Former National Guard Armory
Allen, Oklahoma

Remediation Final Report

Prepared by:
Department of Environmental Quality
707 North Robinson
Oklahoma City, Oklahoma 73101

DEQ
OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
...for a clean, attractive, prosperous Oklahoma

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the Town of Allen with the final remediation report for the former Allen Armory.

DEED NOTICE

A Notice of Remediation has been filed in the county courthouse and is included in this report. It summarizes remediation performed at the former Allen armory and describes continuing operation and maintenance and land use restrictions. This completes the DEQ cleanup of the property. For more detail on the activities described below, see enclosed reports.

ASBESTOS REMEDIATION

DEQ contractors completed the following activities:

- Asbestos inspection
- Asbestos abatement, including:
  - Removal of all asbestos containing material, except for exhaust flues and transite roofing above the drill room
- Proper disposal of associated waste

TARGETED BROWNFIELD ASSESSMENT

In December 2007, DEQ submitted, to the Town of Allen, a Phase I Targeted Brownfield's Assessment. A copy has not been included in this report.

LEAD REMEDIATION

DEQ contractors completed the following activities:

- Lead-based paint (LBP) inspection
- LBP abatement
  - Overhead door frames were scraped and sealed
  - Structural steel above drill room was scraped and sealed
  - Fire door containing LBP was removed
  - Small piece of exterior trim was removed and replaced
- Proper disposal of associated waste
- The building did not contain an indoor firing range

Additional copies of this report can be found at http://www.deq.state.ok.us/lpdnew/scapIndex.htm and DEQ Central Records at 707 N Robinson Oklahoma City, Oklahoma 73101.

This publication is issued by the Oklahoma Department of Environmental Quality authorized by Steven A. Thompson, Executive Director. Copies have been prepared at a cost of $0.053 each. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. 09_03_08 dh\LPD\allen armory report 9_08\allenamrmoryreport.indd.

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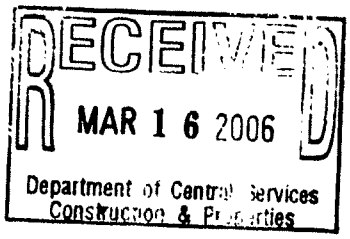
DEEDS AND LEGAL DOCUMENTS

TOWN OF ALLEN

109 North Memphis
P. O. Box 402
Allen, OK 74825

March 13, 2006



John S. Richard, Director
State of Oklahoma
Department of Central Services
Construction and Property
Will Rogers Office Bldg. (2401 N. Lincoln) Suite 106
P. O. Box 53448
Oklahoma City, OK 73152-3218

Re: Offer of Armory Building to the Town of Allen

Dear Mr. Richard:

In response to your letter dated February 10, 2006, the Town of Allen does accept your offer to obtain possession of the Armory Building located in Allen, Oklahoma.

Presently, the Allen Public School is using the facility for classrooms and Agricultural functions. If acceptable, the Town's proposed use of the building would be for the continued use by the Allen Public School for classrooms and Ag.

I understand that full disclosure of environmental issues will be provided to all parties and the level of environmental remediation will be determined by Oklahoma Department of Environmental Quality (DEQ). The DEQ plan of action for environmental remediation must be submitted to your department before transfer of title.

Please advise if you need any other requirements from the Town of Allen for the acceptance of this offer.

Sincerely,

Dianna Brannan

Dianna Brannan, Mayor

Heather Mallory, DEQ LPD, P.O. Box 1677 Oklahoma City, OK 73101

RECEIVED
JUL 24 2008
LAND PROTECTION DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

NOTICE OF REMEDIATION AND EASEMENT
FORMER ALLEN ARMORY
ALLEN, OKLAHOMA

LEGAL BASIS FOR NOTICE: The Oklahoma Department of Environmental Quality ("DEQ") hereby files this Notice of Remediation pursuant to Oklahoma Statutes, 27A § 2-7-123 (C). This Notice does not grant any right to any person not already allowed by law and shall not be construed to authorize or encourage any person or other legal entity to cause or increase pollution, to avoid compliance with State or Federal laws and regulations regarding pollution or to escape responsibility for maintaining environmentally sound operations.

The DEQ may take administrative or civil action to recover costs or to compel compliance with the "Land Use Restrictions" and to prevent damage to or interference with the "Engineering Controls" and "Continuing Operation, Maintenance of said Engineering Controls" herein described.

The Land Use Restrictions, Engineering Controls and Continuing Operation, Maintenance of said Engineering Controls shall apply to the Affected Property and to persons who own and/or use the Affected Property until such time as the DEQ files a subsequent Notice of Remediation that changes or removes one or more of them. Activities that cause or could cause damage to the Remedy or the Engineering Controls or recontamination of soil or groundwater are prohibited.

The owner of the Affected Property has the legal authority to create, and does hereby voluntarily create, an easement granted to the DEQ and its employees and agents, for ingress and egress through, across and onto the parking and other outside areas of the Affected Property as they exist from time to time to assure the ongoing protection of the Remedy, Engineering Controls and Land Use Restrictions. This easement touches and concerns the land and runs with the land, is legally binding on all current and future owners and tenants of the Affected Property, and shall only be removed or modified if and when the DEQ modifies or removes the Land Use Restrictions, Engineering Controls and Continuing Operation, Maintenance of said Engineering Controls.

REASON FOR NOTICE: The below described Affected Property was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Sampling performed by DEQ contractors, conducted on October 26, 2006, indicated that there was asbestos and lead-based paint in the building.

AFFECTED PROPERTY: The Affected Property is the former Allen Armory with a street address of 903 Paul Street in Allen, Oklahoma. The Affected Property is located on lots six (6) through seventeen (17) in block thirteen (13) of Leader Addition to the Town of Allen, Oklahoma, in the Southwest quarter of the Northeast quarter of Section 25, Township 5 North, Range 8 East in Pontotoc County, Oklahoma.

I-2008-004674 Book 2290 Pg: 161
07/23/2008 12:00 pm Pg 0161-0163
Fee: $ 17.00 Doc: $ 0.00
Pam Walker - Pontotoc County Clerk
State of Oklahoma

14

17

REMEDY: Remediation activities ("Remedy") at the Affected Property included:

a. An asbestos abatement to remove all asbestos containing material in the building, except exhaust flues and transite roofing over the drill floor; and
b. Proper disposal of all asbestos-containing materials that were removed from the building.

Additionally, all visible lead-based paint was scraped and sealed from the structural beams of the drill floor. Trim containing lead-based paint was removed and replaced.

Remedial activities were completed on April 14, 2008.

CONTINUING OPERATION, MAINTENANCE AND MONITORING

(A) **Asbestos:** Non-friable asbestos-containing exhaust flues and transite roofing were left in place at the Affected Property. Should the owner of the Affected Property decide to replace the roof or remove the exhaust flues, proper precautions should be taken to ensure the asbestos is not made friable.

(B) **Lead-based paint:** The DEQ did not test every painted surface inside and outside of the building, therefore there is a potential for lead-based paint at the affected property.

LAND USE RESTRICTION: Residential use of the Affected Property is prohibited. Residential use is defined as having any person present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.

CHANGING LAND USE RESTRICTIONS: Changes to land use restrictions must be approved by the Department of Environmental Quality or its successor agency. The person requesting the change in land use must demonstrate to the Department's satisfaction that contamination at the site has reached levels appropriate for the proposed new land uses and that further remediation is not necessary or that additional institutional or engineering controls are adequate to achieve levels protective of human health and the environment for the proposed uses.

The DEQ may require oversight costs, work plans, sampling, reports, and public participation as part of its review of the new information to support the requested change in land use restrictions. The person requesting the change will be required to follow agency procedures effective at the time of the request.

The DEQ at its discretion may determine, based on the new information submitted, that contaminants are present at the Site at levels that will not pose a risk to human health or the environment if the new land use restrictions being requested are allowed. Upon making this determination, the DEQ will file a recordable notice of remediation pursuant to state law in the land records in the in the office of the county clerk where the Site is located designating the new land use restrictions.

I-2008-004674 Book 2290 Pg: 162
07/23/2008 12:00 pm Pg 0161-0163
Fee: $ 17.00 Doc: $ 0.00
Pam Walker - Pontotoc County Clerk
State of Oklahoma

This Notice of Remediation and the restrictions and requirements contained herein run with the land and no change of ownership of the Affected Property will change the Land Use Restrictions. This Notice of Remediation and the restrictions and requirements are effective upon the date of signature by the Executive Director of the DEQ

Steven A. Thompson, Executive Director
Oklahoma Department of Environmental Quality

6.30.08
Date

Subscribed and sworn to before me this 30 day of June, 2008.

JENNIFER L. WRIGHT NOTARY # 06001234 EXP. 01/31/10 PUBLIC STATE OF OKLAHOMA

Jennifer L Wright
Notary Public

My Commission expires:

01/31, 2008.

==========

I hereby certify that I have the legal right to, and do hereby, create an easement and encumber the real property as described in the foregoing Notice of Remediation. I hereby voluntarily grant an easement to the DEQ and its employees and agents, for ingress and egress through, across and onto the Affected Property to assure the ongoing placement, operation and protection of the remedy, engineering controls and land use restrictions described herein above.

Steven A. Thompson, Executive Director
Oklahoma Department of Environmental Quality

6.30.08
Date

Subscribed and sworn to before me this 30 day of June, 2008.

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I-2008-004674 Book 2290 Pg: 163
07/23/2008 12:00 pm Pg 0161-0163
Fee: $ 17.00 Doc: $ 0.00
Pam Walker - Pontotoc County Clerk
State of Oklahoma

PONTOTOC COUNTY CLERK OKLAHOMA

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT THE STATE OF OKLAHOMA, ACTING THROUGH THE OKLAHOMA MILITARY DEPARTMENT, by its Adjutant General, Major General Harry M. Wyatt, III, hereinafter referred to as the "Grantor," and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other valuable consideration in hand paid, the receipt of which is hereby acknowledged, does hereby Quitclaim, Grant, Bargain, Sell and Convey unto the **OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY,** hereinafter referred to as the "Grantee," the following described Real Property, together with any and all improvements thereon and appurtenances thereunto belonging situated in Pontotoc County, Oklahoma, to-wit:

Lots numbered Six (6) through Seventeen (17) in Block Thirteen (13) of Leader Addition to the Town of Allen, Oklahoma, as shown by the amended plat thereof, and further described by metes and bounds as follows:

Beginning at the southeast corner (SE/c) of the NW/4 of the NE/4 of Section 25, Township Five (5) North, Range Eight (8) East, in Pontotoc County, Oklahoma, thence North along the East boundary of said NW/4 NE/4 24-5N-8E for a distance of 180 feet; thence at right angle West along the North boundary of South Street according to the amended plat to the Leader Addition to the Town of Allen a distance of 220 feet to the Southeast corner of Lot 17 of said amended plat of said Leader Addition for a point of beginning; thence continuing West for a distance of 100 feet to the Southwest corner, said point being the Southwest corner of Lot 14, Block 13 of said Leader Addition to the Town of Allen according to the amended plat thereof; thence at a right angle to the North for a distance of 120 feet to the Northwest corner of Lot 14, Block 13, according to the said amended plat to the Leader Addition of the Town of Allen; thence at right angle to the East for a distance of 100 feet to the Northeast corner of said Lot 17, Block 13, according to said amended plat; thence at right angle to the South for a distance of 120 feet to the Southeast corner of said Lot 17, Block 13, Leader Addition to the Town of Allen according to the amended plat thereof, to said point of beginning; and

Beginning a the Southeast corner (SE/c) of the NW/4 of the NE/4 of Section 25, Township Five (5) North, Range Eight (8) East in Pontotoc County, Oklahoma; thence North along the East boundary of said NW/4 of NE/4 of 25-5N-8E for a distance of 320 feet to the North of Alley, Block 13, according to the amended plat of the Leader Addition to the Town of Allen, Oklahoma; thence at a right angle to the West for a distance of 120.0 feet to the Southeast corner of Lot Six (6), Block 13, amended plat to Leader Addition for a POINT OF BEGINNING; thence continuing West along North line of Alley for a distance of 200 feet to the Southwest corner of Lot 13, Block 13, amended plat to the Leader Addition to the Town of Allen, Oklahoma; thence at right angle to the North for a distance of 120 feet to the Northwest corner of Lot 13, Block 13, amended plat to the Leader Addition to the Town of Allen, Oklahoma; thence at right angle to the East for a distance of 200 feet to the Northeast corner of Lot 6, Block 13, according to the amended plat of the Leader Addition; thence at right angle to the South for a distance of 120 feet to the Southeast corner of Lot 6, Block 13, according to said amended plat to the Leader Addition to the Town of Allen, Oklahoma, the said POINT OF BEGINNING.

This Transaction Is Exempt from Document Stamps, 68 O.S. § 3202(11).

]

Grantee to hold said land for the purposes of environmental characterization and remediation thereof as determined to be necessary by the Oklahoma Department of Environmental Quality, and upon the filing of a recordable Notice of Remediation in the land records of Pontotoc County, the described real property shall transfer to Town of Allen, together with any and all improvements thereon and appurtenances thereunto belonging.

TO HAVE AND TO HOLD the Real Property unto the Grantee, free, clear and discharged of and from all former grants, charges and other encumbrances of whatsoever nature except for the interest specifically granted to Town of Allen, herein and any easements of record.

EXECUTED AND DELIVERED this 14th day of March 2007.

STATE OF OKLAHOMA

By: _____
Major General Harry M. Wyatt, III,
Adjutant General of the State of Oklahoma

This Transaction Is Exempt From Document Stamps, 68 O.S. § 3202(11).

STATE OF OKLAHOMA)
) SS:
COUNTY OF OKLAHOMA)

This instrument was acknowledged before me this 14 day of March, 2007, by Major General Harry M. Wyatt, III, as Adjutant General of the State of Oklahoma, on behalf of the State of Oklahoma.

(SEAL)

_____
Notary Public
Commission No. 04000685
My Commission Expires: 1/23/08

1427943.2

OKLAHOMA STATUTORY FORM

WARRANTY DEED

STATE OF OKLAHOMA, PONTOTOC COUNTY, ss.
This instrument was filed for record the 20 day of April A. D., 1955 at 8 o'clock 30 minutes A M., and duly recorded in Book No. 528 at Page 328 Fees $
DOW THOMPSON County Clerk
By [signature] Deputy
When Recorded Return to

KNOW ALL MEN BY THESE PRESENTS, That MAMIE BONDS, a widow,

of Pontotoc County, State of Oklahoma, party of the first part, in consideration of the sum of One Dollar and other good and valuable considerations ($1.00) ~~DEEKXXX~~ in hand paid, the receipt of which is hereby acknowledged, does hereby grant, bargain, sell and convey unto the TOWN OF ALLEN, a municipal corporation,

of Pontotoc County, State of Oklahoma, party of the second part, the following described real property and premises, situated in the County of Pontotoc, State of Oklahoma, to-wit:

Lots 6, 7, 8, 9, 10, 11, 12 and 13, Block 13, Leader Addition to the Town of Allen, Pontotoc County, Oklahoma,

together with all the improvements thereon and the appurtenances thereunto belonging, and warrant the title to the same, only by, through and under the grantor herein.

TO HAVE AND TO HOLD said described premises unto the said party of the second part, its / successors ~~xxxx~~ and assigns, forever free, clear, and discharged of and from all former grants, charges, taxes, judgments, mortgages, and other liens and encumbrances of whatsoever nature.

SIGNED AND DELIVERED this the 12 day of May, 1949

Mamie Bonds

ACKNOWLEDGMENT

STATE OF OKLAHOMA, Pontotoc County, ss.

Before me, the undersigned, a Notary Public in and for said County and State, on this 12 day of May, 1949, personally appeared Mamie Bonds, a widow, ~~xxx~~ to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that she executed the same as her free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

My commission expires 9-23-1950

A. F. Trimbaugh, Notary Public

ACKNOWLEDGMENT BY CORPORATION

STATE OF OKLAHOMA, County, ss.

Before me, the undersigned, a Notary Public in and for said County and State, on this day of , 194 , personally appeared to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument at its President, and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of such corporation, for the purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

My commission expires

Notary Public

294

3530

STATE OF OKLAHOMA)
COUNTY OF PONTOTOC) SS

AFFIDAVIT OF NON FULFILLMENT OF CONTRACTS: NONDEVELOPMENT, AND NONPAYMENT OF RENTALS ON OIL AND GAS LEASES.

A. A. CALDWELL, being first duly sworn on his oath, states:

That he is the same A. A. Caldwell mentioned in a certain affidavit made by W. T. Elsea, regarding ownership of contracts for oil and gas leases covering Block 16 in Commercial Addition to the town of Allen, Pontotoc County, Oklahoma, together with other blocks in the town of Allen, Oklahoma, to-wit:

Blocks 1-2-3-4 in Caldwell Addition and Blocks 8-9-10-11-12-13-14-15-16-17 in Leader Addition all in the town of Allen, Oklahoma. Also blocks 1-12-13-14 Sunset Addition in the town of Allen, Okla. Blocks 1-2-3-4 in Cummings Addition to the town of Allen, Oklahoma; also blocks 2-6-9-14-15-16-17-18-20-22-25-29-30-31-19-21-23-24-36-38-39-32-33-34-35-37-40-41-42-43-45-48-49-53-73-51-52-46-50-67-69-70-71-73-78- and 66 in Commercial Addition to the town of Allen, Oklahoma; also blocks 1-2-3-4-5-6-7-9-11-12-13-14-16-17-18-19-20-22-23-24-25-27-28-29-30-31-33-34-35-36-37-38-39-40-41-42-43 in the original town of Allen, Oklahoma; also blocks 1-2-3-4 in College Addition to the town of Allen, Oklahoma,

which affidavit was filed for record on Oct. 3-1933, and duly recorded in ~~Block~~ book 161 at page 170 of the records in the office of the County Clerk in and for Pontotoc County, Oklahoma;

Affiant further states that he knows of his own knowledge that said contracts mentioned in said affidavit were wholly abandoned and were never fulfilled; that no production of oil or gas has ever been obtained upon any of the above described property; and that no rentals have ever been paid, or tendered to the lessors or to any bank upon the oil and gas leases mentioned, covering the above described property, in the above stated affidavit of the said W. T. Elsea.

Affiant further states that the said W. T. Elsea is now deceased, and that prior to his death he executed releases of the above described affidavit whenever requested so to do by the owners of said property, and for the past fifteen years the said W. T. Elsea has claimed no rights under said Affidavit.

WITNESS MY HAND THIS 30 DAY OF JULY, 1949.

A A Caldwell

Subscribed and sworn to before me, this 30 day of July, 1949.

My Com. Exp. 9-23-1950 A. F. Kimmerling NOTARY PUBLIC

STATE OF OKLAHOMA)
COUNTY OF PONTOTOC.) SS. ACKNOWLEDGEMENT.

Before me, the undersigned, a Notary Public, in and for Pontotoc County, State of Oklahoma, on this 30th day of July, 1949, personally appeared A. A. Caldwell to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

Witness my hand and seal the day and year last above written.

My Com. Exp. 9-20-1950 A. F. Kimmerling

STATE OF OKLAHOMA, PONTOTOC COUNTY, ss.

Filed for record August 8 1949 at 9:20 o'clock A M, and recorded in Book 40 Page 294 CLAUD BURRITT, County Clerk. By P. Jones Deputy

IN THE COUNTY COURT OF PONTOTOC COUNTY, STATE OF OKLAHOMA.

2541

In the Matter of the Estate of Jesse S. Bonds, Deceased.

No. 4431.

ORDER ALLOWING FINAL ACCOUNT OF ADMINISTRATRIX DETERMINING HEIRS, DISTRIBUTING ESTATE, AND DISCHARGING ADMINISTRATRIX.

Now on this 15th day of June, 1949, this cause came on for hearing upon the final account of Administratrix, and petition for determination of heirs and discharge, said Administratrix appearing in person and by attorneys, Kerr, Lambert, Conn & Roberts, and the court, after having heard testimony of witnesses and examined the final account and voucher submitted in support thereof, finds as follows:

That necessary expenses of funeral, last illness of said deceased, and of administration of said estate have been fully paid, and that all of the debts existing against said deceased have been fully paid and satisfied, and that all state, county, school and municipal taxes legally levied have been fully paid, and that said estate has been fully administered as shown by the final account of Mamie Bonds, Administratrix of said estate, duly ordered and allowed by this court pursuant to due notice given and served; reference being had thereto, and said estate is ready for distribution.

