

**Targeted Brownfield Assessment  
Oklahoma Army National Guard  
Cherokee Armory  
Cherokee, Oklahoma**

**ASTM E 1527-05  
Phase I Environmental Site Assessment  
All Appropriate Inquiry**

**December 11, 2006**

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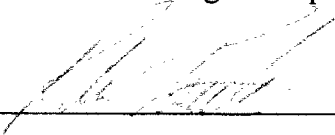
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I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of this part. I have specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed the all appropriate inquiry in conformance with the standards and practices set forth in 40 CFR Part 312.

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*Background and Disclaimer:* The purpose of an environmental site assessment is to identify actual or potential “recognized environmental conditions” that may result in liability or land use restrictions. The ASTM Phase I Environmental Site Assessment E 1527 – 05 is the minimum standard for environmental due diligence in the commercial real estate industry and currently meets the standard for All Appropriate Inquiry under the Small Business Liability Relief and Brownfields Revitalization Act of 2002. A diligent effort in accordance with generally accepted good commercial and customary standards and practices was undertaken to identify the “recognized environmental conditions” that might affect the redevelopment project. However, the identification of old hazardous waste sites is an evolving process; therefore, DEQ cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

## Table of Contents

1.0	Executive Summary .....	6
2.0	Introduction.....	7
2.1	Purpose.....	7
2.2	Detailed Scope-of-Services.....	8
2.3	Significant Assumptions .....	8
2.4	Limitations and Exceptions.....	8
2.5	Special Terms and Conditions .....	9
3.0	Site Description.....	9
3.1	Location and Legal Description.....	9
3.2	Site and Vicinity General Characteristics .....	9
3.3	Current Use of the Property .....	16
3.4	Descriptions of Structures, Roads, Other Improvements on the Site .....	16
3.5	Current Uses of the Adjoining Properties.....	17
3.6	Site Inspection.....	17
4.0	User Provided Information .....	17
4.1	Title and Judicial Records.....	17
4.2	Environmental Liens or Activity and Use Limitations .....	17
4.3	Specialized Knowledge.....	17
4.4	Actual Knowledge of User.....	18
4.5	Commonly Known or Reasonably Ascertainable Information.....	18
4.6	Valuation Reduction for Environmental Issues .....	18
4.7	Owner, Property Manager, and Occupant Information .....	18
4.8	Reason for Performing Phase I .....	18
5.0	Records Review .....	19
5.1	Standard Environmental Record Sources .....	19
5.2	Additional Environmental Record Sources .....	21
5.3	Physical Setting Source(s) .....	21
5.4	Historical Use Information on the Property.....	21
5.5	Historical Use Information on Adjoining Properties.....	22
6.0	Site Reconnaissance.....	23
6.1	Methodology and Limiting Conditions.....	23
6.2	General Site Setting .....	23
6.3	Exterior Observations .....	23
6.4	Interior Observations .....	24
7.0	Interviews.....	24
7.1	Interview with Past and Present Owners .....	24

7.2	Interview with Key Site Manager .....	25
7.3	Interviews with Operators and Occupants .....	25
7.4	Interviews with State and/or Local Government Officials .....	26
7.5	Interviews with Others .....	26
8.0	Findings.....	26
9.0	Opinion .....	28
10.0	Data Gaps.....	28
11.0	Conclusions.....	28
12.0	Additional Services.....	29
13.0	Deviations .....	29
14.0	References.....	29
15.0	Signatures of Environmental Professionals .....	30
16.0	Environmental Professional Statement .....	30
17.0	Appendices.....	30
Appendix A	Site (Vicinity) Maps	
Appendix B	Site Photographs	
Appendix C	Historical Research Documentations	
	Aerial Photographs	
	Topographical Map	
	Fire Insurance Sanborn Maps	
	Floor Plan	
Appendix D	Log Book and Interview Documentation	
Appendix E	Qualification(s) of Environmental Professionals	
Appendix F	DEQ Analytical Results of Indoor Firing Range and Chain of Custody	
	C.H. Guernsey & Company Indoor Firing Range Lead Issues Report	
Appendix G	Notification for Underground Storage Tanks	
Appendix H	City of Cherokee Letter (March 13, 2006)	
Appendix I	County Records of the Cherokee Armory	

## **1.0 Executive Summary**

This Phase I Targeted Brownfield Assessment of the Cherokee Armory was performed in accordance with the ASTM E 1527-05, a guide for conducting Environmental Site Assessments. Jon Reid performed the site reconnaissance on October 12, 2006.

The site is located in the Southwest ¼ of Section 2, Township 26 North, Range 11 West Indian Meridian, in Alfalfa County, Oklahoma. The site's address is 122 East 2<sup>nd</sup> Street in Cherokee, Oklahoma.

A cursory summary of findings is provided below. However, details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The sand trap and dust residue within the Indoor Firing Range (IFR) was found to have lead contamination. Past sampling of the sand trap and the rest of the IFR show results of lead concentrations in need of remediation. The IFR constitutes a recognized environmental condition (REC) based on the lead concentrations and its leachability.
- An Underground Storage Tank (UST) was once located on the east side of the Cherokee Armory property. The tank was closed on April 21, 1987 and removed in 1995. The ground surface is now paved as a parking lot where the UST was once located.
- 9 (nine) 55-gallon drums of hydraulic oil were found in the northwest corner of the Battalion Supply Room.
- Oil and grease spots were found throughout the Battallion Supply Room, the Motor Pool Room, and the Drill Hall from the servicing of vehicles.
- There is a potential for asbestos containing materials (ACMs) in the armory due to the age of the facility. The following materials were found that may have ACM. Drop ceiling panels found on the second floor and the ceiling material found in the Stage area and Drill Hall may contain asbestos. Friable wallboard was found on the east wall of the FDC Room located on the northeast corner of the second floor.
- The Drill Hall and rooms (Rental Area, Stage, and Storage Room) directly west of the Drill Hall have water damage on the ceilings.
- Two pole-mounted transformers were found next to each other located on the southwest corner of the armory building in the alley. These transformers appeared to be very old and rusted from years of weathering. No leakage of polychlorinated biphenyls (PCBs) was noticed from the transformers.
- Tubes of lubricants and adhesives were found on a table in the Supply Room.

- Fluorescent light bulbs were found throughout the armory building. There is a potential that these bulbs may contain PCBs and/or mercury.
- The piping found throughout the Battalion Supply Room, the Motor Pool Room and the Drill Hall contained white paint that appears to have weathered over time. This paint appears to be very old and could contain lead by its age.
- Mold growth may be developing in areas where there is water damage. This is most relevant on the ceilings of the Drill Hall and potentially inside the IFR. This may be harmful to future occupants.

## **Recommendations**

Based on the findings of this assessment, The DEQ recommends that additional investigation be conducted to evaluate areas of the property that may need future clean-up and remediation.

The IFR needs additional evaluation and remediation efforts on the sand trap and dust residue for lead. The vent area of the IFR, which allows indoor air to escape to the outside air into a concrete surfaced alley, should be investigated for dust residue of lead as well. Other suspected lead issues that should be further investigated include the piping on the first floor. The white paint on some of the piping may or may not have lead-based paint, but it is recommended that it be tested and controlled if the paint is positive for lead.

Suspect ACM potentially in the drop ceilings of the rooms described earlier and the friable wallboard in the FDC Room should be sampled for asbestos. If ACM is found, proper remediation should be conducted. Other areas that should be evaluated further are the drums of hydraulic oil, paint and paint thinner in the Oil Room, adhesives and lubricants in the Supply Room, and mold growth that may be found where there is water damage.

## **2.0 Introduction**

The State of Oklahoma Department of Environmental Quality (DEQ) under a Brownfield Assistance Agreement (No. VC98677601) (Ref. 1) with the U.S. Environmental Protection Agency (EPA) conducted a Targeted Brownfield Assessment of the Cherokee Armory.

### *2.1 Purpose*

The purpose of this assessment is to look at the environmental conditions within the target area and provide this information to the City of Cherokee to assist in its revitalization planning as well as meet the All Appropriate Inquiry requirement of the landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, better known as Superfund – Ref. 2), as provided in the Small Business Relief and Brownfields Revitalization Act of 2002

(Public Law 107-118, Subtitle B – Ref. 3). The purpose of a Phase I Environmental Site Assessment is to identify, to the extent feasible, recognized environmental conditions in connection with the target property through a systematic review of readily available information sources and a site reconnaissance.

The DEQ is providing technical assistance to the project by evaluating the environmental condition of the property prior to the City acquiring the property. Funding for this assessment has been provided by the U.S. Environmental Protection Agency (EPA).

## *2.2 Detailed Scope-of-Services*

The DEQ examined the current use of the property and then identified the historical uses of the property to determine if recognized environmental conditions exist. The DEQ examined historical documents, governmental databases, deed records, aerial photographs, governmental environmental files, Sanborn Fire Insurance Maps, conducted interviews, and a site reconnaissance of the area. A good faith effort was made to identify possible environmental conditions that might affect the development of the property.

## *2.3 Significant Assumptions*

Significant assumptions and past studies of the Oklahoma Army National Guard Armories suggest there is a possibility of lead and asbestos contamination at the Cherokee Armory. Most of the State armories, such as the Cherokee Armory, have indoor firing ranges. These ranges usually contain concentrations of lead from past shooting activity. Since all of the armories were built before the 1970s, there is a high potential of finding asbestos containing materials (ACMs) in the armory buildings. The U.S. began banning the use of asbestos in most building products in the 1970s due to studies confirming the harmful health effects caused by exposure to airborne asbestos. ACMs may be found in the insulation wrapping of the heating pipes and/or heaters and nine-inch floor tiles, which were prevalent during the time the Cherokee Armory was built.

The Oklahoma Military Department verbally informed the DEQ that a significant asbestos abatement of the pipe was conducted in the 1990s, but that asbestos may remain on the elbow joints. Visual inspection by the DEQ of the Cherokee Armory indicated that asbestos containing elbow joints and pipe wrapping were not present.

## *2.4 Limitations and Exceptions*

The purpose of an environmental site assessment is to identify actual or potential “recognized environmental conditions” that may result in liability, land use restrictions, or cause delays in revitalization. The ASTM Phase I Environmental Site Assessment E 1527 – 05 (Ref. 4) is the minimum standard for environmental due diligence in the commercial real estate industry and meets the standard for All Appropriate Inquiry under



the Small Business Liability Relief and Brownfields Revitalization Act of 2002. A diligent effort in accordance with generally accepted good commercial and customary standards and practices was undertaken to identify the “recognized environmental conditions” that might affect the revitalization project. However, the identification of old hazardous waste sites is an evolving process; therefore, the DEQ cannot state with absolute certainty that no other potential hazardous waste sites are located in the area. This assessment was conducted under constraints of time, cost, and scope and reflects a limited investigation and evaluation. It reflects the normal degree of care and skill that is ordinarily exercised by environmental professionals conducting business in this or similar localities. In no event shall the DEQ or its employees be liable for any damages, injury, loss, cost or expense whatsoever arising in connection with the use or reliance on the information contained in this report, except as otherwise provided by law.

The information in this report is based on a review of governmental records, interviews with knowledgeable residents in the community, information provided by the City of Cherokee, the Oklahoma Military Department and observations of the environmental professional. The result of this assessment, as written in this report, is valid as of the date of the report. The assessment does not include sampling of soil, rock, groundwater, surface water, or air.

### *2.5 Special Terms and Conditions*

This assessment report has been prepared for the City of Cherokee by the DEQ using EPA funding. Information about this report will be provided to the EPA for its files. This report and the working file are public record and subject to the Oklahoma Open Records Act and the federal Freedom of Information Act.

## **3.0 Site Description**

### *3.1 Location and Legal Description*

The subject property is located in the SW ¼ of Sec. 2, Twp. 26 N, and Range 11 W Indian Meridian in Alfalfa County, Oklahoma (Appendix A). The site is in the center of Cherokee on 122 East 2<sup>nd</sup> Street. The latitude of the site is 36° 45' 24.27" N and the longitude is -98° 21' 22.26" W Indian Meridian.

### *3.2 Site and Vicinity General Characteristics*

The first floor of the armory is currently occupied by the City of Cherokee Street and Water Departments. All their in-house operations occur in this section of the armory building. Two office rooms (Chief's Office, Conference Room), located on the northwest corner of the second floor, are occupied by an employee with the Great Salt Plains Association. Three other rooms on the second floor are used for storage by two local groups. The Administrative Office and the CDR's Office on the northeast corner of the

building are used as storage by the Main Street Chamber of Commerce. The Supply Room located directly south of these two rooms is used to store baseball supplies by a local youth group.

The military left the post in the mid 90's. However, the Oklahoma Military Department (OMD) still owns the property. According to the OMD records, no lease agreements have been made between the OMD and the City of Cherokee.

### Environmental Setting

The general topography of the area is shown in Figure 1 of Appendix C. Alfalfa County, in the northern part of Oklahoma, has an area of 554,880 acres. Cherokee, the county seat, is located in the west-central part of the county. The climate of Alfalfa County is mainly under continental controls, which determine climate of the Great Plains region. At times, however, warm, moist air from the Gulf of Mexico exerts some influence. The continental effects on climate result in pronounced daily and seasonal changes in temperature and in considerable variation in the amount of seasonal and annual precipitation received. Summers are long and are usually hot; winters are comparatively mild and are short.

Average daily maximum temperature ranges from 48° F in January to 96° F in July and August. The average daily minimum temperature ranges from 24° F in January to 70° F in July. Freezing temperatures occur on an average of 100 days each year. On an average of 9 days per year, the maximum temperature is 32° F or less, and on an average of 1 day per year, the minimum temperature is zero or less. On an average of 93 days per year, the temperature is 90° F or higher, and on an average of 27 days per year, the temperature is 100° or higher.

The average annual precipitation is 27 inches. Of this amount, 36 percent falls in summer, 21 percent in spring, 21 percent in fall, and 12 percent in winter. A measurable amount of precipitation falls on about 80 days each year. Much of the precipitation falls during thunderstorms, which occur on an average of 40 days each year (Ref. 5).

### Groundwater

Terrace deposits of the Pleistocene Group from the Quaternary Age underlies the subject property. These deposits are lenticular and interfingering of light-tan to gray gravel, sand, silt, clay, and volcanic ash. Sand dunes are common in many places. Thickness ranges up to 150 feet and averages about 60 feet.

The general yield of water underlying the subject property produces more than 300 gallons per minute. One well, west of the subject property on the west side of US Highway 64 has a reported water level at 18 ft. below ground surface (bgs) and a total depth of 40 ft bgs. The yield of this well averages 400 gallons per minute. Chemical quality of water in this area is generally poor. Dissolved solids content of groundwater in these areas are generally more than 1,000 mg/L. (Ref. 6).

## Soils

The Dale-Reinach-Brewer association are the general soils located at the subject property. These soils are nearly level through sloping, deep, well drained or moderately well drained soils on terraces.

The Dale silt loam soil complex underlies the subject property. This 0 to 1 percent sloping soil is a well-drained soil on terraces. These soils formed in loamy sediment under a cover of tall grasses and scattered cottonwood and elm trees. The surface layer is brown silt loam about 8 inches thick. Just below the surface layer is a layer of brown silt loam that is about 15 inches thick. The subsoil, also of brown silt loam, extends to a depth of about 35 inches. The underlying material is yellowish-red silt loam. In some places this soil is subject to flooding for brief periods in spring and in fall. Flooding rarely occurs, however, and some areas are never flooded.

These soils are free of salts to a depth of less than 40 inches. In some places they are also free of salts below a depth of 40 inches. In others they are slightly, moderately, or strongly affected by salinity below a depth of 40 inches. Permeability is moderate. Available water capacity is high (Ref. 5).

