

C. Owner Was Contacted to

Clarify Responses. Comments

TYPE OF NOTIFICATION

__ A. NEW FACILITY __ B. AMENDED _X_ C. CLOSURE

No. of tanks at facility

No. of continuation sheets attached

INSTRUCTIONS

Please type or print in ink; all items except "signature" in section V. This form must be completed for each location containing underground storage tanks. If more that five (5) tanks are owned at this location, photocopy the following sheets, and staple continuation sheets to the form.

GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substance since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8 1986. The information requested in required by Section 9002 of the Resource Conservation and Recovery Act, (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or in the absence of such record, your knowledge, belief, or recollection.

Who Must Notify: Section 9002 of RCRA, as amended, required that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owner means -

a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and

b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

c) If the State agency so requires, any facility that has undergone any changes to facility information or tank system status (only amended tank information needs to be included).

What Tanks are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. Gasoline, used oil, or diesel fuel, and 2. industrial solvents pesticides herbicides or fumigants.

What Tanks are Excluded? Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for non commercial purposes;
2. tanks used for storing heating oil for consumptive uses on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws:
5. surface impoundments, pits, ponds, or lagoons;
6. stormwater or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances are Covered? The notification requirements apply to under ground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where to Notify? Send completed forms to:
Division of Underground Storage Tanks
Dept. of Environment & Conservation
4th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-1541

When to Notify? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use. 3. If the State requires notification of any amendments to the facility send information to State agency immediately.

Penalties: Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed $10,000 for each tank for which notification is not given or for which false information is submitted.

I. OWNERSHIP OF TANKS

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
81st Regional Support Command

Street Address
255 West Oxmoor Road

City: **Birmingham** State: **AL** Zip Code: **35205**

County

Phone Number (Include Area Code)
(205) 795-1588

II. LOCATION OF TANKS

If required by State, give the geographic location of tanks by degrees, minutes, and seconds. Examples Lat. 42, 36, 12N Long. 85, 24, 17W

Latitude _____ Longitude _____

State Tax Map No. _____ State Tax Parcel No. _____

Facility Name or Company Site Identifier, as applicable
Volunteer Army Ammunition Site

Street Address (P.O. Box Not Acceptable)
6703 Bonny Oaks Dr., Building 756

City: **Chattanooga** State: **TN** Zip Code: **37421**

County: **Hamilton** Municipality

III. TYPE OF OWNER		IV. INDIAN LANDS	
X Federal Government ___ State Government ___ Local Government Authority	___ Commercial ___ Private	Tanks are located on land within an Indian Reservation or on other trust lands. **No** Tanks are owned by native American nation or individual. **No**	Tribe or Nation:

V. TYPE OF FACILITY

Select the Appropriate Facility Description:

___ Gas Station	___ Railroad	___ Trucking/Transport
___ Petroleum Distributor	___ Federal - Non-Military	___ Utilities
___ Air Taxi (Airline)	X Federal - Military	___ Residential
___ Aircraft Owner	___ Industrial	___ Farm
___ Auto Dealership	___ Contractor	
___ Other (Explain)		

VI. CONTACT PERSON IN CHARGE OF TANKS

Name	Job Title	Address	Phone Number (Include Area Code)
Steven Francis		**225 West Oxmoor Road** **Birmingham, AL 35205**	**(205) 795-1588**

VII. FINANCIAL RESPONSIBILITY

I have met the financial responsibility requirements in accordance with 40 CFR Subpart H **Yes**

Check All that Apply		
X Self Insurance	___ Guarantee	___ State Funds
___ Commercial Insurance	___ Surety Bond	X Trust Fund
___ Risk Retention Group	___ Letter of Credit	___ Other Method Allowed Specify

VIII. CERTIFICATION (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.

Name and official title of owner or owner's authorized representative (Print)	Signature	Date Signed
Major William Garrison, Jr.	William P Garrison	21 May 01

EPA estimates public reporting burden for this form to average 30 minutes per response including time for reviewing instructions, gathering and maintaining the data needed and completing and reviewing the form. Send comments regarding this burden estimate to Chief, Information Policy Branch PPM-223, U.S. Environmental Protection Agency, 401 M. Street, Washington D.C. 20460, marked "Attention Desk Officer for EPA." This form amends the previous notification form as printed in 40 CFR Par 280, Appendix I. Previous editions of this notification form may be used while supplied last.

IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)

Tank Identification Number	Tank No. 11	Tank No. 12	Tank No.	Tank No.	Tank No.
1. Status of Tank (mark only one) Currently in Use					
Temporarily Out of Use (Remember to fill out section X)					
Permanently Out of Use (Remember to fill out section X)	X	X			
Amendment of Information					
2. Date of Installation (mo./yr.)	1/30/90	1/30/90			
3. Estimated Total Capacity (gallons)	10,000	500			
4. Material of Construction (Mark all that apply)					
Asphalt Coated or Bare Steel					
Cathodically Protected Steel					
Epoxy Coated Steel					
Composite (Steel with Fiberglass)					
Fiberglass Reinforced Plastic	X	X			
Lined Interior					
Double Walled					
Polyethylene Tank Jacket					
Concrete					
Excavation Liner					
Unknown					
Other, Please specify					
Has tank been repaired?					
5. Piping (Material) (Mark all that apply) Bare Steel					
Galvanized Steel					
Fiberglass Reinforced Plastic	X	X			
Copper					
Cathodically Protected					
Double Walled					
Secondary Containment					
Unknown					
Other, please specify					
6. Piping (Type) (Mark all that apply)					
Suction: no valve at tank					
Suction: valve at tank					
Pressure	X				
Gravity Feed		X			
Has piping been repaired?					

Tank Identification Number	Tank No. 11	Tank No. 12	Tank No.	Tank No.	Tank No.
7. Substance Currently or LastStored In Greatest Quantity by Volume					
Gasoline	X				
Diesel					
Gasohol					
Kerosene					
Heating Oil					
Used Oil		X			
Other, Please Specify					
Hazardous Substance CERCLA name and/or CAS Number					
Mixture of Substances Please Specify					
X. TANKS OUT OF USE, OR CHANGE IN SERVICE					
1. Closing of Tank A. Estimated date last used (mo./day/year)	Unknown	Unknown			
B. Estimate date tank closed (mo./day/year)	4/17/01	4/19/01			
C. Tank was removed fromground	X	X			
D. Tank was closed in ground					
E. Tank filled with inert material Describe					
F. Change in Service					
2. Site Assessment Completed	No	No			
Evidence of a leak detected	No	No			

LEAD-BASED PAINT SURVEY REPORT

United States Army Reserve Center
Hickory Valley Road
Chattanooga, Tennessee (TN107)

Prepared for:

U. S. Army Reserve Center
81st Regional Support Command
Birmingham, Alabama

EEG, INC
Environmental & Construction Services

Prepared by:

Environmental Enterprise Group, Inc.
1345 Barracks Rd
North Charleston, SC 29405-2106

MARCH 2004

DISCLAIMER

This document is provided for informational purposes only. The information contained in this document and these references represents the current view of Environmental Enterprise Group, Inc. on the issues discussed as of the date of publication.

Information provided in this document is provided 'as is' without warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose and freedom from infringement. The user assumes the entire risk as to the accuracy and the use of this document.

This survey is of readily accessible areas of the building and is limited to visual observations and XRF analysis of apparent conditions/components tested and existing at the time of the survey only. Latent and concealed defects and deficiencies are excluded from the survey; equipment items and systems were not dismantled. EEG assumes no responsibility or obligation to update these findings.

Maintenance and other items may be discussed, but they are not a part of this survey. The report is not a compliance survey or certification for past or present governmental codes or regulation of any kind, unless specifically stated for that purpose. The survey and report only address the presence of or danger from the potentially harmful substance of lead in paint. The survey and report do not address the presence of or danger from other potentially harmful substances and environmental hazards including but not limited to radon, asbestos, urea formaldehyde, toxic or flammable chemicals, and water and airborne hazards. Also excluded are surveys of and report on wells, septic systems, security systems, central vacuum systems, sprinkler systems, fire and safety equipment and the presence of rodents, termites, and other insects.

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TABLE OF CONTENTS

ACRONYM LIST

CFR	Code of Federal Regulations
CLR	Color
CND	Condition
DI	Depth Index
EEG	Environmental Enterprise Group
EPA	U. S. Environmental Protection Agency
FEAT	Feature
HUD	U. S. Department of Housing and Urban Development
LBP	Lead-Based Paint
mg/cm^2	milligrams of lead per square centimeter
PPM	Parts Per Million
RES	Result
SSEC	Source Seconds
STRC	Structure
SUB	Substrate
$\mu g/ft^2$	micrograms of lead per square foot
µg/g	micrograms of lead per gram
XRF	X-Ray Fluorescence

EXECUTIVE SUMMARY

The United States Army Reserve, 81st Regional Support Command, retained the Environmental Enterprise Group, Inc (EEG) to perform a modified lead-based paint (LBP) survey of the United States Army Reserve Center (USARC) located in Chattanooga, Tennessee.

A lead inspector from EEG performed the survey using a Niton Model XL700 X-ray Fluorescence (XRF) analyzer (serial # 869) to measure the lead content of various painted surfaces throughout the building. The inspection was performed using modified guidelines of the U.S. Department of Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, June 1995 and 1997. The inspector visually examined the building and grouped similar components together for survey purposes. The inspector then selected a small number of the grouped components for survey to obtain a representative characteristic analysis of similar components throughout the building. Dust and soil samples were not collected.

U.S. Environmental Protection Agency (EPA) and HUD guidelines specify a positive determination of lead in paint when the lead content is equal to or greater than 1.0 milligram of lead per square centimeter (mg/cm^2) using an XRF analyzer. A negative classification does not necessarily mean the component is lead free. The Occupational Safety and Health Administration (OSHA) Lead in Construction Standard (29 CFR 1926.62) defines lead based paint as any detectable amount and guidelines must be followed.

253 LBP readings and calibration checks were taken using the XRF analyzer. The components that contained consistently detectable amounts of lead were interior and exterior doors and casings, door and window lintels, and structural steel components. All of the exterior wood components of Building 202 had significantly elevated levels of lead. Results are included as Appendix A, XRF Field Data Results.

1.0 INTRODUCTION

The United States Army Reserve, 81st Regional Support Command, retained the Environmental Enterprise Group, Inc (EEG) to perform a modified lead-based paint (LBP) survey of the United States Army Reserve Center (USARC) located in Chattanooga, Tennessee. Building 228, the Administration Building, is a 4,640 square foot single story concrete block brick veneer building. Date of construction is unknown, however it is very similar to Building 229. The Reserve Center Training Center, Building 229, is a 5,775 square foot single story concrete block brick veneer building constructed in 1972. Building 756, the Maintenance Shop, is a 14,340 two story concrete block with brick and metal exteriors. It has 7 vehicle bays and was constructed in 1974. Building 202 is a single story wooden framed and sided structure with a large open carport and is in extremely bad condition.

2.0 LEAD-BASED PAINT TESTING PROCEDURES

The facility was inventoried and room equivalents identified. Each room equivalent was further classified into components. The component substrate was then identified. All of these elements make up a testing combination. The following paragraphs describe the wall, room, and component description and designation:

Definition of Room Equivalent:

A room equivalent is an identifiable part of a building, such as a room, an exterior side, or an exterior area. Hallways, stairways, and exterior areas, such as loading docks, parking lots, and each side of a building, are all examples of room equivalents.

Delineation of Room Equivalent:

Each room equivalent is made up of *components*. Components may be located inside or outside a building. For example, components in a room are the ceiling, floor, walls, a door and its casing, the window sash, and window casings. The *substrate* is the material underneath the paint. Many substrates exist, however, the industry standards recommend classifying substrates into one of six

substrate types: brick, concrete, drywall, metal, plaster, and wood. These substrate types are intended to include a broad range of materials. If the true substrate is not one of the six types, the substrate that most closely matches the true substrate is selected. For substrates on top of substrates, such as plaster on concrete, the substrate directly beneath the painted surface is used. The room equivalent, component, and substrate characterize a *testing combination*. In some cases, visible color of paint may also be used to further define unique testing combinations. The *test location* is a specific area on a testing combination where the XRF instrument tests for LBP.

Exterior Structure Designations:

The exterior sides of the building are lettered, starting with the letter A. The A side of the building is the main entry side of the building. Starting on the A side, the remaining sides are lettered consecutively (B, C, D) going clockwise around the building (assuming you are viewing the building from above).

Interior Designations, Room Names, Room Sides, and Component Identification:

Unique rooms (such as halls) in the facility are named on the inspection report. If there is more than one of a certain type of named room, they are numbered. (For example, if there are three halls, they are labeled “Hall 1," “Hall 2," etc.). Other rooms, which cannot be uniquely named because the use may change, are numbered. Certain building components that are adjacent to each other and not likely to have a different painting history are grouped together in a single testing combination. Every room in the building has each of its sides lettered in accordance with the building’s exterior lettering.

Sampling Strategies:

The sampling strategy adheres to the EPA Performance Characteristic Sheet for the particular XRF instrument used, as well as the manufacturer’s modifications and recommendations. The XRF used for detection of LBP in these buildings was the NITON XL700 Spectrum Analyzer Lead Detector, manufactured by NITON Corporation, 74 Loomis Street, Bedford, Massachusetts 01730-0368.

Evaluation of the Quality of Inspection:

Evaluation methods include direct observation of the XRF testing, calibration checks prior to testing, periodically throughout the day, at the end of the day, and repeat testing of painted surfaces. Repeat testing entails randomly selecting and testing (in a different spot) a number of testing combinations from previously tested areas. Usually, the XRF instrument used in the original inspection is used for retesting. The repeat results are compared with the previous results of the same testing combinations. Results should not differ from the original readings by more than the Retest Tolerance Limit, as specified in the XRF Performance Characteristic Sheet. If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, the procedure should be repeated with new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection is considered deficient and should be re-accomplished. Appendix C includes the Quality Evaluation Results and the formula for obtaining the Retest Tolerance Limit.

3.0 IDENTIFICATION OF LEAD-BASED PAINT

Summary of Lead-Based Paint Identified in Facility:

A total 253 XRF samples and calibrations were taken throughout the building. The components that contained significant detectable amounts of lead were:

Buildings 228 – exterior metal porch components and railings, and interior door casings

Building 229 - interior and exterior doors and casings, door and window lintels, and exterior structural steel components

Building 756 - interior doors and casings, stair rails

Building 202 – all exterior painted surfaces

OSHA Lead in Construction Standard (29 CFR 1926.62) defines lead based paint as any detectable amount and guidelines must be followed prior to disturbing these surfaces. Appendix A contains the room-by-room results of the paint sampling conducted in the facility. Appendix B shows the floor plans.

Depth Index

The Depth Index (DI) is an indication of the amount of non-leaded paint covering the lead detected by the XRF. A DI less than 1.5 indicates lead near the surface layer of paint; between 1.5 and 4 indicates moderately covered lead; and greater than 4 indicates deeply buried lead.

APPENDIX A

Lead In Paint
XRF Field Data Sheets

The positive (POS) and negative (NEG) results reported on the following data sheets are based on the EPA/HUD Guidelines that specify a positive determination of lead when the lead content is greater than or equal to 1.0 mg/cm^2 using an XRF analyzer.