THE COURT FURTHER FINDS that due notice of the application for this final decree assigning the estate to the persons entitled thereto by law, has been likewise duly given and served pursuant to the law in such case made and now provided, and it further appearing to the court that said deceased died intestate on the 20th day of December, 1946, and that the residue of the estate consists of the following described real estate, to-wit:

Pontotoc County

Lot 4 in Block 5, Commercial Addition to the Town of Allen, Oklahoma;

Lot 8 in Block 5, Commercial Addition to the Town of Allen, Oklahoma;

Lots 1 to 5, inclusive, Block 4, Commercial Addition to the Town of Allen, Oklahoma;

Lots 7 to 12, inclusive, Block 4, Commercial Addition to the Town of Allen, Oklahoma;

Lot 8, Block 5, Commercial Addition to the Town of Allen, Oklahoma;

Lot 2, Block 7, Commercial Addition to the Town of Allen, Oklahoma;

Lot 4, Block 7, in the Commercial Addition to the Town of Allen, Oklahoma;

Lot 6, Block 7, Commercial Addition to the Town of Allen, Oklahoma;

Lot 1, Block 8, Commercial Addition to the Town of Allen, Oklahoma;

Lot 3, Block 25, Commercial Addition to the Town of Allen, Oklahoma;

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Lot 11, Block 26, Commercial Addition to the Town of Allen, Oklahoma;

Lot 10, Block 27, Commercial Addition to the Town of Allen, Oklahoma;

Lots 9 and 10, Block [illegible], Commercial Addition to the Town of Allen, Oklahoma;

Lots 1 to [illegible], inclusive, Block 10, Leader Addition to the Town of Allen, Oklahoma;

Lots [illegible] to [illegible], inclusive, Block 10, Leader Addition to the Town of Allen, Oklahoma;

The [illegible] 10 feet of Lot [illegible] and Lots 1 to 13, inclusive, Block 13, and Lots [illegible] to 23, inclusive, Block 13, all in the Leader Addition to the Town of Allen, Oklahoma,

An undivided interest in the mineral rights in and under the following described lands located in Pontotoc County, Oklahoma, to-wit:

The South Half of the [illegible] Quarter and the Southeast Quarter of the North Half of the Northeast Quarter of Section [illegible]; and Southwest [illegible] of the [illegible] Quarter of Section [illegible] and the Northwest Quarter of the [illegible] Quarter of Section [illegible], all in Township [illegible] North, [illegible] of Section [illegible] [illegible] Quarter of the Southeast Quarter and the Southwest Quarter of the Southeast Quarter, Township [illegible] North, Range [illegible] East; Northeast Quarter of Section 20, Township 5 North, Range [illegible] and the West Half of the Northeast Quarter and the [illegible] the Northeast Quarter of the [illegible] Quarter [illegible] Township [illegible] North, Range [illegible] East; and

[illegible]

[illegible]

[illegible]

[illegible] interest in the mineral rights in and under: [illegible] Quarter and the [illegible] Range [illegible] East. [illegible] North,

[illegible] that the following named persons are the sole and only heirs of said deceased, Jesse S. Bonds, and that they inherited said estate in the proportions set opposite their respective names:

Annie Bonds, widow, one-third interest;
Russell Bonds, son, one-third interest;
Clifford Bonds, son, one-third interest.

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Herman Bonds, son, one-ninth interest,
Jesse S. Bonds, Jr., son, one-ninth interest,
Mary E. Watson, daughter, one-ninth interest,
Joan Bonds, daughter, one-ninth interest.

And it further appearing to the court that by written assign-ment and conveyance filed herein that all of said children of said Jesse S. Bonds, deceased, have heretofore duly assigned, transferred and conveyed their distributive share in said estate to the surviving widow of said Jesse S. Bonds, Mamie Bonds; it is therefore ordered that the distributive share of said children be set over, transferred and conveyed to Mamie Bonds.

THE COURT FURTHER FINDS that the estate is not of sufficient size for inheritance tax or transfer tax, as more fully shown by order of the Oklahoma Tax Commission on file herein.

THE COURT FURTHER FINDS that the estate is not of sufficient size for Federal inheritance tax or transfer tax.

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED by the court that the following named persons are the sole and only heirs of Jesse S. Bonds, deceased, and that they inherited his said estate in the proportion set opposite their respective names:

Mamie Bonds, widow, one-third interest,
Russell Bonds, son, one-ninths interest,
Clifford Bonds, son, one-ninth interest,
Herman Bonds, son, one-ninth interest,
Jesse S. Bonds, Jr., son, one-ninth interest,
Mary E. Watson, daughter, one-ninth interest,
Joan Bonds, daughter, one-ninth interest.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED by the court that the assignment and conveyance of the children of said Jesse S. Bonds, deceased, assigning and transferring all of their in-terest in and to all real/and personal property or mixed property of what-soever kind or character, and wherever situated belonging to said estate, to Mamie Bonds, is hereby confirmed and approved, and therefore, all of the money, real and personal property of whatever kind or nature belonging to the said decedent at the time of his death, whether the same be described herein or not, be, and the same is hereby ordered transferred, vested, assigned and conveyed to the said Mamie Bonds.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the Final Account of said Administratrix be confirmed, approved and allowed in accordance with the terms and tenor thereof, and that the Administratrix is fully discharged from further duties and res-ponsibilities as such Administratrix; that the estate is hereby declared fully distributed, and the trust settled and closed; and that said Mamie Bonds and her sureties are hereby released from any liability to be hereafter incurred.

Tom D McKeown
County Judge.

Filed for Record June 16 49 9:00 A.M.
In Book 47 Page 496

STATE OF OKLAHOMA } SS
County of Pontotoc }
I, DELLA BEDFORD, Court Clerk of County and State aforesaid do hereby certify that the above and foregoing instrument is a true and correct copy of the original
Order Allowing Final Acct, etc
now on file in ...
Given under my hand and seal of office at Ada, Okla., this 16 June ... 19...
Della Bedford
Court Clerk, Pontotoc County, Oklahoma
By .... Deputy

6-15-1949
DELLA BEDFORD
COURT CLERK
PONTOTOC
D Kniffen

60

WARRANTY DEED

This indenture, made and entered into this 17 day of May, 1949, by and between the Town Council of the Town of Allen, Oklahoma, a municipal corporation, acting by and through O. H. Fanning, the duly elected, qualified and acting Mayor and Chairman of the Town Council of the Town of Allen, 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 17 day of May, 1949, the said Town Council of the Town of Allen, Oklahoma, made an Order by proper resolution, authorizing the said party of the first part to sell certain real estate belonging to the said Town of Allen, Oklahoma, to the said Town Council party, and directing said Chairman of the Town Council of said Town of Allen, Oklahoma, to execute and deliver a deed to the said second party.

Now, therefore, KNOW ALL MEN BY THESE PRESENTS: That the Town Council of the Town of Allen, Oklahoma, acting by and through O. H. Fanning, the duly elected, qualified and acting Mayor and Chairman of the Town Council of the Town of Allen, 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 the Town of Allen, Pontotoc County, Oklahoma, towit:

Lots 6, 7, 8, 9, 10, 11, 12 and 13, Block 13, Leader Addition to the Town of Allen, Pontotoc County, Oklahoma

Lots 14, 15, 16, and 17, Block 13, Leader Addition to the Town of Allen, Pontotoc County, Oklahoma

together with all improvements thereon and the appurtenances 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 12 day of May, 1949.

Town Council of The Town of
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX OF THE
XXXXXXX Allen, OKLAHOMA.

By O.N. Fanning
Mayor and Chairman of the XXXXXX Town
Council XXXXXXXXXXXXXXXXXXXXXX of the XXXXX Town
of Allen, Oklahoma.

ATTEST:

City Clerk

(Seal)

State of Oklahoma)
) SS
Pontotoc County)

Before me, the undersigned, a Notary Public, within and for the above named county and state, on this 12 day of May, 1949, personally appeared O.N. Fanning, to me known to be the duly qualified and acting Mayor of the City of , Oklahoma, and Chairman of the XXXXXXXX Town Council XXXXXXXXXXXXXXXXXX of the Town of Allen, 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 and Chairman of the Town Council XXXXXXXXXXXXXXXXXXXXXXXXXX of the Town of Allen, Oklahoma, as his free and voluntary act and deed as such Mayor and Chairman of said XXXXXXXX Council and as the free and voluntary act and deed of the XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX The Town Council of the Town of Allen, Oklahoma, for the uses and purposes therein set forth.

Witness my hand and seal the date first above written.

O.N. Fanning
Notary Public

My Commission Expires:
7-23-1952

Accepted by the undersigned, Roy N. Kenny, The Adjutant General of the State of Oklahoma, pursuant to Section 213, Title 11, Oklahoma Statutes, 1941, this 12th day of May, 1949.

Roy N. Kenny
ROY N. KENNY, The Adjutant General
State of Oklahoma

I, Roy J. Turner, Governor of the State of Oklahoma, do hereby approve the above and foregoing acceptance, this 13 day of May, 1949.

Roy J. Turner
ROY J. TURNER, Governor of the
State of Oklahoma

STATE OF OKLAHOMA, PONTOTOC COUNTY, ss.
Filed for record June 1 1949 9:20 o'clock A. M., and recorded
in Book 407 Page 60 CLAUD BOBBITT, County Clerk. By Deputy

Printed and Sold by Grigsby, Orr & Allstag, Ada, Okla.

2124

FORM L-2---DEED---QUIT CLAIM

STATE OF OKLAHOMA, PONTOTOC COUNTY, ss.
This instrument was filed for record the 23 day of March A. D. 1938 at 3 o'clock 45 minutes PM and duly recorded in Book No. 248 at Page 486 Fees $
H. D. Garner County Clerk
By [signature] Deputy
When Recorded Return to

THIS INDENTURE, Made this _____ day ~~of~~ March, 19 38 between Susanne M. Maxey and Louise Maxey Shelor, being the sole heirs of N.B. Maxey, Deceased. in _____ County, in the State of Oklahoma _____ of the first part, and Jesse S. Bonds of Allen, Okla. County, in the State of Oklahoma _____ of the second part.

WITNESSETH, That part Y of the first part, in consideration of the sum of Twenty Five and no/100 ($25.00) DOLLARS the receipt of which is hereby acknowledged, do _____ by these presents remise, release and quit claim unto the part Y of the second part his heirs and assigns, all of the following described real estate situated in the County of Pontotoc and State of Oklahoma, _____ to-wit:

Lots Nos. One (1) Two (2) Three (3) Four (4) Five (5) Six (6) Seven (7) Eight (8) Nine (9) Ten (10) Eleven (11) Twelve (12) And Thirteen (13) in Block No. Thirteen (13)

And

Lots Nos. One (1) Two (2) Three (3) Four (4) Five (5) Six (6) Seven (7) Eight (8) Nine (9) Ten (10) Eleven (11) And Twelve (12) in Block No. Sixteen (16) All in Leader Addition to the Town of Allen, according to the plat thereof.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the tenements, hereditaments, and appurtenances thereunto belonging, or in any wise appertaining, forever.

IN WITNESS WHEREOF, The said part Y of the first part has hereunto set Their hand S the day and year first above written.

Susanne M. Maxey
Louise Maxey Shelor

STATE OF ~~OKLAHOMA~~ Missouri, St Louis, ACKNOWLEDGMENT COUNTY, ss.

Before me, the undersigned, a Notary Public in and for said County and State, on this 14th day of March, 1938, personally appeared Susanne M. Maxey and to me known to be the identical person who executed the within and foregoing instrument, and acknowledged to me that she executed the same as her free and voluntary act and deed for the uses and purposes therein set forth.

Witness my hand and seal the day and year last above written.

My commission expires August 1st, 1938 Louis A. Fuentes, Notary Public.

STATE OF OKLAHOMA, Muskogee, COUNTY, ss. ACKNOWLEDGMENT BY CORPORATION

Before me, the undersigned, a Notary Public in and for said County and State, on this 22nd day of March, 1938, personally appeared Louise Maxey Shelor to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its said and acknowledged to me that she executed the same as her free and voluntary act and deed and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.

Given under my hand and seal of office the day and year last above written.

My commission expires July 19, 1938 Myrtle Burchfield, Notary Public. P. O. Muskogee, Oklahoma

1460 QUIT CLAIM DEED

467

KNOW ALL MEN BY THESE PRESENTS,

That Russell Bonds, Flora Bonds, his wife, Clifford Bonds, Dollie Bonds, his wife, Herman Bonds, Josephine Bonds, his wife, Jesse S. Bonds, Jr., Virginia Bonds, his wife, Mary E. Watson and William W. Watson, her husband and Joan Bonds, now Boggs, joined by her husband, James N. Boggs, parties of the first part, in consideration of the sum of One Dollar ($1.00) and other valuable consideration in hand paid, the receipt of which is hereby acknowledged, do hereby quitclaim, grant, bargan, sell and convey unto Mamie Bonds, party of the second part, the following described real property and premises situated in the County of Pontotoc, State of Oklahoma, to-wit:

Lot 4 in Block 5; and Lot 8 in Block 5;
Lots 1 to 5, inclusive, Block 4; and Lots 7 to 12, inclusive, Block 4; and Lot 5, Block 5; and Lot 2, Block 7; and Lot 4, Block 7; and Lot 8, Block 7; and Lot 1, Block 8; and Lot 8, Block 25; and Lot 11, Block 26; and Lot 10, Block 27; and Lots 9 and 10, Block 30; all in the Commercial Addition to the Town of Allen, Oklahoma; and

Lots 1 to 5, inclusive, Block 10; and Lots 10 to 14, inclusive, Block 10; and the West 10 Feet of Lot 2 and Lots 3 to 13, inclusive, Block 13; and Lots 18 to 23, inclusive, Block 13; all in the Leader Addition to the Town of Allen, Oklahoma; and

All of Grantors' right, title, and interest in and to the oil, gas and other mineral rights in and to the following described land situated in Pontotoc County, Oklahoma, to-wit:
South Half of Northeast quarter and Southeast quarter and North Half of the Northeast Quarter (N½ NE¼) of Section 11; and Southwest Quarter of the Southwest Quarter (SW¼ SW¼) of Section 1; and the Northwest Quarter of the Northwest Quarter (NW¼ NW¼) of Section 12; all in Township 4 North, Range 8 East; and the Southwest Quarter of the Southeast Quarter (SW¼ SE¼) of Section 25, Township 5 North, Range 8 East; and the Southwest Quarter of the Southeast Quarter of the Northeast Quarter (SW¼ SE¼ NE¼) of Section 20, Township 5 North, Range 8 East; and the West Half of the Northeast Quarter (W½ NE¼) and the West Half of the Northeast Quarter of the Northeast Quarter (W½ NE¼ NE¼) of Section 20, Township 5 North, Range 8 East, Lots 7 & 9 Block 5; Lots 1, 3, 7, 9, 11, Block 7; and Lots 2, 8, 10, Block 8; all in Commercial Addition to Allen, Okla. together with all the improvements thereon and the appurtenances thereto belonging.

TO HAVE AND TO HOLD said described premises unto the said party of the second part, her heirs and assigns, forever.

SIGNED AND DELIVERED this the 5th day of March, 1949.

Russell Bonds
Russell Bonds

Flora Bonds
Flora Bonds

Clifford Bonds
Clifford Bonds

Dollie Bonds
Dollie Bonds

Jesse Bonds
Jesse Bonds

Virginia Bonds
Virginia Bonds

Herman Bonds
Herman Bonds

Josephine Bonds
Josephine Bonds

Mary E. Watson

William W. Watson

Joan Bonds, now Boggs

James N. Boggs

STATE OF CALIFORNIA,
County of Fresno, ss:

Before me, the undersigned, a Notary Public in and for said County and State on this 30th day of March, 1949, personally appeared RUSSELL BONDS and FLORA BONDS, husband and wife, to me known to be the identical persons who executed the within and foregoing instrument, and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

W. C. Riley Jr.
Notary Public.

My Commission Expires: My Commission Expires February 28, 1952

* * * * * * * * *

STATE OF FLORIDA,
County of Alachua, ss:

Before me, the undersigned, a Notary Public in and for said County and State on this 19 day of March, 1949, personally appeared JESSE S. BONDS, Jr., and VIRGINIA BONDS, husband and wife, to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

Ralph Leon Campbell
Notary Public.

My Commission Expires: Notary Public, State of Florida at Large. My commission expires Sept. 25, 1951. Bonded by American Surety Co. of N. Y.

* * * * * * * * *

STATE OF OKLAHOMA,
County of Oklahoma, ss:

Before me, the undersigned, a Notary Public in and for said County and State on this 12 day of March, 1949, personally appeared MARY E. WATSON and WILLIAM W. WATSON, her husband to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

A. F. Kingsbury
Notary Public

My Commission Expires: 9-23-1950

STATE OF OKLAHOMA,
County of Oklahoma, ss:

Before me, the undersigned, a Notary Public in and for said County and State on this 10th day of March, 1949, personally appeared CLIFFORD BONDS and DOLLIE BONDS, his wife, known to be the identical persons who executed the within foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

Notary Public.

My Commission Expires: 11-5-51.

* * * * * * * * * * *

STATE OF CONNECTICUT,
County of Hartford, ss:

Before me, the undersigned, a Notary Public in and for said County and State on this 24 day of March, 1949, personally appeared HERMAN BONDS and JOSEPHINE BONDS, husband and wife, to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

Notary Public.

My Commission Expires: April 1, 1951.

* * * * * * * * * * *

STATE OF OKLAHOMA,
County of Cleveland, ss:

Before me, the undersigned, a Notary Public in and for said County and State, on this 5 day of March, 1949, personally appeared JOAN BONDS, NOW BOGGS and JAMES N. BOGGS, her husband, to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

WITNESS my hand and seal the day and year last above written.

Notary Public.

My Commission Expires: 9-23-1950.

STATE OF OKLAHOMA, PONTOTOC COUNTY, ss.
Filed for record [illegible] 1949 at [illegible] o'clock [illegible]
CLAUD BOBBITT, County Clerk. By [illegible] Deputy.

170

This is to certify that I, the undersigned, W. T. Elses, have written contracts from A. A. Caldwell and others for oil and gas leases covering fifty-one (51%) per cent or more of the following described blocks located in the town of Allen, Oklahoma, to-wit:

Blocks 1-2-3-4 in Caldwell Addition and Blocks 8-9-10-11-12 13-14-15-16-17 in Leader Addition all in the Town of Allen, Oklahoma. Also Blocks 1-2-13-14 Sunset Addition in the Town of Allen Okla. Blocks 1-2-3-4- in Cummings Addition to the town of Allen, Oklahoma; also

Blocks 2-8-9-14-15-16-17-18-20-22-25-29-30-31- 19-21-23-24-36-38-39 32-33-34-35-37-40-41-42-43-45-46-49-53-73-81-82- 46-50-67-69 -70- 71-73-78 - and 88 in Commercial Addition to the town of Allen, Oklahoma; also

Blocks 1-2-3-4-5-6-7-8-11-12-13-14-16-17-18-19- 20-22-23-24-25-27-28-29-30-31-33-34-35-36-37-38-39- 40-41-42-43 in the original town of Allen, Oklahoma; also

Blocks 1-2-3-4 in College Addition to the town of Allen, Oklahoma.

And by reason of such written contracts I am claiming the oil and gas rights under the blocks described above.

Witness my hand this 2nd day of October, 1933.

[signature]

Subscribed and sworn to before me, a Notary Public the day and year above written.

[signature]
Notary Public.

My commission expires September 26, 1936.

STATE OF OKLAHOMA, PONTOTOC COUNTY: ss No. 2658

This instrument filed for record this the 3rd day of October 1933 at 8 o'clock and 7 minutes A M., and recorded in Book 161 Page 170

[signature] County Clerk, by _____ Deputy

Fee $1.00

(SEAL)

My commission expires May 2 1929. C.S. WILLIAMS, Notary Public

1413: MINERAL GRANT FROM J.G. Brooks to O.L. Parker et al:

STATE OF OKLAHOMA, Pontotoc County, SS.

This instrument was filed for record on the 14 day of July A.D. 1927 at 4 o'clock 30 minutes P.M. and duly recorded in Book No. 52 on page 329:

(Seal) W.A. Peck, County Clerk.

By M.McLachlan, Deputy.

GENERAL WARRANTY DEED

THIS INDENTURE, made this 28th day of May A.D. 1927, between J.M. Case and Cora Bell Case, his wife of Pontotoc County, in the State of Oklahoma, parties of the first part, and Jesse S. Bonds of Pontotoc County, in the State of Oklahoma, party of the second part.

WITNESSETH, That said parties of the first part in consideration of the sum of One and more ($1.00) Dollars, the receipt whereof is hereby acknowledged do by these presents grant, bargain, sell and convey unto said party of the second part, his heirs and assigns, all the following described real estate situated in the County of Pontotoc State of Oklahoma, to-wit:

Lots Nos. 1,2,3,4,5,6,7,8,9,10,11,12, And 13 All in Block 13, in the Leader Addition to the town of Allen, Okla.

To have and to hold the same together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, forever.

Parties of the first part, for themselves and their heirs, executors and administrators, do hereby covenant, warrant, promise and agree to and with said party of the second part, that at the time of the delivery of these presents they are lawfully seized in their own right of an absolute and indefeasible estate of inheritance in fee simple, of and in all and singular the above granted and described premises with all the appurtenances; that the same are free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes assessments and incumbrances of what nature or kind whatsoever, except any taxes now past due and owning on said lots. and that they will warrant and forever defend the same unto said party of the second part, his heirs and assigns, against said parties of the first part, their heirs, and all and every person whomsoever lawfully claiming or to claim the same.