## Air

Prevailing winds are mainly from the south except during January and February when winds are mainly from the north. Average wind speed is 13 miles per hour. Spring is the windiest season. During that part of the year, gusty southwesterly winds of 30 to 45 miles per hour are not uncommon (Ref. 5). No hazardous substances were found on the site that could release hazardous emissions into the air. The only kind of air emission from the facility would be the dust found inside, which is minor.

## Surface water

Most parts of this county are drained by the Salt Fork of the Arkansas River and its tributaries, which include Wagon Creek, Clay Creek, Cottonwood Creek, Driftwood Creek, the Medicine River, and Sandy Creek. Some areas in the southern part of the county drain southward to the Cimarron River (Ref. 5).

According to the Federal Emergency Management Association (FEMA), the armory building lies within the 100-year floodplain. FEMA measured the elevation of the property at 1182-1183 ft. (Ref. 7). There are no surface water bodies in the vicinity of the armory. The closest water body is the Cottonwood Creek located approximately 0.35 mile northeast of the armory. Surface water drainage from the site directly drains into the City of Cherokee Wastewater treatment system. There are no environmental conditions at the armory affecting surface water that may leave the site.

## Utilities

Utility information was obtained from the Oklahoma Corporation Commission Utility Directory. Natural gas is supplied by the Oklahoma Natural Gas Company and electricity is supplied by the Municipal Alfalfa Co-op. Telephone service is supplied by

Southwestern Bell. Potable water, sanitary sewage, and solid waste removal are provided by the City of Cherokee.

#### Underground features

There was once a 1,000-gallon underground storage tank (UST), containing diesel, located on the east side of the building. The UST was removed on September 26, 1995, and closed by the Oklahoma Corporation Commission. No remnants of the UST were found during the site visit.

Floor drains on the second floor of the building can be found on the northeast corner where the Commander's office used to be and the latrine and utility areas located on the west side of the floor. One floor drain can be found on the first floor of the building located in the restroom area on the east side of the building. No floor drains are located inside the Drill Hall where the City works on its vehicles. No floor drains were found in the IFR either. All the floor drains can be found mapped out in the floor plan in Appendix C. A floor drain pit is mapped on the floor plan on the northeast section of the first floor. However, during the site visit this pit was not found. What was found was a cemented-in area in the shape of a square where the pit may have been. Two manholes were also discovered on the west side of the building in the alley. All wastewater from the floor drains and manholes lead into the City of Cherokee waste water treatment system. No septic tanks or cisterns are on the subject property.

#### Structures

No industrial properties were found adjacent to the property except for a laundry mat/beauty salon located south of the armory. The First Christian Church is located east of the armory on the other side of Kansas Avenue followed by the church parking lot and a home to the south. On the north side of the armory across 2<sup>nd</sup> Street there are several vacant properties followed by an old funeral home to the northeast. West of the armory there is an alley followed by a vacant bank and various other vacant properties. No schools are located in the vicinity of the armory.

The Cherokee Armory building is constructed of red brick. The building is in good condition with the roof still intact. A complete floor plan, as described earlier, can be found in Appendix C showing the names of each room and the floors they are on. The Indoor Firing Range is partly underground directly below the stage area of the Drill Floor.

#### Aboveground Storage Tanks (ASTs)

The subject property does not have any ASTs. No ASTs were found on the adjacent properties during the site reconnaissance.

#### Landfills, Dumping, Disturbed Soil

There are no landfills, dumping, or disturbed soil at the subject property or adjoining properties. No solid waste landfills were found in the DEQ database for Alfalfa County.

(Ref. 8). The Clean Harbors Lone Mountain Facility, a hazardous receiving landfill, is approximately 40 miles southwest of Cherokee in Waynoka, Oklahoma.

#### Impoundments

No impoundments were observed at the subject property.

#### Air Emissions, Wastewater Discharge

There are no air emissions coming from the subject property. If there is any air emission it would be the dust found inside the building. The dust in the facility is mainly found on the floors of the Drill Floor, the Battalion Supply Room, and the Motor Pool Room. The only odors noticed during the site visit were oil and grease odors where the City services vehicles in the building.

According to Jason Bell, employee of the Street Department, wastewater discharge at the subject property is directly connected to the City of Cherokee waste water treatment system. No wastewater discharge was visible on the subject property. The inside and outside areas of the armory building had no odors related to wastewater discharge.

#### Industrial Activities

The only types of industrial activities on the subject property are the daily operations conducted by the City of Cherokee Street and Water Department. Servicing of street maintenance vehicles and storage of equipment are the extent of industrial activities inside the armory. No industrial activities were found adjacent to the armory except for a laundry mat/beauty salon on the south side.

#### Monitoring Wells

No monitoring wells are present on the property. The Oklahoma Water Resources Board well record database showed two groundwater wells within the SW ¼ of Section 2, Township 26 North, and Range 11 West Indian Meridian where the armory is located. A well located in the NW ¼ of the SW ¼ of the SW ¼ of Section 2 was found to have a total depth of 24 ft. with the first water zone at 15 ft. below ground surface (bgs). The well has a water producing yield of 40 gallons per minute used for de-watering purposes for the Cherokee Farming Coop. This well is within approximately 0.20 mile of the subject property. The second groundwater well is located in the NE ¼ of the NW ¼ of the SW ¼ of Section 2. This well has a total depth of 60 ft. and the first water zone is at 18 ft. bgs. Estimated yield of the well is 10 gallons per minute. The well is for domestic use. This well is within approximately 0.10 mile of the subject property (Ref. 9).

#### Stained Soils

No stained soils were observed at the subject property.

#### Seeps

No seeps of any kind were observed at the subject property.

### Chemical Spills

No chemical spills were observed at the subject property. Oil and grease stains on the wooden basketball courts in the Drill Hall and on the concrete of the Battalion Supply Room and Motor Pool room were all that was found in relation to a chemical spill. No spills were reported on the property from the Emergency Response Notification System (ERNS) database either (Ref 10).

### Oil and Gas Exploration

Oil and gas exploration was not found on or near the subject property. All that was found related to oil and gas at the armory was a natural gas meter located on the west side of the building and used oil from the servicing of the City's vehicles.

### Known Groundwater or Surface Water contamination

There is no known groundwater contamination. There is no surface water on the property or the adjoining properties.

### Farm Waste

No farm waste was observed at the subject property.

### Known Pesticide Misapplication

No known pesticide misapplications were observed at the site or described in the interview with Jason Bell.

### Discharges and Runoff from Adjacent Property Affecting the Site

No discharges and/or runoff were observed from any of the adjacent properties that would affect the subject property.

### Other known or Suspected Environmental Concerns On the Site

The Indoor Firing Range (IFR) sand trap and dust residue is contaminated by lead. Past sampling has been conducted to characterize the lead concentration of this room. A statewide sampling event for lead was conducted by C.H. Guernsey & Company for the Oklahoma Army National Guard on all armories containing indoor firing ranges. This report is called the "Indoor Firing Range Lead Issues Report" (Ref. 11). Five samples were collected inside the IFR. The following are the locations and concentrations of lead found in the room.

- 58,880.0 ug/ft<sup>2</sup> of lead was found on the east side floor of the IFR.
- 183,900.0 ug/ft<sup>2</sup> of lead was found in the center of the IFR.
- 6,765.0 ug/ft<sup>2</sup> of lead was found next to the ventilation fan.
- 3,398.50 ug/ft<sup>2</sup> of lead was found at the stairs.

- 241.80 ug/ft<sup>2</sup> of lead was found at the window sill northwest of the stairs of the IFR.

A copy of the Cherokee Armory section of the Indoor Firing Range Lead Issues Report can be found in Appendix F.

During the Site reconnaissance performed on October 12, 2006, the DEQ collected two sand samples from the sand pit of the indoor firing range. One sample was taken on the left side and another sample was taken on the right side. The DEQ laboratory performed a total lead and TCLP (toxicity characteristic leaching procedure) analysis of the samples. The left side sample had a total lead concentration of 56,200 mg/kg. The TCLP analysis of the left side sample had a lead concentration of 509,000 ug/L. The right side sample had a total lead concentration of 35,300 mg/kg and a TCLP lead concentration of 521,000 ug/L. These concentrations exceed the DEQ lead screening level for sand/soil of 500 mg/kg and the DEQ lead TCLP value of 5 mg/L. The analytical results of the sand are located in Appendix F.

Suspect asbestos containing materials (ACM) was found while viewing the drop ceiling panels found on the second floor and the ceiling material found in the Stage area and Drill Hall. This observation and time period in which the armory building was constructed indicates that there is a potential for ACM to be present. Friable wallboard located in the FDC Room was also found to have suspect ACM. No suspect ACM insulation was found in the facility. All rooms and their locations in the facility can be found in the Floor Plan of Appendix C.

Mold growth may be developing in areas where there is water damage. This is most relevant on the ceilings of the Drill Hall and potentially inside the IFR. This may be harmful to future occupants.

#### Historical Recognized Environmental Conditions on the Site

There is a historical finding on the subject property, but it is not considered a historical recognized environmental condition (HREC). There was once a 1000-gallon diesel containing UST on the subject property. It was removed in September of 1995. This UST case was closed by the Oklahoma Corporation Commission.

#### Pipelines

A natural gas meter was noticed during the site visit. It is located on the northwest side of the armory building. Numerous piping was found in the Motor Pool Room, Battalion Supply Room, and the Drill Floor. This piping is most likely used for heating and cooling purposes. There were no suspect asbestos found on any of the piping. Most of the piping did not have insulation. The piping was either bare or had old white paint on them. The paint on the piping may contain lead since the paint was old and somewhat peeling in areas.

Two open roof drains can be found on the south side of the building. One open roof drain was found on the east side with no open roof drains located on the north side of the building. The west side of the building towards the north has one open roof drain. All floor drains of the armory building can be found in the floor plan map located in Appendix C. These floor drains lead wastewater into the City of Cherokee wastewater treatment system.

#### Transformers/PCB Equipment

Two pole-mounted transformers were found next to each other located on the southwest corner of the armory building in the alley. These transformers appeared to be very old and rusted from years of weathering. No leakage of PCBs was noticed from the transformers. Photographs #15, #16, and #17 provided in Appendix B, show the two pole-mounted transformers. Other materials found that may have PCBs and possibly mercury were the fluorescent ballast light bulbs located throughout the facility.

### *3.3 Operational History*

The Cherokee Armory was built in 1936 by the Works Progress Administration. The property was managed and maintained by the Oklahoma Military Department to support the military mission of the Oklahoma Army National Guard (OKARNG). The OKARNG is a component of the United States Army and fulfills the military mission of national security (Ref. 12).

The subject property served as an armory to further the mission of the OKARNG. The Cherokee Armory operated as a center of operations for a military component of the OKARNG. It served as a training site for the component and stored those materials required by the component. The facility was placed on the National Register of Historic Places on September 8, 1988 (Ref. 12).

According to Major Joe Merkle of the Oklahoma Military Department, the Army National Guard discontinued their operations at the Cherokee Armory in the mid 1990s. In 2001, according to Jason Bell of the City of Cherokee, the City of Cherokee Street and Water Departments moved into the building and began their in-house operations there. Since then, the City of Cherokee Street and Water Departments have maintained operations on the first floor. Two office rooms on the second floor are now occupied by the Great Salt Plains Association. Two other rooms also on the second floor are being used for storage by two different organizations in the city of Cherokee.

### *3.4 Current Use of the Property*

As mentioned in Section 3.3, the City of Cherokee Street and Water Departments currently occupy the armory along with several other organizations. The City of Cherokee and the rest of the organizations plan to continue their operations at the armory. The building has been kept up fairly well. Improvements made in the armory include a



re-tarred and graveled roof and improved interior of the Chief's Office and Conference Room where the Great Salt Plains Association is located.

### *3.5 Adjacent Properties*

Vacant properties are located adjacent to the armory on the north side. Northeast of the armory there is an old funeral home. The First Christian Church and its parking lot are adjacent to the west of the armory followed by a house to the south. Adjacent properties directly to the south of the armory include a laundry mat/beauty salon followed by a house. Vacant properties, including a vacant bank, are adjacent to the armory on the west side.

### *3.6 Site Inspection*

A site reconnaissance was performed by Jon Reid and Hal Cantwell of the DEQ on October 12, 2006. Jason Bell of the City of Cherokee Street and Water Departments and Major Joe Merkle of the Oklahoma Military Department were present as well. The site visits are explained in detail in Section 6.0.

## **4.0 User Provided Information**

### *4.1 Title and Judicial Records*

The Warranty Deed, provided in the OMD Limited Environmental Baseline Assessment, described the real property and premises of the subject property as situated in Alfalfa County, State of Oklahoma, Lots nineteen (19), twenty (20), twenty-one (21), twenty-two (22), twenty-three (23), and twenty-four (24), in Block twenty-six (26), Original Town, City of Cherokee, Alfalfa County, Oklahoma. This land was granted to the Oklahoma Army National Guard and entered into effect on September 30, 1935.

### *4.2 Environmental Liens or Activity and Use Limitations (AULs)*

There are no environmental liens or activity and use limitations that are known on the subject property.

### *4.3 Specialized Knowledge or Experience of User*

The users of the armory, the City of Cherokee, were not aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property.

#### *4.4 Actual Knowledge of User*

The armory has been occupied by the City of Cherokee Street and Water Departments since 2001. Other occupants include the Great Salt Plains Association, the Main Street Chamber of Commerce, and a local youth group. The Oklahoma Military Department, who owns the property, plans to transfer the armory to the City of Cherokee. Before transfer of ownership can happen, a Phase I Targeted Brownfield Assessment (TBA) and remedial activities must occur.

#### *4.5 Commonly Known or Reasonably Ascertainable Information*

The subject property is owned by the Oklahoma Military Department. The property is currently occupied by the City of Cherokee Street and Water Departments, the Great Salt Plains Association, the Main Street Chamber of Commerce, and a local youth group. Upkeep of the facility is in good condition for the kinds of activities performed there. Weathering of the facility is minimal.

#### *4.6 Valuation Reduction for Environmental Issues*

The DEQ does not have the expertise to make a call on the value of the property. This is outside the scope of this assessment and the expertise of the DEQ.

#### *4.7 Owner, Property Manager, and Occupant Information*

The first floor of the subject property is occupied by the City of Cherokee Street and Water Departments. All their in-house operations occur in this section of the armory building. The City does not have any lease agreements on the subject property with the Oklahoma Military Department. The two office rooms located on the northwest corner of the second floor are occupied by the Great Salt Plains Association. Three other rooms on the second floor are used for storage by two locals groups. The two office rooms on the northeast corner of the building are used as storage by the Main Street Chamber of Commerce. The Supply Room located directly south of these two rooms is used to store baseball supplies by a local youth group. The Oklahoma Military Department still owns the property.

#### *4.8 Reason for Performing Phase I*

The DEQ performed a Phase I Targeted Brownfield Assessment (TBA) on the subject property to analyze whether there are any recognized environmental conditions that need to be addressed prior to transfer of ownership. As of now, the City of Cherokee Street and Water Departments occupy the first floor of the armory for their daily operations and several organizations, including the Great Plains Association, occupy most of the second floor. This current occupancy is planned to continue in the future. The City of Cherokee would like to use the armory building as a community storm shelter and for summer youth activities as well once the subject property is safe to do so.

## 5.0 *Records Review*

### 5.1 *Standard Environmental Record Sources*

A regulatory database search was conducted by the DEQ. This search included, at a minimum, those records and distances from the site dictated as appropriate in the ASTM standard. The DEQ performed a review of available federal and state databases to assess whether the subject property or proximate properties were listed as having environmental concerns, which could have an adverse impact on the subject property. The following provides a summary of the databases reviewed.