USARC - Chattanooga 2, Tennessee
Serial #XL700-U869NR4313 Site: Date: 12/15/2003 to 12/16/2003

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
1	**1772**				**Calibrate**					**14.0**	**12/15/2003 16:09:01**	**1.0**	**POS**	**1.13 ± 0.20**
2	**1773**				**Calibrate**					**18.4**	**12/15/2003 16:09:30**	**1.0**	**POS**	**1.10 ± 0.13**
3	**1774**				**Calibrate**					**9.6**	**12/15/2003 16:10:07**	**1.0**	**POS**	**1.11 ± 0.20**
4	1775	B 756	1	D	Hall 100	Stairs	Metal	Rail cap	Blue	3.2	12/15/2003 16:29:32	3.8	NEG	0.05 ± 0.13
5	1776	B 756	1	D	Hall 100	Stairs	Metal	Stringer	Blue	3.3	12/15/2003 16:29:50	2.8	NEG	0.03 ± 0.27
6	**1777**	**B 756**	**1**	**D**	**Hall 100**	**Stairs**	**Metal**	**Rail cap**	**Yellow**	**14.1**	**12/15/2003 16:30:05**	**1.8**	**POS**	**2.26 ± 0.88**
7	1778	B 756	1	A	Hall 100	Wall	Concrte		Blue	14.9	12/15/2003 16:30:51	1.0	NEG	0.08 ± 0.71
8	1779	B 756	1	B	Hall 100	Door	Metal	Door	Blue	5.6	12/15/2003 16:31:30	1.9	NEG	0.29 ± 0.30
9	1780	B 756	1	B	Hall 100	Door	Metal	Casing	Blue	3.3	12/15/2003 16:31:44	4.3	NEG	0.11 ± 0.44
10	1781	B 756	1	B	Hall 101	Wall	Concrte		Blue	12.6	12/15/2003 16:32:17	10.0	NEG	-0.30 ± 0.79
11	1782	B 756	1	C	Room 105	Wall	Concrte		Blue	10.3	12/15/2003 16:33:08	1.3	NEG	-0.59 ± 0.90
12	1783	B 756	1	C	Room 105	Door	Metal	Door	Blue	3.2	12/15/2003 16:33:35	1.2	NEG	0.05 ± 0.23
13	1784	B 756	1	C	Room 105	Door	Metal	Door	Blue	3.3	12/15/2003 16:33:49	1.7	NEG	0.23 ± 0.37
14	1785	B 756	1	C	Room 105	Door	Metal	Elec Panel	Blue	7.1	12/15/2003 16:34:25	10.0	NEG	0.15 ± 0.65
15	1786	B 756	1	C	Room 100	Wall	Concrte		Beige	10.3	12/15/2003 16:35:32	9.6	NEG	-0.44 ± 0.83
16	1787	B 756	1	B	Room 104	Wall	Concrte		Blue	12.6	12/15/2003 16:36:20	10.0	NEG	-0.16 ± 0.76
17	1788	B 756	1	D	Room 104	Wall	Concrte	I-BEAM	Blue	10.3	12/15/2003 16:37:00	6.5	NEG	0.26 ± 0.47
18	1789	B 756	1	D	Room 104	Door	Metal	Casing	Blue	3.3	12/15/2003 16:37:35	1.5	NEG	0.04 ± 0.32
19	1790	B 756	1	D	Room 104	Door	Metal	Door	Blue	5.6	12/15/2003 16:37:48	2.0	NEG	0.18 ± 0.27
20	1791	B 756	1	B	Room 100	Door	Metal	I-BEAM	Beige	3.3	12/15/2003 16:38:27	1.0	NEG	0.02 ± 0.19
21	1792	B 756	1	B	Room 100	Door	Metal	Ovrhd Door	Beige	3.1	12/15/2003 16:38:45	1.6	NEG	0.02 ± 0.04
22	1793	B 756	1	B	Room 100	Door	Metal	Casing	Beige	3.3	12/15/2003 16:39:00	1.9	NEG	0.02 ± 0.25
23	1794	B 756	1	B	Room 100	Door	Metal	Lintel	Beige	3.3	12/15/2003 16:39:18	1.0	NEG	0.01 ± 0.20
24	1795	B 756	1	D	Room 100	Door	Metal	Lintel	Yellow	3.3	12/15/2003 16:40:01	2.1	NEG	0.02 ± 0.26
25	1796	B 756	1	A	Room 100	Door	Metal	Door	Beige	5.0	12/15/2003 16:40:28	2.0	NEG	0.02 ± 0.05
26	1797	B 756	1	A	Room 100	Door	Metal	Casing	Beige	4.8	12/15/2003 16:40:43	1.3	NEG	0.01 ± 0.03
27	1798	B 756	1	C	Room 101	Wall	Concrte		Beige	12.6	12/15/2003 16:41:38	9.2	NEG	-0.20 ± 0.75
28	1799	B 756	1	C	Room 101	Door	Concrte	Door	Beige	3.2	12/15/2003 16:42:10	1.0	NEG	0.02 ± 0.07
29	1800	B 756	1	C	Room 101	Door	Concrte	Casing	Beige	5.6	12/15/2003 16:42:21	2.3	NEG	0.11 ± 0.30
30	1801	B 756	1	D	Room 100	Door	Metal	Ovrhd Door	Beige	3.0	12/15/2003 16:42:57	4.1	NEG	0.09 ± 0.21
31	1802	B 756	1	D	Room 100	Door	Metal	Casing	Beige	3.3	12/15/2003 16:43:08	1.0	NEG	0.00 ± 0.12
32	1803	B 756	1	D	Room 100	Door	Metal	Lintel	Beige	3.3	12/15/2003 16:43:19	3.1	NEG	0.04 ± 0.27
33	1804	B 756	1	D	Room 100	Wall	Metal	I-BEAM	Beige	3.3	12/15/2003 16:43:40	1.0	NEG	0.02 ± 0.19
34	1805	B 756	1	D	Room 102	Wall	Concrte		Blue	14.9	12/15/2003 16:45:19	10.0	NEG	0.04 ± 0.72

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
35	1806	B 756	1	D	Room 102	Wall	Metal	I-BEAM	Blue	3.3	12/15/2003 16:45:59	1.6	NEG	0.03 ± 0.36
36	1807	B 756	1	D	Room 102	Door	Metal	Door	Blue	5.6	12/15/2003 16:46:21	2.4	NEG	0.19 ± 0.33
37	1808	B 756	1	D	Room 102	Door	Metal	Casing	Blue	3.3	12/15/2003 16:46:36	5.8	NEG	0.12 ± 0.34
38	1809	B 756	1	C	Room 106	Wall	Concrte		Green	12.6	12/15/2003 16:47:41	4.5	NEG	0.04 ± 0.17
39	1810	B 756	1	C	Room 106	Wall	Metal	I-BEAM	Green	3.3	12/15/2003 16:48:16	1.7	NEG	0.02 ± 0.24
40	1811	B 756	1	C	Room 106	Ceiling	Drywall		Green	3.3	12/15/2003 16:48:28	1.0	NEG	0.00 ± 0.05
41	1812	B 756	1	D	Room 106	Door	Metal	Door	Green	3.3	12/15/2003 16:48:43	1.7	NEG	0.09 ± 0.35
42	1813	B 756	1	D	Room 106	Door	Metal	Casing	Green	10.2	12/15/2003 16:48:58	1.9	NEG	0.19 ± 0.17
43	1814	B 756	1	A	Room 111	Wall	Concrte		Beige	14.9	12/15/2003 16:50:03	1.8	NEG	-0.07 ± 0.67
44	1815	B 756	1	D	Room 111	Door	Metal	Ovrhd Door	Beige	3.0	12/15/2003 16:50:50	2.0	NEG	0.02 ± 0.06
45	1816	B 756	1	D	Room 111	Door	Metal	Casing	Beige	3.3	12/15/2003 16:51:02	1.0	NEG	0.00 ± 0.15
46	1817	B 756	1	D	Room 111	Door	Metal	Lintel	Beige	3.3	12/15/2003 16:51:17	1.0	NEG	0.00 ± 0.04
47	1818	B 756	1	D	Room 111	Wall	Metal	I-BEAM	Beige	3.3	12/15/2003 16:51:39	1.0	NEG	0.01 ± 0.14
48	1819	B 756	1	C	Room 108	Wall	Concrte		Beige	10.3	12/15/2003 16:52:19	1.0	NEG	-0.56 ± 0.91
49	1820	B 756	1	C	Room 108	Door	Metal	Casing	Beige	3.2	12/15/2003 16:52:44	1.0	NEG	0.00 ± 0.02
50	1821	B 756	1	C	Room 108	Door	Metal	Door	Beige	5.0	12/15/2003 16:53:03	1.0	NEG	0.00 ± 0.01
51	1822	B 756	1	C	Room 111	Door	Metal	Door	Beige	5.0	12/15/2003 16:54:02	1.4	NEG	0.01 ± 0.03
52	1823	B 756	1	C	Room 111	Door	Metal	Casing	Beige	5.0	12/15/2003 16:54:19	2.6	NEG	0.02 ± 0.07
53	1824	B 756	1	C	Outside	Door	Metal	Door	Green	4.8	12/15/2003 16:54:42	1.0	NEG	0.01 ± 0.02
54	1825	B 756	1	C	Outside	Door	Metal	Door	Green	4.9	12/15/2003 16:55:02	1.2	NEG	0.01 ± 0.03
55	1826	B 756	1	B	Room 110	Wall	Concrte		Blue	10.2	12/15/2003 16:56:50	1.0	NEG	0.00 ± 0.08
56	1827	B 756	1	C	Room 110	Door	Metal	Door	Blue	3.3	12/15/2003 16:57:19	1.0	NEG	0.08 ± 0.06
57	1828	B 756	1	C	Room 110	Door	Metal	Casing	Blue	3.3	12/15/2003 16:57:31	1.8	NEG	0.06 ± 0.43
58	1829	B 756	1	C	Room 110	Wall	Metal	I-BEAM	Blue	3.3	12/15/2003 16:57:46	1.4	NEG	0.01 ± 0.23
59	1830	B 756	1	A	Room 111	Door	Metal	Door	Beige	3.3	12/15/2003 16:58:18	1.3	NEG	0.17 ± 0.27
60	1831	B 756	1	A	Room 111	Door	Metal	Casing	Beige	5.6	12/15/2003 16:58:29	1.8	NEG	0.05 ± 0.23
61	1832	B 756	2	B	Room 200	Wall	Drywall		Blue	5.6	12/15/2003 17:00:15	1.0	NEG	0.00 ± 0.09
62	1833	B 756	2	B	Room 200	Door	Metal	Door	Blue	5.6	12/15/2003 17:01:04	1.8	NEG	0.05 ± 0.22
63	1834	B 756	2	B	Room 200	Door	Metal	Casing	Blue	3.3	12/15/2003 17:01:22	1.2	NEG	0.10 ± 0.23
64	1835	B 756	2	B	Room 207	Window	Metal	Casing	Blue	3.3	12/15/2003 17:02:13	2.6	NEG	0.05 ± 0.38
65	1836	B 756	2	B	Room 207	Window	Metal	Stool	Blue	3.3	12/15/2003 17:02:32	2.2	NEG	0.05 ± 0.44
66	1837	B 756	2	A	Room 207	Wall	Drywall		Blue	7.9	12/15/2003 17:02:58	1.0	NEG	0.00 ± 0.08
67	1838	B 756	2	D	Room 201	Wall	Drywall		Blue	3.3	12/15/2003 17:04:33	1.0	NEG	0.00 ± 0.19
68	1839	B 756	2	D	Room 201	Door	Drywall	Door	Blue	3.3	12/15/2003 17:04:44	1.7	NEG	0.19 ± 0.36
69	1840	B 756	2	D	Room 201	Door	Metal	Casing	Blue	5.6	12/15/2003 17:04:59	1.5	NEG	0.03 ± 0.22
70	1841	B 756	2	B	Room 200	Door	Metal	Door	Blue	3.2	12/15/2003 17:05:34	1.0	NEG	0.00 ± 0.01

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
71	1842	B 756	2	B	Room 200	Door	Metal	Casing	Blue	3.2	12/15/2003 17:05:56	1.0	NEG	0.00 ± 0.02
72	1843	B 756	2	B	Outside	Door	Metal	Casing	Green	3.2	12/15/2003 17:06:13	1.0	NEG	0.01 ± 0.08
73	1844	B 756	2	B	Outside	Door	Metal	Door	Green	5.1	12/15/2003 17:06:26	3.3	NEG	0.03 ± 0.08
74	**1845**	**B 756**	**2**	**B**	**Porch**	**Porch**	**Metal**	**Rail cap**	**Yellow**	**12.0**	**12/15/2003 17:07:07**	**1.3**	**POS**	**1.49 ± 0.30**
75	1846	B 756	2	B	Porch	Stairs 0	Metal	Stringer	Green	13.2	12/15/2003 17:07:51	10.0	NEG	0.03 ± 0.76
76	1847	B 756	2	B	Room 200	COLUMN	Drywall		Blue	10.3	12/15/2003 17:09:08	1.0	NEG	0.00 ± 0.08
77	1848	B 756	2	D	Room 202	Wall	Drywall		Blue	3.3	12/15/2003 17:09:52	1.0	NEG	0.00 ± 0.08
78	1849	B 756	2	D	Room 202	Window	Metal	Stool	Blue	3.3	12/15/2003 17:10:11	1.0	NEG	0.00 ± 0.15
79	1850	B 756	2	D	Room 202	Window	Metal	Casing	Blue	3.3	12/15/2003 17:10:24	1.1	NEG	0.02 ± 0.30
80	1851	B 756	2	B	Room 202	Door	Metal	Door	Blue	7.9	12/15/2003 17:10:51	2.0	NEG	0.22 ± 0.22
81	1852	B 756	2	B	Room 202	Door	Metal	Casing	Blue	3.3	12/15/2003 17:11:13	1.0	NEG	0.01 ± 0.05
82	1853	B 756	2	D	Room 205	Wall	Drywall		Green	12.6	12/15/2003 17:11:58	2.5	NEG	-0.04 ± 0.81
83	1854	B 756	2	D	Room 205	Ceiling	Drywall		Green	12.6	12/15/2003 17:12:26	10.0	NEG	-0.14 ± 0.76
84	1855	B 756	2	A	Room 205	Door	Metal	Door	Green	12.7	12/15/2003 17:12:56	10.0	NEG	0.59 ± 0.44
85	1856	B 756	2	A	Room 205	Door	Metal	Casing	Green	7.9	12/15/2003 17:13:32	2.7	NEG	0.30 ± 0.32
86	1857	B 756	2	B	Room 204	Wall	Drywall		Blue	5.6	12/15/2003 17:14:28	1.3	NEG	0.01 ± 0.25
87	1858	B 756	2	A	Room 204	Door	Metal	Door	Blue	3.3	12/15/2003 17:14:49	1.0	NEG	0.09 ± 0.18
88	1859	B 756	2	A	Room 204	Door	Metal	Casing	Blue	5.6	12/15/2003 17:15:00	2.6	NEG	0.06 ± 0.40
89	1860	B 756	1	D	Outside	Door	Metal	Lintel	Green	3.3	12/15/2003 17:19:26	1.0	NEG	0.00 ± 0.13
90	1861	B 756	1	D	Outside	Door	Metal	Door	Green	4.8	12/15/2003 17:19:53	6.3	NEG	0.08 ± 0.25
91	1862	B 756	1	D	Outside	Door	Metal	Casing	Green	5.0	12/15/2003 17:20:10	1.4	NEG	0.01 ± 0.03
92	1863	B 756	1	D	Porch	Porch	Metal	Ceiling	Green	3.2	12/15/2003 17:20:59	1.0	NEG	0.00 ± 0.09
93	1864	B 756	1	D	Porch	Porch	Metal	Trim Upr	Green	3.2	12/15/2003 17:21:18	3.3	NEG	0.04 ± 0.29
94	1865	B 756	1	D	Outside	Door	Metal	Door	Green	10.2	12/15/2003 17:22:25	10.0	NEG	0.10 ± 0.21
95	1866	B 756	1	D	Outside	Door	Metal	Casing	Green	3.2	12/15/2003 17:22:48	5.8	NEG	0.10 ± 0.30
96	1867	B 756	1	D	Outside	Door	Metal	Casing	Green	3.3	12/15/2003 17:23:27	1.0	NEG	0.01 ± 0.22
97	1868	B 756	1	D	Outside	Door	Metal	Door	Green	12.3	12/15/2003 17:24:04	10.0	NEG	-0.24 ± 0.79
98	1869	B 756	1	D	Outside	Door	Metal	Casing	Green	18.2	12/15/2003 17:24:37	10.0	NEG	-0.09 ± 0.73
99	1870	B 756	1	D	Outside	Wall	Concrte		Beige	7.9	12/15/2003 17:25:23	1.0	NEG	0.00 ± 0.07
100	1871	B 756	1	A	Outside	Door	Metal	Door	Green	5.0	12/15/2003 17:26:28	1.0	NEG	0.00 ± 0.01
101	1872	B 756	1	A	Outside	Door	Concrte	Casing	Green	4.7	12/15/2003 17:26:45	1.0	NEG	0.01 ± 0.21
102	1873	B 756	1	A	Outside	Door	Concrte	Lintel	Green	3.3	12/15/2003 17:27:21	1.0	NEG	0.00 ± 0.11
103	1874	B 756	1	C	Room 113	Wall	Concrte		Blue	10.3	12/15/2003 17:29:37	2.0	NEG	0.01 ± 0.02
104	1875	B 756	1	C	Room 113	Door	Metal	Door	Blue	3.2	12/15/2003 17:30:06	1.0	NEG	0.02 ± 0.06
105	1876	B 756	1	B	Room 113	Door	Metal	Casing	Blue	3.2	12/15/2003 17:30:24	1.1	NEG	0.10 ± 0.20
106	1877	B 756	1	B	Outside	Door	Metal	Door	Green	3.2	12/15/2003 17:30:58	1.0	NEG	0.00 ± 0.16