In witness whereof, the said parties of the first part have hereunto set their hands the day and year first above written.

J.M. CASE

CORA BELL CASE

ACKNOWLEDGMENT:

STATE OF OKLAHOMA, Pontotoc County, SS.

Before me the undersigned a Notary Public in and for said County and State, on

this ...day of May 1927, personally appeared J.M. Case and Cora Bell Case to me known to be the identical persons who executed the within and foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes therein set forth.

Witness my hand and seal the day and year last above written.

(SEAL)

I.S. WHITE, Notary Public

My commission expires Mar 1st 1931.

4417: WARRANTY DEED from J.M. Case and Cora Bell Case to Jesse S. Bonds:

STATE OF OKLAHOMA, County of Pontotoc, SS.

This instrument was filed for record on the 15 day of July A.D. 1927 at 8 o'clock A.M. and duly recorded in Book 52 on page 330:

(Seal) W.A. Peck, County Clerk

By Anne Dodd, Deputy.

X_X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X% X%X%MM%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%X%

GENERAL WARRANTY DEED.

THIS INDENTURE, Made this 1st day of July A.D. 1927 between Melissa Bills, a widow, Vera E. Cole and her husband Joseph B. Cole of Pontotoc County in the State of Oklahoma, parties of the first part, and Ott Reeves, of Pontotoc County, in the State of Oklahoma, party of the second part.

WITNESSETH, That said parties of the first part in consideration of the sum of Five Thousand Three Hundred and ten & no/100 ($5,310.00) Dollars, the receipt whereof is hereby acknowledged do by these presents grant, bargain, sell and convey unto said party of the second part, his heirs and assigns, all the following described real estate situated in the County of Pontotoc State of Oklahoma, to-wit:

Lot 9, Block 6 Chickasaw Addition, to the City of Ada, Oklahoma.

To have and to hold the same together with all and singular the tenements, hereditaments and appurtenances thereunto belonging, or in anywise appertaining, forever.

Parties of the first part, for themselves, their heirs, executors and administrators do hereby covenant, warrant, promise and agree to and with said party of the second part, that at the time of the delivery of these presents they are lawfully seized in their own right of an absolute and indefeasible estate of inheritance in fee simple, of and in all and singular the above granted and described premises with all the appurtenances; that the same are free, clear, discharged and unincumbered of and from all former and other grants, titles, charges, estates, judgments, taxes, assessments and incumbrances of what nature or kind whatsoever except a mortgage to the Home Building & Loan Association, in the sum of $3,500.00 which grantee assumes and agrees to pay according to the terms of the note and mortgage and that they will warrant and forever defend the same unto said party of the second part, his heirs and assigns, against, said parties of the first part, their heirs and all and every person whomsoever lawfully claiming or to claim the same.

In witness whereof, the said parties of the first part have hereunto set their hands the day and year first above written.

MELISSA BILLS

VERA E. COLE

JOSEPH B. COLE

ACKNOWLEDGMENT:

of the State of Oklahoma, and acknowledged to me that he executed the same as his free and voluntary act and deed as such County Treasurer, and as the free and voluntary act and deed of the State of Oklahoma, for the uses and purposes therein set forth.

Witness my hand and seal, the date and year last above mentioned.

Rit Erwin, County Clerk, Pontotoc County, Oklahoma. (SEAL)

8301 DEED FROM STATE OF OKLAHOMA BY D. W. SWAFFAR TO Z. E. CHARLTON.

STATE OF OKLAHOMA,

COUNTY OF PONTOTOC, SS: Filed in the office of County Clerk for record this 7 day of Dec. A. D., 1921, at 11 o'clock A. M., and duly recorded in Book 38 on page 249.

Rit Erwin, County Clerk. (SEAL) By Inez L. Staggs, Deputy.

RE---------SALE----------TAX----------DEED
(INDIVIDUAL)

KNOW ALL MEN BY THESE PRESENTS, That

WHEREAS, I appears from the records of the office of County Treasurer of Pontotoc County, State of Oklahoma, tha the tract parcel or lot of land lastly in this indenture, described was offered for sale at public auction on the 3rd day of November, 1919, at the office of the County Treasurer in the court house in and for said County for the taxes levied thereon for the year 1918, and it appearing that the said lands were legally liable for taxation, and had been duly assessed and properly charged on the tax book or duplicate for said year and had been legally advertised for sale for said taxes, and there being no other bidder therefor offering the amount due thereon, the same was by said County Treasurer on said date bid off in the name of said County of Pontotoc State of Oklahoma, for the sum of $40.36, the same being the amount of taxes, penalties, interest and costs due and unpaid on the following described tract or lot of land returning delinquent for non-payment of taxes, costs and charges for the said year, to-wit:

Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 in Block Thirteen (13); and Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, in Block Sixteen (16); all in Leader Addition to the Town of Allen, Oklahoma, according to the Official Plat and survey thereof.

in the County of Pontotoc, State of Oklahoma; and,

WHEREAS, said tract, parcel or lot of land so sold as aforesaid to said Pontotoc County, having remained unredeemed for a period of two years from said date of sale, and no persons having offered to purchase the same for the taxes, penalties and costs due thereon, the same was duly and legally advertised for sale at re-sale for said taxes, cost, penalty and interest accrued on same, and so remaining due, delinquent, and unpaid, and was on the 28th day of November, 1921, by D. W. Swaffar, the undersigned, County Treasurer of said County, pursuant to said advertisement, offered for sale at public, auction for cash at the office of the County Treasurer in the Court House in and for said County of Pontotoc, where by law the taxes are made payable, and was then and there sold to J. M. Case, in the manner required by law, for $25.00 he being the highest and best bidder therefor, and the said sum being the highest amount bid therefor, and

WHEREAS, the owner of said property so sold at said re-sale has not paid to the said County Treasurer the said delinquent taxes, penalties and costs accrued on said property, and it appearing that the said taxes were levied according to law

and that said lands were legally liable for taxation and had been duly listed and assessed and properly charged on the tax book or duplicate for the year of 1918, and that said land had been legally advertised for sale for said taxes, and that said sales hereinabove set forth and referred to, were in all things regular and proper as provided by law, and that said property now remains unredeemed.

NOW, THEREFORE, This indenture made this 26th day of November, 1921, between the State of Oklahoma by D. W. Swaffar, the Treasurer of said County, of the first part, and the said J. M. Case, of the second part.

WITNESSETH, That the said party of the first part, for and in consideration of the premises and the sum of $25.00, in hand paid, hath granted, bargained and sold and by these presents doth grant, bargain, sell and convey unto the said party of the second part, his heirs and assigns, forever, the tract or parcel of land so sold at re-sale as aforesaid, and described as follows, to-wit:

Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 in Block Thirteen (13); and Lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 in Block Sixteen (16), all in the Leader Addition to the Town of Allen, Oklahoma according to the Official Plat and survey thereof,

in the County of Pontotoc, State of Oklahoma.

TO HAVE AND TO HOLD said mentioned tract or parcel of land with the appurtenances thereunto belonging, to said party of the second part, his heirs, and assigns forever, in as full and ample manner as the said Treasurer of said County is empowered by law to sell the same, and all taxes, penalties, interest and cost accrued thereon for the year, 1918, that being the year's tax for which said property was sold to said County, together with all taxes, penalties, interest and cost previously assessed or existing against said real estate, including paving taxes and outstanding tax sale certificates, are hereby cancelled and set aside.

IN TESTIMONY WHEREOF, the said D. W. Swaffar, Treasurer of said County of Pontotoc has hereunto set his hand and seal on the day and year aforesaid.

STATE OF OKLAHOMA

By D. W. Swaffar, County Treasurer of Pontotoc County. (SEAL)

STATE OF OKLAHOMA,
COUNTY OF PONTOTOC, SS:

ACKNOWLEDGMENT

Before me, Rit Erwin, the County Clerk ~~in and for~~ [illegible] County Clerk in and for said County and State, on this the 6th day of December, 1921, personally appeared D. W. Swaffar, to me known to be the duly qualified and acting County Treasurer of Pontotoc County, State of Oklahoma, and the identical person who executed the within and foregoing instrument for and on behalf of the State of Oklahoma, and acknowledged to me that he executed the same as his free and voluntary act and deed as such county Treasurer and as the free and voluntary act and deed of the State of Oklahoma, for the uses and purposes therein set forth.

Witness my hand and seal, the date and year last above mentioned.

Rit Erwin, County Clerk, Pontotoc County, Oklahoma. (SEAL)

8370 DEED FROM STATE OF OKLAHOMA BY D. W. SWAFFAR TO J. M. CASE

STATE OF OKLAHOMA, COUNTY OF PONTOTOC, SS: Filed in the office of County Clerk for record this 9th day of December, [illegible], at 1 o'clock P. M., and duly recorded in book [illegible] page [illegible].

Rit Erwin, County Clerk, (SEAL) By Nell Lambert, Deputy.

ASBESTOS

DEQ SAMPLE RESULTS

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

State of Oklahoma
Dept. of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73102

Re: QuanTEM ID 142084

QuanTEM appreciates the opportunity to provide analytical testing services to you. Attached are your reports and other supporting documentation for the above referenced project.

Thank you for making QuanTEM your lab of choice. If you have any question concerning this or other reports please feel free to contact us at 800-822-1650.

We continually work to improve our service. Help us out by providing feed back on your experience at www.QuanTEM.com. Click on Service Survey and fill out the form. We look forward to hearing from you.

Respectfully,
QuanTEM Laboratories, LLC.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 142084
Account Number: A795
Date Received: 09/20/2006
Received By: Shana Shanto
Date Analyzed: 09/25/2006
Analyzed By: Joe Melton
Methodology: EPA 600

Client: State of Oklahoma
Dept. of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73102

Project: Allen Armory
Project Location: Allen, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)
001	SR-1	Homogeneous	Brown Pipe Wrap	Asbestos Not Present	Cellulose 70 Synthetic 15
002	SR-2	Homogeneous	Gray Window Glazing	Asbestos Not Present	Cellulose <1
003	UR-3	Homogeneous	Gray Floor Tile	Asbestos Not Present	NA
004	UR-4	Homogeneous	Gray Insulation	Asbestos Present Chrysotile 20 Crocidolite 2	NA
005	OR-6	Layered	Gray Floor Tile	Asbestos Present Chrysotile 15	NA
005a			Black Mastic	Asbestos Not Present	Cellulose 3
006	OR-7	Homogeneous	Gray Ceiling Tile	Asbestos Not Present	Cellulose 30 Glass Fiber 30

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40CFR Ch. 1 (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 142084
Account Number: A795
Date Received: 09/20/2006
Received By: Shana Shanto
Date Analyzed: 09/25/2006
Analyzed By: Joe Melton
Methodology: EPA 600

Client: State of Oklahoma
Dept. of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73102

Project: Allen Armory
Project Location: Allen, OK
Project Number: N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	
007	OMP-9	Homogeneous	White Sheetrock	Asbestos Not Present	Cellulose	55

Joe Melton, Analyst

9/25/2006
Date of Report

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959). This report relates only to the specific items tested. NVLAP accreditation applies only to AHERA analysis [40CFR Ch. 1 (1-1-87 ed.) Part 763, Appendix A to Subparts E and F]. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

QUANTEM LABORATORIES

Asbestos Chain-of-Custody

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502
(800) 822-1650 (405) 755-7272 Fax: (405) 755-2058
www.quantem.com

Page____of____

This Box for Lab Use Only
Lab No. 142084
Accept Reject

Company Name: Oklahoma Dept. of Envir. Quality Acct.#: ____ Project Name: Allen Armory

Project Location: Allen, OK Project Number: ____

Sample Number	To Be Analyzed	Color / Description	Volume / Area (if applicable)	Comments
SR-1		pipe wrap		
SR-2		window glazing cpd		
UR-3		12x12 floor tile, mastic		
UR-4		Large heating pipe		
OR-6		9x9 floor tile, mastic		
OR-7		Ceiling tile		
OMP-9		Wall board		

LEGAL DOCUMENT
Please Print Legibly

PLM	
X	Bulk Analysis (EPA 600/R-93/116)
	400 Point Count
	1000 Point Count
	Gravimetric Preparation Fee
	Other

PCM	
	NIOSH 7400
	Other

TEM	
	Air - AHERA
	Air - NIOSH 7402
	Bulk - Qualitative [Yes / No] - EPA 600/R-93/116
	Bulk - Quantitative [weight %] - Chatfield
	Dust - Qualitative [Yes / No]
	Dust - Quantitative [fibers/sq.cm] - ASTM D5755
	Drinking Water - EPA 100.0
	Waste Water - EPA 600/4-83-043
	Other

TURNAROUND TIME	
	Rush
	Same Day
	24 Hour
X	3-Day
	5-Day

CONTACT INFORMATION

Name: Heather Mallory

Phone: 702-5113

Report Results VIA (CHOOSE ONE):

- FAX:
- QuanTEM WebSite
- E-Mail: Heather.Mallory@deq.state.OK.us

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By:
Heather Mallory	9-20-06 9:45 A.M.		Shana Shunto	9/20/06 9:40 AM		
Relinquished By	Date/Time	VIA	Received By	Date/Time		

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Mark Package **'HOLD FOR SATURDAY PICKUP'**

Revision: May 2006

ASBESTOS INSPECTION REPORT

ASBESTOS INSPECTION REPORT

ALLEN ARMORY

903 N. Paul Street

Allen, Oklahoma 74825

October 26th, 2006

Services Provided For:
Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson
Oklahoma City, OK 73102

Asbestos Inspection Services Provided By:
Marshall Environmental Management, Inc.
1145 SW 74th Street, Building E, Suite 300
Oklahoma City, Ok 73139
(405) 616-0401

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APPENDIX

ASBESTOS SAMPLING TEST RESULTS

CHAIN OF CUSTODY FORMS

SUMMARY OF ESTIMATED QUANTITIES OF ACM

ARMORY FLOOR PLAN

I. CERTIFICATION

This is to certify that an Asbestos Inspection was performed at the Allen Armory located at 903 North Paul Street, in Allen Oklahoma for the Land Protection Division of the Oklahoma Department of Environmental Quality on October 26, 2006. The inspection was performed in an attempt to identify building materials considered suspect for asbestos content. This Inspection for friable and non-friable building materials was performed by an Oklahoma State Department of Labor Licensed AHERA Management Planner, Dr. Charles L. Marshall, Ph.D., C.I.H. The contents, conclusions, and recommendations made in this report are believed to accurately depict the site conditions as noted on the date the inspection work was performed.

Charles L. Marshall, Ph.D., C.I.H., C.S.P — Date: 11/14/06

Certified Industrial Hygienist - Comprehensive Practice Certification #4489
Certified Safety Professional - Comprehensive Practice Certification #9941
Registered Professional Environmental Specialist - State Department of Health # 710
Certified Hazardous Materials Manager, Master Level Certification #1909
Certified Healthcare Safety Professional, Master Level Certification #521
EPA AHERA Certifications - #400517 Inspector
#500396 Management Planner
#2415 Project Designer
Oklahoma Department of Labor License - #OKMP-0028 Project Designer
#OKMP-0246 Management Planner
#OK-150343 Inspector
AIHA/NIOSH PAT Lab ID #201334

Laboratory Analysis Performed by:
Marshall Environmental Management, Inc. (AIHA PAT ID# 102334)
1145 SW 74th Street, E-300
Oklahoma City, OK. 73139

II. LIMITATIONS OF SURVEY

This Inspection was conducted within the limitations of budgetary constraints, cost, time, and scope and reflects a limited investigation and evaluation. Physical limitations of facility construction may have, in some cases, prevented the complete inspection of hidden or inaccessible building materials and substrates. Inaccessible Asbestos Containing Building Materials (ACM) were not inspected. Locations with high potential for disturbance, or locations presenting a hazard to the inspectors, or the Armory staff or visitors were also not inspected at this time. Additional inspections should be conducted whenever the Owner anticipates conducting demolition or renovation work. Plans for the abatement of friable asbestos should only be developed by an Oklahoma State Department of Labor (ODOL) Licensed Asbestos Project Designer. Additional sampling may be required to support the planning for asbestos abatement work.

Our Investigation was performed using the degree of care and skill ordinarily exercised under similar circumstances by professional consultants practicing in this or similar localities. The findings of this Report are valid as of the date of the investigation. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation, from the broadening of knowledge, or from other reasons. Professional services have been performed, results obtained and reported in accordance with generally accepted principles and practices. No other representations either expressed or implied are made. Thus, Marshall Environmental Management, Inc. is not responsible for independent conclusions, opinions, or recommendations made by others based on field inspections and other data presented in this report.

III. EXECUTIVE SUMMARY

The Oklahoma Department of Environmental Quality (DEQ) Land Protection Division (LPD) requested that the Oklahoma Department of Central Services (DCS) provide a Licensed Asbestos Inspection Firm to evaluate the locations and conditions of Asbestos Containing Materials (ACM) in the Allen Armory located at 903 North Paul Street located in Allen Oklahoma.

Marshall Environmental Management, Inc. (MEM) was contracted by DCS to conduct an Asbestos Inspection for the ODEQ at the Allen Armory. The Asbestos Inspection was conducted on October 26, 2006. A total of twenty-three (23) asbestos samples were analyzed in accordance with the EPA authorized Method 600 49 CFR Part 61 Subpart M, Asbestos NESHAPS Rules.

The Asbestos Inspection identified the presence of friable asbestos in all of the plumbing pipe insulation for hot and cold water supply. This type of insulated plumbing is referred to as Thermal System Insulation or (TSI). In this Armory, both the straight linear runs of pipe and all elbows and connections consist of ACM. Non-friable asbestos was also found in miscellaneous materials consisting of the older 9-inch by 9-inch floor tiles which have the black asbestos containing asphalt mastic associated with the floor tiles. Another miscellaneous form of non-friable asbestos was identified in the Inspection that consisted of the cement asbestos flue pipes (Transite) which are used to exhaust combustion products from space heaters and hot water tanks throughout the Armory. Many of these, such as those present in the Drill Floor, are abandoned. It should also be noted that the roof over the Drill Floor in the Armory Building is also composed of Transite.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while on-site, conducting the friable asbestos removal, the Licensed Asbestos Contractor should remove all asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Storage Room.

IV. REGULATORY REVIEW

The Allen Armory Building was constructed prior to 1950. The Armory Building was constructed in the era when asbestos was used in construction and installed in certain building components. In 1994, the Occupational Safety and Health Administration (OSHA) required employers to identify asbestos containing building materials (ACM) in pre-1980 construction as part of its Standard for Occupational Exposure to Asbestos in Construction (29 CFR 1926.1101). This OSHA standard covers maintenance, repair and removal functions involving ACM or Presumed ACM (PACM). Without asbestos identification surveys, owners and/or operators must treat suspected ACM as asbestos. In such cases, this is referred to as presumed ACM or PACM. One of the purposes of the Asbestos Survey was to identify the types of ACM present in the various building components.

The Oklahoma Department of Labor (ODOL) regulates the Hazard Communication requirements for public employees as part of the ODOL Public Employees Occupational Safety and Health (PEOSH) Program. The State of Oklahoma Hazard Communication Standard (HAZCOM), revised as of August 2006, is provided for in OAC 380 Chapter 45. http://www.state.ok.us/~okdol/peosh/PEOSHTitle%20380-45%20(8-06).pdf

Specific provisions of the Standard (OAC: 45-15-1) addresses an Asbestos Notice and Labeling requirement. The Labeling requirements specify that various equipment, such as pipe insulation and equipment with asbestos insulation (e.g. HVAC equipment), as well as room locations where asbestos is present, such as mechanical rooms, be provided with an Asbestos Warning Label. These labels are to be readily visible and include the following warning:

DANGER

CONTAINS ASBESTOS FIBERS

AVOID BREATHING DUST

CANCER AND LUNG DISEASE HAZARD

Section 380:45-15-2 requires a Notice to Employees when ACM is used in acoustical materials on ceilings and walls. This type of ACM is referred to as Surfacing Material.

The U.S. Environmental Protection Agency (EPA) requires inspections in schools grades K through 12, as part of the Asbestos Hazard and Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. These AHERA requirements would only be applicable to the Armory in the case that the future use of the Armory Facility would include any use by a Local Educational Authority (LEA), such as a school grades K through 12. The AHERA inspection protocol requires a thorough sampling of all forms of asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Thermal System Insulation (TSI) – found on plumbing lines, HVAC equipment, boilers and steam lines

Surfacing Materials (SM) – blown on, textured or troweled onto building components (e.g. ceilings and beams)

Miscellaneous Materials (Misc.) – floor tile, mastics, ceiling tile, wallboard, cement asbestos boards, etc.

The AHERA sampling protocol addresses the systematic sampling of each of these forms of ACM and the identification of both friable ACM (i.e. that which can be rendered to a powder by hand pressure) and non-friable ACM, such as floor tiles and mastic. This Inspection also evaluated the condition of the ACM identified as good, damaged, or significantly damaged. No significantly damaged ACM was identified in the Inspection. The potential for disturbance of the ACM identified was indicated on the field inspection forms in accordance with the AHERA inspection protocol in order to assist with future Asbestos Management Planning efforts.