#### Federal National Priorities List (NPL) Sites within one Mile

The subject property is not on the NPL. There are no NPL sites reported within a one-mile radius of the subject property (Ref. 13).

#### Federal Delisted NPL site list within one-half mile

The subject property does not have any Delisted NPL sites within one-half mile (Ref. 13).

#### Federal Active Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Sites within one-half mile

The subject property is not on the CERCLIS list. There are no CERCLIS sites reported within a 0.50-mile radius of the subject property (Ref. 14).

#### Federal Archived CERCLIS (NFRAP) Sites within one-half mile

The subject property is not on the Archived CERCLIS list. There are no Archived CERCLIS sites reported within a 0.50-mile radius of the subject property (Ref. 14).

#### Federal RCRA CORRACTS Facilities List within one mile

The subject property does not have any federal RCRA CORRACTS facilities within one mile (Ref. 15).

#### RCRA non-CORRACTS TSD Facilities List within one-half mile

The subject property does not have any RCRA non-CORRACTS TSD facilities within one-half mile (Ref. 15).

#### Federal RCRA Generators List (property and adjoining properties)

The subject property is not a RCRIS-Large Quantity Generator (LQG) or RCRIS-Small Quantity Generator (SQG). There is no RCRIS LQG or SQG sites reported at the adjoining properties (Ref. 16).

#### Federal Institutional Control/Engineering control registries (property only)

There are no Institutional Control/Engineering controls registries found on the property from the record search at the Alfalfa County Clerk's Office. The Oklahoma DEQ is building an Institutional Control Database. The site is not in the preliminary data. There are no Federal Institutional Control Registries in place at this time.

Federal ERNS list (property only)

The subject property and adjoining properties are not listed as ERNS sites (Ref. 10).

State lists of hazardous waste sites identified for investigation or Remediation (property only)

The subject property is listed on the DEQ's Site Cleanup Assistance Program list. Cleanup of the Indoor Firing Range is planned in 2007.

State Landfill and/or Solid Waste Disposal Sites within one-half mile

The subject property does not have any listed state landfills within one-half mile (Ref. 8).

State Leaking Underground Storage Tank (LUST) List within one-half Mile

The UST Notification Database maintained by the Oklahoma Corporation Commission was searched for LUST sites listed within one-half mile of the Cushing Armory. There were two LUST sites recorded within one-half mile of the subject site. The table below lists the LUST sites, their addresses, and status.

Facility Name	Address	Date Opened	Date Closed
Farmers Coop Elevator A	305 S. Ohio Avenue	April 1, 1986	November 26, 2003
Alfalfa County District 2	400 S. Euclid Avenue	May 17, 2000	January 3, 2003

State Registered Storage Tank Lists (property and adjoining properties)

There is one UST site recorded within the property boundary and eight USTs in close proximity of the site. The UST found onsite (DET 1 BTRY A 1/189 FA) was installed on December 31, 1947 and last used on January 15, 1988. This 1,000 gallon diesel tank was removed on September 26, 1995. This UST site and the eight UST sites in close proximity of the armory are listed in the table below. This information was obtained from the UST Notification Database maintained by the Oklahoma Corporation Commission.

Facility Name	Address
DET 1 BTRY A 1/189 FA	122 E. 2 <sup>nd</sup> Street
Richard Ritter	220 S. Grand Avenue
City of Cherokee	121 N. Grand Avenue
WFEC Cherokee Plant	N. Grand Avenue
Clepper's Conoco	303 S. Grand Avenue
Toni's Express Stop LLC	105 N. Grand Avenue

Mobil Bulk	323 S. Grand Avenue
Cherokee Motor Co.	103 N. Grand Avenue
M R Gindlesberger Sinclair	122 N. Grand Avenue

State Institutional Control(IC)/Engineering Control (EC) Registries (property only)

The subject property is not on the preliminary database designed for the Oklahoma IC registry. No ICs/ECs were found in the local land records.

State Voluntary Cleanup Sites and Brownfield Sites within one-half mile

The subject property has one archived State Voluntary Cleanup Site within a one-half mile directly north of the site near Grand Avenue. The latitude of the site is 36° 45' 48" and the longitude is -98° 21' 25." The site is called the ODOT/Ice Plant. This site had hydrocarbon issues at one time. It has been closed since May 4, 2004. There are no active Voluntary Cleanup Sites or Brownfield Sites listed in the DEQ database within one-half mile of the subject property.

*5.2 Additional Environmental Record Sources*

There are no additional environmental record sources other than what is provided in this Phase I Targeted Brownfield Assessment.

*5.3 Physical Setting Sources*

Physical Setting sources were obtained from the U.S. Geological Survey, Federal Emergency Management Association, United States Department of Agriculture Soil Conservation Service Soil Survey of Alfalfa County, Oklahoma, and a site visit conducted on October 12, 2006.

*5.4 Historical Use Information on the Property*

The Cherokee Army was built in 1936 by the Works Progress Administration (WPA). Construction was finished on September 12<sup>th</sup> of that year. From 1936 to the mid 90s the subject property served as an armory to further the mission of the OKARNG. The Cherokee Armory operated as a center of operations for a military component of the OKARNG. It served as a training site for the component and stored those materials required by the component. The facility was placed on the National Register of Historic Places on September 8, 1988 (Ref. 12).

According to Major Merkle of the Oklahoma Military Department, the Army National Guard discontinued their operations at the Cherokee Armory in the mid 90s. In 2001, according to Jason Bell of the City of Cherokee, the City of Cherokee Street and Water Departments moved into the building and began their in-house operations there. Since

then, the City of Cherokee Street and Water Departments have maintained their operations on the first floor. Two office rooms on the second floor are now occupied by the Great Salt Plains Association. Two other rooms also on the second floor are being used for storage by the Main Street Chamber of Commerce and a local youth group.

#### *5.5 Historical Use Information on Adjoining Properties*

##### Aerial Photo Review

Aerial photographs of the subject property were reviewed. The earliest archived aerial photograph was taken on January 22, 1942. This photograph shows the armory building where it is located today. A black and white aerial photograph taken in 1995 and a colored aerial photograph taken in 2003 were viewed as well. There is no change in the property or surrounding properties from 1995 to 2003. The only change from 1942 to 1995 was the addition of a building where the funeral home is located. Each aerial photograph can be found in Appendix C.

##### Zoning/Land Use Records Review

No zoning/land use records were reviewed while conducting this Phase I Targeted Brownfield Assessment of the Cherokee Armory.

##### Fire Insurance Maps

Fire Insurance Sanborn Maps were reviewed from the University of Oklahoma library. In a May 1929 Cherokee map, the subject property has not been developed. A later Sanborn map of Cherokee, in a continual process from May 1929 – September 1948, was also viewed. This map shows the development of the armory where it is currently located. As discussed earlier the armory was built in 1936, which is clearly shown in the 1929-1948 Sanborn map. These maps can be viewed in Appendix C (Ref.17).

##### Property Tax files

No property tax files were reviewed while conducting this Phase I Targeted Brownfield Assessment of the Cherokee Armory.

##### City Directories

No city directories were reviewed while conducting this Phase I Targeted Brownfield Assessment of the Cherokee Armory.

##### Building Department Records

No building department records were reviewed while conducting this Phase I Targeted Brownfield Assessment of the Cherokee Armory.

##### Interviews

Jason Bell, employee for the Street and Water Department of the City of Cherokee, was interviewed at the subject property. Major Joe Merkle of the Oklahoma Military Department was also interviewed concerning the Indoor Firing Range. Information on

the interviews is located in Section 7.1, "Interviews with Past and Present Owners of the property" and Section 7.3, "Interviews with Operators and Occupants of the property."

## **6.0 Site Reconnaissance**

### *6.1 Methodology and Limiting Conditions*

A site reconnaissance at the Cherokee Armory was performed on October 12, 2006. Jon Reid and Hal Cantwell of the DEQ met Jason Bell, the Section leader of the City of Cherokee Street and Water Department at the armory. Mr. Bell guided the DEQ throughout the building and answered questions concerning the armory. The only room that Mr. Bell could not guide the DEQ through was the Indoor Firing Range (IFR) because it was locked by the Oklahoma Military Department (OMD). Later that day, Major Joe Merkle of the OMD arrived onsite and unlocked the door to the IFR. Major Merkle guided the DEQ throughout the room and answered any questions that they had. After the inspection of the IFR all rooms of the Cherokee Armory had been inspected.

### *6.2 General Site conditions*

The general condition of the site is well maintained by the City of Cherokee Street and Water Departments for the daily operations they perform there. No recognized environmental conditions were found left behind by the Army National Guard except for what is found in the actual structure of the building and the lead contamination in the IFR. Most of the properties surrounding the armory are vacant. The First Christian Church on the east side and a laundry mat/beauty salon, with exception of a few houses nearby, were the only adjacent properties with activity. Most of the surrounding properties that are vacant were noticed as being commercial businesses in the past. The general topographic gradient of the area is towards the southeast. All water comes directly from the City of Cherokee water supply. Wastewater and sewage from the armory is drained into the City of Cherokee wastewater treatment system.

### *6.3 External observations*

Entrances into the armory building are on the north side off of Second Street and the East side off of Kansas Avenue. The building is located in the downtown area next to properties observed to be approximately the same age. An alley runs along the west side of the building with a parking area on the south side. Three manholes can be found along the alley way. Two pole-mounted transformers located southwest of the building can be found in the alley as well. These transformers were found to be fairly old and rusted. However, no leakage was found on the transformers. An Oklahoma Natural Gas pipeline is located on the north part of the west side of the building in the alley way. A water hydrant is north of the gas meter next to Second Street. No wells were observed on the site. No stressed vegetation or stained soils were observed onsite as well. No remnants were observed where the removed 1,000-gallon diesel UST used to be.

#### 6.4 *Internal observations*

Inside the building, there was water damage on the ceilings of the Drill Floor, Stage area, Rental Area, and Storage Rooms on each side of the Stage. Some parts of the ceiling in these areas had enough damage that some of the ceiling was missing. Throughout the floor area of the Drill Floor, Battalion Supply Room, and the Motor Pool area there were oil and grease spots from the servicing of street maintenance vehicles and other kinds of equipment. Nine 55-gallon drums of hydraulic oil were found on the northwest corner of the first floor. Buckets of paint and paint thinner were observed in the Oil Room. These materials all belong to the Street and Water Departments. Piping was found throughout the first floor especially in the Battalion Supply Room Motor Pool areas. No insulation was noticed on any of the piping that may be suspect for ACM. However, some of the piping had white paint in areas, which may contain lead. The rest of the first floor mainly contained vehicles, tools, signs, and street maintenance equipment.

Drop ceiling panels were observed on the second floor which may contain ACM depending upon the age of the panels. A heating unit, observed in the Utility Room, had wrapping around the piping connected to the unit. This wrapping did not show any signs of having ACM and looked fairly new. The CDR's Office, located on the northeast corner of the building, was found to have a wall that had a friable wallboard in very poor condition. This wallboard, located on the east wall, may contain ACM. The CDR's Office and the Administration Office directly west of CDR's Office were found to contain speakers, jugs, signs, and boxes of other miscellaneous items owned by the Main Street Chamber of Commerce. The Supply Room south of these rooms contained baseball supplies from a local youth group and also a table with lubricants and adhesives belonging to an unknown party.

The IFR was observed when Major Merkle of the OMD arrived to unlock the entry door. The entry door had a notice duct-taped on it that prohibited the use of the room. The IFR had a few gun shells lying around. Dust was apparent throughout the range from past gunshot activity and the sand trap on the north end of the range. The DEQ collected two sand samples from the sand trap for disposal analysis of lead. The metal backstop above the sand trap was found to have holes in it from guns not supposed to be used on the 0.22 caliber rated metal backstop (Ref 18).

#### 7.0 *Interviews*

##### 7.1 *Interviews with Past and Present Owners of the property*

The property is currently owned by the Oklahoma Military Department. The DEQ has had several conversations regarding environmental and safety issues at the armories, with various employees of the military department. Major Joe Merkle, Colonel Jim Peck, and Richard Brooks were among the OMD staff the DEQ interviewed. The Oklahoma



Military Department (OMD) provided a Baseline Assessment of the property to the DEQ, and the DEQ was able to review the OMD files on the IFR.

On October 12, 2006, Major Merkle of the OMD met with Jon Reid and Hal Cantwell of the DEQ to inspect the IFR. The IFR had been locked by the OMD to prohibit the City and public of Cherokee from using the room. Major Merkle unlocked the IFR door to allow the DEQ employees to inspect the room.

Major Merkle commented that before the IFR was locked and restricted for use, the IFR was misused by the public and former National Guard members who were once stationed at the Cherokee Armory. The IFR was being used as recreational purposes for shooting practice and as a storm shelter. Major Merkle pointed out some of the gun-shot holes on the IFR metal backstop and mentioned that these individuals were using higher caliber guns not permissible for this kind of firing range. He commented that the range was only suitable for 0.22 caliber guns, which is all that the armory used in the IFR when in operation. The IFR had only a few gun shells lying around, but before the OMD took disciplinary actions in locking the door, there were gun shells lying everywhere. There after, the IFR was locked for safety purposes to keep the public from exposure of lead and to prohibit the use of the IFR for recreational shooting purposes.

### *7.2 Interviews with Key Site Manager*

Key site managers of the armory are from the OMD. These individuals include: Major Joe Merkle, Chuck Revelle, and Colonel Jim Peck. Major Merkle was interviewed. This interview is provided in Section 7.1, "Interviews with Past and Present Owners of the property."

### *7.3 Interviews with Operators and Occupants of the property*

An interview, on October 12, 2006, was conducted at the subject property with a current operator of the armory. Jason Bell, employee for the City of Cherokee Water and Street Departments, was interviewed by Jon Reid of the DEQ. Mr. Bell walked the DEQ through each room except for the IFR and provided what he knew about them. The following information was attained by Jason Bell during the walk-through of the property.

- Around 2001, the City of Cherokee Water and Street Departments moved into the facility and began their in-house operations there. Bell did not know when the Army National Guard discontinued their operations at the armory.
- Approximately three years ago the roof was re-tarred and covered with gravel rock.

- All sewage and waste water from the facility leads into the City of Cherokee wastewater treatment system. Water is supplied by the City of Cherokee as well. No wells or septic tanks are on the property. There is no propane on the property.
- The City of Cherokee Water and Street Departments occupy all of the first floor of the building. An individual with the Great Salt Plains Association conducts her office duties in the Chief's Office and the Conference Room located on the northwest side of the second floor. The Main Street Chamber of Commerce keeps storage of miscellaneous items in the CDR's Office located on the northeast side of the second floor. A local youth group stores baseball equipment in the Supply Room located on the east side of the second floor.
- No chemical spills have happened at the facility while The City of Cherokee Water and Street Departments have been there. Oil and grease spots are the only kinds of substances found on the ground, which are due from the servicing of vehicles and equipment.
- Mr. Bell did not have any information on the armory regarding the Army National Guard activities prior to the City of Cherokee's operational control of the facility.

#### *7.4 Interviews with State and/or Local Government Officials*

Major Merkle of the Oklahoma Military Department was interviewed. This interview is provided in Section 7.1, "Interviews with Past and Present Owners of the property."

#### *7.5 Interviews with Others*

No interviews were conducted with anyone else except for Jason Bell with the City of Cherokee and Major Merkle of the OMD.

### **8.0 Findings**

This Phase I Targeted Brownfield Assessment of the Cherokee Armory was performed in accordance with the ASTM E 1527-05, a guide for conducting Environmental Site Assessments. Jon Reid performed the site reconnaissance on October 12, 2006.