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
107	1878	B 756	1	B	Outside	Door	Metal	Casing	Yellow	5.6	12/15/2003 17:31:16	1.0	NEG	0.02 ± 0.12
108	1879	B 756	1	B	Outside	Door	Metal	Lintel	Yellow	3.3	12/15/2003 17:31:43	1.1	NEG	0.02 ± 0.31
109	1880	B 756	1	B	Island	Wall	Concrte		Green	17.4	12/15/2003 17:34:22	3.0	NEG	0.09 ± 0.64
110	1881	B 756	1	C	Island	Door	Metal	Door	Grey	5.5	12/15/2003 17:35:09	2.6	NEG	0.06 ± 0.39
111	1882	B 756	1	C	Island	Door	Metal	Casing	Grey	3.2	12/15/2003 17:35:24	1.2	NEG	0.14 ± 0.24
112	1883	B 756	1	C	Island	Floor	Metal		Yellow	3.2	12/15/2003 17:35:50	1.0	NEG	0.00 ± 0.04
113	1884	B 756	1	A	Island	Door	Metal	Casing	Grey	5.5	12/15/2003 17:36:31	1.5	NEG	0.31 ± 0.25
114	1885	B 756	1	A	Island	Door	Metal	Door	Grey	3.2	12/15/2003 17:36:46	1.0	NEG	0.03 ± 0.03
115	1886	B 756	1	A	Island	Door	Metal	Lintel	Grey	3.3	12/15/2003 17:37:08	1.0	NEG	0.00 ± 0.01
116	**1887**				**Calibrate**					**20.5**	**12/15/2003 17:37:54**	**1.0**	**POS**	**1.12 ± 0.17**
117	**1888**				**Calibrate**					**9.6**	**12/15/2003 17:38:36**	**1.0**	**POS**	**1.15 ± 0.25**
118	**1889**				**Calibrate**					**20.5**	**12/15/2003 17:38:58**	**1.1**	**POS**	**1.17 ± 0.17**
119	1				Shutter Cal 1					53.1	12/16/2003 08:41:18	0.0	...	NA
120	**2**				**Calibrate**					**9.6**	**12/16/2003 09:18:48**	**1.1**	**POS**	**1.15 ± 0.26**
121	**3**				**Calibrate**					**16.2**	**12/16/2003 09:19:10**	**1.0**	**POS**	**1.11 ± 0.19**
122	**4**				**Calibrate**					**14.0**	**12/16/2003 09:19:43**	**1.0**	**POS**	**1.07 ± 0.15**
123	5	B 229		A	E 001	Wall	Concrte		Green	12.6	12/16/2003 09:21:50	7.3	NEG	-0.28 ± 0.78
124	6	B 229		A	E 001	Door	Metal	Door	Green	21.8	12/16/2003 09:22:21	10.0	NEG	0.28 ± 0.67
125	7	B 229		A	E 001	Door	Wood	Door	Green	9.9	12/16/2003 09:23:07	3.6	NEG	0.13 ± 0.42
126	8	B 229		B	Room 102	Wall	Concrte		Green	10.2	12/16/2003 09:25:33	2.3	NEG	0.09 ± 0.18
127	9	B 229		B	Room 102	Ceiling	Drywall		White	12.6	12/16/2003 09:26:03	3.5	NEG	0.12 ± 0.27
128	10	B 229		C	Room 103	Wall	Concrte		Green	5.6	12/16/2003 09:27:30	5.2	NEG	0.05 ± 0.19
129	11	B 229		C	Room 103	Door	Metal	Casing	Green	10.3	12/16/2003 09:27:47	6.8	NEG	0.29 ± 0.48
130	12	B 229		C	Room 103	Door	Wood	Door	Green	14.5	12/16/2003 09:28:12	7.5	NEG	0.28 ± 0.40
131	13	B 229		D	Room 104	Wall	Concrte		Green	5.6	12/16/2003 09:29:12	6.6	NEG	0.07 ± 0.19
132	14	B 229		A	Room 104	Door	Metal	Casing	Green	17.3	12/16/2003 09:29:34	10.0	NEG	0.49 ± 0.35
133	15	B 229		A	Room 104	Door	Wood	Door	Green	7.6	12/16/2003 09:30:18	10.0	NEG	0.24 ± 0.38
134	16	B 229		B	Room 105	Wall	Concrte		Green	17.3	12/16/2003 09:31:15	10.0	NEG	0.13 ± 0.64
135	17	B 229		B	Room 105	Ceiling	Drywall		White	5.6	12/16/2003 09:31:56	1.0	NEG	0.00 ± 0.16
136	18	B 229		B	Room 106	Door	Metal	Casing	Green	12.5	12/16/2003 09:32:44	8.7	NEG	0.41 ± 0.42
137	19	B 229		B	Room 106	Door	Wood	Door	Green	12.2	12/16/2003 09:33:15	10.0	NEG	0.13 ± 0.63
138	20	B 229		D	Room 108	Window	Wood	Casing	Green	7.7	12/16/2003 09:34:24	7.6	NEG	0.20 ± 0.33
139	21	B 229		B	Room 108	Window	Wood	Casing	Green	12.2	12/16/2003 09:34:50	10.0	NEG	0.63 ± 0.48
140	22	B 229		B	Room 108	Wall	Concrte		Green	12.6	12/16/2003 09:35:23	8.6	NEG	-0.16 ± 0.82
141	23	B 229		B	Room 107	Cabinet	Wood	Shelf	Green	3.2	12/16/2003 09:36:56	5.5	NEG	0.09 ± 0.34
142	24	B 229		D	Room 107	Window	Wood	Casing	Green	10.0	12/16/2003 09:37:25	4.0	NEG	0.14 ± 0.44

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
143	25	B 229		D	Room 107	Stairs	Metal	Rail cap	Green	12.6	12/16/2003 09:37:58	10.0	NEG	0.76 ± 0.56
144	26	B 229		A	Room 107	Wall	Concrte		Green	12.6	12/16/2003 09:38:34	1.6	NEG	0.01 ± 0.15
145	27	B 229		B	Room 109	Wall	Concrte		Green	10.3	12/16/2003 09:40:45	4.3	NEG	-0.50 ± 0.94
146	28	B 229		B	Room 109	Door	Metal	Door	Green	7.9	12/16/2003 09:41:15	2.5	NEG	0.13 ± 0.24
147	29	B 229		B	Room 109	Door	Metal	Casing	Green	10.2	12/16/2003 09:41:34	3.0	NEG	0.11 ± 0.26
148	30	B 229		A	Room 109	Door	Wood	Door	Green	3.1	12/16/2003 09:42:05	1.6	NEG	0.07 ± 0.46
149	31	B 229		A	Room 109	Door	Metal	Casing	Green	7.8	12/16/2003 09:42:20	2.3	NEG	0.06 ± 0.22
150	32	B 229		C	Room 111	Wall	Concrte		Green	21.9	12/16/2003 09:42:53	10.0	NEG	0.27 ± 0.58
151	33	B 229		B	Room 111	Wall	Concrte		White	10.1	12/16/2003 09:43:40	8.1	NEG	0.25 ± 0.32
152	34	B 229		C	Room 117	Wall	Concrte		Green	5.6	12/16/2003 09:45:05	1.5	NEG	0.01 ± 0.16
153	35	B 229		C	Room 117	Door	Metal	Door	Green	4.9	12/16/2003 09:45:21	1.0	NEG	0.00 ± 0.01
154	36	B 229		C	Room 117	Door	Metal	Casing	Green	5.0	12/16/2003 09:45:37	1.0	NEG	0.00 ± 0.01
155	37	B 229		D	Room 117	Wall	Drywall		White	10.3	12/16/2003 09:46:04	5.1	NEG	0.03 ± 0.06
156	38	B 229		C	Outside	Door	Metal	Door	Beige	4.9	12/16/2003 09:46:48	2.4	NEG	0.02 ± 0.07
157	39	B 229		C	Outside	Door	Metal	Casing	Beige	4.8	12/16/2003 09:47:05	1.0	NEG	0.01 ± 0.01
158	40	B 229		B	Outside	Door	Metal	Door	Beige	3.2	12/16/2003 09:47:41	1.0	NEG	0.04 ± 0.10
159	41	B 229		B	Outside	Door	Metal	Casing	Beige	5.5	12/16/2003 09:47:55	2.4	NEG	0.13 ± 0.37
160	42	B 229		B	Outside	Door	Metal	Door	Beige	3.2	12/16/2003 09:48:14	1.9	NEG	0.12 ± 0.39
161	43	B 229		B	Outside	Door	Metal	Casing	Beige	5.5	12/16/2003 09:48:25	2.2	NEG	0.19 ± 0.32
162	44	B 229		D	Room 109	Door	Wood	Door	Green	7.8	12/16/2003 09:49:42	2.4	NEG	0.07 ± 0.31
163	45	B 229		D	Room 109	Door	Metal	Casing	Green	19.2	12/16/2003 09:50:15	10.0	NEG	0.01 ± 0.74
164	46	B 229		C	Hall 100	Wall	Concrte		Green	14.9	12/16/2003 09:51:51	10.0	NEG	0.00 ± 0.76
165	47	B 229		A	Room 113	Wall	Concrte		Green	10.3	12/16/2003 09:53:01	10.0	NEG	-0.62 ± 0.91
166	48	B 229		A	Room 113	Door	Metal	Casing	Green	3.1	12/16/2003 09:53:26	2.9	NEG	0.05 ± 0.36
167	49	B 229		B	Room 113	Door	Metal	Casing	Green	3.2	12/16/2003 09:53:43	5.1	NEG	0.13 ± 0.41
168	50	B 229		B	Room 113	Door	Wood	Door	Green	9.9	12/16/2003 09:53:56	6.4	NEG	0.30 ± 0.58
169	51	B 229		A	Room 114	Wall	Concrte		Green	7.9	12/16/2003 09:55:03	1.5	NEG	0.02 ± 0.20
170	52	B 229		B	Room 114	Window	Wood	Casing	Green	12.3	12/16/2003 09:55:37	10.0	NEG	0.53 ± 0.42
171	53	B 229		B	Room 114	Door	Metal	Casing	Green	12.6	12/16/2003 09:56:13	10.0	NEG	0.55 ± 0.41
172	54	B 229		B	Room 114	Door	Wood	Door	Green	5.4	12/16/2003 09:56:42	1.9	NEG	0.07 ± 0.32
173	55	B 229		C	Hall 102	Wall	Concrte		Green	14.9	12/16/2003 09:57:19	10.0	NEG	-0.13 ± 0.76
174	56	B 229		C	Hall 102	Door	Wood	Door	Green	9.9	12/16/2003 09:57:56	3.5	NEG	0.11 ± 0.42
175	57	B 229		C	Hall 102	Door	Metal	Casing	Green	10.2	12/16/2003 09:58:22	6.5	NEG	0.26 ± 0.47
176	58	B 229		B	Room 116	Window	Wood	Casing	Green	10.0	12/16/2003 09:59:14	10.0	NEG	0.49 ± 0.40
177	59	B 229		D	Room 116	Wall	Concrte		Green	10.3	12/16/2003 10:00:08	4.0	NEG	0.04 ± 0.18
178	60	B 229		B	Room 116	Door	Wood	Door	Green	9.9	12/16/2003 10:00:38	5.3	NEG	0.21 ± 0.53

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
179	61	B 229		B	Room 116	Door	Metal	Casing	Green	12.4	12/16/2003 10:01:03	9.4	NEG	0.29 ± 0.27
180	**62**	**B 229**		**C**	**Outside**	**House**	**Metal**	**Ladder**	**Beige**	**20.7**	**12/16/2003 10:04:14**	**1.1**	**POS**	**1.02 ± 0.16**
181	**63**	**B 229**		**C**	**Outside**	**Window**	**Metal**	**Lintel**	**Beige**	**5.1**	**12/16/2003 10:05:24**	**1.8**	**POS**	**6.75 ± 2.21**
182	64	B 228		D	Porch	Porch	Metal	Columns	Beige	14.6	12/16/2003 10:06:47	10.0	NEG	0.57 ± 0.42
183	65	B 228		D	Outside	Door	Metal	Columns	Beige	10.2	12/16/2003 10:07:24	10.0	NEG	0.14 ± 0.31
184	66	B 228		D	Outside	Door	Metal	Casing	Beige	17.1	12/16/2003 10:07:47	10.0	NEG	-0.13 ± 0.74
185	67	B 228		D	Outside	Door	Metal	Lintel	Beige	7.9	12/16/2003 10:08:40	2.3	NEG	0.07 ± 0.24
186	**68**	**B 228**		**D**	**Porch**	**Porch**	**Metal**	**Trim Upr**	**White**	**12.3**	**12/16/2003 10:09:14**	**4.1**	**POS**	**2.70 ± 1.12**
187	69	B 228		D	Porch	Porch	Metal	Trim Upr	White	7.8	12/16/2003 10:09:42	6.5	NEG	0.15 ± 0.30
188	70	B 228		D	Porch	Porch	Metal	Rail cap	Beige	3.1	12/16/2003 10:10:18	2.8	NEG	0.04 ± 0.09
189	71	B 228		D	Hall 100	Door	Metal	Door	Tan	3.3	12/16/2003 10:11:09	1.0	NEG	0.01 ± 0.04
190	72	B 228		D	Hall 100	Door	Metal	Casing	Tan	3.3	12/16/2003 10:11:21	1.0	NEG	0.00 ± 0.03
191	73	B 228		C	Hall 100	Wall	Concrte		Beige	17.3	12/16/2003 10:11:37	2.1	NEG	0.13 ± 0.65
192	74	B 228		D	Room 103	Wall	Concrte		Beige	19.6	12/16/2003 10:13:24	1.7	NEG	0.15 ± 0.65
193	75	B 228		A	Room 103	Wall	Drywall		Beige	10.2	12/16/2003 10:14:10	2.6	NEG	0.10 ± 0.22
194	76	B 228		A	Room 103	Door	Wood	Door	Brown	3.2	12/16/2003 10:14:40	1.3	NEG	0.01 ± 0.28
195	77	B 228		A	Room 103	Door	Metal	Casing	Brown	3.3	12/16/2003 10:14:59	1.0	NEG	0.01 ± 0.19
196	78	B 228		A	Room 103	Wall	Concrte		Brown	12.6	12/16/2003 10:15:14	1.5	NEG	-0.13 ± 0.79
197	79	B 228		A	Room 104	Wall	Drywall		Beige	10.3	12/16/2003 10:16:14	4.6	NEG	0.16 ± 0.46
198	80	B 228		D	Room 104	Wall	Concrte		Beige	12.6	12/16/2003 10:16:43	3.7	NEG	0.01 ± 0.79
199	81	B 228		D	Room 104	Ceiling	Concrte		White	7.9	12/16/2003 10:17:13	2.1	NEG	0.05 ± 0.24
200	82	B 228		C	Room 104	Door	Wood	Door	Brown	3.2	12/16/2003 10:17:44	1.0	NEG	0.00 ± 0.02
201	83	B 228		C	Room 104	Door	Wood	Casing	Brown	3.3	12/16/2003 10:18:05	1.0	NEG	0.01 ± 0.05
202	84	B 228		B	Room 106	Wall	Drywall		Brown	7.9	12/16/2003 10:18:37	3.4	NEG	0.16 ± 0.38
203	85	B 228		A	Room 106	Wall	Concrte		Brown	12.6	12/16/2003 10:19:07	2.0	NEG	-0.03 ± 0.77
204	86	B 228		A	Room 106	Door	Wood	Door	Brown	3.2	12/16/2003 10:19:37	1.4	NEG	0.02 ± 0.35
205	87	B 228		A	Room 106	Door	Metal	Casing	Brown	3.3	12/16/2003 10:19:49	2.2	NEG	0.04 ± 0.38
206	88	B 228		C	Room 105	Wall	Concrte		Beige	10.3	12/16/2003 10:20:23	1.0	NEG	-0.52 ± 0.94
207	89	B 228		C	Room 105	Door	Metal	Casing	Brown	3.3	12/16/2003 10:20:54	1.5	NEG	0.02 ± 0.35
208	90	B 228		C	Room 105	Door	Wood	Door	Brown	3.2	12/16/2003 10:21:07	1.0	NEG	0.00 ± 0.03
209	91	B 228		D	Room 105	Wall	Drywall		Brown	7.9	12/16/2003 10:21:23	1.0	NEG	0.02 ± 0.07
210	92	B 228		B	Hall 100	Door	Metal	Casing	Brown	3.2	12/16/2003 10:22:04	1.2	NEG	0.02 ± 0.32
211	93	B 228		B	Hall 100	Door	Wood	Door	Brown	3.2	12/16/2003 10:22:17	1.0	NEG	0.01 ± 0.27
212	94	B 228		C	Room 110	Wall	Concrte		Brown	12.6	12/16/2003 10:23:02	1.3	NEG	-0.29 ± 0.79
213	95	B 228		B	Room 110	Door	Metal	Door	Brown	3.2	12/16/2003 10:23:39	1.0	NEG	0.02 ± 0.05
214	96	B 228		C	Room 110	Door	Metal	Casing	Brown	3.3	12/16/2003 10:23:54	7.9	NEG	0.15 ± 0.28