In addition to AHERA, the EPA regulates asbestos removal and land disposal requirements. These efforts are now administered by the Oklahoma Department of Environmental Quality (DEQ). Air quality regulations require the filing of advance notices of any demolition or renovation activities. These notices are referred to as a National Emission Standard for Hazard Air Pollutants (NESHAPS) Notice. Both historical and future asbestos abatement response actions track asbestos removal from the Armory to the DEQ approved landfill on a project by project basis as part of this NESHAP notification process.

The ODOL Asbestos Division regulates the abatement of asbestos in Oklahoma. Under the ODOL asbestos rule, OAC 380:50, only Licensed Contractors can perform asbestos abatement, develop management plans and project designs. All abatement supervisors, abatement workers, and asbestos inspectors must also be licensed by the Oklahoma State Department of Labor. It should be noted that the ODOL Asbestos Rules are currently undergoing a Rule Change process regarding the current ODOL Asbestos Rules.

One of the goals of the Asbestos Inspection was to identify the presence, types, and quantity of ACM within the Armory so that plans can be made to abate the asbestos, and therefore eliminate the need for any long term asbestos management requirements, such as those required by ODOL or the EPA AHERA regulations.

V. HISTORICAL OVERVIEW OF ASBESTSOS ACTIVITIES

This Asbestos Inspection did not identify evidence of prior asbestos inspection work or previous abatement of friable ACM. No historical inspection records were available. As a result, this Asbestos Inspection took the approach of a thorough initial sampling of the Armory, as opposed to a re-inspection and confirmation sampling approach.

VI. RESULTS OF THE ASBESTOS INSPECTION

The DEQ LPD requested that the DCS provide a Licensed Asbestos Inspection Firm to perform an initial Asbestos Inspection of the Armory. Marshall Environmental Management, Inc. began a systematic inspection of the Armory on November 16, 2006 to locate and assess the condition of the suspected Asbestos Containing Materials in the facility. Each room was visually inspected by a Licensed AHERA Asbestos Inspector. All accessible locations throughout the Armory were visually inspected for suspected ACM.

Sampling consisted of taking bulk asbestos samples from each category of suspected ACM consisting of the following typical examples:

Surfacing Materials (SM) – blown on or troweled on ACM, typically observed on ceilings, structural steel, and concrete ceils or metal pan decks.

Thermal System Insulation (TSI) - typically located on plumbing, HVAC equipment, boilers, steam lines and heated thermal processes.

Miscellaneous Materials (Misc.) - typically consists of floor tiles, mastics, ceiling tiles, sheet vinyl flooring and wallboard bedding tapes and joint compounds, and other suspect ACM not typically included in Surfacing Materials or TSI designations.

A total of twenty-three (23) samples were collected and nine (9) were identified by laboratory testing to be "Positive" for asbestos content, which is defined by EPA regulations to consist of any material with more than 1% asbestos as determined by the EPA approved Test Method 0600 or Polarized Light Microscopy (PLM).

The following Table is a summary of the samples collected by location and type of building component. Locations where ACM was identified can be identified by referring to the facility floor plan diagram provided in the Appendix of this Inspection Report. A summary of the estimated quantities of ACM located during the Asbestos Inspection is provided in the Appendix.

Location	Sample ID	Type of ACM	Asbestos Content Type (%)	Condition - Item
Classroom	A-3	TSI	Chrysotile 8%	Good – Pipe lagging above Ceiling
Storage Room	A-8A	Misc. Floor Tile	Chrysotile 5%	Good – Gray 9-in x 9in Floor Tile
Storage Room	A-8B	Misc. Floor Tile	Chrysotile 5%	Good – Black Mastic from back of E-8A
Storage Room (Kitchen)	A-9	Misc. Sheet Vinyl	Chrysotile 25%	Good – Vinyl Floor Covering
Storage Room by Vault	A-12	TSI	Chrysotile70%	Good – Elbow on Pipe
Storage Room by Vault	A-13	TSI	Chrysotile 5%	Good – TSI Straight Run of Air-Cell
Mechanical Room	A-14	TSI	Chrysotile 5%	Good – Tee Fitting over Hot Water Tank
Tool Room	A-15	TSI	Chrysotile 65%	Damaged – TSI Insulation
Motor Pool	A-21	Misc.	Chrysotile 60%	Good – Transite Flue Vent

Table 1 - Summary of Sampling Data for Samples that were Positive for Asbestos Content

Copies of the individual asbestos sample test results provided by the accredited testing lab, along with the chain of custody forms and several digital photos are provided for review in the Appendix of this Inspection Report.

VII. ASBESTOS INSPECTION – CONCLUSIONS AND FINDINGS

The results for this initial Asbestos Inspection did identify that ACM, both friable and non-friable forms, are present in the Allen Oklahoma Armory.

The following are some of the conclusions and findings related to the results of this initial Asbestos Inspection Report.

1. **Surfacing Materials** – No surfacing materials in the form of blown on fireproofing or acoustical insulation were observed for sampling at any of the accessible locations selected for sampling as a part of this initial Asbestos Inspection.

   CONDITION OF SURFACING MATERIALS – No Surfacing Materials were found.

2. **Thermal System Insulation** – The predominant category of ACM identified in the Asbestos Inspection of the Allen Armory is found on Thermal System components consisting of water lines in the Mechanical Room and above the ceilings in the offices, classrooms of the Armory.

   Plumbing – TSI, consisting of insulation on all piping, both linear runs of plumbing and all hard packed mud on elbows, valves and fittings contained 5-70% Chrysotile asbestos. The straight runs of Pipe are referred to as "Air-Cell" (a cellulose containing insulation), and the places where the insulation is joined by tape or at elbow and fittings are insulated with mudded plaster or ACM paste.

HVAC – No Friable ACM was identified on HVAC equipment or components, but some exhaust flues and/or abandoned exhaust flue vents were made of Transite.

CONDITION OF TSI – Good.

3. **Miscellaneous Materials** – The predominant type of miscellaneous ACM located within the Allen Armory is the 9-inch by 9-inch non-friable asbestos containing floor tiles and the associated non-friable asbestos containing black asphalt mastics; each contains around 5% Chrysotile asbestos.

The other miscellaneous forms of asbestos consisted of the sheet of vinyl floor covering found in the Storage Room Area that may have once been used as a Kitchen. This material is regulated by the ODOL with specific abatement procedures outlined in OAC 380:50 23-1. In addition, non-friable Transite exhaust flues for space heaters and hot water tanks were identified in the Armory. Some of the exhaust pipes, such as those found in the Drill Floor Area, are abandoned.

CONDITION OF MISCELLANEOUS ACM –

Floor Tiles and Black Asphalt Mastic - Good

Kitchen Sheet Vinyl Floor Covering – Damaged

Transite Exhaust Flue Vents – Good

It should be noted that this Armory did not have an Indoor Firing Range.

VIII. RECOMMENDATIONS

This Asbestos Inspection Report should be considered as the initial step in a process to develop plans for asbestos abatement or an Armory Asbestos Management Plan.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while the Licensed Asbestos Contractor is on site conducting the friable asbestos removal, they shall also remove all the non-friable asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Storage Room.

1. A Project Design needs to be developed to allow for the removal of the TSI consisting of the insulation on the full run of the pipes ("Air-Cell") and all hard mudpack on the plumbing components located in the Armory.

2. The Project Design should include the removal of the sheet vinyl floor covering located in the Kitchen in accordance with ODOL rules.

3. The Scope of Work for the Asbestos Response Action should include the requirement for the removal of all of the non-friable asbestos containing Floor Tiles and the asbestos containing Black Asphalt Mastic. The removal of non-friable Transite Exhaust Flues can also be accomplished so long as funds are provided for the corresponding repairs to the roof that would be needed if these items were removed.

APPENDIX

ASBESTOS SAMPLING TEST RESULTS

CHAIN OF CUSTODY FORMS

SUMMARY OF ESTIMATED QUANTITIES OF ACM

ARMORY FLOOR PLAN

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ - Land Protection Division 707 N. Robinson Oklahoma City, OK	**Client Contact:**	Angela Brunsman
		Project Reference:	Allen Armory

Sample ID	Sample Description		Results
A-1	Location:	Class Room #1	Asbestos Not Detected
	Color:	White	20% Cellulose
	Type:	Misc	80% Calcareous Material
	Note	Wallboard with Mold	
			Total Asbestos: None Detected
A-2A	Location:	Mechanical Closet in Class Room #1	Asbestos Not Detected
	Color:	White	60% Vinyl Aggregate
	Type:	Misc.	35% Calcareous Material
	Note	Floor Tile	5% Cellulose
			Total Asbestos: None Detected
A-2A	Location:	Mechanical Closet in Class Room #1	Asbestos Not Detected
	Color:	White	100% Rubber Adhesive
	Type:	Misc.	
	Note	Mastic	
			Total Asbestos: None Detected
A-3	Location:	Classroom #1 Above Ceiling	**Asbestos Detected**
	Color:	White	**8% Chrysotile**
	Type:	TSI	92% Cellulose
	Note	Good	
			Total Asbestos: 8%

Charles L. Marshall Ph.D., CIH

DATE: 10/26/06

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ - Land Protection Division 707 N. Robinson Oklahoma City, OK	**Client Contact:** **Project Reference:**	Angela Brunsman Allen Armory

Sample ID	Sample Description		Results
A-4	Location: Color: Type: Note	Hallway by Class Room Entrance White TSI Wallboard above the Ceiling	Asbestos Not Detected 20% Cellulose 80% Calcareous Material Total Asbestos: None Detected
A-5	Location: Color: Type: Note	Class Room #2 White Misc. Ceiling Tile	Asbestos Not Detected 100'% Plastic Foam Total Asbestos: None Detected
A-6	Location: Color: Type: Note	Class Room #2 Yellow TSI Batting Insulation	Asbestos Not Detected 100% Fibrous Glass Total Asbestos: None Detected
A-7	Location: Color: Type: Note	Storage Room White Misc. Inside Cinder Block	Asbestos Not Detected 100% Cellulose Material Total Asbestos: None Detected

Charles L. Marshall Ph.D., CIH **DATE:** 11/7/06

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ - Land Protection Division 707 N. Robinson Oklahoma City, OK	**Client Contact:**	Angela Brunsman
		Project Reference:	Allen Armory

Sample ID	Sample Description	Results
A-8A	Location: Storage Room Color: Gray Type: Misc. Note Floor Tile	**Asbestos Detected** **5% Chrysotile** 60% Calcareous Material 35% Vinyl Aggregate **Total Asbestos: 5%**
A-8B	Location: Storage Room Color: Gray Type: Misc. Note Mastic	**Asbestos Detected** **5% Chrysotile** 95% Asphalt Mastic **Total Asbestos: 5%**
A-9	Location: Storage Room Color: Brown Marble Type: Misc. Note Vinyl Floor Covering	**Asbestos Detected** **25% Chrysotile** 75% Vinyl Aggregate **Total Asbestos: 25%**
A-10	Location: Storage Room Area Color: White Type: Misc. Note Ceiling Tile	Asbestos Not Detected 40% Cellulose 40% Perlite 20% Fibrous Glass Total Asbestos: None Detected

Charles L. Marshall Ph.D., CIH **DATE:** 11/7/06

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ - Land Protection Division 707 N. Robinson Oklahoma City, OK	**Client Contact:**	Angela Brunsman
		Project Reference:	Allen Armory

Sample ID	Sample Description		Results
A-11	Location: Color: Type: Note	Hallway White Misc. Floor Tile - no visible mastic	Asbestos Not Detected 40% Calcareous Materials 60% Vinyl Aggregate Total Asbestos: None Detected
A-12	Location: Color: Type: Note	Storage Room by Vault White TSI Elbow	**Asbestos Detected** **70% Chrysotile** 30% Cellulose **Total Asbestos: 70%**
A-13	Location: Color: Type: Note	Storage Room by Vault White TSI Linear Run	**Asbestos Detected** **5% Chrysotile** 95% Cellulose **Total Asbestos: 5%**
A-14	Location: Color: Type: Note	Mechanical Room White TSI Painted Fitting	**Asbestos Detected** **5% Chrysotile** 95% Cellulose **Total Asbestos: 5%**

Charles L. Marshall Ph.D., CIH **DATE:**

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ - Land Protection Division 707 N. Robinson Oklahoma City, OK	**Client Contact:**	Angela Brunsman
		Project Reference:	Allen Armory

Sample ID	Sample Description		Results
A-15	Location:	Tool Room	**Asbestos Detected**
	Color:	White	**65% Chrysotile**
	Type:	TSI	35% Cellulose
	Note	Damaged Insulation	
			Total Asbestos: 65%
A-16	Location:	Motor Pool	Asbestos Not Detected
	Color:	White	10% Cellulose
	Type:	Misc	85% Calcareous Material
	Note	Wallboard	5% Cellulose
			Total Asbestos: None Detected
A-17	Location:	Hallway	Asbestos Not Detected
	Color:	White	10% Cellulose
	Type:	Misc	85% Calcareous Material
	Note	Bedding Tape & Plaster	5% Cellulose
			Total Asbestos: None Detected
A-18	Location:	Motor Pool Area	Asbestos Not Detected
	Color:	White	100% Calcareous Material
	Type:	Misc.	
	Note	Interior Window Caulking Compound	
			Total Asbestos: None Detected

Charles L. Marshall Ph.D., CIH **DATE:** 11/2/06

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, Oklahoma 73139
Phone: (405) 616-0401 Fax: (405) 972-0525

Date:	10/26/2006	**Lab Accreditation:**	AIHA PAT ID #102334
Client:	ODEQ	**Client Contact:**	
		Project Reference:	Allen Armory

Sample ID	Sample Description		Results
A19	Location:	Motor Pool	Asbestos Not Detected
	Color:	White	5% Cellulose
	Type:	Misc	95% Calcareous Material
	Note	Bedding Tape Plaster	
			Total Asbestos: None Detected
A-20	Location:	Exterior of Bldg.	Asbestos Not Detected
	Color:	White	50% Cellulose
	Type:	Misc	95% Calcareous Material
	Note	Exterior Window Panel Caulking	
			Total Asbestos: None Detected
A-21	Location:	Motor Pool	**Asbestos Not Detected**
	Color:	Gray	**60% Chrysotile**
	Type:	Misc	40% Cementous Material
	Note	Flue Vent	
			Total Asbestos: 60%

Charles L. Marshall Ph.D., CIH — DATE: 10/26/06

Test Method: 40 CFR Chapter I, Part 763, Subpart F, Appendix A Interim Method for Determination of Asbestos in Bulk Insulation Samples and/or Current EPA Method for the Analysis of Asbestos in Building Materials by Polarized Light Microscopy.

Chain of Custody

Marshall Environmental Management, Inc.	**TAT**	Standard X	**JOB ID:** #2184
1145 SW 74th Street Suite E-300		Rush	**Project Name:** **ALLEN ARMORY INSPECTION**
Oklahoma City, OK 73139	**Phone:**	(405) 616-0401	DCS Project #06164C-12
Email marshenv@swbell.net	**Fax:**	(405) 972-0525	

Location Address:		**Invoice To:**	
Name:	Allen Armory	Company: **DEQ - Land Protection Division**	Contact: Angela Brunsman
Company:	N/A	Mailing Address:	707 N. Robinson, Oklahoma City, OK 73102
Mailing Address:	903 North Paul Street, Allen OK	Phone No: 405-702-5141	__ Phone Results
Contact Name:	Angela Brunsman	Fax No:	__ Fax Results
PO Number:	N/A Department: DEQ LPD	Email:	_X_ Email Results

Date	Sample Number	Location/Description	Sample Type	Volume Area	Analysis Requested
10/26/2006	A-1	Classroom #1 Wallboard with Mold	Bulk	N/A	Asbestos
10/26/2006	A-2 A&B	Mechanical Closet in Classroom #1, Floor Tile & mastic	Bulk	N/A	Asbestos
10/26/2006	A-3	Classroom #1 TSI above Ceiling	Bulk	N/A	Asbestos
10/26/2006	A-4	Lady's Room Joint Compound for Wallboard	Bulk	N/A	Asbestos
10/26/2006	A-5	Classroom #2 Ceiling Tile	Bulk	N/A	Asbestos
10/26/2006	A-6	Firing Range Refractory in Gas Heater	Bulk	N/A	Asbestos
10/26/2006	A-7	Storage Room Inside Cinder Block	Bulk	N/A	Asbestos
10/26/2006	A-8 A&B	Storage Room Floor Tile and Mastic	Bulk	N/A	Asbestos
10/26/2006	A-9	Storage Room Vinyl Floor Covering	Bulk	N/A	Asbestos
10/26/2006	A-10	Storage Room Area Ceiling Tile	Bulk	N/A	Asbestos
10/26/2006	A-11	Hallway Floor Tile	Bulk	N/A	Asbestos
10/26/2006	A-12	Storage Room by Vault, TSI Linear Run on Plumbing	Bulk	N/A	Asbestos
10/26/2006	A-13	Motor Pool Area Insulation Inside Fire Door	Bulk	N/A	Asbestos
10/26/2006	A-14	Mechanical Room Painted TSI Fitting	Bulk	N/A	Asbestos
10/26/2006	A-15	Tool Room, Damaged TSI Insulation	Bulk	N/A	Asbestos

Instructions/Special Requirements:

Collected By (print):	Charles Marshall	**Date:** 10/26/06 **Time:** 1200	**Collector's Signature:**		
Relinquished By:		**Date:** 10/26/06 **Time:** 1700	**Receive By:**	LAB	**Date:** **Time:**
Relinquished By:		**Date:** **Time:**	**Receive By:**		**Date:** **Time:**
Relinquished By:		**Date:** **Time:**	**Receive By:**		**Date:** **Time:**

Method of Shipment: **Condition Upon Reception:** __ **Acceptable** __ **Unacceptable**

Chain of Custody

Marshall Environmental Management, Inc.	**TAT**	Standard X	**JOB ID:** #2184
1145 SW 74th Street Suite E-300		Rush ___	**Project Name:** **ALLEN ARMORY INSPECTION**
Oklahoma City, OK 73139	**Phone:**	(405) 616-0401	DCS Project #06164C-12
Email marshenv@swbell.net	**Fax:**	(405) 972-0525	

Location Address:		**Invoice To:**	
Name:	Allen Armory	Company: **DEQ - Land Protection Division**	Contact: Angela Brunsman
Company:	N/A	Mailing Address:	707 N. Robinson, Oklahoma City, OK 73102
Mailing Address:	903 North Paul Street, Allen OK	Phone No: 405-702-5141	__ Phone Results
Contact Name:	Angela Brunsman	Fax No:	__ Fax Results
PO Number:	N/A Department: DEQ LPD	Email:	_X_ Email Results

Date	Sample Number	Location/Description	Sample Type	Volume Area	Analysis Requested
10/26/2006	A-16	Motor Pool Wallboard		N/A	Asbestos
10/26/2006	A-17	Hallway Bedding Tape & Plaster	Bulk	N/A	Asbestos
10/26/2006	A-18	Motor Pool Area Interior Window Caulking	Bulk	N/A	Asbestos
10/26/2006	A-19	Motor Pool Bedding Tape	Bulk	N/A	Asbestos
10/26/2006	A-20	Exterior of Bldg. Window Panel Caulking	Bulk	N/A	Asbestos
10/26/2006	A-21	Motor Pool Gas Heater Flue Vent	Bulk	N/A	Asbestos
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					
10/26/2006					

Instructions/Special Requirements:

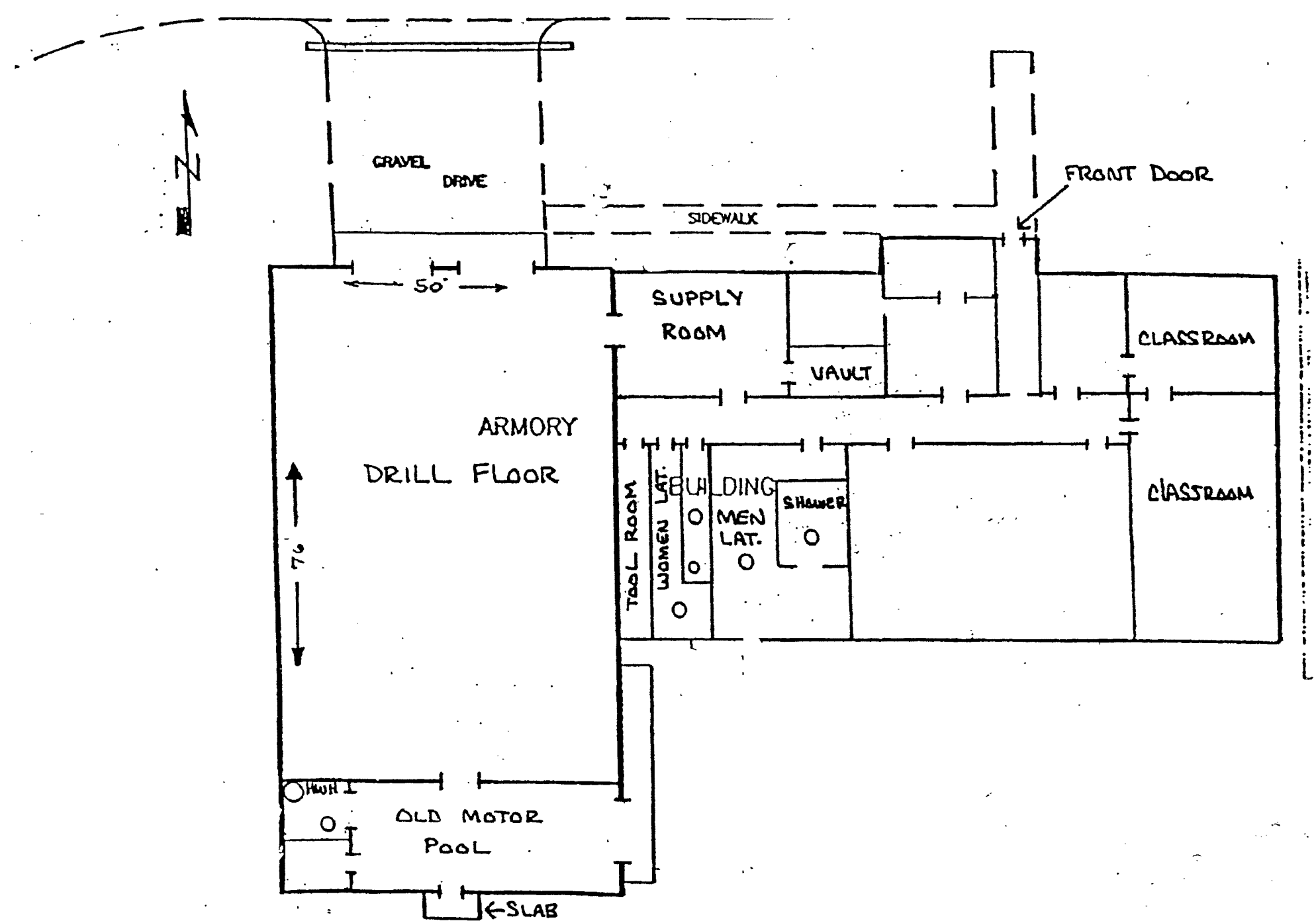
Collected By (print):	Charles Marshall	**Date:** 10/26/06 **Time:** 1202	**Collector's Signature:**		
Relinquished By:		**Date:** 10/26/06 **Time:** 1700	**Receive By:**	LAB	**Date:** **Time:**
Relinquished By:		**Date:** **Time:**	**Receive By:**		**Date:** **Time:**
Relinquished By:		**Date:** **Time:**	**Receive By:**		**Date:** **Time:**

Method of Shipment: **Condition Upon Reception:** __ Acceptable __ Unacceptable

Oklahoma Department of Environmental Quality
Land Protection Division
ALLEN ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 10-26-06

Location	Type of ACM	Category	Estimated Quantity	Units	Comments
Inside Armory					
TSI on Plumbing					
Classrom Area	TSI	Air-Cell & Mud Packs	46	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway	TSI	Air-Cell & Mud Packs	12	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Meeting Room	TSI	Air-Cell & Mud Packs	30	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room	TSI	Air-Cell & Mud Packs	34	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Mens Room	TSI	Air-Cell & Mud Packs	36	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room	TSI	Air-Cell & Mud Packs	25	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Tool Room	TSI	Air-Cell & Mud Packs	2	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Above Ceiling Tile Grids or in Exposed Portions of Ceiling Through the Armory	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	193	Total Est. Linear Feet of TSI	Approximately 64 Glove Bags (Ave. 3 LF each)
Floor Tiles & Mastic					
Storage Room	Misc.	Floor Tile/Mastic	219	Square Feet	Asbestos Floor Tile & Asbestos Mastic
Transite					
Drill Floor Roof	TSI		6,080	~Square Feet	Roof is Transite Panels on Steel Trusses & Brick
Exhaust Flues:					
Drill Floor	Misc.	Cement Asbestos	36	Linear Feet	4 Flues for Old "Removed" Space Heaters
Maintenance Room	Misc.	Cement Asbestos	12	Linear Feet	2 Flues Active
Supply Room	Misc.	Cement Asbestos	6	Linear Feet	1 Flue Active
Classroom Heaters	Misc.	Cement Asbestos	10	Linear Feet	2 Abandoned next to existing heaters
Motor Pool	Misc.	Cement Asbestos	16	Linear Feet	2 Flues, Space Heater & Hot Water Tank


N
GRAVEL
DRIVE
SIDEWALK
FRONT DOOR
50'
SUPPLY
ROOM
VAULT
CLASSROOM
ARMORY
DRILL FLOOR
76'
TOOL ROOM
WOMEN LAT.
BUILDING
MEN
LAT.
SHOWER
CLASSROOM
HUH I
OLD MOTOR
POOL
SLAB

ASBESTOS SCOPE OF WORK

August 2007

Asbestos Abatement in 5 National Guard Armories 08066

State of Oklahoma
Department of Central Services
Construction and Properties Division

This addendum forms a part of the contract document and modifies the original specifications as noted below. Please acknowledge receipt of this addendum in the space provided on the bid form. Failure to do so may subject bidders to disqualification.

Date of Issue: September 14, 2007

Addendum Number: 1

DCS Project Number: 08066

Project Name: Asbestos Abatement in 5 National Guard Armories

TO ALL BIDDERS OF CONCERN:

Item #1: "Specific Site Information", one (1) page
Item #2: "Scope of Work For Remediation of Non-Friable Asbestos at Former National Guard Armories", one (1) page
Item #3: "Bid Package Corrections", one (1) page
Item #4: "Project Design Missing Pages", ten (10) pages
Item #5: Corrected pages separated by section and/or Armory location, eighteen (18) pages

All sheets are 8 1/2-inch x 11-inch

ALL OTHER DOCUMENTS, SPECIFICATIONS AND DRAWINGS ARE TO REMAIN THE SAME AND INTACT.

David Morrison for

John W. Morrison, AIA
State Construction Administrator

SPECIFIC SITE INFORMATION

ALLEN ARMORY
- WATER - YES
- ELECTRICITY - YES
- ACCESS - RESTRICTED (Coordinate with Allen School) (Building in use by Allen School)

CHICKASHA ARMORY
- WATER - NO
- ELECTRICITY - NO
- ACCESS - UNRESTRICTED (Coordinate with DEQ)

HARTSHORNE ARMORY
- WATER - YES
- ELECTRICITY - YES
- ACCESS - UNRESTRICTED (Coordinate with DEQ)

WATONGA ARMORY
- WATER - NO
- ELECTRICITY - YES
- ACCESS - UNRESTRICTED (Coordinate with DEQ)

WEWOKA ARMORY
- WATER - NO
- ELECTRICITY- NO
- ACCESS - UNRESTRICTED (Coordinate with DEQ)

Scope of Work
For
Remediation of Non-Friable Asbestos at
Former National Guard Armories

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from qualified bidders for asbestos remediation services at former National Guard armories in Oklahoma. This scope of work (SOW) describes the non-friable asbestos containing materials (ACM) that will either be removed or left in place. The ACM to be removed shall be included in your bid.

Below is a list of the non-friable asbestos in each armory that will be removed or left in place:

ALLEN ARMORY

Remove vinyl floor covering located over the floor tile in Storage Room # 5;
Remove floor tile and mastic from Storage Room # 3, Storage Room # 4, and Storage Room # 5;
Do Not Remove Transite Drill Floor Roof and Transite Exhaust Flues;

CHICKASHA ARMORY

Remove exterior transite and interior floor tile and mastic from the Portable Building;

HARTSHORNE ARMORY

Remove floor tile and mastic from Orderly Room and Offices;
Do Not Remove Transite Drill Floor Roof and Transite Exhaust Flues;

WATONGA

Remove floor tile and mastic from Orderly Room and attached Office;
Remove sheet vinyl and mastic from Motor Pool and 2nd Floor Day Room;

WEWOKA

Remove floor tile and mastic from Lobby and Offices;
Remove sheet vinyl and mastic from Kitchen;
Remove floor tile debris located outside the armory;

Bid Package Corrections

Project Design

- Pages 4, 6, 8, 10, 12, 14, 16, 18, and 20 are missing (Missing Pages Attached);

Project Design – Summary of Estimated Quantities Attachments

- Allen Armory Summary (Corrected Page Attached)
  - Under Floor Tiles & Mastic – Storage Room Misc. is removed and Storage Room #3, #4, & #5 is added;
  - Under Floor Tiles & Mastic – Estimated Quantities is increased;
  - Vinyl floor covering in Storage Room #5 is added;
  - All room locations are given numbers so they can be found on the Armory Floor Plan;
- Watonga Armory Summary (Corrected Page Attached)
  - 2nd Floor Mechanical Room is changed to 2nd Floor Day Room;

Allen Armory – Asbestos Inspection Report

- Page 6, first paragraph, last sentence - Storage Room is changed to Storage Rooms #3, #4, and #5 (Corrected Page Attached);
- Page 12, Table 1 – sample location names are changed and room map numbers are added (Corrected Page Attached);
- Page 14, second paragraph under Miscellaneous Materials, first sentence – Storage Room is changed to Storage Room # 5 (Corrected Page Attached);
- Page 15, second paragraph, last sentence – Armory Storage Room is changed to Armory Storage Rooms # 3, #4, and #5;
- Armory Floor Plan – numbers added to rooms (Corrected Page Attached);
- Summary of Estimated Quantities page (Corrected Page Attached);
  - Under Floor Tiles & Mastic – Storage Room Misc. is removed and Storage Room #3, #4, & #5 is added;
  - Under Floor Tiles & Mastic – Estimated Quantities is increased;
  - Vinyl floor covering in Storage Room #5 is added;
  - All room locations are given numbers so they can be found on the Armory Floor Plan;

Watonga Armory – Asbestos Inspection Report

- Page 5, page 11, page 13, and Summary of Estimated Quantities page - 2nd Floor Mechanical Room is changed to Day Room (Corrected Pages Attached);

Wewoka Armory – Asbestos Inspection Report

- Page 5, last paragraph - asbestos floor tile debris located outside is added (Corrected Page Attached);
- Summary of Estimated Quantities page - asbestos containing portable safe and outside asbestos tile debris is added (Corrected Page Attached);

PROJECT DESIGN

MISSING PAGES

Upon completion of the Asbestos removal the Asbestos Contractor shall complete the re-insulation work for Thermal System Insulation (plumbing pipe re-insulation) as specified in the Oklahoma State Department of Central Services (DCS) Bid Packet.

II. Responsible Parties and Consultants

Licensed Contractor: ODOL Licensed Asbestos Contractor
To be selected based on a successfully bid
The Oklahoma Department of Central Services (DCS)
Will oversee the bidding and the Award of the Contract
The DEQ LPD will be the Project's Contracting Officer.

Licensed Project Designer: Marshall Environmental Management, Inc.
1145 SW 75th Street, Bldg. E-300
Oklahoma City, Oklahoma 73139
(405) 616-0401 (Office)
(405) 820-1656 (Mobile)
(405) 972-0525 (Fax)
E-Mail: marshenv@swbell.net

Charles L. Marshall, Ph.D., C.I.H., OKPD-140028

Owner's Representative: Angela Brunsman
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5141 (Office)
(405) 702-5101 (Fax)
(405) 641-3362 (Mobile)
E-Mail: angela.brunsman@deq.state.ok.us

IV. Sequence of Events, Projected Dates and Duration of Project

The Abatement Contractor will follow the following sequence of events.

1. The Licensed Asbestos Contractor shall file required ODOL and NESHAP Notification NESHAPS notifications. **Note**: Copies of the notifications are to be provided to DEQ LPD and the Licensed Project Designer.
2. Licensed Asbestos Contractor will mobilize to begin prep work based upon DEQ LPD approval after coordination is confirmed with any appropriate authorities (e.g. armory occupants) for work dates and times of work at each specific Armory.
3. The Air Monitoring Firm shall conduct background air monitoring prior to prep inspection.
4. As part of the preparation for abatement, the Licensed Asbestos Contractor shall isolate adjacent areas and install critical barriers.
5. Establish GFI circuits and a Decon for use throughout prep.
6. Establish a Centralized Decon for use during prep work and abatement
7. Place abatement supplies in the Armory rooms.
8. Surround regulated work areas with asbestos hazard warning tape.
9. Remove the ceiling tiles to access the TSI on plumbing lines
10. Perform any pre-cleaning of loose ACM, if necessary, to complete the Prep.
11. Hang all required negative pressure glovebags per ODOL Rules.
12. Prepare any rooms requiring abatement of vinyl floor coverings per ODOL Rules 30:50-23-1.
13. Schedule ODOL Prep Inspection.
14. Perform asbestos abatement and loadout all wastes.
15. Schedule any interim ODOL visual inspections per ODOL Inspector requirements.
16. Upon completion of final cleaning call, for ODOL visual inspection.
17. Perform any lock-down applications required by ODOL Rules.
18. Conduct clearance sampling and schedule final inspection with ODOL.
19. Tear down prep work and critical barriers and demobilize after approval by the Owner's Representative (DEQ LPD).
20. File final project documents with ODOL and provide a copy to the DEQ LPD Representative.

The Licensed Asbestos Contractor shall file the notification of the intended start date based upon the schedule to be determined by the DEQ LPD Representative. This project is anticipated to start, once a Licensed Contactor is selected as a successful bidder and a notice to proceed is issued by the DEQ LPD. The initial projects are likely to begin in May of 2007 and continue on a periodic basis over the remainder of the year.

to an emergency. The Contractor shall also be responsible for submitting any request for variances within this period of notification.

Note: A NESHAP notification shall be filed by the Licensed Asbestos Contractor with the DEQ Air Quality Division. A copy is to be provided to the ODOL, Project Designer and DEQ LPD representative. All quantities and disposition of waste shall conform to the notification. Changes in the amounts of asbestos waste materials (greater or less than 20% of the notified amounts) shall require that the Licensed Asbestos Contractor files a revised NESHAP Notice with the DEQ AQD at the time the waste is prepared for disposal. The DEQ LPD representative shall approve the landfill indicated on the NESHAP form prior to the Contractor filing the notification.

D. Waste Disposal

The Licensed Asbestos Contractor is responsible for all fees for wastes, storage, transportation and disposal. Unless properly insured, in accordance with the Oklahoma Asbestos Control Act, the Licensed Asbestos Contractor shall hire a Licensed and Insured Asbestos Disposal Contractor that is also a Licensed Asbestos Contractor, for the transportation and disposal of all asbestos wastes as specified in the Project Design and in accordance with the NESHAP notification and Subchapter 41 of the Oklahoma Clean Air Act.

The Contractor or Licensed Transporter shall be responsible to provide onsite storage and licensed transportation of all asbestos wastes to the DEQ Permitted Asbestos Landfill where the ACM will be disposed of at the end of the job. The Project's NESHAP notification shall list the disposal site to be used for the Project.

During periods of time when the asbestos waste is to be stored onsite, the Asbestos Abatement Contractor shall maintain a properly placarded waste storage area and/or waste disposal trailer or roll-off bin located in a secure area on the Armory campus at a location determined by the Owner's Representative (DEQ LPD).

The storage area, trailer or roll-off bin shall be prepared with 6-mil polyethylene and placarded in accordance with OSHA and DOT requirements. When not in use, the storage area, trailer or roll-off bin will be kept locked, wherever possible (e.g. trailer), or sealed tightly (e.g. roll-off bin) to control access to any stored waste. This trailer will be available for inspection to representatives of the ODOL during all site visits, no later than the initial prep inspection.

A uniform style industrial waste manifest or asbestos disposal record shall accompany each load transported to the landfill as specified in the NESHAP regulation. All 6-mil double wrapped wastes, 6-mil double bagged asbestos

obtain one in accordance with ODOL Rules. Based on the pre-abatement inspection, no live electricity is located within the work area.

The Owner's Representative will be responsible for any required notifications of all applicable Armory personnel. Access to the mechanical room space, outside of the regulated work area, is to be kept to licensed personnel and the authorized DEQ LPD personnel.

VI. Prep for Abatement

A. Available Utilities.

Special Condition: Some Armories do not have utilities. This may include the supply of potable water for the use in abatement methods, decontamination facility, and waste water disposal. Also, some armories do not have an active electrical supply hook-up with the local electric utility authority. A list of those Armories that do not have utilities for electricity, potable water and sewer connections will be provided with the DCS Bid Packet by the DEQ. The Asbestos Contractor will be responsible to provide all utility services in connection with their services for any location that does not have these services. Any fees or cost for the connection and disconnection of these services shall be paid by the Asbestos Contractor as a part of the SOW and are to be included in the cost for the services for these projects.

B. Isolate adjacent areas and install critical barriers.

The Licensed Asbestos Contractor shall prepare the work area(s) for abatement in accordance with the requirements of ODOL regulations OAC 380:50-17-4 with the following modifications.

1. Establish required asbestos warning signs and regulated work area boundaries using asbestos warning tape at the entrances to the rooms and hallways undergoing the removal of the friable ACM.
2. Isolate adjacent areas and install critical barriers.
3. Establish GFI circuits for use throughout prep and abatement.
4. Establish a centralized decon for use during prep work and abatement
5. Place abatement supplies in the Armory rooms.
6. Surround regulated work area with asbestos hazard warning tape.
7. Remove the ceiling tiles to access the TSI on plumbing lines
8. Perform any pre-cleaning of loose ACM, if necessary, to complete the prep.
9. Hang all required negative pressure glovebags per ODOL Rules.
10. Prepare any rooms requiring abatement of vinyl wall coverings per ODOL Rule 380:50-23-1.
11. Schedule ODOL Prep Inspection.

The removal shall be performed by wetting the top and the back of the floor sheeting with amended water. The sheeting can be cut in to 1 foot (more or less) diameter strips and removed from the floor and immediately placed into an asbestos disposal bag.

If the removal of the vinyl sheet and/or its associated mastic requires the use of a solvent, the Licensed Asbestos Contractor shall submit a copy of the MSDS to the Owner's Representative and obtain written approval for the products' use prior to its use at the each specific Armory.

Once the floor sheeting removal is completed, the Licensed Asbestos Contractor shall call for a visual inspection by the ODOL Inspector.

C. HVAC Cloth Vibration Dampers

The Licensed Asbestos Contractor shall remove all HVAC asbestos vibration dampers that are located at the Armory.

All work shall be performed in a buddy system consisting of two licensed workers.

Note: Not all of the Armories have HVAC asbestos vibration dampers. Therefore, whenever the scope of work involves only the removal of the asbestos vibration dampers at an Armory, the Licensed Asbestos Contractor shall follow the procedures listed in this Project Design. An ODOL notice must be filed to schedule the work and air monitoring must be conducted in accordance with ODOL rules, and as described in a subsequent section of this Project Design.

Procedures for Removal of HVAC Asbestos:

1. The HVAC equipment is to be de-energized and locked out in accordance with standard lockout-tagout procedures.
2. A central decon facility will be placed in the Armory at a suitable location that provides for water and electrical utilities.
3. A popup change room will be placed at the entrance to the work area to facilitate egress under a double suit protocol to a central decontamination facility.
4. Critical barriers will be placed over windows or any openings to the adjacent rooms in the Armory.
5. A layer of 6-mil poly will be place below the dampers on the floor (wear space is available) to collect any fallen pieces of ACM as the dampers are removed.

VIII. Engineering Controls

A. Glovebag Operations.

The primary engineering control will consist of the use of wet methods and HEPA vacuums to wet the ACM and maintain a negative pressure within the glovebag.

B. Asbestos Containing Sheet Vinyl Flooring.

The abatement of all asbestos containing sheet flooring shall be conducted in accordance with ODOL Rules and OAC 380-50-23-1. This calls for the use of wet methods and sufficient negative air machines to provide four (4) air exchanges per hour. In most cases, this will require only one (1) negative air machine. According to the Rule, the negative air machines need not be exhausted to the outside (i.e. externally vented).

C. HVAC Cloth Vibration Dampers

The primary engineering control will consist of the use of wet methods and the use of a HEPA vacuum.

IX. Worker Protection

A. Respiratory Protection.

Full Face (FF-APR's) – are to be worn by all personnel in the regulated areas during all prep work that has a potential to disturb ACM and during each work shift for the asbestos removal activities until final clearance levels have been met provided the fiber counts remain <0.5 f/cc UCL .

Full Face PAPR's - Full Face PAPR's may be provided to employees who request them or who need to wear one on the basis of a physician's recommendation provided the fiber counts remain <0.5 f/cc UCL.

XI. Air Monitoring and Clearance Testing

Sampling Requirements.

A. Background Samples

At least three background air samples will be collected in the Armory work areas prior to the start of any asbestos abatement. A minimum of one background sample is to be collected in any space prepared for the removal of asbestos containing floor sheeting. At least two background samples are to be required to be collected in a representative location for the glovebag efforts.

No background samples are required if only HVAC dampers are being removed at a specific Armory.