The site is located in the SW ¼ of Section 2, Township 26N, Range 11W Indian Meridian, in Alfalfa County, Oklahoma. The site's address is 122 East 2<sup>nd</sup> Street in Cherokee, Oklahoma.

A cursory summary of findings is provided below. However, details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The sand trap and dust residue within the Indoor Firing Range (IFR) was found to have lead contamination. Past sampling of the sand trap and the rest of the IFR show results of lead concentrations in need of remediation. The IFR constitutes a recognized environmental condition (REC) based on the lead concentrations and its leachability.
- An Underground Storage Tank (UST) was once located on the east side of the Cherokee Armory property. The tank was closed on April 21, 1987 and removed in 1995. The ground surface is now paved as a parking lot where the UST was once located.
- 9 (nine) 55-gallon drums of hydraulic oil were found in the northwest corner of the Battalion Supply Room. These drums could present a potential for improper disposal and could result in undesirable consequences if released into the environment.
- Oil and grease spots were found throughout the Battalion Supply Room, the Motor Pool Room, and the Drill Hall from the servicing of vehicles.
- There is a potential for asbestos containing materials (ACMs) in the armory due to the age of the facility. The following materials were found that may have ACM. Drop ceiling panels found on the second floor and the ceiling material found in the Stage area and Drill Hall may contain asbestos. Friable wallboard was found on the east wall of the FDC Room located on the northeast corner of the second floor.
- The Drill Hall and rooms (Rental Area, Stage, and Storage Room) directly west of the Drill Hall have water damage on the ceilings.
- Two pole-mounted transformers were found next to each other located on the southwest corner of the armory building in the alley. These transformers appeared to be very old and rusted from years of weathering. No leakage of PCBs was noticed from the transformers.
- Tubes of lubricants and adhesives were found on a table in the Supply Room.
- Fluorescent light bulbs were found throughout the armory building. There is a potential that these bulbs may contain PCBs and/or mercury.
- The piping found throughout the Battalion Supply Room, the Motor Pool Room and the Drill Hall contained white paint that appears to have weathered over time. This paint appears to be very old and could contain lead by its age.
- Mold growth may be developing in areas where there is water damage. This is most relevant on the ceilings of the Drill Hall and potentially inside the IFR. This may be harmful to future occupants.

## **9.0 Opinion**

Based on the findings of this assessment, The DEQ recommends that additional investigation be conducted to evaluate areas of the property that may need future clean-up and remediation.

Areas of additional evaluation consist of the following:

- The IFR needs additional evaluation and remediation efforts on the sand trap and dust residue for lead. The vent area of the IFR, which allows indoor air to escape to the outside air into a concrete surfaced alley, should be investigated for dust residue of lead as well.
- Suspected ACM potentially in the drop ceilings of the rooms described earlier and the friable wallboard in the FDC Room should be sampled for asbestos. If ACM is found, proper remediation should be conducted.
- Areas where there is water damage should be investigated for possible mold growth.
- The white paint on the piping located on the first floor should be tested for lead.
- Other areas that should be further investigated are the drums of hydraulic oil in the Battalion Supply Room, paint and paint thinner in the Oil Room, and adhesives and lubricants in the Supply Room.

## **10.0 Data Gaps**

No data gaps were discovered during the process of this Targeted Brownfield Assessment.

## **11.0 Conclusions**

A Phase I Targeted Brownfield Assessment in conformance with the scope of work and ASTM Practice E 1527-2005 was performed on the subject property. This assessment revealed recognized environmental conditions that may need additional investigation and remediation of the subject property before occupational control of the facility can take place. The information provided in this assessment is to assist the Oklahoma Military Department and the City of Cherokee in the transfer of property as well as meet the All Appropriate Inquiry requirement of the landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, better known as Superfund – Ref. 2), as provided in the Small Business Relief and Brownfields Revitalization Act of 2002 (Public Law 107-118, Subtitle B – Ref. 3).

## **12.0 Additional Services**

No additional services were provided in this Phase I Targeted Brownfield Assessment other than the lead results of the IFR sand trap given in Section 3.2, "Other known or Suspected Environmental Concerns on the Site." In addition to the Phase I Targeted Brownfield Assessment, the DEQ will assist the city with removal of the environmental contaminants and ensure that the property is ready for revitalization.

## **13.0 Deviations**

No deviations and deletions from E 1527-05 were made for this Phase I site investigation.

## **14.0 References**

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2. U.S. Environmental Protection Agency. (1980). *Comprehensive Environmental Response, Compensation, and Liability Act*. (Public Law 96-510). Washington, DC: U.S. Government Printing Office.
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4. ASTM International. (2005). *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment E 1527 – 05*. West Conshohocken, PA.
5. United States Department of Agriculture, Soil Conservation Service (1975). Williams GE, Grover E.S. *Soil Survey of Alfalfa County, Oklahoma. February 1975*. U.S. Government Printing Office: Washington, D.C.
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8. State Landfill site list: <http://www.deq.state.ok.us/LpDnew/swindex.html>.
9. Oklahoma Water Resources Board. <http://www.owrb.state.ok.us/wd/search/search.php>.

10. Emergency Response Notification System: <http://www.nrc.uscg.mil/foia.html>.
11. Oklahoma Army National Guard. *Indoor Firing Range Lead Issues Report*. C.H. Guernsey & Company. (2004).
12. Oklahoma Military Department Environmental Office (OKDE-ENV). Limited Environmental Baseline Assessment, Cherokee Armory. March 7, 2006.
13. EPA NPL list: <http://www.epa.gov/superfund/sites/npl/status.htm>.
14. CERCLIS current and archived sites: <http://cfpub.epa.gov/supercpad/cursites/srchsites.cfm>.
15. RCRA database: [http://www.epa.gov/enviro/html/rcris/rcris\\_query\\_java.html](http://www.epa.gov/enviro/html/rcris/rcris_query_java.html).
16. RCRA NOTIFIERS sorted by county and then city:  
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17. The University of Oklahoma Libraries. Digital Sanborn Maps. Last accessed (September 18, 2006). (Cherokee Sanborn Maps, January 1931 and 1929 – September 1948).  
<http://www.libraries.ou.edu/eresources/LORA/LORA.asp?type=index&list=0&value=S>
18. Reid, Jonathan (2006). *Field Notes for Site Reconnaissance of the Cherokee Army*, October 12, 2006.
19. DEQ Dataviewer: <http://maps.scigis.com/deq%5Fwq/>.

### **15.0 Signature(s) of Environmental Professional(s)**

See page two for signatures of environmental professionals.

### **16.0 Environmental Professional(s) Statement**

I declare that to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of this part. I have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

### **17.0 Appendices**

- Appendix A Site (Vicinity) Maps
- Appendix B Site Photographs
- Appendix C Historical Research Documentations

	Aerial Photographs
	Topographical Map
	Fire Insurance Sanborn Maps
	Floor Plan
Appendix D	Log Book and Interview Documentation
Appendix E	Qualification(s) of Environmental Professionals
Appendix F	DEQ Analytical Results of Indoor Firing Range and Chain of Custody C.H. Guernsey & Company Indoor Firing Range Lead Issues Report
Appendix G	Notification for Underground Storage Tanks
Appendix H	City of Cherokee Letter (March 13, 2006)
Appendix I	County Records of the Cherokee Armory

## **Appendix A**

### **Site (Vicinity) Maps**



Figure 1: Site (Vicinity) Map (Ref. 19)



Figure 2: Site (Vicinity) Map (Ref. 19)



**Appendix B**

**Site Photographs**



Date Photos Taken: October 12, 2006



**Photo #1:** Drill Hall where vehicles are stationed.



**Photo #2:** Stage area west of the Drill Hall.



**Photo #3:** Drill Hall facing northeast.



**Photo #4:** Motor Pool room looking into the Battalion Supply room.



**Photo #5:** South side of the Battalion Supply Room.



**Photo #6:** West side of the Battalion Supply Room. 55-gallon drums located on the northwest corner.

Date Photos Taken: October 12, 2006



**Photo #7:** North side of the Battalion Supply Room.



**Photo #8:** View of the north and northeast corner of the armory building.



**Photo #9:** North view of the armory building.



**Photo #10:** Christmas decorations stored in the Storage Room east of the Stage.



**Photo #11:** Stage area.



**Photo #12:** West wall of the CDR's Office on the second floor.





**Photo #13:** Ceiling in the Drill Hall.



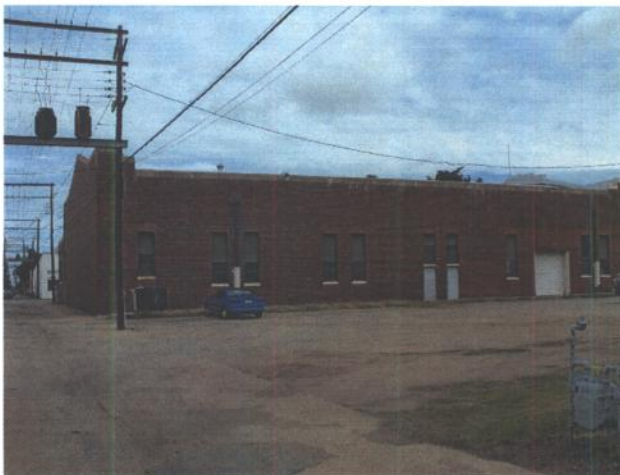
**Photo #14:** Ceiling in the Stage area.



**Photo #15:** Close-up view of the pole-mounted transformers.



**Photo #16:** Pole-mounted transformers located southwest of the armory building.

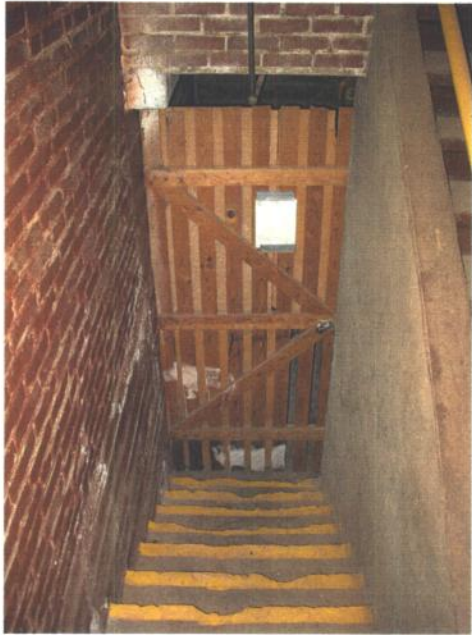


**Photo #17:** South view of the armory building.



**Photo #18:** East and northeast corner view of the armory building.

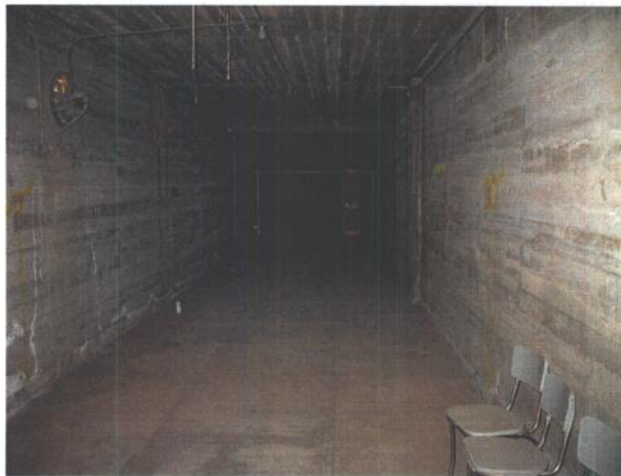
Date Photos Taken: October 12, 2006



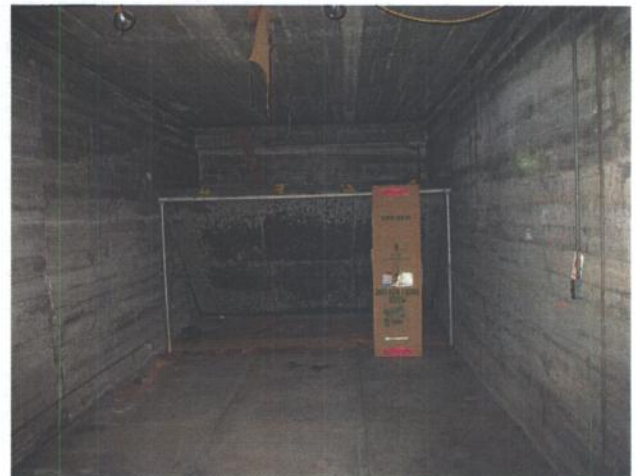
**Photo #19:** Entrance door to the IFR with the OMD notice prohibiting entrance.



**Photo #20:** IFR vent fan.



**Photo #21:** IFR looking north towards the sand trap.



**Photo #22:** IFR sand trap with makeshift target.



**Photo #23:** Close-up view of the IFR sand trap.

## **Appendix C**

### **Historical Research Documentations**



## **Aerial Photographs**

Figure 1: 2003 Aerial Photograph (Ref. 19)





Figure 2: 1995 Aerial Photograph (Ref. 19)