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
215	97	B 228		B	Room 110	Door	Metal	Casing	Brown	5.5	12/16/2003 10:24:22	2.3	NEG	0.07 ± 0.30
216	98	B 228		B	Room 110	Door	Metal	Door	Brown	3.2	12/16/2003 10:24:38	1.3	NEG	0.02 ± 0.37
217	99	B 228		A	Room 110	Wall	Drywall		Beige	10.3	12/16/2003 10:24:55	1.0	NEG	0.00 ± 0.06
218	100	B 228		A	Room 110	Door	Metal	Door	Brown	3.2	12/16/2003 10:25:28	1.0	NEG	0.00 ± 0.17
219	101	B 228		A	Room 110	Door	Metal	Casing	Brown	3.1	12/16/2003 10:25:40	1.0	NEG	0.00 ± 0.05
220	102	B 228		C	Outside	Door	Metal	Door	Tan	3.3	12/16/2003 10:26:14	4.7	NEG	0.07 ± 0.30
221	103	B 228		C	Outside	Door	Metal	Casing	Tan	3.3	12/16/2003 10:26:30	2.9	NEG	0.06 ± 0.42
222	104	B 228		C	Outside	Door	Metal	Lintel	Tan	31.2	12/16/2003 10:26:55	7.0	NEG	0.10 ± 0.16
223	105	B 228		C	Outside	Door	Metal	Door	Tan	3.3	12/16/2003 10:28:10	2.6	NEG	0.03 ± 0.27
224	106	B 228		C	Outside	Door	Metal	Casing	Tan	3.3	12/16/2003 10:28:25	4.0	NEG	0.06 ± 0.29
225	107	B 228		C	Outside	Door	Metal	Lintel	Tan	3.3	12/16/2003 10:28:38	1.0	NEG	0.01 ± 0.18
226	108	B 228		A	Outside	Door	Metal	Door	Tan	3.2	12/16/2003 10:31:12	3.1	NEG	0.04 ± 0.28
227	109	B 228		A	Outside	Door	Metal	Casing	Tan	3.2	12/16/2003 10:31:24	2.1	NEG	0.02 ± 0.26
228	110	B 228		A	Outside	Door	Metal	Lintel	Tan	3.2	12/16/2003 10:31:34	1.5	NEG	0.02 ± 0.33
229	**111**				**Calibrate**					**16.2**	**12/16/2003 10:32:31**	**1.1**	**POS**	**1.20 ± 0.20**
230	**112**				**Calibrate**					**14.0**	**12/16/2003 10:33:05**	**1.1**	**POS**	**1.17 ± 0.21**
231	**113**				**Calibrate**					**9.6**	**12/16/2003 10:33:34**	**1.0**	**POS**	**1.10 ± 0.24**
232	**114**	**B 202**		**D**	**Outside**	**House**	**Wood**	**Wall**		**7.5**	**12/16/2003 10:40:04**	**2.5**	**POS**	**3.69 ± 1.15**
233	**115**	**B 202**		**D**	**Outside**	**Door**	**Wood**	**Ovrhd Door**		**3.0**	**12/16/2003 10:40:33**	**2.3**	**POS**	**5.10 ± 1.94**
234	116	B 202		D	Outside	Window	Wood	Sash Ext		40.9	12/16/2003 10:40:53	3.5	NEG	0.95 ± 0.24
235	117	B 202		C	Outside	Wall	Wood			5.5	12/16/2003 10:42:23	1.8	NEG	0.07 ± 0.28
236	118	B 202		B	Outside	Window	Wood	Stool		39.0	12/16/2003 10:42:55	3.1	NEG	0.88 ± 0.22
237	**119**	**B 202**		**B**	**Outside**	**Window**	**Wood**	**Stool**		**5.2**	**12/16/2003 10:45:24**	**3.1**	**POS**	**4.17 ± 1.50**
238	120	B 202		C	Room 101	Wall	Wood		White	9.8	12/16/2003 10:46:56	1.5	NEG	0.51 ± 0.22
239	121	B 202		C	Room 101	Door	Wood	Door	White	3.2	12/16/2003 10:47:23	1.0	NEG	0.03 ± 0.18
240	**122**	**B 202**		**C**	**Room 101**	**Door**	**Wood**	**Casing**	**White**	**20.6**	**12/16/2003 10:47:36**	**1.4**	**POS**	**1.02 ± 0.19**
241	123	B 202		D	Room 100	Door	Wood	Door	Grey	3.1	12/16/2003 10:48:34	1.2	NEG	0.04 ± 0.35
242	124	B 202		D	Room 100	Door	Wood	Casing	Grey	3.2	12/16/2003 10:48:46	1.0	NEG	0.04 ± 0.13
243	125	B 202		D	Room 100	Window	Wood	Casing	Grey	3.2	12/16/2003 10:49:00	1.0	NEG	0.04 ± 0.11
244	126	B 202		D	Room 100	Window	Wood	Sash	Grey	3.2	12/16/2003 10:49:15	1.7	NEG	0.11 ± 0.42
245	127	B 202		D	Room 100	Cabinet	Wood	Door Out	Grey	5.4	12/16/2003 10:49:48	1.0	NEG	0.02 ± 0.09
246	128	B 202		D	Room 100	Cabinet	Wood	Inside	Grey	3.1	12/16/2003 10:50:11	1.0	NEG	0.01 ± 0.03
247	129	B 202		D	Room 100	Cabinet	Wood	Wall	Grey	3.2	12/16/2003 10:50:33	1.0	NEG	0.01 ± 0.05
248	130	B 202		D	Room 101	Cabinet	Wood	Door Out	Grey	3.2	12/16/2003 10:51:01	1.0	NEG	0.00 ± 0.14
249	131	B 202		D	Room 101	Cabinet	Wood	Wall	Grey	3.2	12/16/2003 10:51:13	1.0	NEG	0.00 ± 0.19
250	132	B 202		D	Room 101	Cabinet	Wood	Shelf	Grey	3.2	12/16/2003 10:51:28	1.0	NEG	0.00 ± 0.19

No	XLNo	Site	Flr	Side	Room	Source	Sub	Feat	Clr	Ssec	Date/Time	DI	Result	Pbc ± Prec
251	133	B 202		D	Room 101	Door	Wood	Door	Grey	9.8	12/16/2003 10:52:18	1.2	NEG	0.61 ± 0.21
252	134	B 202		D	Room 101	Window	Wood	Casing	White	3.2	12/16/2003 10:52:52	1.0	NEG	0.01 ± 0.29
253	135	B 202		A	Room 101	Wall	Drywall		White	5.5	12/16/2003 10:53:09	1.5	NEG	0.04 ± 0.25

APPENDIX B

Facility Floor Plans and Photographs

C

B

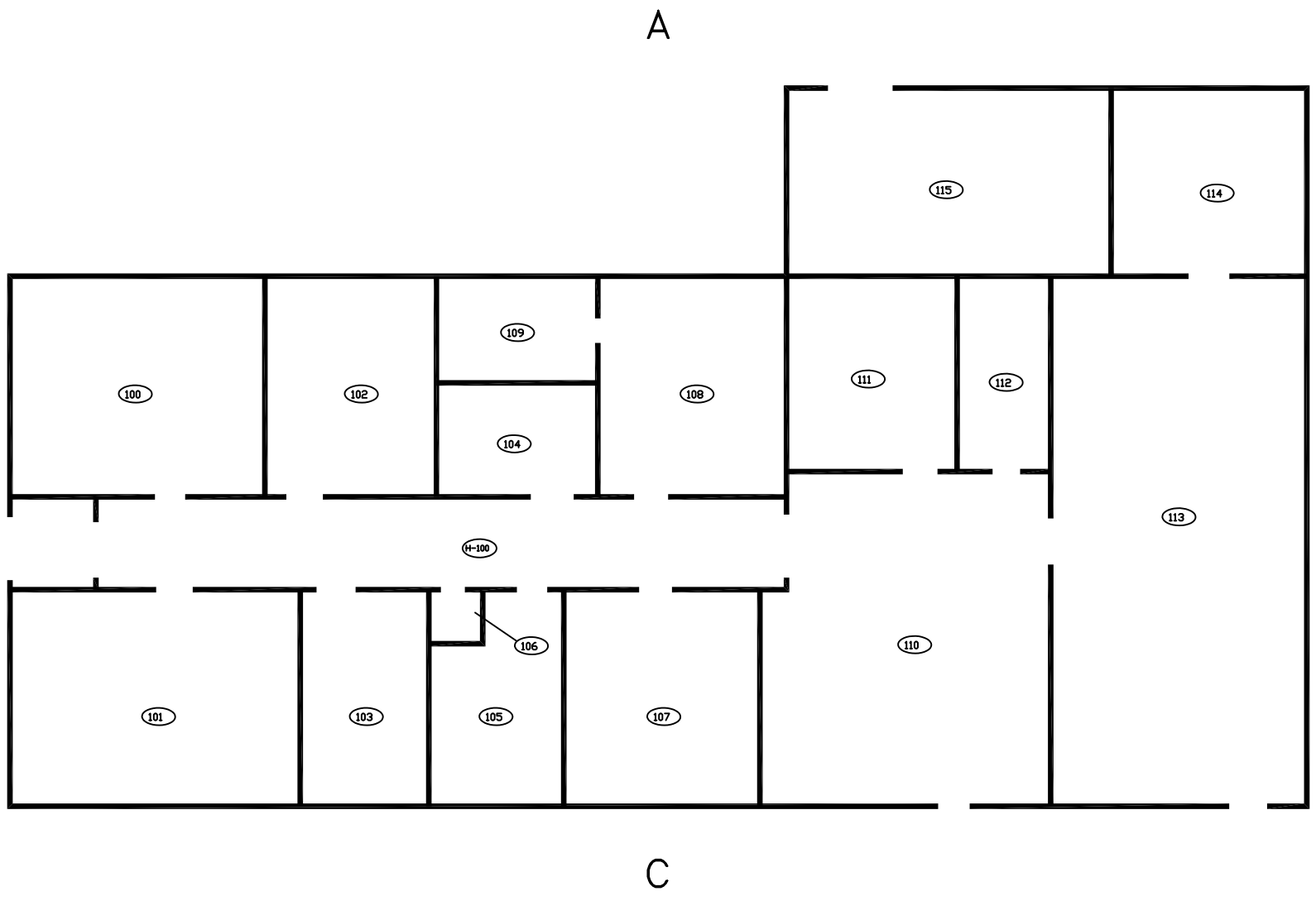
D

A

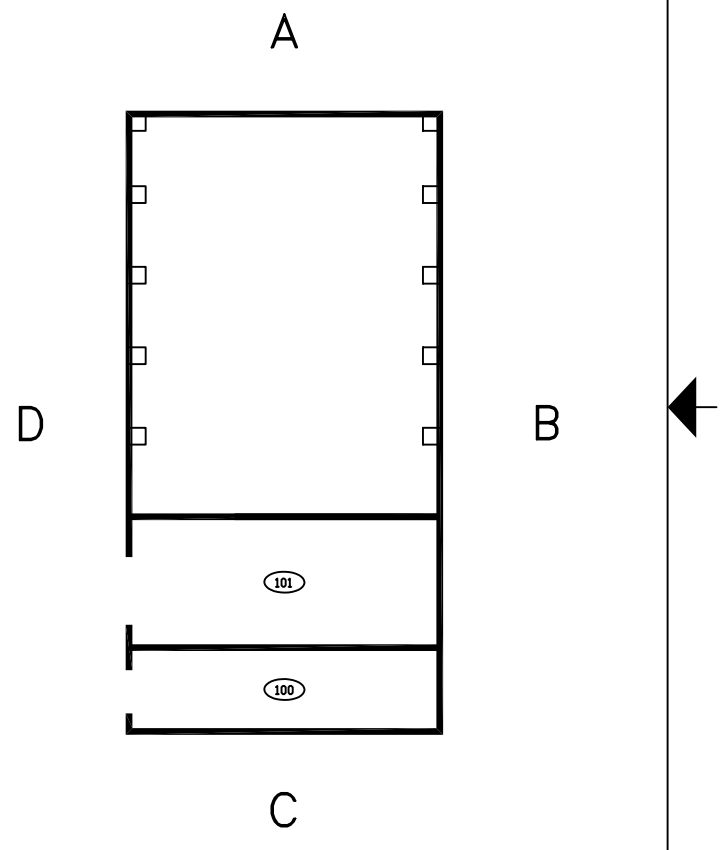
ENVIRONMENTAL ENTERPRISE GROUP, INC.
1345 BARRACKS RD
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

FLOOR PLAN
BUILDING 229
CHATTANOOGA ARC (TN107), CHATTANOOGA, TN

DATE	PREPARED BY:	DRAWN BY	REV
03-22-04	T. LEWIS	J.I. BROWNLEE	-
SCALE	DWG NUMBER	SHEET	
NONE	CHATTANOOGA_TN_ARC_BLDG229	1 OF 1	



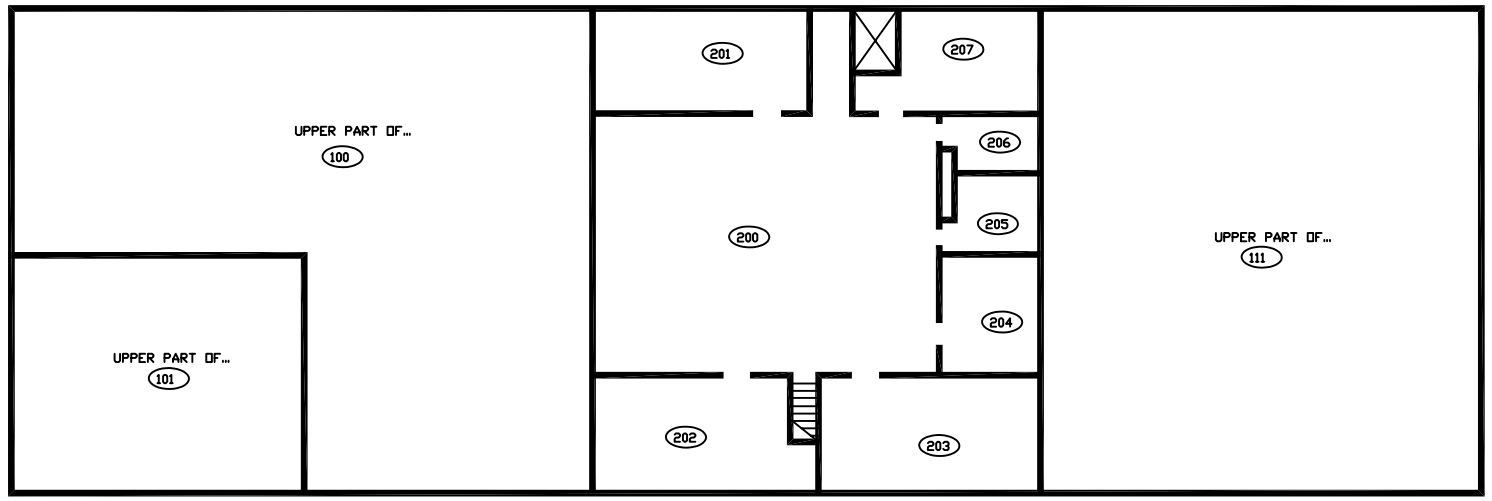
BUILDING 228



BUILDING 202

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 BARRACKS RD NORTH CHARLESTON, SOUTH CAROLINA 29405-2106			
FLOOR PLAN BUILDINGS 202 & 228 CHATTANOOGA ARC (TN107), CHATTANOOGA, TN			
DATE 03-22-04	PREPARED BY: T. LEWIS	DRAWN BY J.I. BROWNLEE	REV -
SCALE NONE	DWG NUMBER CHATTANOOGA_TN_ARC_B202&228	SHEET 1 OF 1	