B. Personal Monitoring.

1. During Preparation for Abatement.

A minimum of 25% of the workers will be monitored during preparation of the work area and/or hanging of glovebags if any prep work has the potential to disturb asbestos. Examples of tasks requiring air monitoring during prep work include such tasks as pre-cleaning contaminated fixed and non-fixed items, cleanup of loose ACM on floors or ceiling tiles, and putting up of any critical barriers within arms reach of exposed friable ACM (e.g. TSI where lagging is significantly damaged or missing).

2. During Abatement.

A minimum of 25% of the workers will be monitored during the abatement activities. Personal monitoring is required during these phases to assure adequate respirator protection factors are applied in respirator selection. One 30-minute excursion sample will be collected during the removal of the asbestos on each day abatement work is conducted for each separate activity (i.e. one for glovebag work, one for sheet vinyl work).

3. During HVAC Damper Removal.

The worker monitoring shall consist of a minimum of 25% of the workers during each shift of HVAC Damper removal.

The clearance criteria will be 0.01 fibers/cc UCL. NIOSH 7402 TEM Analysis will be used to confirm asbestos levels if the PCM clearances exceed 0.01 f/cc UCL. If they exceed the criteria, the Licensed Asbestos Contractor will contact ODOL, reclean the work areas and schedule a re-test for clearance. This process will be repeated until the clearance criteria are met or as approved by ODOL.

Clearance samples inside the room(s) where asbestos containing sheet flooring has been removed will require three PCM samples collected for a minimum of 6 hours and 3000 liters inside each room

Clearance tests for HVAC damper removal work will require three PCM samples collected for a minimum of 6 hours and 3000 liters inside each mechanical room.

F. Laboratory Requirements.

PCM Asbestos Fiber Analysis - Marshall Environmental Management, Inc.

All routine and periodic asbestos air monitoring, performed during this response action, will be performed by Marshall Environmental Management, Inc. (MEM). Monitoring personnel or the Air Monitoring Firm identified on the ODOL Notification based upon the work order issued by the DEQ LPD Coordinator.

Air monitoring for the sole purpose of the abatement of HVAC dampers at an Armory facility can be performed by the Licensed Asbestos Contractor provided a properly trained worker (i.e. worker has completed a 2-day air monitoring course) is a member of the crew of abatement workers.

Air monitoring personnel will have an ODOL Worker and/or Inspector Licenses where applicable. Air monitoring staff and lab analysts will have completed the NIOSH 582 equivalency course for sampling and analysis of airborne asbestos. MEM is a participant in the AIHA Proficiency Analytical Testing Program (PAT) in accordance with ODOL requirements.

PLM – Bulk Asbestos Analysis - Marshall Environmental Management, Inc.

Bulk Asbestos samples will be analyzed in accordance with EPA methods. Marshall Environmental Management, Inc. is a participant in the AIHA/RTI Bulk Asbestos Proficiency Analytical Testing Program (PAT).

Transmission Electron Microscope (TEM) analysis of asbestos air samples, when PCM results exceed 0.01 f/cc UCL, will be performed by Quantem Labs of Oklahoma City.

XVI. Special Materials or Methods

The Armory locations selected for asbestos abatement are to be unoccupied during the asbestos removal work. No special materials or methods for accomplishing the removal are anticipated. Requests for the use of any special materials or methods shall be coordinated with the Licensed Project Designer and submitted as a Site-Specific Project Design Amendment for consideration by the ODOL.

PROJECT DESIGN

SUMMARY OF ESTIMATED QUANTITIES ATTACHMENTS

CORRECTED PAGES

Oklahoma Department of Environmental [illegible]ity
Land Protection Division
ALLEN ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection 10-26-2006

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
TSI on Plumbing							
Classroom Area # 9	TSI	Air-Cell & Mud Packs	46	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway # 13	TSI	Air-Cell & Mud Packs	12	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Meeting Room # 10	TSI	Air-Cell & Mud Packs	30	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room # 1	TSI	Air-Cell & Mud Packs	34	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Men's Room # 11	TSI	Air-Cell & Mud Packs	36	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room 14	TSI	Air-Cell & Mud Packs	25	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room # 15	TSI	Air-Cell & Mud Packs	8	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Tool Room # 16	TSI	Air-Cell & Mud Packs	2	Linear Feet	Chrysotile	65%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Total TSI Quantities	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	193	Total Est. Linear Feet of TSI			
		Glove Bags	64	Glove Bag			Approximately 64 Glove Bags (Ave. 3 LF each)
Floor Tiles & Mastic							Negative Pressure Glovebag Operation
Storage #3, #4, #5	Miscellaneous	Floor Tile/Mastic	420	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic							
Storage #5	Miscellaneous	Sheet Vinyl & Mastic	100	Square Feet	Chrysotile	25%	Asbestos Sheet Vinyl over Asbestos Floor Tile
Transite							
~~Drill Floor Roof~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~6,000~~	~~Square Feet~~		~~50% (est.)~~	~~NOT TO BE INCLUDED IN BID~~
~~Exhaust Flues:~~							
~~Drill Floor~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~36~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	~~NOT TO BE INCLUDED IN BID~~
~~Maintenance Room~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~12~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	~~NOT TO BE INCLUDED IN BID~~
~~Supply Room~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~6~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	~~NOT TO BE INCLUDED IN BID~~
~~Classroom Heaters~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~10~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	~~NOT TO BE INCLUDED IN BID~~
~~Motor Pool~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~16~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	~~NOT TO BE INCLUDED IN BID~~
DOL Required Air Monitoring	N/A	Air Monitoring	2.5	Shifts			100% Glove Bag Personal Monitoring for Clearances, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

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Oklahoma Department of Environmental Quality
Land Protection Division
WATONGA ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 11-09-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
Floor Tiles & Mastic							
Orderly Room/Office	Misc.	Floor Tile/Mastic	384	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic							
Motor Pool	Miscellaneous	Sheet Vinyl & Mastic	250	~Square Feet	Chrysotile	25%	Spread out over an approximate 500 Sq. Floor Area
2nd Floor Day Room	Miscellaneous	Sheet Vinyl & Mastic	130	~Square Feet	Chrysotile	25%	Does not appear to go under HVAC equipment
DOL Required Air Monitoring	N/A	Air Monitoring	1.5	Shifts			Personal and Area Monitoring for Sheet Vinyl, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

DCS CONST PROPERTIES PAGE 17/32

ASBESTOS INSPECTION REPORT

ALLEN ARMORY

CORRECTED PAGES

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while on-site, conducting the friable asbestos removal, the Licensed Asbestos Contractor should remove all asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Storage Rooms #3, #4, and #5.

IV. REGULATORY REVIEW

The Allen Armory Building was constructed prior to 1950. The Armory Building was constructed in the era when asbestos was used in construction and installed in certain building components. In 1994, the Occupational Safety and Health Administration (OSHA) required employers to identify asbestos containing building materials (ACM) in pre-1980 construction as part of its Standard for Occupational Exposure to Asbestos in Construction (29 CFR 1926.1101). This OSHA standard covers maintenance, repair and removal functions involving ACM or Presumed ACM (PACM). Without asbestos identification surveys, owners and/or operators must treat suspected ACM as asbestos. In such cases, this is referred to as presumed ACM or PACM. One of the purposes of the Asbestos Survey was to identify the types of ACM present in the various building components.

The Oklahoma Department of Labor (ODOL) regulates the Hazard Communication requirements for public employees as part of the ODOL Public Employees Occupational Safety and Health (PEOSH) Program. The State of Oklahoma Hazard Communication Standard (HAZCOM), revised as of August 2006, is provided for in OAC 380 Chapter 45. http://www.state.ok.us/~okdol/peosh/PEOSHTitle%20380-45%20(8-06).pdf

Location	Sample ID	Type of ACM	Asbestos Content Type (%)	Condition - Item
Classroom 2 Map #9	A-3	TSI	Chrysotile 8%	Good – Pipe lagging above Ceiling
Storage Room Map #4	A-8A	Misc. Floor Tile	Chrysotile 5%	Good – Gray 9-in x 9in Floor Tile
Storage Room Map #3	A-8B	Misc. Floor Tile	Chrysotile 5%	Good – Black Mastic from back of E-8A
Storage Room (Kitchen) #5	A-9	Misc. Sheet Vinyl	Chrysotile 25%	Good – Vinyl Floor Covering
Supply Room Map #1	A-12	TSI	Chrysotile70%	Good – Elbow on Pipe
Supply Room Map #1	A-13	TSI	Chrysotile 5%	Good – TSI Straight Run of Air-Cell
Mechanical Room #14	A-14	TSI	Chrysotile 5%	Good – Tee Fitting over Hot Water Tank
Tool Room Map #16	A-15	TSI	Chrysotile 65%	Damaged – TSI Insulation
Motor Pool Map #17	A-21	Misc.	Chrysotile 60%	Good – Transite Flue Vent

Table 1 - Summary of Sampling Data for Samples that were Positive for Asbestos Content

Copies of the individual asbestos sample test results provided by the accredited testing lab, along with the chain of custody forms and several digital photos are provided for review in the Appendix of this Inspection Report.

HVAC – No Friable ACM was identified on HVAC equipment or components, but some exhaust flues and/or abandoned exhaust flue vents were made of Transite.

CONDITION OF TSI – Good.

3. **Miscellaneous Materials** – The predominant type of miscellaneous ACM located within the Allen Armory is the 9-inch by 9-inch non-friable asbestos containing floor tiles and the associated non-friable asbestos containing black asphalt mastics; each contains around 5% Chrysotile asbestos.

The other miscellaneous forms of asbestos consisted of the sheet of vinyl floor covering found in the Storage Room #5 that may have once been used as a Kitchen. This material is regulated by the ODOL with specific abatement procedures outlined in OAC 380:50 23-1. In addition, non-friable Transite exhaust flues for space heaters and hot water tanks were identified in the Armory. Some of the exhaust pipes, such as those found in the Drill Floor Area, are abandoned.

CONDITION OF MISCELLANEOUS ACM –

Floor Tiles and Black Asphalt Mastic - Good

Kitchen Sheet Vinyl Floor Covering – Damaged

Transite Exhaust Flue Vents – Good

It should be noted that this Armory did not have an Indoor Firing Range.

VIII. RECOMMENDATIONS

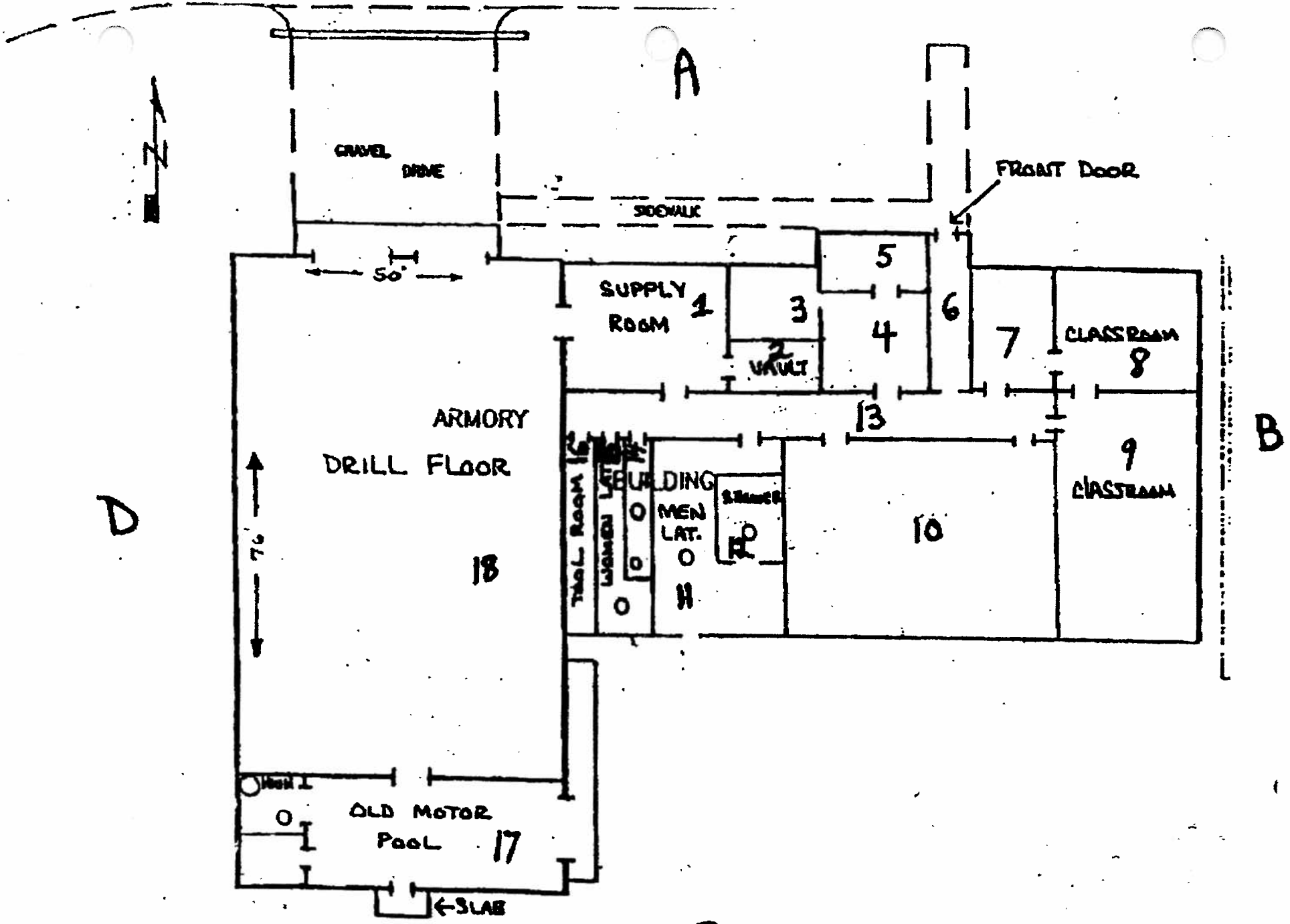
This Asbestos Inspection Report should be considered as the initial step in a process to develop plans for asbestos abatement or an Armory Asbestos Management Plan.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action (i.e. Project Design) to abate the TSI insulation on the plumbing lines. It is recommended that while the Licensed Asbestos Contractor is on site conducting the friable asbestos removal, they shall also remove all the non-friable asbestos floor tiles and the associated black asphalt asbestos containing mastic located in the Armory Storage Rooms #3, #4, and #5.

1. A Project Design needs to be developed to allow for the removal of the TSI consisting of the insulation on the full run of the pipes ("Air-Cell") and all hard mudpack on the plumbing components located in the Armory.

2. The Project Design should include the removal of the sheet vinyl floor covering located in the Kitchen in accordance with ODOL rules.

3. The Scope of Work for the Asbestos Response Action should include the requirement for the removal of all of the non-friable asbestos containing Floor Tiles and the asbestos containing Black Asphalt Mastic. The removal of non-friable Transite Exhaust Flues can also be accomplished so long as funds are provided for the corresponding repairs to the roof that would be needed if these items were removed.



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Oklahoma Department of Environmental Quality
Land Protection Division
ALLEN ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 10-26-06

Location	Type of ACM	Category	Estimated Quantity	Units	Comments
Inside Armory					
TSI on Plumbing					
Classroom Area(2) #9	TSI	Air-Cell & Mud Packs	46	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway #13	TSI	Air-Cell & Mud Packs	12	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Meeting Room #10	TSI	Air-Cell & Mud Packs	30	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room #1	TSI	Air-Cell & Mud Packs	34	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Men's Room #11	TSI	Air-Cell & Mud Packs	36	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room 14	TSI	Air-Cell & Mud Packs	25	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room #15	TSI	Air-Cell & Mud Packs	8	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Tool Room #16	TSI	Air-Cell & Mud Packs	2	Linear Feet	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Above Ceiling Tile Grids or in Exposed Portions of Ceiling Through the Armory	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	193	Total Est. Linear Feet of TSI	Approximately 64 Glove Bags (Ave. 3 LF each)
Floor Tiles & Mastic					
Storage #3, #4, #5	Misc.	Floor Tile/Mastic	420	Square Feet	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic					
Storage #5	Misc.	Sheet Vinyl & Mastic	100	~Square Feet	Abestos Sheet Vinyl over Asbestos Floor Tile
Transite					
Drill Floor Roof #18	TSI		6,080	~Square Feet	Roof is Transite Panels on Steel Trusses & Brick
Exhaust Flues:					
Drill Floor	Misc.	Cement Asbestos	36	Linear Feet	4 Flues for Old "Removed" Space Heaters
Maintenance Room	Misc.	Cement Asbestos	12	Linear Feet	2 Flues Active
Supply Room	Misc.	Cement Asbestos	6	Linear Feet	1 Flue Active
Classroom Heaters	Misc.	Cement Asbestos	10	Linear Feet	2 Abandoned next to existing heaters
Motor Pool	Misc.	Cement Asbestos	16	Linear Feet	2 Flues, Space Heater & Hot Water Tank

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ASBESTOS INSPECTION REPORT

WATONGA ARMORY

CORRECTED PAGES

III. EXECUTIVE SUMMARY

The Oklahoma Department of Environmental Quality (DEQ) Land Protection Division (LPD) requested that the Oklahoma Department of Central Services (DCS) provide a Licensed Asbestos Inspection Firm to evaluate the locations and conditions of Asbestos Containing Materials (ACM) in the Watonga Armory located at 301 West Main Street in Watonga Oklahoma.

Marshall Environmental Management, Inc. (MEM) was contracted by DCS to conduct an Asbestos Inspection for the ODEQ at the Watonga Armory. The Asbestos Inspection was conducted on November 9, 2006. A total of thirty (30) asbestos samples were analyzed in accordance with the EPA authorized Method 600 49 CFR Part 61 Subpart M, Asbestos NESHAPS Rules.

The Asbestos Inspection did not identify the presence of asbestos Surfacing Materials or for the Armory's plumbing system's Thermal System Insulation (TSI). Asbestos was found in some miscellaneous materials such as older 9 inch by 9 inch floor tiles and the black asphalt mastics associated with the floor tiles in the Armory Building. Asbestos was also detected in some remnants of the sheet vinyl floor covering located in the Motor Pool area and Day Room.

The principal recommendations of the Asbestos Inspection Report consist of developing plans for a response action to remove the asbestos containing floor tile, sheet vinyl and their associated black asphalt asbestos containing mastics located in the Motor Pool and second floor Orderly Room.

The following Table is a summary of the samples collected by location and type of building component. Locations where ACM was identified can be identified by referring to the facility floor plan diagram provided in the Appendix of this Inspection Report. A summary of the estimated quantities of ACM located during the Asbestos Inspection is provided in the Appendix.

Location	Sample ID	Type of ACM	Asbestos Content Type (%)	Condition - Item
Motor Pool Area	C-10	Misc. Sheet Vinyl	Chrysotile 25%	Damaged – Old Sheet Vinyl On South Side of Floor
Motor Pool Area	C-11A	Misc. Sheet Vinyl	Chrysotile 25%	Damaged – Old Sheet Vinyl On South Side of Floor
Motor Pool Area	C-11B	Misc. Mastic	Chrysotile 5%	Good – Black Mastic From back of C-11B
Day Room	C-17	Misc. Sheet Vinyl	Chrysotile 25%	Good – Floor Covering Around Heat Air Units
Orderly Room	C-14A	Misc. Floor Tile	Chrysotile 5%	Good – 9-in. x 9-in. Brown Floor Tile
Orderly Room	C-14B	Misc. Mastic	Chrysotile 3%	Good – Black Mastic from back of C-14A

Table 1 - Summary of Sampling Data for Samples that were Positive for Asbestos Content

Copies of the individual asbestos sample test results provided by the accredited testing lab, along with the chain of custody forms and several digital photos are provided for review in the Appendix of this Inspection Report.

3. **Miscellaneous Materials** – The predominant type of miscellaneous ACM located within the Watonga Armory is older 9-inch by 9-inch Floor Tile and the associated black asphalt containing mastics that containing approximately 3-5% Chrysotile asbestos.

The other miscellaneous forms of asbestos consisted of the sheet of vinyl floor covering found in the Motor Pool area and Day Room. Only remnants of Sheet Vinyl Flooring were identified in the Motor Pool and laboratory testing identified the floor sheeting to contain asbestos on the back side of the sheets of floor covering

CONDITION OF MISCELLANEOUS ACM –

Asbestos Containing Floor Tiles -

Black Asphalt Mastic - Good

Motor Pool Sheet Vinyl – Damaged

Mastic for Motor Pool Sheet Vinyl – Good

Mastic and Sheet Vinyl in Day Room - Good

Oklahoma Department of Environmental Quality
Land Protection Division
WATONGA ARMORY
Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 11-09-06

Location	Type of ACM	Category	Estimated Quantity	Units	Comments
Inside Armory					
Floor Tiles & Mastic					
Orderly Room/Office	Misc.	Floor Tile/Mastic	384	Square Feet	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic					
Motor Pool	Misc.	Sheet Vinyl & Mastic	250	~Square Feet	Spread out over an approximate 500 Sq. Floor Area
2nd Floor Day Room	Misc.	Sheet Vinyl & Mastic	130	~Square Feet	Does not appear to go under HVAC equipment

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ASBESTOS INSPECTION REPORT

WEWOKA ARMORY

CORRECTED PAGES

III. EXECUTIVE SUMMARY

The Oklahoma Department of Environmental Quality (DEQ) Land Protection Division (LPD) requested that the Oklahoma Department of Central Services (DCS) provide a Licensed Asbestos Inspection Firm to evaluate the locations and conditions of Asbestos Containing Materials (ACM) in the Wewoka Armory located at U.S. Highway 270 and State Highway 56 in Wewoka Oklahoma.