CUA-10B-67

1-22-42

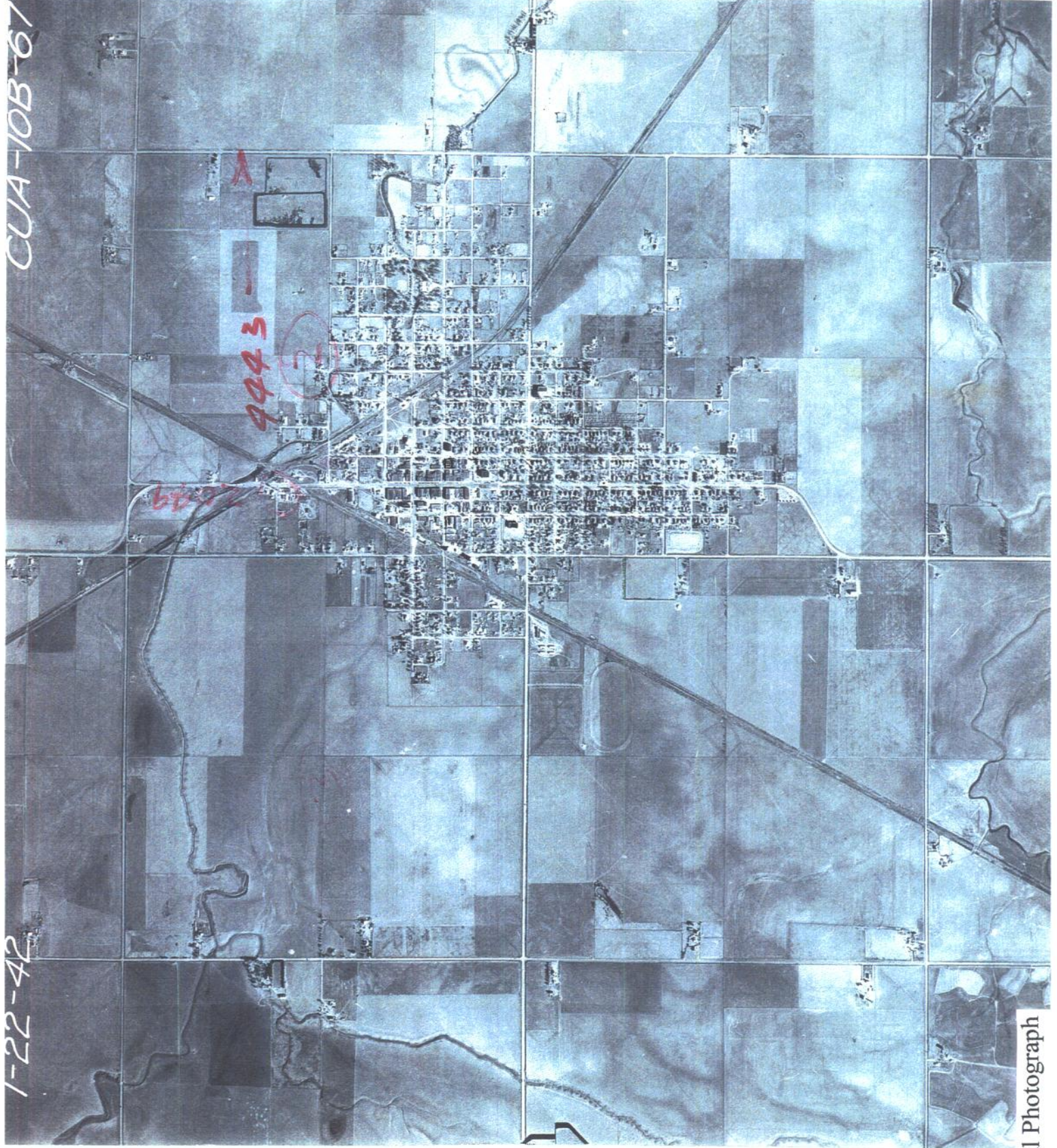
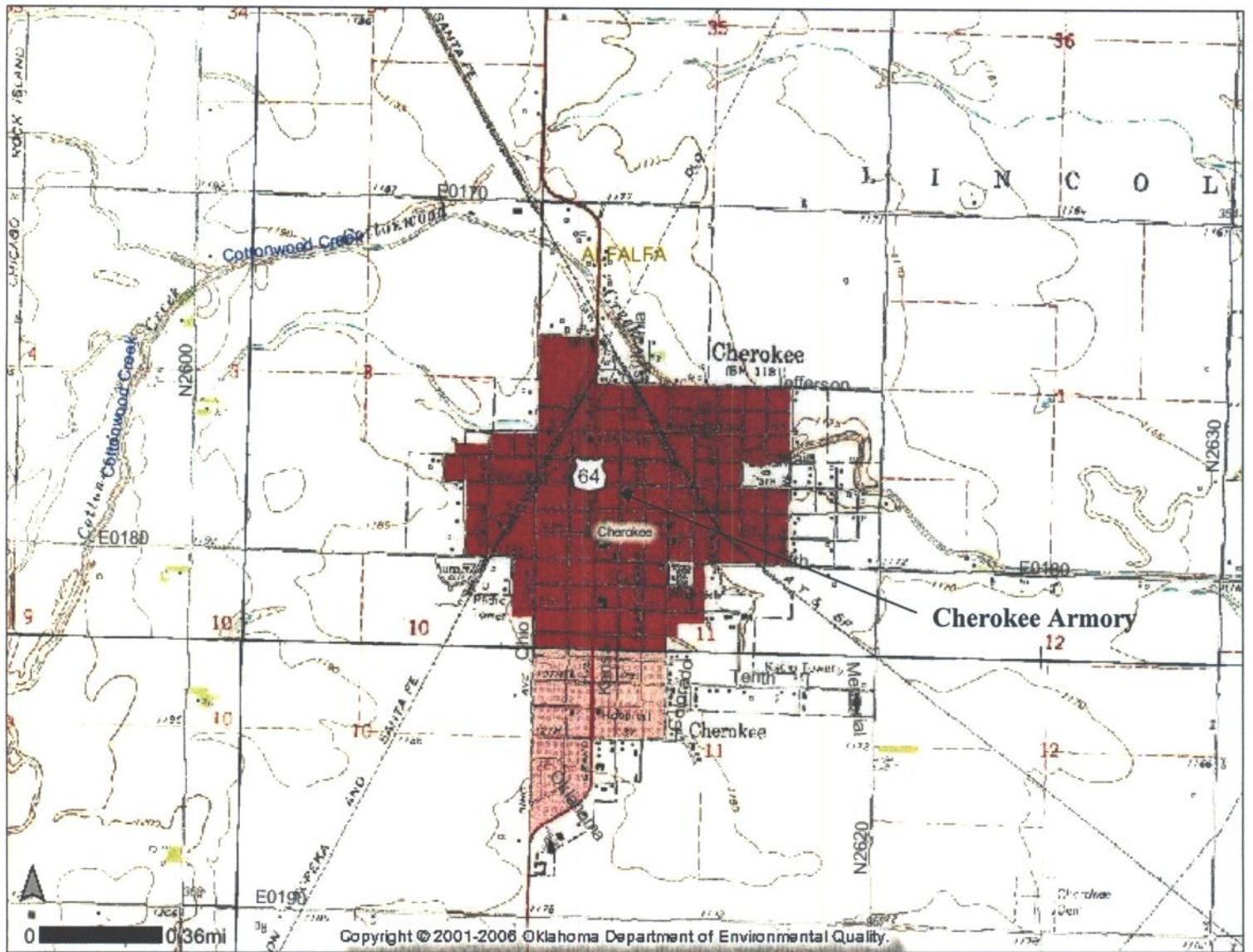


Figure 3: 1942 Aerial Photograph

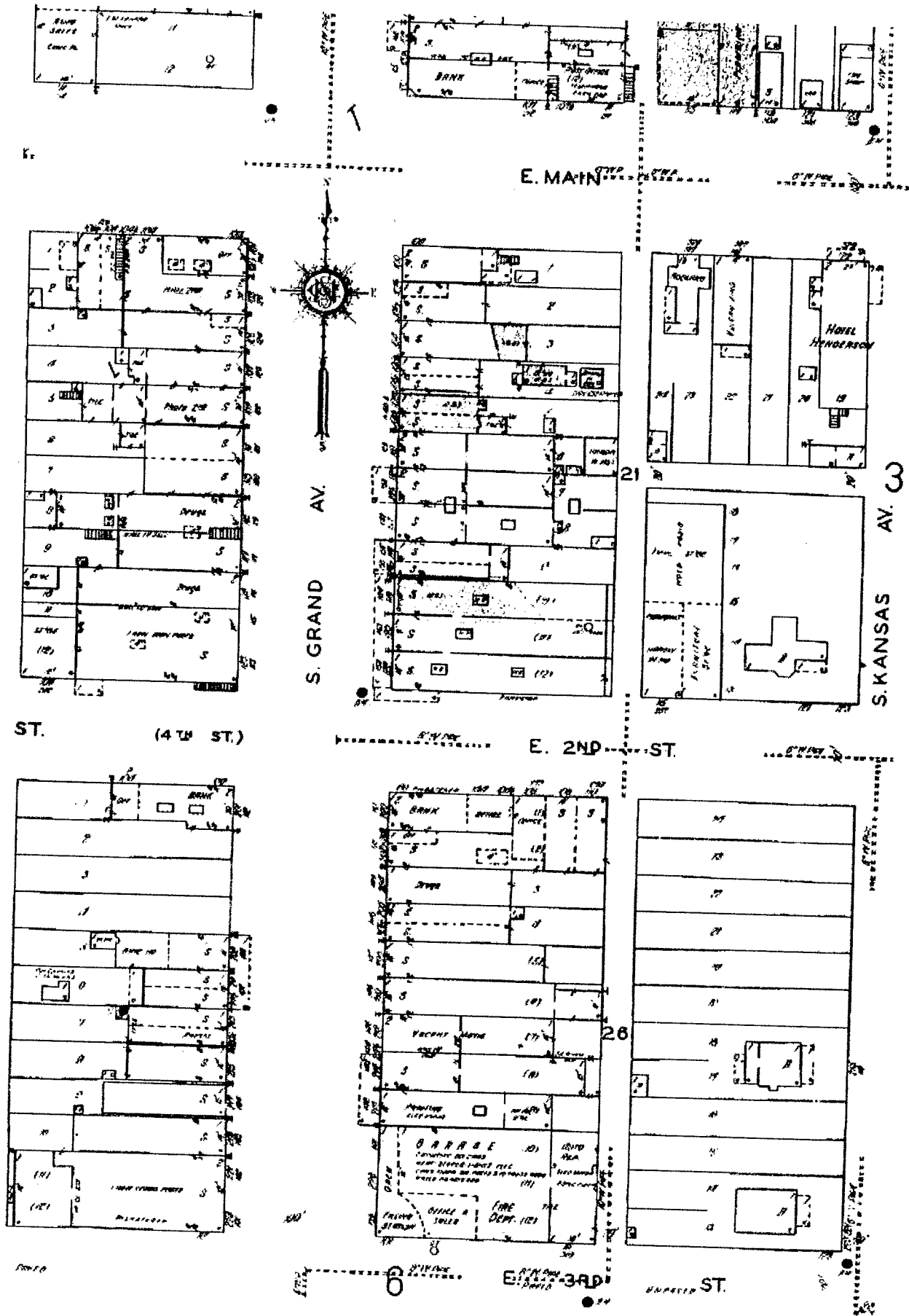


## Topographical Map

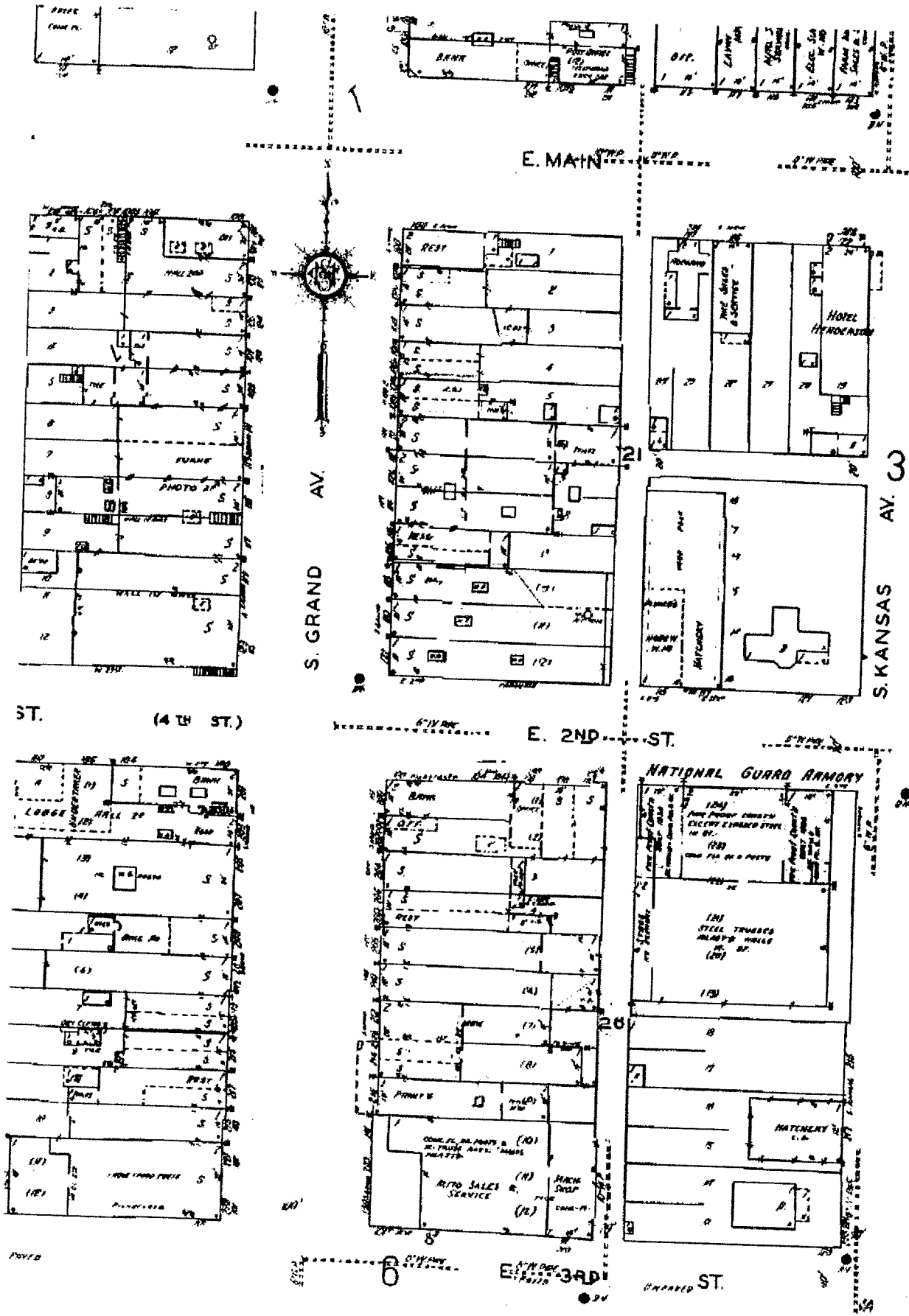
Figure 1: Topographic Map (Ref. 19)