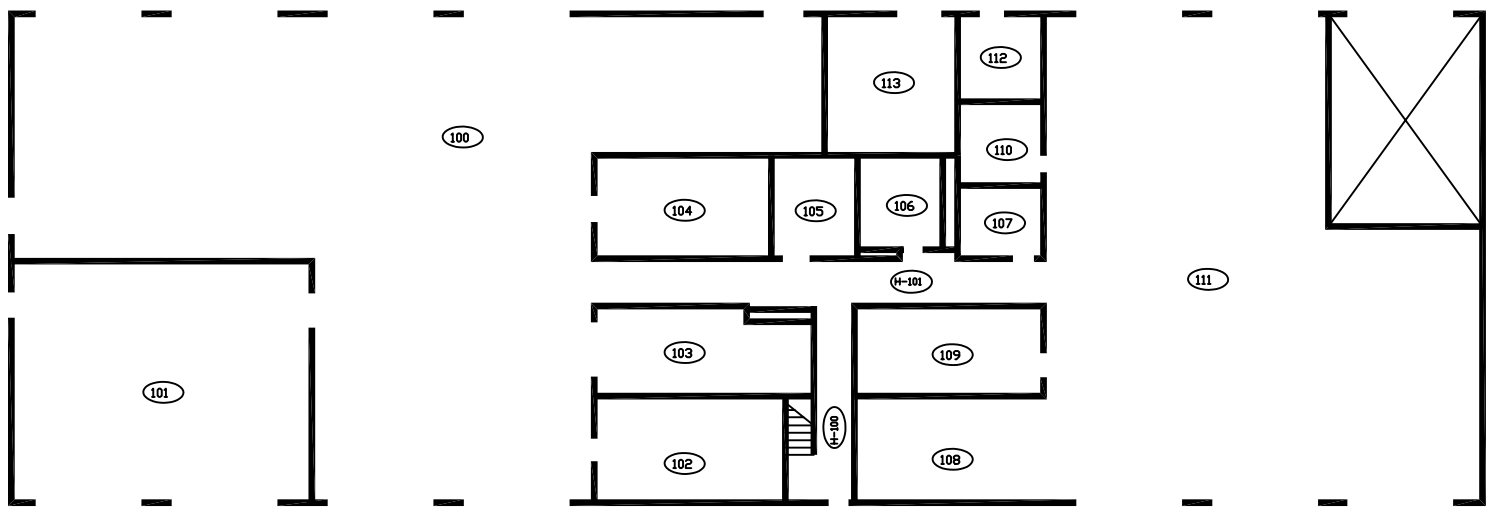
B



BUILDING 756, SECOND FLOOR

A

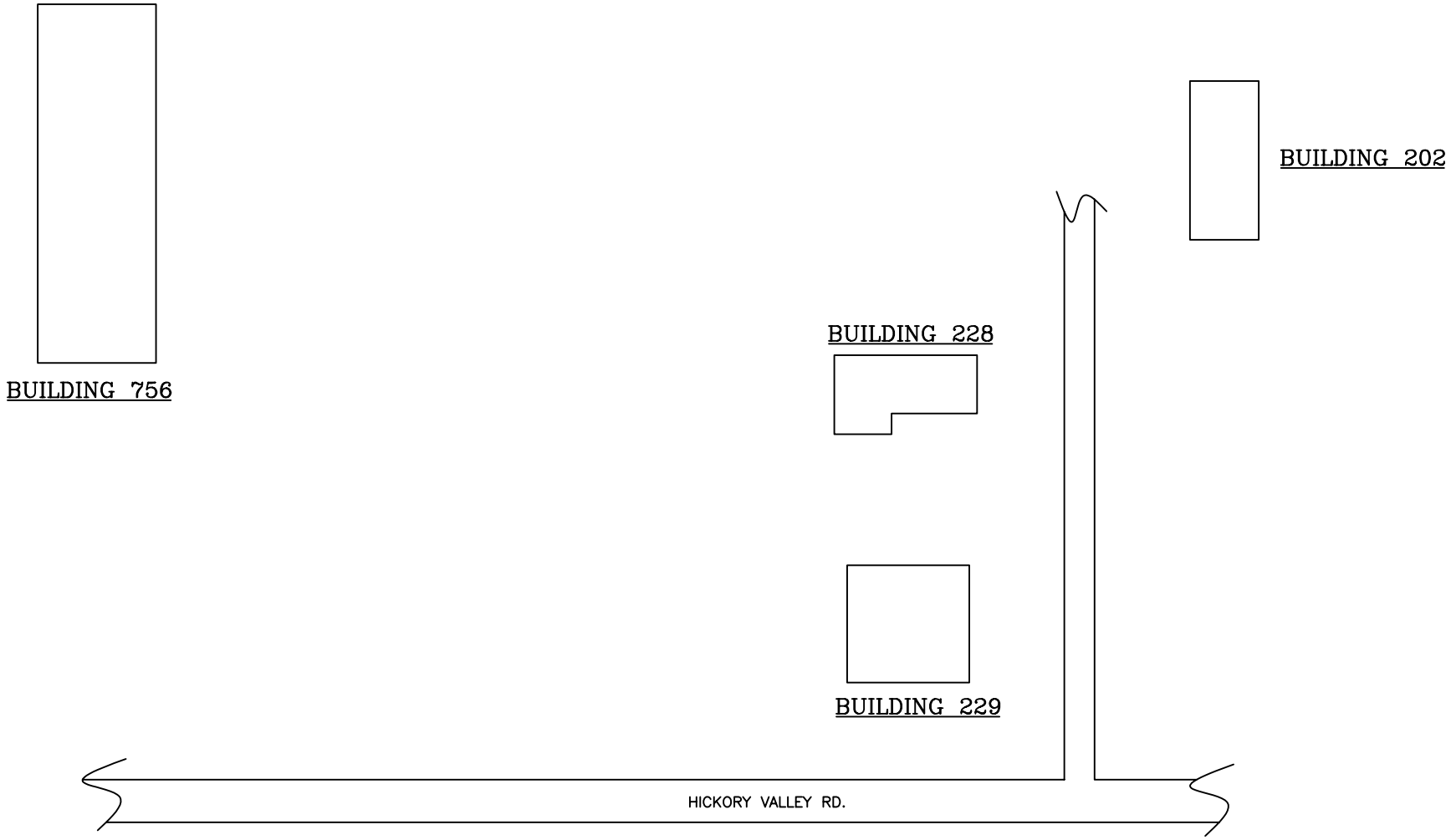
C



D

BUILDING 756, FIRST FLOOR

ENVIRONMENTAL ENTERPRISE GROUP, INC. 1345 BARRACKS RD NORTH CHARLESTON, SOUTH CAROLINA 29405-2106			
FLOOR PLAN BUILDING 756 – FIRST & SECOND FLOORS CHATTANOOGA ARC (TN107), CHATTANOOGA, TN			
DATE 03-22-04	PREPARED BY: T. LEWIS	DRAWN BY J.I. BROWNLEE	REV –
SCALE NONE	DWG NUMBER CHATTANOOGA_TN_ARC_BLDG756	SHEET 1 OF 1	



ENVIRONMENTAL ENTERPRISE GROUP, INC.
1345 BARRACKS ROAD
NORTH CHARLESTON, SOUTH CAROLINA 29405

SITE MAP
CHATTANOOGA ARC (TN107)
CHATTANOOGA, TN

DATE	PREPARED BY:	DRAWN BY:	REV
03-22-04	T. LEWIS	J.I. BROWNLEE	-

SCALE	DWG NUMBER	SHEET
NONE	CHATTANOOGA_TN_ARC_SITE MAP	1 OF 1

BUILDING 228 – ADMINISTRATIVE BUILDING – CHATTANOOGA-2, TN

BUILDING 229 – TRAINING BUILDING – CHATTANOOGA-2, TN

BUILDING 756 – MAINTENANCE SHOP – CHATTANOOGA-2, TN

APPENDIX C

Quality Evaluation Results

Lead-Based Paint Survey Report
Quality Evaluation Results

Original XRF #	Original Result	Retest XRF#	Retest Result	Average	Squared
95	0.0200	98	0.0200	0.0200	0.0004
96	0.1500	97	0.0700	0.1100	0.0121
102	0.0700	105	0.0300	0.0500	0.0025
103	0.0600	106	0.0600	0.0600	0.0036
104	0.1000	107	0.0100	0.0550	0.0030
Total	**0.4000**		**0.1900**	**0.2950**	**0.0216**

Original Reading Average **0.0800**
Retest Reading Average **0.0380**
0.0420

Absolute Difference **0.0420**

C= 0.0216
D= 0.0216 x 0.0072 = 0.0002
E= 0.0002 + 0.0320 = 0.0322
F= 0.0322 sqrt = 0.1793
Retest Tolerance Limit = 0.1793 x 1.645 = 0.2950

Retest Tolerance Limit = 0.2950
Absolute Difference = 0.0420

Inspection passed retest: 0.0420 < 0.2950

The Retest Tolerance Limit was computed using the following steps

1. Calculate the average of the original XRF result and retest XRF result for each combination.
2. Square the average of each testing combination
3. Add the ten squared averages together. This quantity is called C.
4. Multiply the number C by 0,0072. This quality is called D.
5. Add the number 0.032 to D. This quantity is called E.
6. Take the square root of E. Call this quantity F.
7. Multiply F by 1.645. The result is the Retest Tolerance Limit.
8. Find the absolute difference of the two averages.

If the absolute difference is less than the Retest Tolerance Limit, the inspection has passed retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, the procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, the inspection is considered deficient. Retest Tolerance was performed in accordance with HUD/EPA Performance Characteristics Sheet for Niton XRF instruments.

APPENDIX E

REGULATORY DATABASE SEARCH REPORTS

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Rob Newman
FMSM Engineers
1901 Nelson Miller
Louisville, KY 40223

Order Date: 7/25/2006 **Completion Date:** 7/25/2006
Inquiry #: 1722164.13
P.O. #: NA
Site Name: Chattanooga (VAAP) USARC
Address: 6703 Bonny Oaks Drive
City/State: Chattanooga, TN 37421
Cross Streets:

Customer Project: USARC
1022764WEI 502-212-5039

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

The EDR Radius Map
with GeoCheck®

Chattanooga (VAAP) USARC
6703 Bonny Oaks Drive
Chattanooga, TN 37363

Inquiry Number: 01752567.1r

September 11, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

6703 BONNY OAKS DRIVE
CHATTANOOGA, TN 37363

COORDINATES

Latitude (North):	35.074500 - 35° 4' 28.2''
Longitude (West):	85.154400 - 85° 9' 15.8''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	668275.1
UTM Y (Meters):	3882664.8
Elevation:	758 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	35085-A2 EAST CHATTANOOGA, TN
Most Recent Revision:	1976

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
US ARMY RESERVES 81ST REGIONAL SUPPORT COMMAND -BUILDING 232 6703 BONNY OAKS DR CHATTANOOGA, TN 37421	UST	N/A
DEPT. OF THE ARMY, VAAP 6703 BONNY OAKS DRIVE CHATTANOOGA, TN 37422	PADS CERCLIS RCRA-SQG FINDS	TN6210020933

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

NPL ---------- National Priority List

EXECUTIVE SUMMARY

Proposed NPL Proposed National Priority List Sites
Delisted NPL National Priority List Deletions
NPL RECOVERY Federal Superfund Liens
CERC-NFRAP CERCLIS No Further Remedial Action Planned
CORRACTS Corrective Action Report
RCRA-TSDF Resource Conservation and Recovery Act Information
RCRA-LQG Resource Conservation and Recovery Act Information
ERNS Emergency Response Notification System
HMIRS Hazardous Materials Information Reporting System
US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls
DOD Department of Defense Sites
FUDS Formerly Used Defense Sites
US BROWNFIELDS A Listing of Brownfields Sites
CONSENT Superfund (CERCLA) Consent Decrees
ROD Records Of Decision
UMTRA Uranium Mill Tailings Sites
ODI Open Dump Inventory
TRIS Toxic Chemical Release Inventory System
TSCA Toxic Substances Control Act
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS Section 7 Tracking Systems
ICIS Integrated Compliance Information System
MLTS Material Licensing Tracking System
MINES Mines Master Index File
RAATS RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

SHWS Promulgated Sites
SWF/LF Solid Waste Disposal Facilities
LUST Fund Eligible Leaking Underground Storage Tank Sites
LUST_JO Leaking Underground Storage Tanks Sites
LUST TRUST LUST TRUST Fund Database
HIST_LUST CO Leaking Underground Storage Tanks Sites
AST Aboveground Storage Tanks
ENG CONTROLS Engineering Control Sites
INST CONTROL Institutional Control Sites
VCP Voluntary Cleanup, Oversight and Assistance Program Sites
DRYCLEANERS Registered Facilities List
BROWNFIELDS Superfund VOAP Listing
CDL Registry of Contaminated Properties
NPDES Permitted Facility Listing

TRIBAL RECORDS

INDIAN RESERV Indian Reservations
INDIAN LUST Leaking Underground Storage Tanks on Indian Land
INDIAN UST Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were not identified.

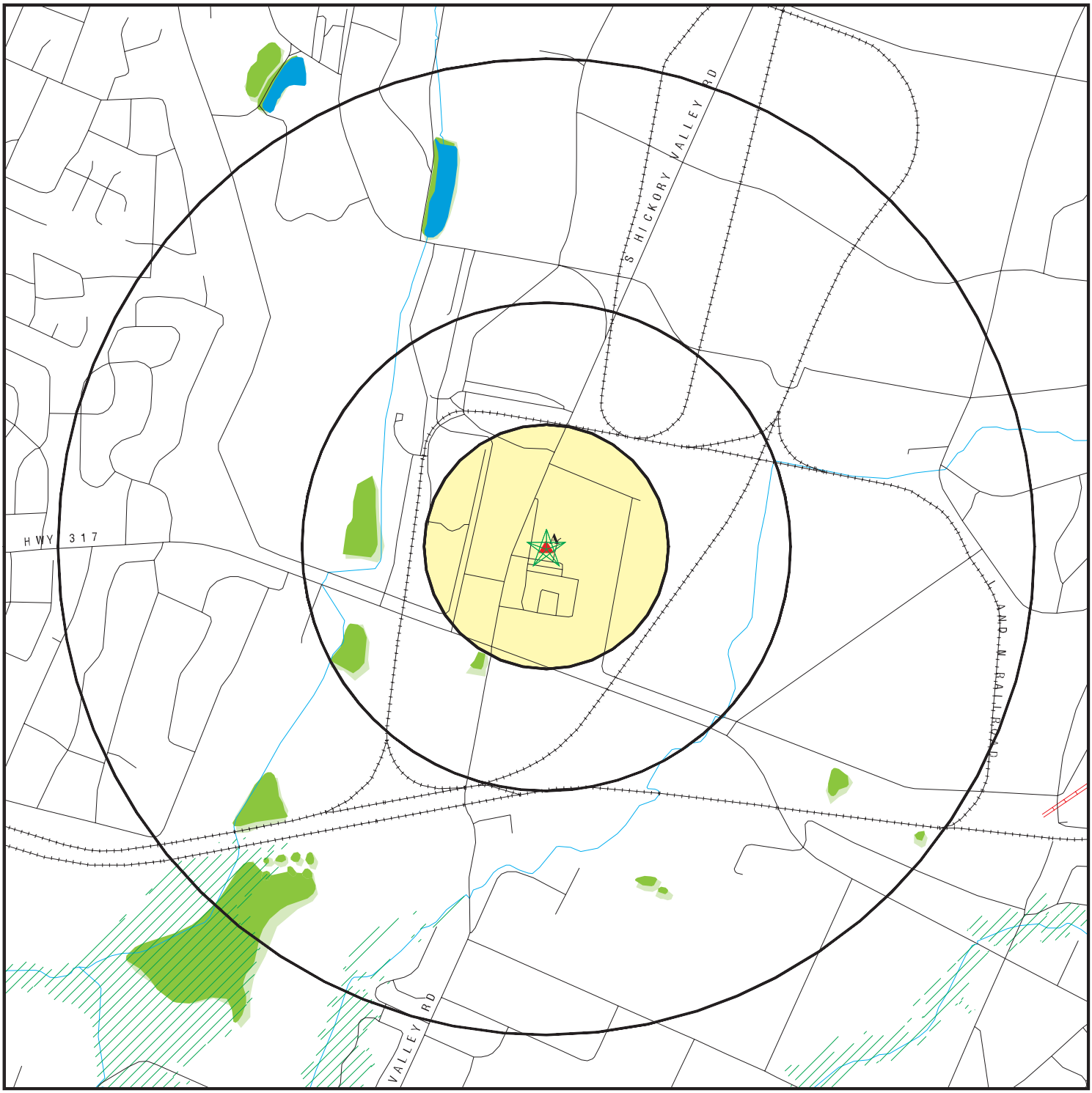
Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
ONE HOUR CLEANERS	DRYCLEANERS
STANDEFER MOTOR SALES INC	LUST
BP STATION #24380	LUST
FORMER HWY 58 SHELL, AKA SHELL FACI	LUST
K-MART #3408	LUST
POWER EQUIPMENT COMPANY - CHATT.	LUST
MURRAY HILLS 76	LUST
HWY 58 CHEVRON,LLC	LUST
LOWERY'S BAIT & TACKLE	LUST
PREBUL JEEP/EAGLE	LUST
SCOTCHMAN #201	LUST
FORMER CITY OF CHATTANOOGA BUS BARN	LUST
CHATTANOOGA RTR (DOT/FAA)	LUST
CHEMLAWN SERVICES CORP.	LUST
FAMILY ENTERTAINMENT INC	LUST
GOLDEN GALLON #26	LUST
ELDER FOOD MARKET	LUST
GOLDEN GALLON #28	LUST
J. A. THOMPSON SERVICE STATION (UNO	LUST
CLIFFORD BRADY	LUST
FAMILY ENTERTAINMENT INC	UST, AST
SOUTH CENTRAL BELL OLTWTN 89102RS	RCRA-SQG, FINDS
MASTER TUFT INC	RCRA-SQG, FINDS
PHILLIPS BROS INC	RCRA-SQG, FINDS
INTERSTATE 75, NORTH OF CHATTANOOGA, TN	ERNS
CHATTANOOGA YARD	ERNS
CHATTANOOGA MILE POST 240A	ERNS
CHATTANOOGA SEWER	ERNS
N. CHATTANOOGA RAIL YARD MM C&D 0.8	ERNS
CHATTANOOGA TN	ERNS
CHATTANOOGA YARD	ERNS
17 MILES NORTH OF CHATTANOOGA	ERNS
17 MILES NORTH OF CHATTANOOGA ON 124	ERNS
NEAR CHATTANOOGA	ERNS
WALNUT STREET BRIDGE, CHATTANOOGA, TN	ERNS
CITY OF CHATTANOOGA SUMMIT LANDFILL	FINDS
BENTON OIL - POLK COUNTY	LUST TRUST
TEXACO 211800072	LUST TRUST
CLOSED BP OIL SVC STATION	LUST TRUST