Marshall Environmental Management, Inc. (MEM) was contracted by DCS to conduct an Asbestos Inspection for the ODEQ at the Wewoka Armory. The Asbestos Inspection was conducted on November 16, 2006. A total of twenty six (26) asbestos samples were analyzed in accordance with the EPA authorized Method 600 49 CFR Part 61 Subpart M, Asbestos NESHAPS Rules.

The Asbestos Inspection identified the presence of asbestos in some of the hard mudpacks used to insulate plumbing elbows and connections for the plumbing system's Thermal System Insulation (TSI). Asbestos was also found in some miscellaneous materials such as older 9 inch by 9 inch floor tiles debris which was inside and outside of the Armory and the black asphalt mastics associated in the Armory Building. A miscellaneous form of friable asbestos was also identified in the sample collected from the portable fireproof safe located in the Armory Vault. Asbestos containing vinyl floor covering (linoleum) was identified in the Kitchen of the Armory.

Oklahoma Department of Environmental Quality
WEWOKA ARMORY
Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 12-16-06

Location	Type of ACM	Category	Estimated Quantity	Units	Comments
Lobby & Offices	Miscellaneous	Mastic	4,352	Square Feet	Black Asbestos Containing Asphalt Mastics
Lobby & Offices	Miscellaneous	Floor Tile	0.5	Cubic Yard	Misc. Broken Floor Tile Debris
Lobby & Offices	Miscellaneous	Floor Tile	1	Cubic Yard	Misc. Broken Floor Tile Debris
Outside Debris	Miscellaneous	Floor Tile	3	Cubic Yard	Misc. Broken Floor Tile Debris
Drill Hall	TSI	Mud Packs	6	Glovebags	Asbestos in Mud Packs at elbows and fittings
Firing Range	TSI	Mud Packs	5	Glovebags	Asbestos in Mud Packs at elbows and fittings
Lobby Area	TSI	Mud Packs	1	Glovebags	Asbestos in Mud Packs at elbows and fittings
Office Areas	TSI	Mud Packs	30	Glovebags	Asbestos in Mud Packs at elbows and fittings
Mechanical Room	TSI	Mud Packs	14	Glovebags	Asbestos in Mud Packs at elbows and fittings
Classrooms	TSI	Mud Packs	4	Glovebags	Asbestos in Mud Packs at elbows and fittings
Bathroom & Walls	TSI	Mud Packs	20	Glovebags	Asbestos in Mud Packs at elbows and fittings
Kitchen	Miscellaneous	Sheet Vinyl	288	Square Feet	ACM on back of Kitchen floor covering
Vault Area	Fire Proofing	Protable Safe	2.5x2x2	feet	Safe door is broken open Fire-proofing exposed

ASBESTOS PROJECT DESIGN

TEMPLATE AND

SCOPE OF WORK

RELATED TO THE

ASBESTOS ABATEMENT

AT THE

DEQ OKLAHOMA ARMORY RESTORATION PROJECTS

DCS Project #08066

ODOL # Project # _____

Armory _____

February 12, 2007
(Version 1.0)

Services Provide For:
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson Ave.
Oklahoma City, OK 73102

Asbestos Inspection Services Provided By:
Marshall Environmental Management, Inc.
1145 SW 74th Street, Building E, Suite 300
Oklahoma City, Oklahoma 73139
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Appendix

Individual Armory Floor Plan Diagrams

Individual Armory Estimated Quantities of ACM

Asbestos Inspection Report and Bulk Asbestos Test Results

Project Designer License

I. Scope of Work

This Project Design has been prepared to allow for the safe and economical removal of friable Asbestos Containing Material (ACM) as part of the Oklahoma Department of Environmental Quality (DEQ), Land Protection Division (LPD) Oklahoma Armory Restoration Projects. Each Armory that requires asbestos abatement will receive a Project Number that is to be assigned by the Oklahoma Department of Labor (ODOL).

This Project Design will be used as a Template to address the removal of friable ACM from each Armory that is scheduled for abatement by the DEQ LPD. The initial Project Design will include in the Scope of Work regarding the quantities of friable ACM to be abated at the initial Armory locations identified by the DEQ LPD for asbestos removal. Once hired, a Licensed Asbestos Abatement Contractor's will file the individual notifications required by ODOL and NESHAP. The information on the Armory's floor plans and the estimated quantities and types of ACM is provided in the Appendix of each Project Design at the time the Project Design is submitted to the ODOL for approval.

The work to be conducted at each Armory involves the removal of friable asbestos. Therefore, the ODOL rules that govern the removal of friable asbestos containing materials shall apply to each of the Projects.

The most commonly identified ACM present in each of the Armories generally consists of Thermal System Insulation (TSI) on plumbing lines and/or fittings such as elbows, valves and tee's, and HVAC cloth asbestos dampers. Other ACM regulated as friable under the ODOL Rules consist of sheet vinyl floor coverings.

The Licensed Asbestos Contactor may also be authorized by the DEQ LPD to conduct the removal of non-friable asbestos floor tile and mastic, and potentially cement asbestos (transite) exhaust flues and/or panels. The removal of non-friable ACM is not to be considered a part of the Project Design or ODOL Notification. The quantities of non-friable ACM to be removed shall be indicated on the NESHAP Notice for the individual Armory Project. A Project Design Amendment will be filed whenever the non-friable ACM has the potential to be rendered friable by the removal methods. However, this is not anticipated to happen in most cases.

The methods used for work area preparation, cleaning, and abatement of the friable ACM shall be consistent with the requirements of the Oklahoma Rules for Abatement of Friable Asbestos Materials, OAC 380:50 (ODOL Rules).

The Asbestos Project Design Template addresses the generic requirements for the abatement of the most common forms of ACM identified during the asbestos inspections, conducted as a part of the DEQ Oklahoma Armory Restoration Project.

Owner's Representative: Angela Brunsman
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E-Mail: angela.brunsman@deq.state.ok.us

III. Location, Types of ACM and Estimated Quantities

The Appendix to the Project Design contains the documentation on the location and estimated quantities for the type of ACM identified in the Armory.

The initial set of projects will consist of the removal of ACM from five (5) armories selected for remediation by the DEQ LPD.

The types of the response actions to be taken, quantities, dates and responsible parties performing the abatement, air monitoring and waste disposal will be indicated on the Licensed Asbestos Contractor's NESHAPS Notice and Notification of Asbestos Abatement that are to be filed with DEQ and ODOL, respectively.

Once a notification is received, the ODOL Asbestos Division will assign each Armory Project a unique Project ID Number. The ODOL will utilize this Project Design, and any subsequent Project Design Amendments, as a basis to assess the required scope of work, sequence of events, abatement procedures, air monitoring, clearance sampling and any other related requirements.

The abatement will include removal of asbestos containing TSI on plumbing lines throughout the entire Armory. All TSI on plumbing lines is to be abated by the Licensed Asbestos Contractor.

The abatement will include the removal of all asbestos containing vinyl floor coverings throughout the entire Armory.

The asbestos abatement will include the removal of all asbestos containing HVAC vibration dampers.

Whenever the asbestos abatement includes the removal of asbestos containing surfacing materials, asbestos containing wallboard plaster compounds (bedding tape and joint compounds), a Site Specific Project Design will be submitted to address the requirements for asbestos abatement at that specific Armory.

The Licensed Asbestos Contractor shall file the notification of the intended start date based upon the schedule to be determined by the DEQ LPD Representative. This project is anticipated to start, once a Licensed Contactor is selected as a successful bidder and a notice to proceed is issued by the DCS/CAP. The initial projects are likely to begin in September or October of 2007 and continue on a periodic basis over the remainder of the year. The total project is anticipated to last up to 70 days.

Each Armory project's duration is estimated to take less than less than five days to complete. Clearance testing will be conducted per ODOL rules or as specified in the Project Design Template or Project Specific Project Design Amendment.

V. General Requirements

A. Asbestos Contractor

The DCS has selected a Licensed Asbestos Abatement Contractor for use by the DEQ on the Oklahoma Armory Remediation Projects. A Licensed Asbestos Contractor has been selected to perform the asbestos abatement work in accordance with the ODOL Rules, this Project Design, any Site Specific Project Design Amendments and all applicable rule and regulations issued by those authorities' having jurisdiction.

B. Codes and Regulations

The Asbestos Abatement Contractor (herein and hereafter referred to as the Contractor) shall abide by this Project Design and the requirements which govern asbestos removal in OAC 380:50 and transportation of asbestos waste materials to include, but not limited to, the following:

1. 29 CFR 1910, OSHA General Industry Standards.
2. 29 CFR 1926, OSHA Construction Industry Standard.
3. 29 CFR 1926, 1101 OSHA Asbestos Construction Standard
3. 40 CFR 61, Subpart M (NESHAPS) enforced by ODEQ.
4. ANSI Z88.2 latest edition (Respiratory Protection).
5. Oklahoma Asbestos Control Act Title 40 Sections 450-456.
6. Oklahoma Rules for Abatement of Friable Asbestos Materials, OAC 380:50 (All-inclusive).
7. 49 CFR (USDOT) Hazardous Material Transportation Regulations.
8. All Applicable State Statutes, County and City Codes/Ordinances
9. OAC 252:100-41-16, Air Pollution Control Rules

Wherever conflicts arise in any of this Project Design's General Requirements or Procedures and/or among the applicable Rules and Regulations, the most stringent rules shall apply, subject to approval by ODOL or other authorities' having jurisdiction (e.g. DEQ). Wherever allowed by the authority that has jurisdiction, a request for a variance can be submitted, provided it is acceptable to the Owner's Representative (DEQ)

requirements. When not in use, the storage area, trailer or roll-off bin will be kept locked, wherever possible (e.g. trailer), or sealed tightly (e.g. roll-off bin) to control access to any stored waste. This trailer will be available for inspection to representatives of the ODOL during all site visits, no later than the initial prep inspection.

A uniform style industrial waste manifest or asbestos disposal record shall accompany each load transport to the landfill as specified in the NESHAP regulation. All 6 mil double wrapped wastes, 6-mil double bagged asbestos waste, manifests, landfill disposal records and NESHAP notices shall designate the DEQ and the specific Armory Name (with its address) as the generator of each specific project (e.g. DEQ – Konawa –Address).

E. Insurance

The Contractor performing the asbestos abatement shall provide the DCS and the DEQ LPD with copies of current Certificates of Insurance. The Contractor's General Liability Insurance, Worker Compensation, Hired and Non-Owned Auto Insurance shall meet the requirements of the DCS and the DEQ as specified in the Bid Packet and this Project Design, as well as applicable State Statutes and meet the requirements of Section 452 of Title 40, Oklahoma Asbestos Control Act.

F. Documentation

The Abatement Contractor shall complete all documentation as required by the authorities having jurisdiction and those specified in this Project Design. Air monitoring data shall be generated by the Project's air monitoring firm and supplied to the Licensed Abatement Contractor for any required submittal upon completion of the clearance sampling.

Upon completion of the job, the Licensed Asbestos Abatement Contractor shall provide the Owner's Representative and the DCS/CAP with copies of ODOL inspections, copy of asbestos supervisor's daily reports, electrical engineers safety instructions (if required), all air monitoring results, final clearance testing results, copies of negative pressure recording devices (if required) tapes, and all signed asbestos disposal manifests.

G. Site Security, Electrical Safety and Employee Hazard Communication

All entrances and exits to the regulated work areas within the Armory (i.e. areas marked by asbestos warning signs) and entrance to the central decon shall have an asbestos hazard warning sign attached. During off shift hours, all entryways into the Armory shall be kept locked to restrain unauthorized personnel from entry into the Armory until such time as all the ACM has

5. Place abatement supplies in the Armory rooms.
6. Surround regulated work area with asbestos hazard warning tape.
7. Remove the ceiling tiles to access the TSI on plumbing lines
8. Perform any pre-cleaning of loose ACM, if necessary, to complete the prep.
9. Hang all required negative pressure glovebags per ODOL Rules.
10. Prepare any rooms requiring abatement of vinyl wall coverings per ODOL Rule 380:50-23-1.
11. Schedule ODOL Prep Inspection.

VII. Abatement Procedures.

During all phases of the work, the building's re-circulating heat and air system will be turned off, and the critical barriers are to be placed over all HVAC supply and return air grilles. These shall be routinely inspected and maintained in a sealed condition by the Licensed Abatement Contractor.

A. Glovebag Removal

Prior to beginning any removal of TSI from the plumbing lines, the Contractor shall have hung as many negative pressure glovebags as possible for ODOL inspection at the scheduled prep inspection.

The negative pressure glovebag procedure shall conform to the Licensed Asbestos Contractor's written Operation and Maintenance (O&M) Program on file with the ODOL.

As a standard operating procedure, the exposed plumbing inside each glovebag will be treated with an EPA approved post abatement sealant/ lockdown agent prior to removing the glovebag. The sealant shall be pigmented so as to identify piping treated with the lockdown once the ACM is removed.

The Asbestos Supervisor shall keep a written log of the number of glovebag operations performed at the Armory each day that work is performed.

Once the scheduled glovebag removal is completed, the Licensed Asbestos Contractor shall call for a visual inspection by the ODOL Inspector.

B. Asbestos Containing Sheet Vinyl Flooring.

3. A popup change room will be placed at the entrance to the work area to facilitate egress under a double suit protocol to a central decontamination facility.
4. Critical barriers will be placed over windows or any openings to the adjacent rooms in the Armory.
5. A layer of 6-mil poly will be place below the dampers on the floor (wear space is available) to collect any fallen pieces of ACM as the dampers are removed.
6. All HEPA vacuums, waste disposal bags and amended water supplies and all other abatement supplies are to be present in the work area before any removal begins.
7. The Licensed Abatement Contractor shall have contacted the ODOL Asbestos Division to determine if a prep inspection will be required prior to scheduling the start of the abatement.
8. The Licensed Asbestos Contractor can begin to remove the HVAC cloth vibration dampers after the prep inspection is approved by ODOL and/or as otherwise approved by communication with the ODOL inspector.
9. The Licensed Asbestos Contractor shall remove all HVAC asbestos vibration dampers (found in the mechanical room and/or or in heat and air equipment closets) in a systematic and controlled manner using wet methods and HEPA vacuum techniques.
10. A HEPA vacuum is to be used to draw a negative pressure along the perimeter of the duct as the dampers are treated with amended water. Once wet, the worker can begin to carefully free up the asbestos cloth damper material from the sheet metal duct work using sheet metal pliers or similar tools. Once removed, the wetted damper materials are to be immediately disposed of by placing the damper into an asbestos disposal bag.
11. The exposed edges of the metal duct and adjacent interior of the HVAC ductwork are to be HEPA vacuumed and wet wiped so as to be free of any visible residue of the asbestos cloth damper.
12. The Licensed Abatement Contractor shall have contacted the ODOL Asbestos Division to determine if a visual inspection will be required prior to scheduling the clearance sampling.
13. Once dry, the exposed edges of the metal ductwork that had held the asbestos damper material are to be treated with a post abatement sealant (i.e. lockdown).
14. Once the post abatement sealant/lockdown has dried, and if necessary a visual inspection has been performed by ODOL, clearance sampling shall be conducted in the area in accordance with ODOL rules.
15. Upon approval of the clearance sampling, the Licensed Asbestos Inspector shall seal the opening to the ducts with a layer of 6-mil polyethylene until such time as the replacement of the dampers can be scheduled.

B. Work Clothing and Associated PPE.

Additional PPE will consist of disposable asbestos worker clothing, protective gloves, hard hats, steel toe rubber boots and disposable work gloves.

All disposable PPE not limited to respirator cartridges, asbestos work clothing, gloves and other disposable items will be disposed of as asbestos waste throughout all phases of work.

Re-use items will be decontaminated using wet methods and HEPA vacuums at the central decontamination unit before they are brought out of the work area (e.g. rubber boots, respirator face piece).

X. Decontamination and Waste Loadout

A. Decon and Loadout.

Workers will be provided a three-chamber centralized decontamination facility (Decon).

A popup change room is to set up at the perimeter of the egress point for the regulated work area. Workers who exit the work area for the sheet flooring removal will put on an additional asbestos suit inside the popup change room before exiting the work area to proceed to the central decon in accordance with OAC 380:50-23-1. Worker Decontamination procedures shall comply with OAC 380:50-15-8.

The central decon will be connected to a HEPA filtered negative pressure device, such as a large HEPA vacuum or low speed negative air machine attached to the dirty side of the central decon. The set-up will allow for the flow of clean air into the clean room and then allow for the air to exhaust through the HEPA filter device attached to the dirty side of the Decon.

This will allow the central decon to have a flow of clean air that is drawn into the clean room and exhausts out through the central decon's dirty room per ODOL requirements OAC 380:50-15-12 (7).

Due to limitations in space, the Licensed Asbestos Contractor shall have some flexibility in the placement of the decontamination facility and loadout.

The Clean Room shall conform to the requirements of OAC 380:50-15-7. When space is limited, a variance may be requested from ODOL for the size and configuration of the centralized decontamination facility.

C. Area Monitoring.

The following area samples shall be collected inside the Armory during each work shift when asbestos removal activities are being conducted.

One sample should be placed in the vicinity of a work crew during each work shift (i.e. one in the glovebag work area and one in the sheet vinyl work area).

A maximum of two samples outside on the work area in the Armory building on the side of the regulated area where critical barrier were established to separate off area(s) where no asbestos removal was required (e.g. a classroom area or hallway with no TSI or vinyl flooring).

One sample will be collected outside the Clean Room each day the Decon is in use.

One sample will be collected outside the loadout during loadout activities.

One area sample shall be placed in the Mechanical Room or HVAC heat and air conditioning closet during the shift when the HVAC asbestos cloth dampers are being removed.

D. Action Level.

Fiber counts for outside area samples collected in adjacent spaces which exceed an actual fiber concentration of >0.01 fibers/cc, shall be cause to stop work and evaluate the need to change procedures and perform necessary cleanup. A representative set of such samples will be re-analyzed by the NIOSH 7402 TEM method to establish a confirmed level of asbestos fibers. If it is determined that a representative number of samples tested using the NIOSH 7402 procedure exceed the 0.01 fibers per cc then all the work will stop and ODOL will be notified before any work is allowed to continue. Those samples, which are B.D.L., due to insufficient sample volume or sampling time, will not be considered as exceeding this action level.

E. Clearance Testing.

Clearance Testing will consist of one PCM sample collected for a minimum of 6 hours and 3000 liters inside each room or hallway where asbestos removal activities have taken place once a visual inspection has been approved by ODOL. This will require a minimum of three samples if less than three rooms were involved in regulated work.

XII. Loadout and Disposal.

Double bagged asbestos waste will be brought to an exit location at the Armory. Waste generator labels will be placed on each bag. Then each bag will be transported by the workers to the prepared storage unit, waste trailer or roll-off bin.

Waste manifests will be used to track the quantity of waste to the disposal site on the NESHAPS Notice.

XIII. Safety Issues, Electrical Safety, Fire and Emergency Egress

No work will be at performed without adequate lighting. The work area will be clearly illuminated by droplights, light stands, or equivalent lighting, if the ambient room light does not properly illuminate the work area through the polyethylene sheeting used for critical barriers over the windows.

All work will be performed using a buddy system.

All power to the area is to be supplied by the GFI power source.

All exit routs from the Armory building work areas will be clearly marked with a sign and arrow designating the exit path. Emergency lights will be in place, where necessary, in all areas that are not properly illuminated so as to assist in the identification of the exit locations.

A minimum of three fire extinguishers will be on site during all phases of work. The fire extinguishers shall be 10 # A:B:C rated.

A minimum of one fire extinguisher will be in the glovebag work area and one in the area(s) prepared for the removal of sheet flooring material.

A minimum of one fire extinguisher shall be place the in the clean room of the Decon facility.

XIV. Requests for Variances

Request for variances must be submitted to both the Licensed Project Designer and ODOL Inspector.

None were anticipated at the Pre-abatement Bid Conference.

XV. Removal of Asbestos in Soil

This Project does not require the removal of any soils contaminated with ACM.