## **Fire Insurance Sanborn Maps**



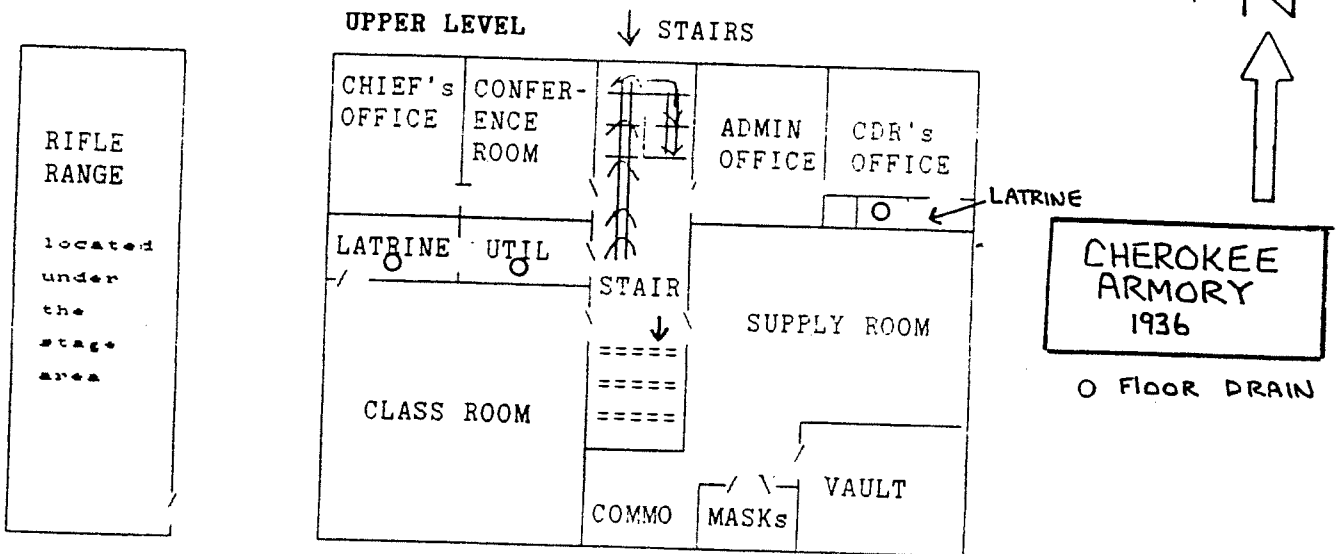
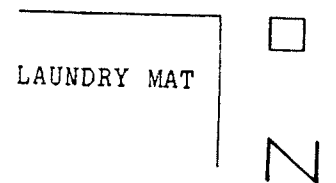
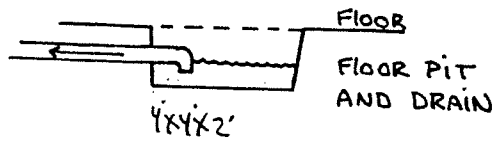
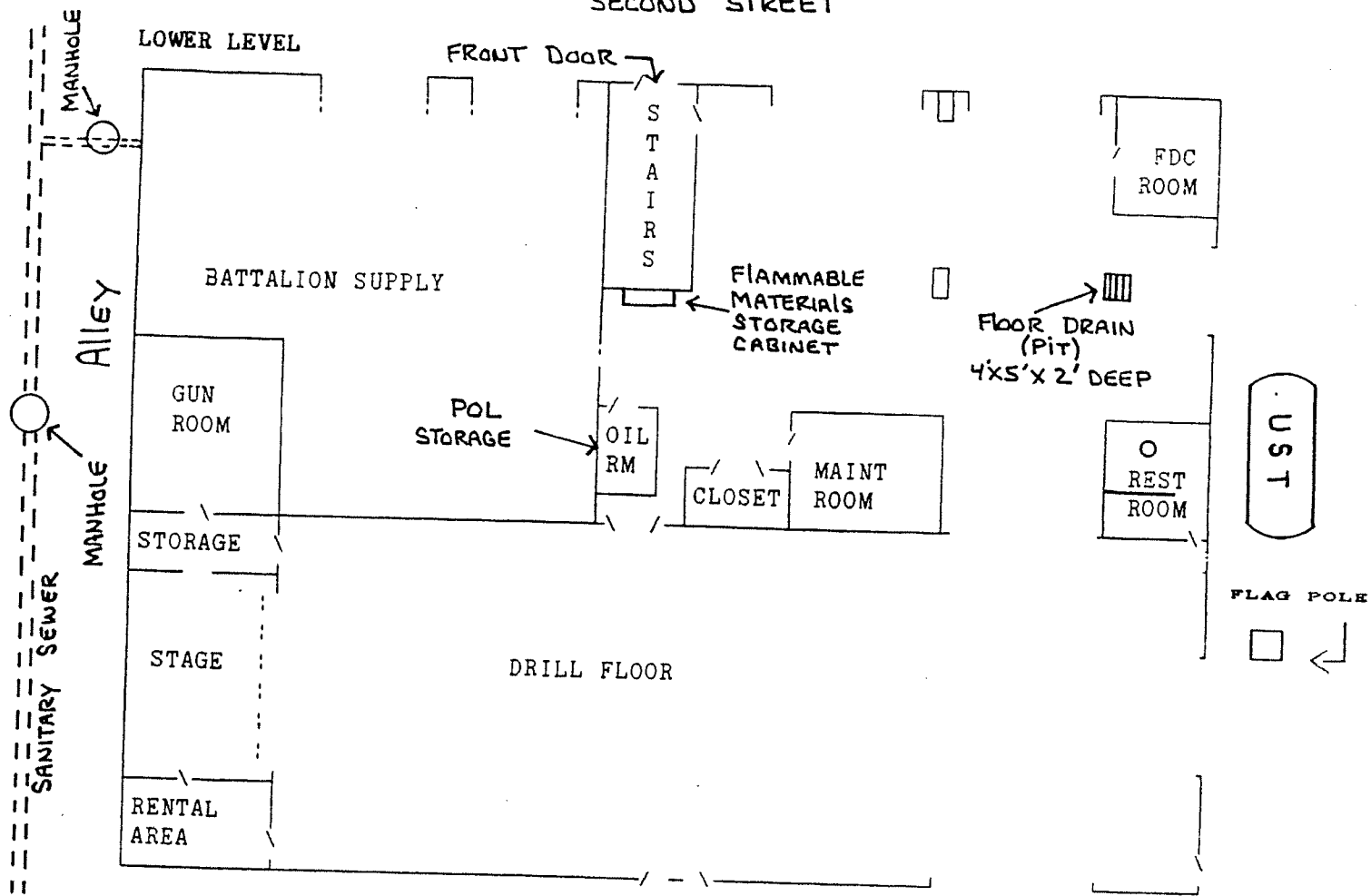




## Floor Plan

ANNEX a

SECOND STREET



## **Appendix D**

### **Log Book and Interview Documentation**

Location Cherokee, OK Date 10-12-06 9

Project / Client Cherokee National Guard  
Armory - 122 East 2nd Street / <sup>Space</sup> clouds  
65°F no rain

10:30 - Hal Cantwell & Jon Reid of the ODEA met with Steve Voth at City Hall then met Jason Bell with the street & water Dept. They work on equipment here. Depts. have been here approx. 4-5 years - Jason Bell Section Director.  
- The street & water Depts. are located on the first floor of the armory. This is where Hal Cantwell & Jon Reid met Jason Bell. Jason Bell guided Cantwell & Reid throughout the building and answered questions concerning each room & operations that occur here at the armory. While each room was observed Jon Reid took notes on each room on a xerox copied map showing the floor plan of the Cherokee Armory. Hal Cantwell took pictures of the facility. Pictures are listed in order

code: 233-151-233

10

Location Cherokee, Armony  
Project / Client Cherokee National Guard  
Armony - 122 East 2nd Street

Date

10-12-06

of the picture page. — 2A

The condition of the site is well maintained by the City of Cherokee. Street & water Depts. for their daily operations they perform there.

Most properties surrounding the Armony are vacant. The First Christian Church is adjacent on the east side. A laundry cleaner/beauty salon was adjacent to the south side. All other properties were either vacant or residential.

— Jason Bell said that all water comes directly from the City of Cherokee. Water supply, wastewater is also connected to the City.

— An alley runs along the west side.

— A parking lot on the south side.

— Two mounted transformers are located southwest of the Armony in the alley. They are old & rusted.

— A natural gas pipeline is located on the north part of the west side of the facility in the alley way.

code: 233-151-233

Location

Date 10-12-06

Cherokee, OK

Project / Client Cherokee National Guard

Armony - 122 East 2nd Street

— A water hydrant is north of the gas meter next to second street.

— No wells observed, No stressed vegetation or stains on site.

— No remnant of the removed 1000-gallon diesel UST.

— water damage on the ceilings at the Drill Hall, stage area, Rental area, & storage Room on each side of the stage. Some parts of the ceiling in these areas had enough damage that some of the ceiling was missing.

— Oil & grease spots were found throughout the Drill Hall, Battalion Supply Room, & the Motor Pool area.

— Servicing of vehicles occur in these areas.

— 9 55-gallon drums of used oil were found on the NW corner of the first floor.

— Buckets of paint & paint thinner were observed in the Oil Room.

— Piping was found throughout the



12 Location Cherokee, OK Date 10-12-06  
Project/Client Cherokee National Guard  
Armory - 122 East 2nd Street

the first floor especially in the Battalion supply Room & Motor Pool areas.

- No insulation noticed on any of the piping that may be suspect for Asbestos containing material (ACM).
- Some piping had white paint in areas which may contain lead.
- The first floor mainly contained vehicles, tools, signs, & street maintenance equip.
- Drop ceiling panels were observed on the second floor which may contain ACM depending upon the age of the panels.
- A heating unit, in the Utility Room, on the second floor, had wrapping around the piping connected to the unit. This wrapping did not show any signs of having ACM & looked fairly new.
- The Commander's Office on the 1st floor of the second floor had a friable wallboard in very poor condition. The wallboard located on the east wall may contain ACM.
- Speakers, jugs, signs, boxes of other

Location Cherokee, OK Date 10-12-06  
Project/Client Cherokee National Guard  
Armory - 122 East 2nd Street

miscellaneous items found in the Commander's office & the Administrative office west of the Commander's office. Items owned by the Main Street Chamber of Commerce.

- The Supply Room 3 of these rooms contained baseball supplies from a local youth group, a table of lubricants & adhesives from an unknown party.

Major Merkle of the OK Military Dept. (CMD) arrived @ 2:15 PM to unlock the Indoor Firing Range (IFR) door.

- The entry door had a notice duct-taped on it that prohibited anyone other than the CMD from using the room.
- A few gun shells were lying around. Dust was apparent throughout the range.
- DEQ collected two jars of sand from the bullet traps for analysis of lead.

Project / Client Cherokee National Guard Armory - 122 East 2nd Street

- The metal backstop above the bullet trap was found to have holes in it from guns not supposed to be used on the 0.22 caliber rated metal backstop.

- Interviews - October 12, 2006
- Jason Bell - Around 2001 the City of Cherokee Water & Street Dept. moved into the Armory
- He did not know when the National Guard discontinued their operations @ the armory.
- Approx. 3 yrs ago the roof was retained & covered with gravel
- No information on Armory during the period of National Guard Service
- No chemical spills that he's aware of
- The city occupies all the first floor
- The second floor is occupied by the Great Salt Plains Association

Project / Client Cherokee National Guard Armory - 122 East 2nd Street

on the NW side • The main street chamber of Commerce stores themselves & a local youth group store items on the NE side of the second floor.

Major Merkle - The IFR was misused by the public & former National Guard who were once stationed @ the Armory. He pointed out by the holes in the bullet trap backstop that higher caliber guns were being used not suited for the 0.22 caliber Range

- Before OMD took disciplinary action of the IFR, there were gun shells lying everywhere. There after, the IFR was locked for safety purposes to keep the public from exposure of lead & to prohibit the use of the IFR for Recreational shooting purposes.



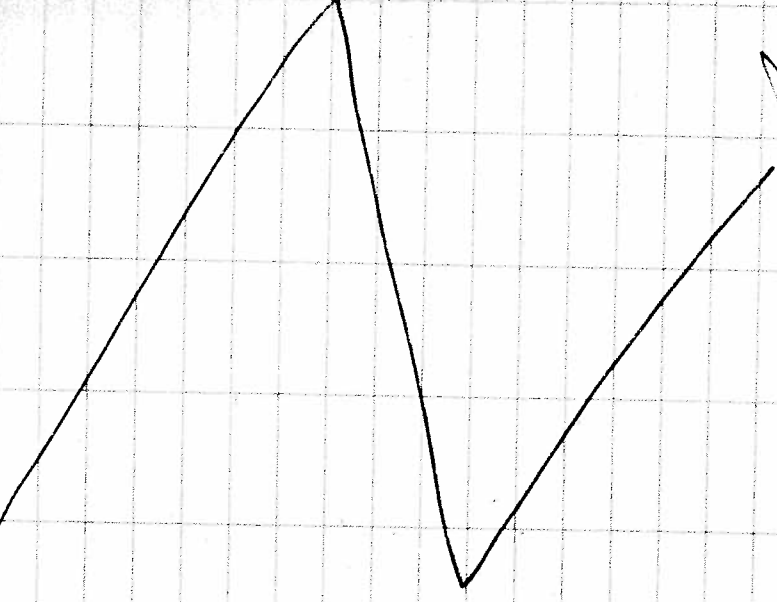
Location Cherokee, OK

Project / Client Cherokee National

Army - 122 East 2nd Street

The IFR was also being used as a storm shelter well before the OMD took disciplinary measures

~~X~~ Pictures taken on 10-12-01



Amal Khan  
Field

## **Appendix E**

### **Qualifications of Environmental Professionals**

## **Environmental Professional Qualifications**

**Jonathan Reid** holds a Bachelor Degree in Environmental Science with an emphasis in Natural Resources and a Minor in Soil Science from Oklahoma State University. Mr. Reid has 3 years experience in environmental sampling and technical studies. He is an Environmental Programs Specialist with the Land Protection Division of the Oklahoma Department of Environmental Quality. His responsibilities include: project management of Brownfield/Voluntary Cleanup Project (VCP) sites, conducting Targeted Brownfield Assessments, and assisting other project managers on technical activities at other Brownfield/VCP and National Priorities List sites as needed.

**Rita R. Kottke, Ph.D.**, holds a Doctorate in Environmental Science from Oklahoma State University. She is an Environmental Programs Manager with the Land Protection Division of the Oklahoma Department of Environmental Quality. She functions as the DEQ's Brownfield Coordinator, Brownfield Cleanup Revolving Loan Fund Contact, Superfund Site Redevelopment Contact, Superfund Emergency Response Contact, Land Revitalization/Reuse Contact, and as a liaison between the state, EPA, and local communities. Her responsibilities also include acting as technical project manager at various Voluntary Cleanup and Superfund sites within the state. She has been with the agency for thirteen years, working in the Superfund and Brownfields Programs. She has 13 years experience performing site assessments of real property. She was heavily involved in the formulation of the Brownfields Program's implementing rules, the negotiation of DEQ's Brownfields Memorandum of Agreement (MOA) with EPA, and the development of the Brownfield Cleanup Revolving Loan Fund Grant Proposal.

**Hal Cantwell** holds a Bachelor Degree in Geography with emphasis in Physical Geography and ecological from the University of Oklahoma, and a Masters Degree in Geography with emphasis in Biogeography and Remote Sensing from the University of Oklahoma. Mr. Cantwell has 20 years experience working in the Superfund program including directing the investigation and remediation of National Priority List (NPL) sites. He has 20 years experience in performing site assessments and ten years experience in directing and supervising CERCLA Preliminary Assessments and Site Investigations with the Oklahoma Department of Environmental Quality Land Protection Site Assessment Unit. He also has six years experience performing and supervising Targeted Brownfield Assessments under the DEQ Brownfields Program.

**Appendix F**

**DEQ Analytical Results of Indoor Firing Range  
and Chain of Custody**

**C.H. Guernsey & Company  
Indoor Firing Range Lead Issues Report**

Sample Number: 407472  
Project Code: LP-ARM  
Agency Number:  
Date Collected: 10/12/2006  
Time Collected: 1430  
Date Received: 10/13/2006  
Date Completed: 11/22/2006  
Collected By: JR  
PWS Id:  
Location Code:  
Station:  
Facility:  
Report Date: 11/22/2006

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**STATE ENVIRONMENTAL LABORATORY**  
707 N. ROBINSON  
OKLAHOMA CITY  
OKLAHOMA, 73102-6010  
General Inquiries: 1-800-869-1400  
Sample Receiving: (405) 702-1113  
**Report of Analysis by Metals**

LAND PROTECTION DIVISION  
HEATHER MALLORY

CC: FILE COPY

PARAMETER NAME	QUALIFIER	VALUE	UNITS	ANALYZED	METHOD
Lead, Sediment		56200.	MG/KG	11/06/06	6010
Lead (TCLP)		509000.	UG/L	11/06/06	6010
% Solids		99.84	%	11/20/06	CLP 05.3

SOURCE: CHEROKEE ARMORY  
PROGRAM:  
COUNTY: ALFALFA CITY: CHEROKEE

LEGAL DESCRIPTION:  
/4 /4 /4 SEC: T: R: M:

SAMPLERS COMMENTS:  
IFR-1L

SAMPLE RECEIVING COMMENTS:

ANALYST'S COMMENTS:

\*

ANALYST 

Labs performing analysis on this Sample:  
Metals

Sample Number: 407473  
Project Code: LP-ARM  
Agency Number:  
Date Collected: 10/12/2006  
Time Collected: 1435  
Date Received: 10/13/2006  
Date Completed: 11/22/2006  
Collected By: JR  
PWS Id:  
Location Code:  
Station:  
Facility:  
Report Date: 11/22/2006

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**STATE ENVIRONMENTAL LABORATORY**  
707 N. ROBINSON  
OKLAHOMA CITY  
OKLAHOMA, 73102-6010  
General Inquiries: 1-800-869-1400  
Sample Receiving: (405) 702-1113  
**Report of Analysis by Metals**

LAND PROTECTION DIVISION  
HEATHER MALLORY

CC: FILE COPY

PARAMETER NAME	QUALIFIER	VALUE	UNITS	ANALYZED	METHOD
Lead, Sediment		35300.	MG/KG	11/06/06	6010
Lead (TCLP)		521000.	UG/L	11/06/06	6010
% Solids		99.93	%	11/20/06	CLP 05.3

SOURCE: CHEROKEE ARMORY  
PROGRAM:  
COUNTY: ALFALFA CITY: CHEROKEE

LEGAL DESCRIPTION:  
/4 /4 /4 SEC: T: R: M:

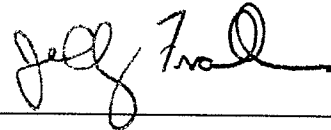
SAMPLERS COMMENTS:  
IFR-2R

SAMPLE RECEIVING COMMENTS:

ANALYST'S COMMENTS:

\*

ANALYST



Labs performing analysis on this Sample:

Metals

Chain of Custody Record

CPD

Site Name: Cherokee Army		Site Location: Cherokee, OK		Code: 493		S.E.L. Numbers	
Sample Location	Date	Time	GCMS Purgeables		Metals		General Chemistry
			GCMS Extractables				
IFR-IL	10-12-06	14:30		✓	✓		407472
IFR-ZR	10-12-06	14:35		✓	✓		407473
Sampler's Signature (Relinquished by):							
Relinquished by:	10-13-06	11:35					Received by: [Signature]
Relinquished by:							Received by:
Remarks:							Received by:

\* Indicate the number of containers for each analysis in the proper column.