OVERVIEW MAP - 01752567.1r



0 1/4 1/2 1 Miles

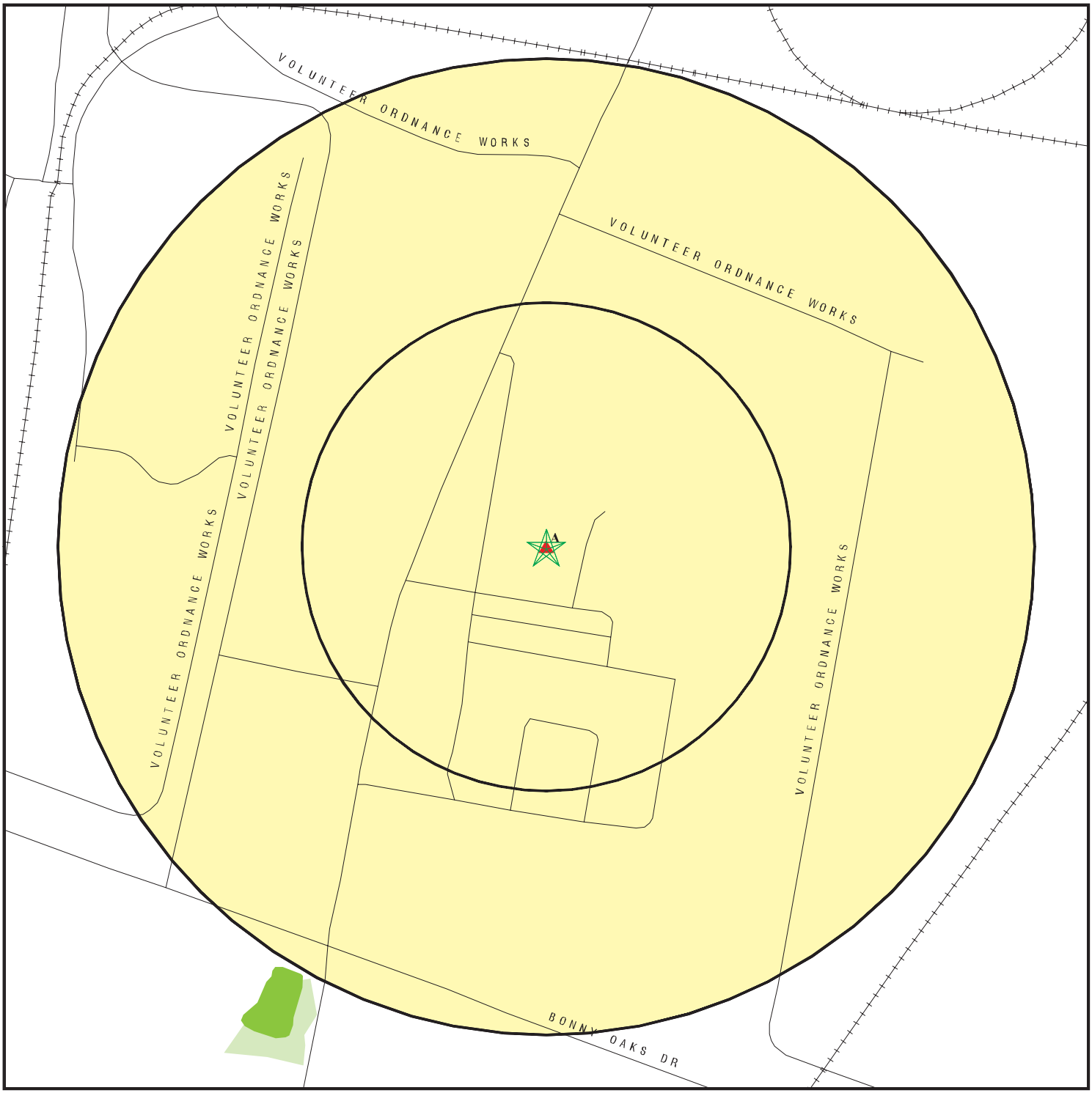
N

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Chattanooga (VAAP) USARC	CLIENT:	FMSM Engineers
ADDRESS:	6703 Bonny Oaks Drive Chattanooga TN 37363	CONTACT:	Rob Newman
		INQUIRY #:	01752567.1r
LAT/LONG:	35.0745 / 85.1544	DATE:	September 11, 2006 3:58 pm

DETAIL MAP - 01752567.1r



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

N

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		INQUIRY #:	01752567.1r
LAT/LONG:	35.0745 / 85.1544	DATE:	September 11, 2006 3:58 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY		TP	NR	NR	NR	NR	NR	0
CERCLIS	X	0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.	X	0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS	X	TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
STATE AND LOCAL RECORDS								
State Haz. Waste		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	0	NR	NR	0
LUST_JO		0.500	0	0	0	NR	NR	0
LUST TRUST		0.500	0	0	0	NR	NR	0
HIST_LUST CO		0.500	0	0	0	NR	NR	0
UST	X	0.250	0	0	NR	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
BROWNFIELDS		0.500	0	0	0	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NPDES		TP	NR	NR	NR	NR	NR	0
TRIBAL RECORDS								
INDIAN RESERV		1.000	0	0	0	0	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

US ARMY RESERVES 81ST REGIONAL
SUPPORT COMMAND -BUILDING 232 6703 BONNY OAKS DR
CHATTANOOGA, TN 37421

UST

U002097857
N/A

Site 1 of 2 in cluster A

Actual:
758 ft.

UST:

Facility ID:	0-330776	Tank ID:	1
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		

Tank:

Contents:	Gasoline	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	10152
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1977
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False

Piping:

Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	2
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		

Tank:

Contents:	Gasoline	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	10152
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1977
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False

Piping:

Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

US ARMY RESERVES 81ST REGIONAL (Continued) **U002097857**

Facility ID:	0-330776	Tank ID:	3
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		
Tank:			
Contents:	Used Oil	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	550
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1977
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False
Piping:			
Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	4
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		
Tank:			
Contents:	Diesel	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	5000
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1942
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False
Piping:			
Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	5
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		

US ARMY RESERVES 81ST REGIONAL (Continued) **U002097857**

Owner Address: 255 West Oxmoor Road
Birmingham, AL 35205

Tank:

Contents:	Gasoline	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	3000
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1942
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False

Piping:

Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	6
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		

Tank:

Contents:	Gasoline	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	3000
Mannual Gauge:	False	Tightness:	True
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	False
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1942
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False

Piping:

Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	False
Line Tightness:	True	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	7
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		

Tank:

Contents:	Not Listed	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	20100

US ARMY RESERVES 81ST REGIONAL (Continued) **U002097857**

Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1971
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False
Piping:			
Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	9
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		
Tank:			
Contents:	Diesel	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	500
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1974
TANK INTERSTITIAL:			
Double Walled:	False	2nd Contained:	False
Overfill Installed:	False	Spill Installed:	False
Piping:			
Type:	Not Listed	Cathodic Protection:	False
Material:	Bare Steel	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

Facility ID:	0-330776	Tank ID:	10
Facility Description:	Federal Military	Owner Description:	Not Listed
Owner ID:	157506	Owner Telephone:	(205) 795-1588
Owner Name:	US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND		
Owner Address:	255 West Oxmoor Road Birmingham, AL 35205		
Tank:			
Contents:	Diesel	Secondary Trait:	None
Status:	Permanently Out of Use	Capacity:	500
Mannual Gauge:	False	Tightness:	False
Vapor Monitor:	False	Groundwater Monitor:	False
ATG:	False	SIR:	False
Inventory Control:	False	Leak Detection Listed:	True
Material:	Asphalt Coated or Bare Steel	Date Installed:	05/26/1970

US ARMY RESERVES 81ST REGIONAL (Continued) **U002097857**

TANK INTERSTITIAL:
Double Walled: False
2nd Contained: False
Overfill Installed: False
Spill Installed: False
Piping:
Type: Not Listed
Cathodic Protection: False
Material: Bare Steel
Other Material: None
SIR: False
Leak Detection Listed: True
Line Tightness: False
Auto Line Leak Detect.: False
Vapor Monitor: False
Groundwater Monitor: False
PIPE INTERSTITIAL:
Double Walled: Not reported
2nd Contained: False

Facility ID: 0-330776
Tank ID: 11
Facility Description: Federal Military
Owner Description: Not Listed
Owner ID: 157506
Owner Telephone: (205) 795-1588
Owner Name: US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND
Owner Address: 255 West Oxmoor Road
Birmingham, AL 35205
Tank:
Contents: Gasoline
Secondary Trait: Double-Walled
Status: Permanently Out of Use
Capacity: 10000
Mannual Gauge: False
Tightness: False
Vapor Monitor: False
Groundwater Monitor: False
ATG: True
SIR: False
Inventory Control: True
Leak Detection Listed: False
Material: Fiberglass Reinforced Plastic
Date Installed: 01/30/1990
TANK INTERSTITIAL:
Double Walled: True
2nd Contained: False
Overfill Installed: True
Spill Installed: True
Piping:
Type: Pressurized
Cathodic Protection: True
Material: Fiberglass Reinforced Plastic
Other Material: None
SIR: False
Leak Detection Listed: False
Line Tightness: True
Auto Line Leak Detect.: True
Vapor Monitor: False
Groundwater Monitor: False
PIPE INTERSTITIAL:
Double Walled: Not reported
2nd Contained: False

Facility ID: 0-330776
Tank ID: 12
Facility Description: Federal Military
Owner Description: Not Listed
Owner ID: 157506
Owner Telephone: (205) 795-1588
Owner Name: US ARMY RESERVES 81st REGIONAL SUPPORT COMMAND
Owner Address: 255 West Oxmoor Road
Birmingham, AL 35205
Tank:
Contents: Used Oil
Secondary Trait: None
Status: Permanently Out of Use
Capacity: 500
Mannual Gauge: True
Tightness: False
Vapor Monitor: False
Groundwater Monitor: False
ATG: False
SIR: False
Inventory Control: True
Leak Detection Listed: False
Material: Fiberglass Reinforced Plastic
Date Installed: 01/30/1990
TANK INTERSTITIAL:
Double Walled: False
2nd Contained: False
Overfill Installed: False
Spill Installed: False
Piping:
Type: Gravity Feed
Cathodic Protection: True

US ARMY RESERVES 81ST REGIONAL (Continued) **U002097857**

Material:	Fiberglass Reinforced Plastic	Other Material:	None
SIR:	False	Leak Detection Listed:	True
Line Tightness:	False	Auto Line Leak Detect.:	False
Vapor Monitor:	False	Groundwater Monitor:	False
PIPE INTERSTITIAL:			
Double Walled:	Not reported	2nd Contained:	False

A2
Target
Property
Actual:
758 ft.

DEPT. OF THE ARMY, VAAP **PADS** **1000155714**
6703 BONNY OAKS DRIVE **CERCLIS** **TN6210020933**
CHATTANOOGA, TN 37422 **RCRA-SQG**
FINDS

Site 2 of 2 in cluster A

CERCLIS:

Site ID:	0404165
Federal Facility:	Federal Facility
NPL Status:	Not on the NPL
Non NPL Status:	Other Cleanup Activity: Federal Facility-Lead Cleanup

CERCLIS Site Contact Name(s):

Contact Name:	TIM WOOLHEATER
Contact Tel:	(404) 562-8510
Contact Title:	Remedial Project Manager (RPM)
Contact Name:	Beth Walden
Contact Tel:	(404) 562-8814
Contact Title:	Site Assessment Manager (SAM)
Contact Name:	Doyle Brittain
Contact Tel:	(404) 562-8549
Contact Title:	Remedial Project Manager (RPM)

CERCLIS Site Alias Name(s):

Alias Name:	VOLUNTEER army AMMUNITION PLANT
Alias Address:	BONNY OAKS DRIVE CHATTANOOGA, TN 28405
Alias Name:	US ARMY VOLUNTEER ARMY AMMO PLANT
Alias Address:	Not reported HAMILTON, TN
Site Description:	Site is being managed by Federal Facilities Branch under RCRA authority. (Mike Norman 11/18/2005)

CERCLIS Assessment History:

Action:	PRELIMINARY ASSESSMENT
Date Started:	Not reported
Date Completed:	01/01/1983
Priority Level:	High
Action:	SITE INSPECTION
Date Started:	Not reported
Date Completed:	11/10/1987
Priority Level:	High
Action:	DISCOVERY
Date Started:	Not reported
Date Completed:	02/12/1988
Priority Level:	Not reported

DEPT. OF THE ARMY, VAAP (Continued) **1000155714**

Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: 05/18/1994
Date Completed: 10/27/1994
Priority Level: Not reported

Action: Restoration Advisory Board
Date Started: 01/01/1998
Date Completed: Not reported
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT ORDER
Date Started: Not reported
Date Completed: 12/04/2001
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: 06/13/2002
Date Completed: 06/13/2002
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: 12/04/2001
Date Completed: 06/13/2002
Priority Level: Not reported

Action: RISK/HEALTH ASSESSMENT
Date Started: 07/05/2002
Date Completed: 04/22/2003
Priority Level: Not reported

Action: ECOLOGICAL RISK ASSESSMENT
Date Started: 07/05/2002
Date Completed: 04/22/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: 12/04/2001
Date Completed: 08/11/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT CORRECTIVE MEASURE STUDY
Date Started: 12/30/2001
Date Completed: 08/13/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: 12/04/2001
Date Completed: 08/13/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: 11/10/2003
Date Completed: 11/10/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 12/04/2001

DEPT. OF THE ARMY, VAAP (Continued) **1000155714**

Date Completed: 12/18/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 12/04/2001
Date Completed: 12/18/2003
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 06/12/2002
Date Completed: 06/09/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 02/11/2003
Date Completed: 09/28/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 10/28/2003
Date Completed: 10/12/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 12/18/2003
Date Completed: 10/12/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 12/18/2003
Date Completed: 10/12/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 12/18/2003
Date Completed: 10/12/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 08/13/2003
Date Completed: 10/12/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 12/04/2001
Date Completed: 11/04/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT INTERIM/STABILIZATION MEASURE
Date Started: 04/26/2004
Date Completed: 11/04/2004
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT CORRECTIVE MEASURE STUDY
Date Started: 11/04/2004
Date Completed: 11/04/2004
Priority Level: Not reported

DEPT. OF THE ARMY, VAAP (Continued) **1000155714**

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 12/04/2001
Date Completed: 02/08/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 12/04/2001
Date Completed: 02/08/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 12/04/2001
Date Completed: 02/08/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 08/13/2003
Date Completed: 02/09/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 08/27/2003
Date Completed: 03/07/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 08/13/2003
Date Completed: 03/07/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT SB/RTC
Date Started: Not reported
Date Completed: 11/01/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT SB/RTC
Date Started: Not reported
Date Completed: 11/01/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT SB/RTC
Date Started: Not reported
Date Completed: 11/01/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT SB/RTC
Date Started: Not reported
Date Completed: 11/01/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION
Date Started: 06/20/2004
Date Completed: 11/01/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT CORRECTIVE MEASURE STUDY
Date Started: 03/07/2005