## 12.0 CHEROKEE ARMORY

C.H. Guernsey & Company (GUERNSEY) surveyed the indoor firing range (IFR) at the Cherokee Armory on March 18, 2005 (Photographs 12-1 through 12-11). The IFR is approximately 100 feet long, approximately 12 feet wide, and the ceiling is approximately 15 feet high. The ventilation system is comprised of a vent fan in the exterior wall that discharges directly outside. The IFR is located subgrade.

Based upon information supplied to GUERNSEY, Oklahoma Military Department (OMD) personnel collected wipe samples from the IFR on April 29, 2004. Concentrations within the IFR were between 183,900  $\mu\text{g}/\text{ft}^2$  (middle of IFR floor) to 3,398  $\mu\text{g}/\text{ft}^2$  (at IFR entrance). A sample on a window sill was 241  $\mu\text{g}/\text{ft}^2$ . Because of City of Cherokee activity on the drill floor, remedial measures will not be undertaken on those surfaces, only in the IFR. Table 12-1 summarizes the laboratory results for the wipe samples.

**Table 12-1**  
**Laboratory Analysis**

Sample ID #	Sample Date	Result ( $\mu\text{g}/\text{sq. Ft.}$ )	Lab Report ID #
421	4/29/2004	58,880.0	Quantem 111870
422	4/29/2004	183,900.0	Quantem 111870
423	4/29/2004	6,765.0	Quantem 111870
424	4/29/2004	3,398.50	Quantem 111870
425	4/29/2004	241.80	Quantem 111870

No equipment was identified for cleaning by OMD personnel.

Table 12-2 provides a preliminary cost estimate to clean the equipment and/or remediate the lead contamination in the IFR. Figure 12-1 shows the approximate locations of the OMD samples.

### 12.1 OTHER ENVIRONMENTAL CONSIDERATIONS

Beyond the issues related to the IFR, the following environmental related issues potentially exist at the Armory:

- Asbestos containing material (ACM) is material that contains 1% or more asbestos fibers. Because of the Armory's age, there is a potential for ACM in building materials (roofing materials, floor tiles, mastic, ceiling tiles, window putty, natural gas-fired heating systems, etc);
- Lead has been used as a color carrier in paints for hundreds of years. In 1978, its use in residential paints was restricted in the United States. Because of its age, there is a potential for lead containing paints at the Armory;
- Polychlorinated biphenyls (PCB) are oils that were used in electrical equipment until their regulation in 1977. There is a potential for PCB in fluorescent lighting ballasts, capacitors, transformers and other dielectric fluid filled electrical equipment at the Armory;



- The potential for mold exists within the Armory due to a compromise of the building envelope and the presence of standing water and visible water damage;
- Chlorofluorocarbons (CFCs) are compounds used in heating, ventilation, and cooling (HVAC) systems and in fire suppression (i.e., halon) systems. The use, release and recycling of these compounds are regulated by EPA. There is a potential for CFCs to be present in the HVAC equipment and fire suppression system of the Armory;
- Mercury is a heavy metal used in thermostats, pressure gauges, and other building and process related equipment. There is a potential for mercury containing thermostats at the Armory;
- Lead, nickel, and cadmium are heavy metals used in batteries. There is a potential for heavy metal containing batteries in the emergency lighting and exit signage at the Armory; and
- Other issues may be present that were not visually evident to GUERNSEY.

**Table 12-2  
Preliminary Cost Estimate**

<b>Equipment Cleaning Costs (a)</b>				
<b>Item Description</b>	<b>Number</b>	<b>Unit</b>	<b>Cost Per Unit</b>	<b>Total Cost</b>
<b>Total</b>				<b>\$0</b>

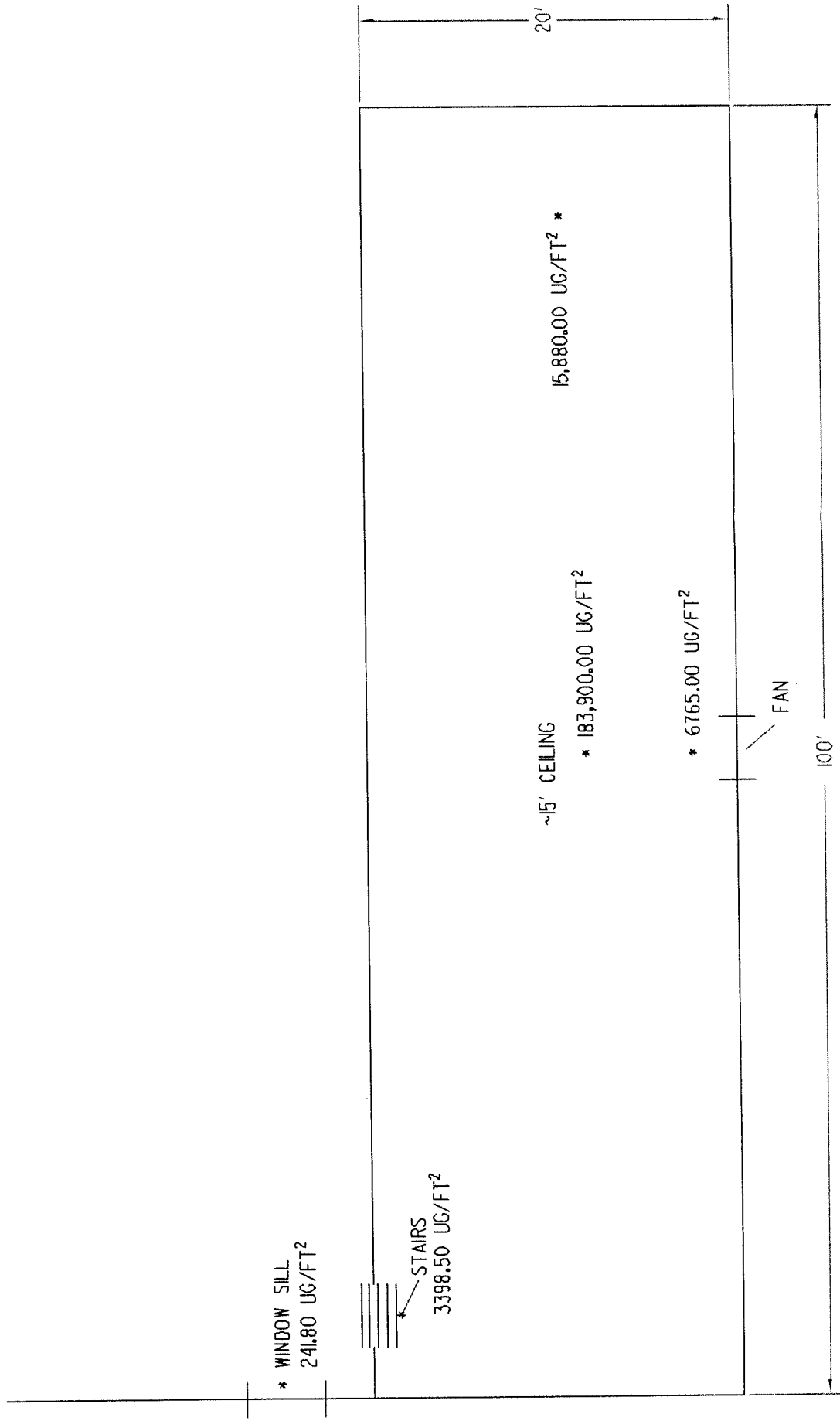
<b>Remediation Costs (b)</b>				
<b>Item Description</b>	<b>Number</b>	<b>Unit</b>	<b>Cost Per Unit</b>	<b>Total Cost</b>
Mob/DeMob	1	Each	\$1,500	\$1,500
Stage/Clean Equipment/Components for Disposal	1	Each	\$2,500	\$2,500
Cleaning of Army Equipment (a)	N/A	N/A	N/A	\$0
Clean/Seal Firing Range surfaces	5760	ft <sup>2</sup>	\$5	\$25,920
Clean Drill Floor	0	ft <sup>2</sup>	\$0.10	\$0
Solidify/Stabilize Material in Bullet Trap	100	ft <sup>3</sup>	\$15	\$1,500
Waste Disposal (non-hazardous)	5	Ton	\$1,000	\$5,000
<b>Total (+/- 25%)</b>				<b>\$36,420</b>

**Notes:**

- (a) Includes the cleaning of equipment identified by OMD personnel during site visit. Please reference photographs for each item.
- (b) Includes cleaning of firing range space, drill floor, and other surfaces to <40 ug/ft<sup>2</sup>.

CHEROKEE FIRING RANGE NOTES:

1. ALL MEASUREMENTS ARE APPROX.
2. SAMPLE LOCATIONS ARE APPROX. & IDENTIFIED BY "\*"
3. SAMPLE CONCENTRATIONS ARE IN MICROGRAMS PER SQUARE
4. SAMPLES COLLECTED BY OMD PERSONNEL 29-APR-04
5. SEE PHOTOGRAPHS FOR REFERENCE
6. SEE INVENTORY LIST FOR DESCRIPTION OF EQUIPMENT TO E



## **Appendix G**

### **Notification for Underground Storage Tanks**

# Notification for Underground Storage Tanks

FORM APPROVED BY  
EPA REGION 8  
APPROVAL # 8-10-86-001

FOR TANKS IN OK

RETURN COMPLETED FORM TO

Underground Storage Tank Program  
Oklahoma Corporation Commission  
Jim Thorpe Building  
Oklahoma City, OK 73105

STATE USE ONLY  
I.D. Number 0205415  
Date Received APR 28 1986

## GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances 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 is 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 records, your knowledge, belief, or recollection.

Who Must Notify? Section 9002 of RCRA, as amended, requires 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.

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 noncommercial purposes;
2. tanks used for storing heating oil for consumptive use 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. storm water 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 underground 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? Completed notification forms should be sent to the address given at the top of this page.

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.

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.

## 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 than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

Indicate number of continuation sheets attached

25 of 146

### I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)  
Oklahoma Military Department

Street Address  
3501 Military Circle, N.E.

County  
Oklahoma City, Oklahoma 73111

City  
405 427-8371 State  
OK ZIP Code  
73111

Area Code Phone Number

### II. LOCATION OF TANK(S)

(If same as Section I, mark box here )

Facility Name or Company Site Identifier, as applicable  
Det 1 Btry A 1/189 FA

Street Address or State Road, as applicable  
122 E. 2nd Street

County  
Cherokee Okla 73728-2002

City (nearest) State ZIP Code

Type of Owner (Mark all that apply )

Current  State or Local Gov't  Private or Corporate

Former  Federal Gov't (GSA facility I.D. no. \_\_\_\_\_)  Ownership uncertain

Indicate number of tanks at this location

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands

### III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here ) Job Title Area Code Phone Number  
CPT Richard L. Harwell Environmental Engr (405) 427-8371 X333

### IV. TYPE OF NOTIFICATION

Mark box here only if this is an amended or subsequent notification for this location.

### V. CERTIFICATION (Read and sign after completing Section VI.)

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 the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative Signature Date Signed

**VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS** (Complete for each tank at this location.)

Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3...)	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.
<b>1. Status of Tank</b> (Mark all that apply) <input type="checkbox"/> Currently in Use <input type="checkbox"/> Temporarily Out of Use <input checked="" type="checkbox"/> Permanently Out of Use <input type="checkbox"/> Brought into Use after 5/8/86	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Estimated Age (Years)</b>	20				
<b>3. Estimated Total Capacity (Gallons)</b>	1000				
<b>4. Material of Construction</b> (Mark one) <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Unknown Other, Please Specify _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>5. Internal Protection</b> (Mark all that apply) <input type="checkbox"/> Cathodic Protection <input type="checkbox"/> Interior Lining (e.g., epoxy resins) <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6. External Protection</b> (Mark all that apply) <input type="checkbox"/> Cathodic Protection <input type="checkbox"/> Painted (e.g., asphaltic) <input type="checkbox"/> Fiberglass Reinforced Plastic Coated <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7. Piping</b> (Mark all that apply) <input type="checkbox"/> Bare Steel <input checked="" type="checkbox"/> Galvanized Steel <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Cathodically Protected <input type="checkbox"/> Unknown Other, Please Specify _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>8. Substance Currently or Last Stored</b> In Greatest Quantity by Volume (Mark all that apply) <input type="checkbox"/> a. Empty <input checked="" type="checkbox"/> b. Petroleum <input type="checkbox"/> Diesel <input type="checkbox"/> Kerosene <input type="checkbox"/> Gasoline (including alcohol blends) <input type="checkbox"/> Used Oil Other, Please Specify _____ <input type="checkbox"/> c. Hazardous Substance Please Indicate Name of Principal CERCLA Substance OR Chemical Abstract Service (CAS) No. Mark box <input type="checkbox"/> if tank stores a mixture of substances <input type="checkbox"/> d. Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Additional Information (for tanks permanently taken out of service)</b> a. Estimated date last used (mo/yr) b. Estimated quantity of substance remaining (gal.) c. Mark box <input type="checkbox"/> if tank was filled with inert material (e.g., sand, concrete)	6/80	1	1	1	1
	0				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

62-05815

LB 10-31-90

OCT 30 1990

DETACHMENT 1 BATTERY B 1ST BATTALION 189TH FIELD ARTILLERY  
OKLAHOMA ARMY NATIONAL GUARD  
122 EAST 2ND STREET, CHEROKEE, OKLAHOMA 73728-2002

22 OCT 90

MEMORANDUM FOR State of Oklahoma, Military Department, Environmental Officer  
ATTN: Major Harwell, 3501 Mil. Cir., Ok City, OK 73111-4398

SUBJECT: Closure of Fuel Storage Facility

1. The underground fuel storage tank at the National Guard Armory located at Cherokee Oklahoma, has been out of service since 15 Jan 88. No fuel has been purchased or pumped since that time.
2. POC, THOMAS B. STROUD Jr., (405) 596-2215.

FOR THE COMMANDER:

*for Jose H. SSG*  
 THOMAS B. STROUD Jr.  
 SSG OKARNG  
 NCOIC

<b>Notification for Underground Storage Tanks</b>	<b>STATE USE ONLY</b>
Local Agency Name and Address: <u>OKLAHOMA Military Department</u> <u>3501 Military Circle, Okc Ok 73111</u>	ID NUMBER <u>0-205815</u>
TYPE OF NOTIFICATION	DATE RECEIVED
<input type="checkbox"/> A. NEW FACILITY <input type="checkbox"/> B. AMENDED <input checked="" type="checkbox"/> C. CLOSURE	A. Date Entered into Computer _____
____ No. of tanks at facility      ____ No. of continuation sheets attached	B. Data Entry Clerk Initials _____
INSTRUCTIONS	C. Owner Was Contacted to _____
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 than five (5) tanks are owned at this location, photocopy the following sheets, and staple continuation sheets to the form.	Clarify Responses, Comments. _____ _____ _____

### GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances 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 is 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 records, your knowledge, belief, or recollection.

**Who Must Notify?** Section 9002 of RCRA, as amended, requires that, unless exempt, 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 discontinuance 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 fungicides.

**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 noncommercial purposes.
- 2. tanks used for storing heating oil for consumptive use 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 interstate pipeline facility regulated under State laws;
- 5. surface impoundments, pits, ponds, or lagoons;
- 6. storm water 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 basements, cellars, mine workings, 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 underground 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 (50 degrees Fahrenheit and 14.7 pounds per square inch absolute).

**Where To Notify?** Send completed forms to:

OKlahoma Corporation Commission  
Underground Storage Tank Program  
Jim Thorpe Building  
Room 240  
Oklahoma City, OK 73105

**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 facility and tank information to State agency immediately.

**Penalties:** Any owner who knowingly fails to notify or submit 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 TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)  
OKLAHOMA MILITARY DEPARTMENT

Street Address  
3501 MILITARY CIRCLE

OKLAHOMA CITY, OK      73111-4398  
City      State      ZIP Code

OKLAHOMA  
County

405/425-8334  
Phone Number (include Area Code)

#### II. LOCATION OF TANK(S)

If required by State, give the geographic location of tanks by depression, elevation and contour.  
Example: E1, 24, 12 N Long 06, 24, 17W

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

(If same as Section I, mark box )

Facility Name or Company Site Identifier, as applicable  
CHEROKEE Nat Guard Army

Street Address (P.O. Box not acceptable)  
122 E 2ND

Cherokee, Ok  
City      State      ZIP Code

Adair Co  
County      Municipality

III. TYPE OF OWNER		IV. INDIAN LANDS	
<input type="checkbox"/> Federal Government	<input type="checkbox"/> Commercial	Tanks are located on land within an Indian Reservation or on other trust lands. <input type="checkbox"/>	Tribe or Nation: _____
<input checked="" type="checkbox"/> State Government	<input type="checkbox"/> Private		
<input type="checkbox"/> Local Government		Tanks are owned by native American nation, tribe, or individual. <input type="checkbox"/>	

V. TYPE OF FACILITY

Select the Appropriate Facility Description:

<input type="checkbox"/> Gas Station	<input type="checkbox"/> Railroad	<input type="checkbox"/> Trucking/Transport
<input type="checkbox"/> Petroleum Distributor	<input type="checkbox"/> Federal - Non-Military	<input type="checkbox"/> Utilities
<input type="checkbox"/> Air Taxi (Airline)	<input type="checkbox"/> Federal - Military	<input type="checkbox"/> Residential
<input type="checkbox"/> Aircraft Owner	<input type="checkbox"/> Industrial	<input type="checkbox"/> Farm
<input type="checkbox"/> Auto Dealership	<input type="checkbox"/> Contractor	<input checked="" type="checkbox"/> Other (Explain) <u>NATIONAL GUARD ARMORY</u>

VI. CONTACT PERSON IN CHARGE OF TANKS

Name	Job Title	Address	Phone Number (Include Area Code)
ALTON ENGBRETTSON	Deputy Dir of Engineering	ATTN ORDE-D 3501 Military Circle, Ala	7311-4388 (405) 425-8334

VII. FINANCIAL RESPONSIBILITY

I have met the financial responsibility requirements in accordance with 40 CFR Subpart H

Check All that Apply

<input type="checkbox"/> Self Insurance	<input type="checkbox"/> Guarantee	<input type="checkbox"/> State Funds
<input type="checkbox"/> Commercial Insurance	<input type="checkbox"/> Surety Bond	<input type="checkbox"/> Trust Fund
<input type="checkbox"/> Risk Retention Group	<input type="checkbox"/> Letter of Credit	<input type="checkbox"/> 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 the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative (Print) ALTON L. ENGBRETTSON Deputy Dir of Engineering Alabama Military Department	Signature 	Date Signed 9-26-95
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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 this form. Send comments regarding this burden estimate to Chief, Information Policy Branch PM-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 Part 280, Appendix I. Previous editions of this notification form may be used while supplies last.



**IX. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)**

Tank Identification Number: 0-205815 Tank No. 1 Tank No.      Tank No.      Tank No.      Tank No.     

1. Status of Tank (mark only one)	Currently in Use:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Temporarily Out of Use: <small>(Refer to Section II.)</small>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Permanently Out of Use: <small>(Refer to Section II.)</small>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Amendment of Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Date of Installation (mo./year)	<u>1958</u>				
------------------------------------	-------------	--	--	--	--

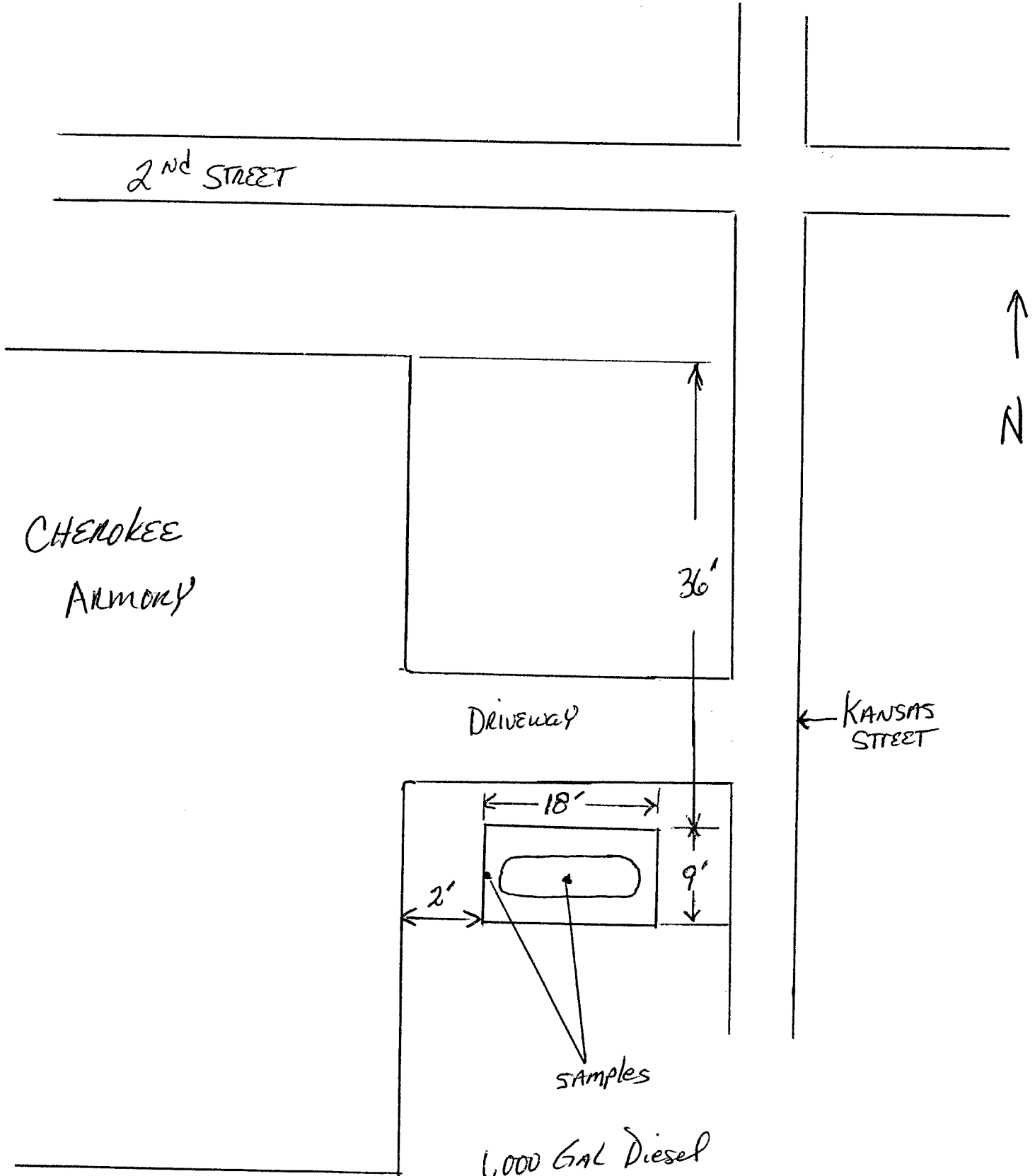
3. Estimated Total Capacity (gallons)	<u>1,000</u>				
---------------------------------------	--------------	--	--	--	--

4. Material of Construction (Mark all that apply)	Asphalt Coated or Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Epoxy Coated Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Composite (Steel with Fiberglass)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lined Interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Polyethylene Tank Jacket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Excavation Liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has tank been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Piping (Material) (Mark all that apply)	Bare Steel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Galvanized Steel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Fiberglass Reinforced Plastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Copper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Cathodically Protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Double Walled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Secondary Containment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unknown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other, Please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

6. Piping (Type) (Mark all that apply)	Suction: no valve at tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Suction: valve at tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Gravity Feed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Has piping been repaired?	<u>NO</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Tank Identification Number <u>0-205815</u>	Tank No. <u>1</u>	Tank No. _____	Tank No. _____	Tank No. _____	Tank No. _____
7. Substance Currently or Last Stored In Greatest Quantity by Volume					
Gasoline					
Diesel					
Gasohol					
Kerosene					
Heating Oil					
Used Oil					
Other, Please specify					
Hazardous Substance CERCLA name and/or, CAS number					
Mixture of Substances Please specify					
<b>X. TANKS OUT OF USE, OR CHANGE IN SERVICE</b>					
1. Closing of Tank					
A. Estimated date last used (mo./day/year)					
B. Estimate date tank closed (mo./day/year)	<u>09/21/87</u>				
C. Tank was removed from ground	<u>9/26/95</u>				
D. Tank was closed in ground					
E. Tank filled with inert material Describe					
F. Change in service					
2. Site Assessment Completed	<input checked="" type="checkbox"/>				
Evidence of a leak detected					



CHEROKEE  
ARMORY

2<sup>ND</sup> STREET

36'

DRIVEWAY

← KANSAS STREET

← 18' →

9'

← 2' →

SAMPLES

1,000 GAL Diesel  
REMOVED 26 Sep 95

↑  
N

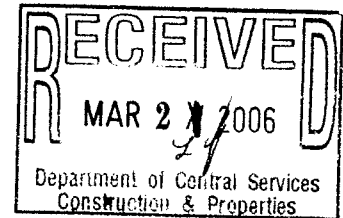
## **Appendix H**

**City of Cherokee Letter (March 13, 2006)**



'GATEWAY TO THE GREAT SALT PLAINS'

THE CITY OF  
**CHEROKEE**  
WATER UTILITIES MUNICIPALLY OWNED  
CHEROKEE, OKLAHOMA 73728



March 13<sup>th</sup>, 2006

John S. Richard, Director  
State of Oklahoma  
Dept. of Central Services  
P.O. Box 53448  
Oklahoma City, OK. 73152-3218

Re: Cherokee Armory Building

Dear Director Richards:

The City of Cherokee would like to obtain the Cherokee Armory Building located at block 26 lot 24 in the Original Town of Cherokee. We will use the building for many things. It will house the Great Salt Plains Association, the City of Cherokee Public Works Dept. and when it is cleaned a Community Storm Shelter. Cherokee Summer Youth activities will also be located there. This building is a part of Cherokee history and we should keep it as that. Please let us know what we need to do to keep it. If you have questions you may contact Steven Vetter or Roberta Berry at 580-596-3326

Sincerely,

Steven Vetter, Cherokee City Manager

## **Appendix I**

### **County Records of the Cherokee Armory**



STATE RECORDS  
RECORDED WITHOUT FEE  
IN COMPLIANCE WITH  
SEC. 30 SEN. BILL 284  
1935 SESSION LAWS

RETURN TO  
THE ADJUTANT GENERAL,  
STATE CAPITOL,  
OKLAHOMA CITY, OKLAHOMA.

W A R R A N T Y D E E D

THIS INDENTURE, Made and entered into this 30th day of September, 1935, by and between the City Commissioners of City of Cherokee, Alfalfa County, Oklahoma, acting by and through Ira A. Hill, the duly elected, qualified and acting Mayor of City of Cherokee, Alfalfa County, Oklahoma, party of the first part, and the State of Oklahoma, acting as trustee for the Oklahoma National Guard, party of the second part, witnesseth:

That, Whereas, on the 30th day of September, 1935, the said City Commissioners of City of Cherokee, Alfalfa County, Oklahoma, made an Order by proper resolution, authorizing the said party of the first part to sell certain real estate belonging to the said City of Cherokee, Alfalfa County, Oklahoma, to the said second party, and directing said Mayor of said City of Cherokee, Alfalfa County, Oklahoma, to execute and deliver a deed thereto to the said second party.

Now, Therefore, Know All Men By These Presents: That the City of Cherokee, Alfalfa County, Oklahoma, acting by and through Ira A. Hill, the duly elected and qualified and acting Mayor of City of Cherokee, Alfalfa County, Oklahoma, party of the first part, in consideration of the sum of One Dollar and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, does grant, bargain, sell and convey unto the State of Oklahoma for the use and benefit of the Oklahoma National Guard, party of the second part, the following described real property and premises situated in Alfalfa County, State of Oklahoma, to-wit:

Lots nineteen (19), twenty (20), twenty-one (21) twenty-two (22), twenty-three (23) and twenty-four (24), in Block twenty-six (26), Original Town, now City of Cherokee, Alfalfa County, Oklahoma,

together with all improvements thereon and the appertences thereunto belonging, and warrant the title to same.

To Have and To Hold the said described premises unto the said party of the second part, its successors and assigns forever

free, clear and discharged of and from all former grants, taxes, judgments, mortgages, and other liens and incumbrances of whatsoever nature.

Signed and delivered this 30th day of September, 1935.

CITY OF CHEROKEE  
ALFALFA COUNTY, OKLAHOMA

BY *La A. Hill*  
MAYOR

ATTEST:  
*Bey Bontrager*  
CITY CLERK

STATE OF OKLAHOMA )  
COUNTY OF ALFALFA ) SS

Before me the undersigned, a Notary Public, within and for the above named County and State, on this 30th day of September, 1935, personally appeared Ira W. Hill to me known to be the duly qualified and acting Mayor of City of Cherokee, Alfalfa County, Oklahoma, and the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same in his capacity as Mayor of City of Cherokee, Alfalfa County, Oklahoma, as his free and voluntary act and deed of the City of Cherokee, Alfalfa County, Oklahoma, for the use and purposes therein set forth.

WITNESS my hand and seal the date first above written.

*Sam H. Buchanan*  
Notary Public

My commission expires:

*Aug. 27 - 1938*

Accepted by the undersigned, Charles F. Barrett, the Adjutant General of the State of Oklahoma, pursuant to Chapter 25, House Bill No. 226 of the Session Laws of the State of Oklahoma for 1931.

This *1st* day of *October*, 1935.

*Charles F. Barrett*  
Charles F. Barret, Adjutant General,  
State of Oklahoma.

I, E. W. MARLAND, Governor of the State of Oklahoma, do

hereby approve the above and foregoing acceptance, this 28

day of October, 1935.



E. W. Marland, Governor  
State of Oklahoma.