DEPT. OF THE ARMY, VAAP (Continued) **1000155714**

Date Completed: 12/19/2005
Priority Level: Not reported

Action: RESOURCE CONSERVATION AND RECOVERY ACT SB/RTC
Date Started: Not reported
Date Completed: 02/09/2006
Priority Level: Not reported

RCRAInfo:
Owner: U S ARMY
(423) 855-7100
EPA ID: TN6210020933

Contact: JOHN J BOYLE
(423) 855-7104

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BENTON	S105585895	BENTON OIL - POLK COUNTY	HIGHWAY 411 SOUTH	37416	LUST TRUST
CHATTANOOGA	S107461463	STANDEFER MOTOR SALES INC	HWY 153 @ SHALLOWFORD RD	37421	LUST
CHATTANOOGA	S107461275	BP STATION #24380	4428 HWY 58 / 153	37416	LUST
CHATTANOOGA	S107461311	FORMER HWY 58 SHELL, AKA SHELL FACI	4531 HWY 58	37416	LUST
CHATTANOOGA	S107461319	K-MART #3408	4801 HWY 58	37416	LUST
CHATTANOOGA	S107461394	POWER EQUIPMENT COMPANY - CHATT.	4295 HWY 58	37416	LUST
CHATTANOOGA	S107461522	MURRAY HILLS 76	4345 HWY 58	37416	LUST
CHATTANOOGA	S107461563	HWY 58 CHEVRON,LLC	4434 HWY 58	37416	LUST
CHATTANOOGA	S107461334	LOWERY'S BAIT & TACKLE	4820 HWY 58N	37416	LUST
CHATTANOOGA	93345565	INTERSTATE 75, NORTH OF CHATTANOOGA, TN	INTERSTATE 75, NORTH OF CHATTANOOGA, TN		ERNS
CHATTANOOGA	S107591730	ONE HOUR CLEANERS	AIRPORT PLAZA, 5813 LEE HWY STE 10	37421	DRYCLEANERS
CHATTANOOGA	S107461638	PREBUL JEEP/EAGLE	2120 CHAPMAN RD / HWY 153	37421	LUST
CHATTANOOGA	8875402	CHATTANOOGA YARD	CHATTANOOGA YARD		ERNS
CHATTANOOGA	8860096	CHATTANOOGA MILE POST 240A	CHATTANOOGA MILE POST 240A		ERNS
CHATTANOOGA	93330037	CHATTANOOGA SEWER	CHATTANOOGA SEWER		ERNS
CHATTANOOGA	91222417	N. CHATTANOOGA RAIL YARD MM C&D 0.8	N. CHATTANOOGA RAIL YARD MM C&D 0.8		ERNS
CHATTANOOGA	2002628334	CHATTANOOGA TN	CHATTANOOGA TN		ERNS
CHATTANOOGA	2000539216	CHATTANOOGA YARD	CHATTANOOGA YARD		ERNS
CHATTANOOGA	S105790574	TEXACO 211800072	37120 CUMMINGS HIGHWAY		LUST TRUST
CHATTANOOGA	S107461416	SCOTCHMAN #201	TN HWY 58 / ROCKY RIVER RD	37416	LUST
CHATTANOOGA	S107461712	FORMER CITY OF CHATTANOOGA BUS BARN	205 MARKET / BROAD STREET		LUST
CHATTANOOGA	89134030	17 MILES NORTH OF CHATTANOOGA	17 MILES NORTH OF CHATTANOOGA		ERNS
CHATTANOOGA	89119166	17 MILES NORTH OF CHATTANOOGA ON 124	17 MILES NORTH OF CHATTANOOGA ON 124		ERNS
CHATTANOOGA	2003655344	NEAR CHATTANOOGA	NEAR CHATTANOOGA		ERNS
CHATTANOOGA	S107460872	CHATTANOOGA RTR (DOT/FAA)	5905 PINEHURST AVE LOVELL FIEL	37421	LUST
CHATTANOOGA	S107461564	CHEMLAWN SERVICES CORP.	3903 B VOLUNTEER DR.	37416	LUST
CHATTANOOGA	92291369	WALNUT STREET BRIDGE, CHATTANOOGA, TN	WALNUT STREET BRIDGE, CHATTANOOGA, TN		ERNS
OOLTEWAH	S104780987	CLOSED BP OIL SVC STATION	I-75 / US HWY 11	37363	LUST TRUST
OOLTEWAH	1000405170	SOUTH CENTRAL BELL OLTWTN 89102RS	HWY 11	37363	RCRA-SQG, FINDS
OOLTEWAH	S107461231	FAMILY ENTERTAINMENT INC	US 11 HWY	37363	LUST
OOLTEWAH	S107461270	GOLDEN GALLON #26	HWY 11 - MAIN ST	37363	LUST
OOLTEWAH	U001309360	FAMILY ENTERTAINMENT INC	US 11 HIGHWAY	37363	UST, AST
OOLTEWAH	S107461580	ELDER FOOD MARKET	10000 HWY. 58	37363	LUST
OOLTEWAH	S107461253	GOLDEN GALLON #28	I-75 @ OLD LEE HWY	37363	LUST
OOLTEWAH	S107461296	J. A. THOMPSON SERVICE STATION (UNO	9039 LEE HIGHWAY / I-75	37363	LUST
OOLTEWAH	1000919061	MASTER TUFT INC	RURAL RT 1 BOX 374 B	37363	RCRA-SQG, FINDS
OOLTEWAH	1000919155	PHILLIPS BROS INC	RURAL RT 3 BOX 43	37363	RCRA-SQG, FINDS
OOLTEWAH	S107461195	CLIFFORD BRADY	SNOW HILL RD 58 HWY	37363	LUST
OOLTEWAH	1004596897	CITY OF CHATTANOOGA SUMMIT LANDFILL	WOODLAND DRIVE	37363	FINDS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/19/2006
Date Data Arrived at EDR: 05/05/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2006
Next Scheduled EDR Contact: 10/30/2006
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 04/19/2006
Date Data Arrived at EDR: 05/05/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2006
Next Scheduled EDR Contact: 10/30/2006
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/19/2006
Date Data Arrived at EDR: 05/05/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 08/02/2006
Next Scheduled EDR Contact: 10/30/2006
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL RECOVERY: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/19/2006
Date Data Arrived at EDR: 06/22/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 62

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 06/22/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/01/2006
Date Data Arrived at EDR: 03/21/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 23

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 06/23/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 04/13/2006
Number of Days to Update: 27

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/05/2006
Next Scheduled EDR Contact: 12/04/2006
Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/13/2006
Date Data Arrived at EDR: 06/28/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 56

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/22/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 01/12/2006
Date Made Active in Reports: 02/21/2006
Number of Days to Update: 40

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 07/25/2006
Next Scheduled EDR Contact: 10/23/2006
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/03/2006
Date Data Arrived at EDR: 07/19/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 35

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/19/2006
Next Scheduled EDR Contact: 10/16/2006
Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006
Date Data Arrived at EDR: 03/27/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 09/07/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006
Date Data Arrived at EDR: 03/27/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 703-603-8905
Last EDR Contact: 09/07/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/08/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 177

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 08/11/2006
Next Scheduled EDR Contact: 11/06/2006
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 01/19/2006
Date Made Active in Reports: 02/21/2006
Number of Days to Update: 33

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/17/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/10/2006
Date Data Arrived at EDR: 07/13/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/11/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/2004
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 04/25/2005
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/24/2006
Next Scheduled EDR Contact: 10/23/2006
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/10/2006
Date Data Arrived at EDR: 07/21/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 47

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/06/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005
Date Data Arrived at EDR: 11/28/2005
Date Made Active in Reports: 01/30/2006
Number of Days to Update: 63

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/05/2006
Next Scheduled EDR Contact: 12/18/2006
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 07/20/2006
Date Data Arrived at EDR: 07/21/2006
Date Made Active in Reports: 08/22/2006
Number of Days to Update: 32

Source: EPA
Telephone: 202-564-6064
Last EDR Contact: 07/06/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Quarterly

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 06/22/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 62

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 06/22/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 07/17/2006
Next Scheduled EDR Contact: 10/16/2006
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/14/2006
Date Data Arrived at EDR: 07/18/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 50

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 06/19/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 07/14/2006
Date Data Arrived at EDR: 07/18/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 50

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 06/19/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 05/11/2006
Date Made Active in Reports: 05/22/2006
Number of Days to Update: 11

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/17/2006
Next Scheduled EDR Contact: 10/16/2006
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006
Date Data Arrived at EDR: 04/21/2006
Date Made Active in Reports: 05/11/2006
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/17/2006
Next Scheduled EDR Contact: 10/16/2006
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/07/2006
Date Data Arrived at EDR: 08/09/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 28

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 08/09/2006
Next Scheduled EDR Contact: 11/06/2006
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/10/2006
Date Data Arrived at EDR: 07/20/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 48

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/16/2006
Date Data Arrived at EDR: 06/28/2006
Date Made Active in Reports: 08/23/2006
Number of Days to Update: 56

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/28/2006
Next Scheduled EDR Contact: 09/25/2006
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/21/2006
Date Data Arrived at EDR: 07/25/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 43

Source: EPA
Telephone: N/A
Last EDR Contact: 04/03/2006
Next Scheduled EDR Contact: 07/03/2006
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 09/05/2006
Next Scheduled EDR Contact: 12/04/2006
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2003
Date Data Arrived at EDR: 06/17/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 07/21/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

SHWS: Promulgated Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 05/02/2006
Date Data Arrived at EDR: 05/10/2006
Date Made Active in Reports: 06/12/2006
Number of Days to Update: 33

Source: Department of Health and Environment
Telephone: 615-532-0900
Last EDR Contact: 05/05/2006
Next Scheduled EDR Contact: 07/31/2006
Data Release Frequency: Semi-Annually

SWF/LF: Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 04/19/2006
Date Data Arrived at EDR: 04/24/2006
Date Made Active in Reports: 05/16/2006
Number of Days to Update: 22

Source: Department of Environment and Conservation
Telephone: 615-532-0804
Last EDR Contact: 07/11/2006
Next Scheduled EDR Contact: 10/09/2006
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Fund Eligible Leaking Underground Storage Tank Sites

Many requests are received for lists of leaking UST sites in Tennessee. No list is currently available. The information on leaking UST sites that is available is included in the list of Fund-eligible sites. This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST fund.

Date of Government Version: 07/19/2006
Date Data Arrived at EDR: 07/26/2006
Date Made Active in Reports: 08/30/2006
Number of Days to Update: 35

Source: Department of Environment and Conservation
Telephone: 615-532-0104
Last EDR Contact: 09/05/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Quarterly

LUST_JO: Leaking Underground Storage Tanks Sites

Leaking UST sites in Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi and Washington counties.

Date of Government Version: 08/02/2005
Date Data Arrived at EDR: 08/03/2005
Date Made Active in Reports: 09/07/2005
Number of Days to Update: 35

Source: Department of Environmental Conservation, Johnson City Field Office
Telephone: 423-854-5441
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: Varies

LUST TRUST: LUST TRUST Fund Database

This list contains information on sites that had accidental releases of petroleum and are eligible for reimbursement from the TN Petroleum UST Fund.

Date of Government Version: 12/29/2004
Date Data Arrived at EDR: 12/09/2005
Date Made Active in Reports: 01/23/2006
Number of Days to Update: 45

Source: Department of Environment & Conservation
Telephone: 615-532-0971
Last EDR Contact: 09/05/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Varies

HIST_LUST CO: Leaking Underground Storage Tanks Sites

Date of Government Version: 10/18/1994
Date Data Arrived at EDR: 10/24/1994
Date Made Active in Reports: 12/30/1994
Number of Days to Update: 67

Source: Department of Environmental Conservation, Columbia Field Office
Telephone: 931-380-3371
Last EDR Contact: 07/03/2006
Next Scheduled EDR Contact: 10/02/2006
Data Release Frequency: No Update Planned

UST: Facility and Tank Report

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/04/2005
Date Data Arrived at EDR: 03/16/2005
Date Made Active in Reports: 04/12/2005
Number of Days to Update: 27

Source: Department of Environment and Conservation
Telephone: 615-532-0104
Last EDR Contact: 08/28/2006
Next Scheduled EDR Contact: 09/11/2006
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 10/01/1999
Date Data Arrived at EDR: 10/12/1999
Date Made Active in Reports: 11/05/1999
Number of Days to Update: 24

Source: Department of Environmental and Conservation
Telephone: 615-532-0965
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENG CONTROLS: Engineering Control Sites
Sites that have engineering controls.

Date of Government Version: 06/27/2006
Date Data Arrived at EDR: 06/27/2006
Date Made Active in Reports: 07/26/2006
Number of Days to Update: 29

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 09/11/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Varies

INST CONTROL: Institutional Control Sites
Sites that have institutional controls.

Date of Government Version: 06/27/2006
Date Data Arrived at EDR: 06/27/2006
Date Made Active in Reports: 07/26/2006
Number of Days to Update: 29

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 09/11/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Varies

VCP: Voluntary Cleanup, Oversight and Assistance Program Sites
The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site.

Date of Government Version: 07/31/2006
Date Data Arrived at EDR: 08/01/2006
Date Made Active in Reports: 08/30/2006
Number of Days to Update: 29

Source: Department of Environmental & Conservation
Telephone: 615-532-0912
Last EDR Contact: 07/31/2006
Next Scheduled EDR Contact: 10/30/2006
Data Release Frequency: Varies

DRYCLEANERS: Registered Facilities List
A list of all active registered drycleaner facilities, There may be some inactive facilities included.

Date of Government Version: 01/01/2006
Date Data Arrived at EDR: 03/09/2006
Date Made Active in Reports: 04/12/2006
Number of Days to Update: 34

Source: Dept. of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/15/2006
Next Scheduled EDR Contact: 11/13/2006
Data Release Frequency: Annually

BROWNFIELDS: Superfund VOAP Listing
Brownfields sites included on the Superfund Voluntary Cleanup, Oversight & Assistance Program listing.

Date of Government Version: 07/31/2006
Date Data Arrived at EDR: 08/01/2006
Date Made Active in Reports: 08/30/2006
Number of Days to Update: 29

Source: Department of Environment & Conservation
Telephone: 615-532-0912
Last EDR Contact: 07/31/2006
Next Scheduled EDR Contact: 10/30/2006
Data Release Frequency: Varies

CDL: Registry of Contaminated Properties
Pursuant to TCA 68212509 the following properties have been quarantined because of methamphetamine production, but have not been cleaned and certified within the 60day time frame allotted by the statute. These properties are hereby registered by the Tennessee Department of Environment and Conservation as unremediated methamphetamine sites. This is not a comprehensive list of quarantined properties. These are properties that TDEC has been notified as being quarantined, but have not been cleaned within the 60 day grace period. Other properties where methamphetamine production residues are a concern may not have been quarantined, may not have been reported to TDEC, or may not have passed the 60day grace

Date of Government Version: 04/17/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 07/26/2006
Number of Days to Update: 47

Source: Department of Environment & Conservation
Telephone: 615-532-0900
Last EDR Contact: 08/31/2006
Next Scheduled EDR Contact: 11/27/2006
Data Release Frequency: Varies

NPDES: Permitted Facility Listing
A listing of permitted wastewater facilities.

Date of Government Version: 06/01/2006
Date Data Arrived at EDR: 06/08/2006
Date Made Active in Reports: 07/26/2006
Number of Days to Update: 48
Source: Department of Environment & Conservation
Telephone: 615-253-2245
Last EDR Contact: 05/18/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/08/2005
Date Made Active in Reports: 08/04/2005
Number of Days to Update: 177
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 08/11/2006
Next Scheduled EDR Contact: 11/06/2006
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 06/08/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 06/28/2006
Number of Days to Update: 19
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005
Date Data Arrived at EDR: 01/21/2005
Date Made Active in Reports: 02/28/2005
Number of Days to Update: 38
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 06/06/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 07/28/2006
Number of Days to Update: 49
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 06/08/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 07/28/2006
Number of Days to Update: 49
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/01/2006
Date Data Arrived at EDR: 06/23/2006
Date Made Active in Reports: 08/02/2006
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

Date of Government Version: 06/06/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 07/28/2006
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

Date of Government Version: 12/02/2004
Date Data Arrived at EDR: 12/29/2004
Date Made Active in Reports: 02/04/2005
Number of Days to Update: 37

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

Date of Government Version: 06/08/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 07/28/2006
Number of Days to Update: 49

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

A listing of underground storage tank locations on Indian Land.

Date of Government Version: 06/08/2006
Date Data Arrived at EDR: 06/09/2006
Date Made Active in Reports: 06/30/2006
Number of Days to Update: 21

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

Date of Government Version: 06/30/2006
Date Data Arrived at EDR: 07/03/2006
Date Made Active in Reports: 09/06/2006
Number of Days to Update: 65

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

Date of Government Version: 06/01/2006
Date Data Arrived at EDR: 06/23/2006
Date Made Active in Reports: 08/02/2006
Number of Days to Update: 40

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/21/2006
Next Scheduled EDR Contact: 11/20/2006
Data Release Frequency: Quarterly

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2004
Date Data Arrived at EDR: 02/17/2006
Date Made Active in Reports: 04/07/2006
Number of Days to Update: 49

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 09/11/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/02/2006
Date Data Arrived at EDR: 05/31/2006
Date Made Active in Reports: 06/27/2006
Number of Days to Update: 27

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/30/2006
Next Scheduled EDR Contact: 11/27/2006
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 05/04/2006
Date Made Active in Reports: 06/06/2006
Number of Days to Update: 33

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 09/11/2006
Next Scheduled EDR Contact: 12/11/2006
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 09/30/2005
Date Data Arrived at EDR: 05/09/2006
Date Made Active in Reports: 05/24/2006
Number of Days to Update: 15

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/19/2006
Next Scheduled EDR Contact: 09/18/2006
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 06/29/2006
Date Made Active in Reports: 07/31/2006
Number of Days to Update: 32

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 08/15/2006
Next Scheduled EDR Contact: 11/13/2006
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/17/2006
Date Made Active in Reports: 05/02/2006
Number of Days to Update: 46

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/25/2006
Next Scheduled EDR Contact: 10/09/2006
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Listing
Source: Department Of Human Services
Telephone: 615-313-4778

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Tennesee Lust TDEC: In 1998 EDR reviewed technical reports, phase II reports and phase II report equivalents held by the Tennessee Department of Environment and Conservation and recorded data on leaking underground storage tanks in Davidson, Knox, and Shelby counties.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CHATTANOOGA (VAAP) USARC
6703 BONNY OAKS DRIVE
CHATTANOOGA, TN 37363

TARGET PROPERTY COORDINATES

Latitude (North):	35.07450 - 35° 4' 28.2''
Longitude (West):	85.1544 - 85° 9' 15.9''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	668275.1
UTM Y (Meters):	3882664.8
Elevation:	758 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	35085-A2 EAST CHATTANOOGA, TN
Most Recent Revision:	1976

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

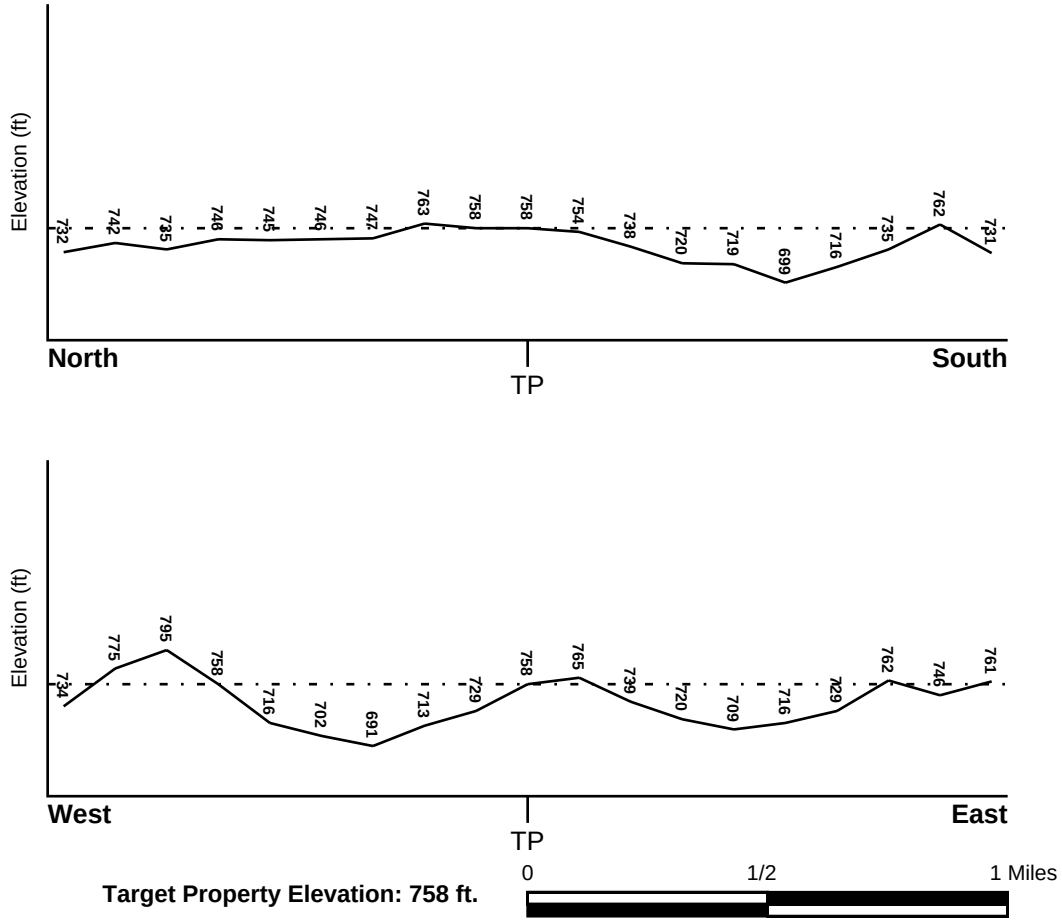
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
HAMILTON, TN	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 4700710150D

Additional Panels in search area: 4700720012A
4700720017D
4700720018D

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EAST CHATTANOOGA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	C *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	FULLERTON
Soil Surface Texture:	cherty - silt loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	15 inches	cherty - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
2	15 inches	19 inches	cherty - silty clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50
3	19 inches	90 inches	cherty - clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 2.00 Min: 0.60	Max: 5.50 Min: 4.50

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: cherty - loam
silt loam

Surficial Soil Types: cherty - loam
silt loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: cherty - silty clay loam
very cherty - silty clay
clay
cherty - silt loam
silty clay loam
silt loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

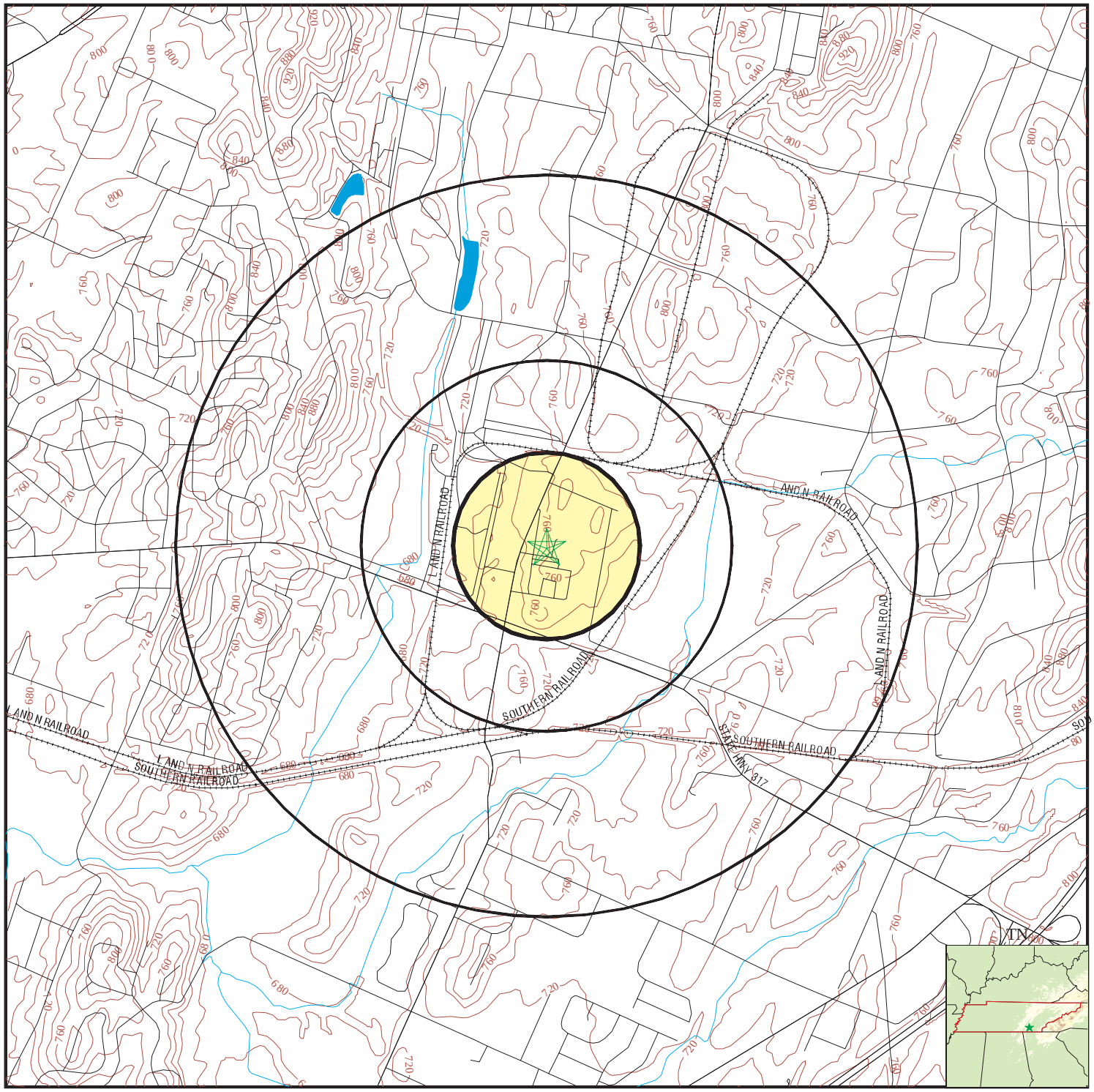
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 01752567.1r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

N

SITE NAME:	Chattanooga (VAAP) USARC	CLIENT:	FMSM Engineers
ADDRESS:	6703 Bonny Oaks Drive Chattanooga TN 37363	CONTACT:	Rob Newman
LAT/LONG:	35.0745 / 85.1544	INQUIRY #:	01752567.1r
		DATE:	September 11, 2006 3:58 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: TN Radon

Radon Test Results

County	Total Sites	Avg	Max	<4 pCi/L	4-10 pCi/L	10-20 pCi/L	20-50 pCi/L	50-100 pCi/L	>100 pCi/L
HAMILTON	48	1.7	6.1	43	5	0	0	0	0

Federal EPA Radon Zone for HAMILTON County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 37363

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.775 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.950 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Tennessee Spatial Data Server
Telephone: 931-528-6481

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

County Water Wells in Tennessee
Source: Department of Environment and Conservation
Telephone: 615-532-0191
Water wells in the following counties - Shelby, Davidson, Knox, Williamson, Anderson, Hamilton. Includes Nashville, Memphis and Knoxville.

OTHER STATE DATABASE INFORMATION

RADON

State Database: TN Radon
Source: Department of Environment & Conservation
Telephone: 615-299-9725
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

The EDR-City Directory
Abstract

Chattanooga (VAAP) USARC
6703 Bonny Oaks Drive
Chattanooga, TN 37421

Inquiry Number: 1722164.16

Thursday, July 27, 2006

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening report designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 2001 through 2003. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources: July 27, 2006

Target Property:
6703 Bonny Oaks Drive
Chattanooga, TN 37421

Year	***Uses***	***Source***
2001	Ammunition Plant	Cross Reference Directory
	Anderson Butler & Co	Cross Reference Directory
	Army Ammunition Plant	Cross Reference Directory
	591st Transportation Co	Cross Reference Directory
	Flair Precast Products	Cross Reference Directory
	Hamilton County Education Dept Information	Cross Reference Directory
	I T Corp	Cross Reference Directory
	Pit Stop Portables	Cross Reference Directory
	Port-O-Toilet Special Events	Cross Reference Directory
	Modern Cable Technology	Cross Reference Directory
	Chattanooga Railcar Svc	Cross Reference Directory
	Tecumseh Professional Assoc	Cross Reference Directory
	TNT Plant	Cross Reference Directory
	Aroma Release Technologies Inc	Cross Reference Directory
	Testing & Technology Inc	Cross Reference Directory
	Mark Tafoya Wood Works	Cross Reference Directory
	US Army Dept Reserve Unit	Cross Reference Directory
2003	591st Transportation Co	Polk's City Directory
	Hamilton County Education Dept	Polk's City Directory

Year	Uses	Source
2003	I T Corp	Polk's City Directory
	US Army	Polk's City Directory
	Pit Stop Portables	Polk's City Directory
	Port-O-Toilet Special Events	Polk's City Directory
	Modern Cable Technology	Polk's City Directory
	Chattanooga Railcar Svc	Polk's City Directory
	Hamilton County Superintendent	Polk's City Directory
	Tecumseh Professional Assoc	Polk's City Directory
	TNT Plant	Polk's City Directory
	Aroma Release Technologies Inc	Polk's City Directory
	Testing & Technology Inc	Polk's City Directory
	Mark Tafoya Wood Works	Polk's City Directory

Adjoining Properties

SURROUNDING

Multiple Addresses
Chattanooga, TN 37421

Year	Uses	Source
2001	*Bonny Oaks Drive*	Cross Reference Directory
	Tyner Church Of Christ (6620)	Cross Reference Directory
	No other listings 6603-6803 Bonny Oaks Drive	Cross Reference Directory
2003	*Bonny Oaks Drive*	Polk's City Directory
	Tyner Church Of Christ (6620)	Polk's City Directory
	No other listings 6603-6803 Bonny Oaks Drive	Polk's City Directory

August 7, 2006 O.1.1.LV2004028L01

Tennessee Department of Environment and Conservation
Ground Water Protection
ATTN: File Review Request
10th Floor, L&C Tower
401 Church Street
Nashville, TN 37243-1540
615-532-0762

Re: Request for File Review
Phase I Environmental Site Assessment
Chattanooga, TN

Dear Records Review:

We are conducting a Phase I Environmental Site Assessment and would like to check on any files which may be available for the following sites. The sites and addresses are listed below:

Guerry USARC, 2021 E 23rd Street, Chattanooga TN 37404
VAAP USARC, 6703 Bonny Oaks Drive, Chattanooga TN 37421

I am requesting that you review your environmental records and advise if you have any file information regarding the subject site. Please indicate below whether such records exist and return this letter via fax to (502) 292-6995 or call me at (502) 212-5006. Thank you for your assistance.

Sincerely,

FULLER, MOSSBARGER, SCOTT, AND MAY
ENGINEERS, INC.

Robert Newman

/cdm

_____ No, we have no environmental records for the sites listed.

_____ Yes, we have information on file for the sites listed.

August 7, 2006 O.1.1.LV2004028L01

Chattanooga/Hamilton County
Air Pollution Control Bureau
ATTN: Records Review Request
6125 Preservation Drive
Chattanooga, TN 37416
Phone: (423) 643-5971

Re: Request for File Review
Phase I Environmental Site Assessment
Chattanooga, TN

Dear Records Review:

We are conducting a Phase I Environmental Site Assessment and would like to check on any files which may be available for the following sites. The sites and addresses are listed below:

Guerry USARC, 2021 E 23rd Street, Chattanooga TN 37404
VAAP USARC, 6703 Bonny Oaks Drive, Chattanooga TN 37421

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ENGINEERS, INC.

Robert Newman

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August 7, 2006 O.1.1.LV2004028L01

Tennessee Department of Environment and Conservation
Division of Underground Storage Tanks
ATTN: File Review Request
401 Church Street
4th Floor, L&C Tower
Nashville, TN 37243-1541
(615) 532-0945

Re: Request for File Review
Phase I Environmental Site Assessment
Chattanooga, TN

Dear Records Review:

We are conducting a Phase I Environmental Site Assessment and would like to check on any files which may be available for the following sites. The sites and addresses are listed below:

Guerry USARC, 2021 E 23rd Street, Chattanooga TN 37404
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Robert Newman

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_____ Yes, we have information on file for the sites listed.

August 7, 2006 O.1.1.LV2004028L01

Tennessee Department of Environment and Conservation
Solid and Hazardous Waste Management
ATTN: File Review Request
5th Floor, L&C Tower
401 Church Street
Nashville, TN 37243-1535
615-532-0780
615-532-0886 (fax)

Re: Request for File Review
Phase I Environmental Site Assessment
Chattanooga, TN

Dear Records Review:

We are conducting a Phase I Environmental Site Assessment and would like to check on any files which may be available for the following sites. The sites and addresses are listed below:

Guerry USARC, 2021 E 23rd Street, Chattanooga TN 37404
VAAP USARC, 6703 Bonny Oaks Drive, Chattanooga TN 37421

I am requesting that you review your environmental records and advise if you have any file information regarding the subject site. Please indicate below whether such records exist and return this letter via fax to (502) 292-6995 or call me at (502) 212-5006. Thank you for your assistance.

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