Appendix

Individual Armory Floor Plan Diagrams

Individual Armory Estimated Quantities of ACM

Asbestos Inspection Report and Bulk Asbestos Test Results

Project Designer License

Oklahoma Department of Environmental Quality
Land Protection Division
WATONGA ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 11-09-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
Floor Tiles & Mastic							
Orderly Room/Office Misc.		Floor Tile/Mastic	384	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic							
Motor Pool Miscellaneous		Sheet Vinyl & Mastic	250	~Square Feet	Chrysotile	25%	Spread out over an approximate 500 Sq. Floor Area
2nd Floor Mech. Rm. Miscellaneous		Sheet Vinyl & Mastic	130	~Square Feet	Chrysotile	25%	Does not appear to go under HVAC equipment
DOL Required Air Monitoring	N/A	Air Monitoring	1.5	Shifts			Personal and Area Monitoring for Sheet Vinyl, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

Project Design Review Form

Approved ☒

Disapproved ☐

Oklahoma Department of Labor

Asbestos Division

4001 N. Lincoln Blvd., Oklahoma City, OK 73105

Phone - (405) 528-1500 Fax - (405) 524-6793

Project Name: Watonga Armory

Project No.: 07-5274 Date: 3/19/2007

Project Designer: Charles Marshall

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	✖		V.(B) OAC 380:50 ODOL Rules, 29CFR1910,1926, 40CFR61, ANSI Z.88:2, 49CFR (DOT), and all state statutes, county, and city codes/ordinances, and OAC 252:100-41-16
2.	Sequencing and phasing of work.	✖		IV.
3.	Identification of means of egress and a fire protection plan.	✖		XIII. Exits clearly marked with sign and arrows towards exit path emergency lights in place where necessary, minimum of (3) 10# ABC rated fire extinguishers, all areas illuminated with drop lights and light stands
4.	The quantity, type, and location of asbestos materials to be abated.	✖		④ Summary Sheet: 380 sq. ft. sheet vinyl and mastic 25 % Chrysotile and 5 % Chrysotile
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	✖		VII. (B) Accordance with 380:50-23-1
6.	Numbers of area air monitoring pumps.	✖		XI. Backgrounds collected prior to start of abatement. Min. 25% personals, (5) samples 1 in work area, 2 outside work area, 1 outside clean room, 1 at loadout during activity Clearances: 3 PCM samples collected for min. of 6 hours at 3000 liters
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	✖		VIII. (B) following 380:50-31-1, 4 air changes per hour vented internally, 1 neg. air, 1 neg air attached to dirty room of decon to pul air across shower.
8.	Details of the project containment(s).	✖		VI.(B) Establish regulated work area with warning signs and tape, install criticals, establish GFI circuits, setup decon, place supplies in room, prep rooms according to 380:50-23-1
9.	Details of the decontamination system(s).	✖		X. 3 chamber centralized decon facility(380:50-15-8), accessed by placing clean suit over contaminated suit before exiting work area. Neg air attached to dirty room to pull air across shower.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	✖		XV. None anticipated
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	✖		XVI. None anticipated
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	✖		XIV. None, any request must be submitted to Project Designer and ODOL inspector.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: [signature] DATE: 3/23/07 REVIEWED BY: [signature] DATE: 3/23/07

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division
4001 N. Lincoln Blvd., Oklahoma City, OK 73105
Phone - (405) 528-1500 Fax - (405) 524-6793

Project Name: Allen Armory
Project No.: 07 - 5272 Date: 4 / 5 / 07
Project Designer: Charles Marshall

Approved ☒
Disapproved ☐

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	X		page three.
2.	Sequencing and phasing of work.	X		page six. IV.
3.	Identification of means of egress and a fire protection plan.	X		page nineteen. XIII.
4.	The quantity, type, and location of asbestos materials to be abated.	X		193 ln. ft. TSI. App. 64 glovebags. 5 to 70% Chrysotile. Located above ceiling tile.
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	X		page eleven. VII. A. Glovebag Removal.
6.	Numbers of area air monitoring pumps.	X		page seventeen. C. Area Monitoring.
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	X		Glovebag operation, will pull air across shower.
8.	Details of the project containment(s).	X		Glovebag operation. See drawings.
9.	Details of the decontamination system(s).	X		page fourteen. X. Centralized de-con.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	NA		
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	NA		
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		page nineteen. XIV. None requested at this time.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: [signature] DATE: 4-5-07 REVIEWED BY: [signature] DATE: 4/5/07

Project Design Review Form

Approved [X]

Disapproved [ ]

Oklahoma Department of Labor
Asbestos Division
4001 N. Lincoln Blvd., Oklahoma City, OK 73105
Phone - (405) 528-1500 Fax - (405) 524-6793

Project Name: Chickasha Armory
Project No.: 07-5273 **Date:** 3/19/2007
Project Designer: Charles Marshall

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	X		V.(B) OAC 380:50 ODOL Rules, 29CFR1910,1926, 40CFR61, ANSI Z.88.2, 49CFR (DOT), and all state statutes, county, and city codes/ordinances, and OAC 252:100-41-16
2.	Sequencing and phasing of work.	X		IV.
3.	Identification of means of egress and a fire protection plan.	X		XIII. Exits clearly marked with sign and arrows towards exit path emergency lights in place where necessary, minimum of (3) 10# ABC rated fire extinguishers, all areas illuminated with drop lights and light stands
4.	The quantity, type, and location of asbestos materials to be abated.	X		④ Summary Sheet: Two vibration dampers that are 80 % Chrysotile.
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	X		VII. Isolate work area, utilize wet methods during removal of vibration dampers.
6.	Numbers of area air monitoring pumps.	X		XI. Min. 25% personals, (5) samples 1 in work area, 2 outside work area, 1 outside clean room, 1 at loadout during activity Clearances: 3 PCM samples collected for min. of 6 hours at 3000 liters
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	X		VIII. 1 neg air attached to dirty room of decon to pull air across shower.
8.	Details of the project containment(s).	X		VI.(B) Establish regulated work area with warning signs and tape, install criticals, establish GFI circuits, setup decon, place supplies in room, prep rooms according to 380:50-23-1
9.	Details of the decontamination system(s).	X		X. 3 chamber centralized decon facility(380:50-15-8), accessed by placing clean suit over contaminated suit before exiting work area. Neg air attached to dirty room to pull air across shower.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	X		XV. None anticipated
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	X		XVI. None anticipated
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		XIV. None, any request must be submitted to Project Designer and ODOL inspector.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: _____ DATE: 3-21-07 REVIEWED BY: _____ DATE: 3/3/07

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division
4001 N. Lincoln Blvd., Oklahoma City, OK 73105
Phone - (405) 528-1500 Fax - (405) 524-6793

RECEIVED 3.21.07

Project Name: Hartshorne Armory
Project No.: 07-5279 Date: March 20, 2007
Project Designer: Charles L. Marshall - Lic.5140028

Approved [X]
Disapproved [ ]

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	XX		Section I Scope of Work
2.	Sequencing and phasing of work.	XX		Section IV
3.	Identification of means of egress and a fire protection plan.	XX		Section XIII
4.	The quantity, type, and location of asbestos materials to be abated.	XX		Appendix : TSI - approx. 195 linear feet or 65 glovebags; ~~Floor Tile - 600 square feet.~~ Floor Tile - Non-friable and non-regulated Abbott 3/22/07
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	XX		Section VII : Glovebag removal in accordance with OAC 380:50-13. ~~Sheet Vinyl Flooring removal in accordance with OAC 380:50-23-4.~~ No Sheet Flooring involved - Abbott 3/22/07
6.	Numbers of area air monitoring pumps.	XX		Section XI
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	XX		The decontamination facility will require a negative air machine to be attached to the dirty room.
8.	Details of the project containment(s).	XX		Appendix Map
9.	Details of the decontamination system(s).	XX		Section X : Three stage, centralized decontamination facility will be utilized on this project. Negative air machine will be located on the dirty room of the decon to create a flow of air from the clean room, through the shower, and exhaust out the dirty room.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	N/A		
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	N/A		
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	N/A		

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: Bryan Keaton DATE: 03/20/2007

REVIEWED BY: Bernita Hart DATE: 3/22/07

03/20/2007 TUE 15:25 [JOB NO. 6006] 002
MAR. 20. 2007 4:43PM OKLA_DPT_OF_LABOR NO. 511 P. 2
NO. 809 P. 2/2

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division
4001 N. Lincoln Blvd., Oklahoma City, OK 73105
Phone - (405) 528-1500 Fax - (405) 524-6793

Project Name: Watonga Armory
Project No.: 07-5274 Date: 3/19/2007
Project Designer: Charles Marshall

Approved [X]
Disapproved [ ]

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	X		V.(B) OAC 380:50 ODOL Rules, 29CFR1910,1926, 40CFR61, ANSI Z-88.2, 49CFR (DOT), and all state statutes, county, and city codes/ordinances, and OAC 252:100-41-16
2.	Sequencing and phasing of work.	X		IV.
3.	Identification of means of egress and a fire protection plan.	X		XIII. Exits clearly marked with sign and arrows towards exit path emergency lights in place where necessary, minimum of (3) 10# ABC rated fire extinguishers, all areas illuminated with drop lights and light stands
4.	The quantity, type, and location of asbestos materials to be abated.	X		④ Summary Sheet: 380 sq. ft. sheet vinyl and mastic 25 % Chrysotile and 5 % Chrysotile
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	X		VII. (B) Accordance with 380:50-23-1
6.	Numbers of area air monitoring pumps.	X		XI. Backgrounds collected prior to start of abatement. Min. 25% personals, (5) samples 1 in work area, 2 outside work area, 1 outside clean room, 1 at loadout during activity Clearances: 3 PCM samples collected for min. of 6 hours at 3000 liters
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	X		VIII. (B) following 380:50-31-1, 4 air changes per hour vented internally, 1 neg. air, 1 neg air attached to dirty room of decon to pul air across shower.
8.	Details of the project containment(s).	X		VI.(B) Establish regulated work area with warning signs and tape, install criticals, establish GFI circuits, setup decon, place supplies in room, prep rooms according to 380:50-23-1
9.	Details of the decontamination system(s).	X		X. 3 chamber centralized decon facility(380:50-15-8), accessed by placing clean suit over contaminated suit before exiting work area. Neg air attached to dirty room to pull air across shower.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	X		XV. None anticipated
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	X		XVI. None anticipated
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		XIV. None, any request must be submitted to Project Designer and ODOL inspector.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: [signature] DATE: 3/23/07 REVIEWED BY: [signature] DATE: 3/23/07

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division
4001 N. Lincoln Blvd., Oklahoma City, OK 73105
Phone - (405) 528-1500 Fax - (405) 524-6793

Project Name: Welcome Armory
Project No.: 07-5270 **Date:** 03/20/07
Project Designer: Dr. Charles Marshall

Approved [X]
Disapproved [ ]

ITEM NO.	ITEM	ACCEPT-ABLE	NOT ACCEPT-ABLE	COMMENTS
1.	A statement that DOL Abatement of Friable Asbestos Materials Rules apply.	X		Section 1, Page 3. The methods used for work area preparation, cleaning, and abatement of the friable ACM shall be consistent with the requirements of the Oklahoma Rules for Abatement of Friable Asbestos Materials, OAC 380:50 (ODOL Rules).
2.	Sequencing and phasing of work.	X		Section IV, Page 6. Sequence of Events, Projected Dates and Duration of Project.
3.	Identification of means of egress and a fire protection plan.	X		Section XIII, Page 19. Exit routes will be clearly marked with a sign and arrow designating path. Emergency lights will be placed where necessary. A minimum of three 10:ABC fire extinguishers will be on site with at least one in each area of abatement and one in the clean
4.	The quantity, type, and location of asbestos materials to be abated.	X		Section III, Page 5. The abatement will include removal of asbestos containing TSI on all plumbing lines, vinyl flooring and vibration dampers throughout the entire Armory. The types and amounts of ACM are located in the appendix of the project design.
5.	Abatement methods, and techniques, and numbers of glovebags or mini-containment.	X		All TSI shall be removed by the glove bag method. Vinyl flooring shall be removed by wetting the top and back of the floor sheeting with amended water. The sheeting can be cut into one foot diameter strips and removed from the floor and immediately placed into an asbestos bag.
6.	Numbers of area air monitoring pumps.	X		Section XI, page 17. A minimum of seven area air monitoring pumps will be anticipated during each day of removal.
7.	Numbers, capacities, location, and discharge points, if any, of negative air machines.	X		Section VIII, Page 13. Sufficient number of negative air machines to provide four air exchanges per hour will be required in areas of vinyl floor covering abatement. Neg-air machines need not be exhausted externally. One negative air machine will be attached to the equipment room.
8.	Details of the project containment(s).	X		Section VI, Page 10. Warning signs and tape to establish regulated area, critical barriers, GFI, centralized de-con. Any room requiring abatement of vinyl floor coverings shall be prepped and completed following procedures in OAC 380:50-23-1.
9.	Details of the decontamination system(s).	X		Section X, Page 14. Workers will be provided a three chambered centralized de-con. Workers who exit the work area for floor sheeting will put on an additional clean suit in an attached change room before proceeding to the de-con facility. The de-con will be under neg. pressure.
10.	The extent to which asbestos-contaminated soils, if any, must be removed, and the sampling methods of determining the efficacy of such removal.	X		Section XV, Page 19. This Project does not require the removal of any soils contaminated with ACM.
11.	Special materials or methods required to protect objects in the work area should be detailed, (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).	X		Section XVI, page 20. No special materials or methods for accomplishing the removal are anticipated.
12.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		Section XIV, Page 19. None were anticipated at the Pre-abatement Bid Conference.

The Department of Labor reserves the right to require additional engineering or environmental controls consistent with the Abatement of Friable Asbestos Materials Rules which may be necessary because of discrepancies between this project design and field conditions, or from unanticipated changes in field conditions.

REVIEWED BY: Greg Horner DATE: 3-26-07 REVIEWED BY: Brenita Hunt DATE: 3/27/07

Oklahoma Department of Environmental Quality
Land Protection Division
ALLEN ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection 10-26-2006

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
TSI on Plumbing							
Classroom Area	TSI	Air-Cell & Mud Packs	46	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway	TSI	Air-Cell & Mud Packs	12	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Meeting Room	TSI	Air-Cell & Mud Packs	30	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room	TSI	Air-Cell & Mud Packs	34	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Men's Room	TSI	Air-Cell & Mud Packs	36	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room	TSI	Air-Cell & Mud Packs	25	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Tool Room	TSI	Air-Cell & Mud Packs	2	Linear Feet	Chrysotile	65%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Total TSI Quantities	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	193	Total Est. Linear Feet of TSI			Approximately 64 Glove Bags (Ave. 3 LF each)
		Glove Bags	64	Glove Bag			Negative Pressure Glovebag Operation
Floor Tiles & Mastic							
Storage Room	Miscellaneous	Floor Tile/Mastic	219	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Transite							
~~Drill Floor Roof~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~6,080~~	~~Square Feet~~		~~50% (est.)~~	**NOT TO BE INCLUDED IN BID**
~~Exhaust Flues:~~							
~~Drill Floor~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~36~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
~~Maintenance Room~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~12~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
~~Supply Room~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~6~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
~~Classroom Heaters~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~10~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
~~Motor Pool~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~16~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
DOL Required Air Monitoring	N/A	Air Monitoring	2.5	Shifts			100% Glove Bag Personal Monitoring for Clearances, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

Oklahoma Department of Environmental Quality
Land Protection Division
HARTSHORNE ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 10-31-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
TSI on Plumbing							
Small Class Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Chrysotile	5%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Supply Room	TSI	Air-Cell & Mud Packs	20	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Hallway	TSI	Air-Cell & Mud Packs	14	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Kitchen	TSI	Air-Cell & Mud Packs	17	Linear Feet	Chrysotile	8-70%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Men's Room	TSI	Air-Cell & Mud Packs	54	Linear Feet	Chrysotile	8-90%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Maintenance Room	TSI	Air-Cell & Mud Packs	46	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Ladies Room	TSI	Air-Cell & Mud Packs	8	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Other Above Ceiling	TSI	Air-Cell & Mud Packs	36	Linear Feet	Chrysotile	8%	Runs are Air-Cell, Chrysotile at Taped Joints/Muds
Total TSI Quantities	TSI	All of the Plumbing Lines (Straight Runs and Mud Packs)	195	Total Est. Linear Feet of TSI			Approximately 65 Glove Bags (Ave. 3 LF each)
		Glove Bags	65	Glove Bag			Negative Pressure Glovebag Operation
Floor Tiles & Mastic							
Orderly Room/Offices	Miscellaneous	Floor Tile/Mastic	588	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Transite							
~~Drill Floor Roof~~	~~Miscellaneous~~	~~Trasite Roof~~	~~6,080~~	~~Square Feet~~	~~Chrysotile~~	~~50% (est.)~~	**NOT TO BE INCLUDED IN BID**
~~Exhaust Flues:~~							
~~Drill Floor~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~36~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
~~Motor Pool~~	~~Miscellaneous~~	~~Cement Asbestos~~	~~6~~	~~Linear Feet~~	~~Chrysotile~~	~~60%~~	**NOT TO BE INCLUDED IN BID**
DOL Required Air Monitoring	N/A	Air Monitoring	2.5	Shifts			100% Glove Bag Personal Monitoring for Clearances, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

Oklahoma Department of Environmental Quality
Land Protection Division
CHICKASHA ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 11-14-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
				N/A			
Armory							
Boiler Room	TSI	Damper	4	Square Feet	Chrysotile	80%	Two (2) 6 ft. by 4 in. Vibration Dampers
Portable Building							
Exterior	Miscellaneous	Transite	1	Cubic Yard	Chrysotile	40%	Only Portions of Transite Remain on the Building
Interior	Miscellaneous	Floor Tile	1	Cubic Yard	Chrysotile	3%	Floor Tiles are Loose on Floor of Structure
Interior	Miscellaneous	Mastic	500	Square Feet	Chrysotile	5%	Mastic May Come Up With Loose Floor Tiles
DOL Required Air Monitoring	N/A	Air Monitoring	N/A	N/A			Contractor to provided Air Monitoring as Needed Per ODOL Rules

Oklahoma Department of Environmental Quality
Land Protection Division
WEWOKA ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 12-16-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
TSI on Plumbing							
Drill Hall	TSI	Mud Packs	6	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Firing Range	TSI	Mud Packs	5	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Lobby Area	TSI	Mud Packs	1	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Office Areas	TSI	Mud Packs	30	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Mechanical Room	TSI	Mud Packs	14	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Classrooms	TSI	Mud Packs	4	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Bathroom & Walls	TSI	Mud Packs	20	Glovebags		15%	Asbestos in Mud Packs at elbows and fittings
Total Mud Packs	TSI	Mud Packs	80	Glovegags		15%	Approximately 80 Glove Bags (Ave. 3 LF each)
Save in Vault	TSI	TSI Mud	1	N/A		4%	Wrap for Disposal
Total TSI:		Glove Bags	80	Glove Bag			Negative Pressure Glovebag Operation
Floor Tiles & Mastic							
Lobby & Offices	Miscellaneous	Mastic	4,352	Square Feet		5%	Black Asbestos Containing Asphalt Mastics
Lobby & Offices	Miscellaneous	Floor Tile	0.5	Cubic Yard		3%-5%	Misc. Broken Floor Tile Debris
Lobby & Offices	Miscellaneous	Floor Tile	1	Cubic Yard		3%-5%	Misc. Broken Floor Tile Debris
Outside	Miscellaneous	Floor Tile	1	Cubic Yard		3%-5%	
Sheet Vinyl & Mastic							
Kitchen	Miscellaneous	Sheet Vinyl	288	Square Feet		25%	ACM on back of Kitchen floor covering
DOL Required Air Monitoring	N/A	Air Monitoring	2.5	Shifts			100% Glove Bag Personal Monitoring for Clearances, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer, Sheet Vinyl per ODOL Rule.

Oklahoma Department of Environmental Quality
Land Protection Division
WATONGA ARMORY

Asbestos Inspection by:
Marshall Environmental Management, Inc.
Summary of Estimated Quantities of ACM
Date of Inspection: 11-09-06

Location	Type of ACM	Category	Estimated Bid Quantities	Units	Types of ACM	Percentage	Comments
Inside Armory							
Floor Tiles & Mastic							
Orderly Room/Office	Misc.	Floor Tile/Mastic	384	Square Feet	Chrysotile	3%-5%	Asbestos Floor Tile & Asbestos Mastic
Sheet Vinyl & Mastic							
Motor Pool	Miscellaneous	Sheet Vinyl & Mastic	250	~Square Feet	Chrysotile	25%	Spread out over an approximate 500 Sq. Floor Area
2nd Floor Mech. Rm.	Miscellaneous	Sheet Vinyl & Mastic	130	~Square Feet	Chrysotile	25%	Does not appear to go under HVAC equipment
DOL Required Air Monitoring	N/A	Air Monitoring	1.5	Shifts			Personal and Area Monitoring for Sheet Vinyl, Negative Exposure Assessment on Floor Tile, One Clearance Sample per Room Recommended by Project Designer.

ASBESTOS FINAL REPORT

ABATEMENT SYSTEMS, INC.

ENVIRONMENTAL SAFETY CONTRACTORS

January 16, 2008

DCS/CAP RETAINED COPY JSM

Mr. Dustin Davidson
Department of Environmental Quality
Will Rogers Building
2401 N. Lincoln Blvd., #106
Oklahoma City, OK 73105-4402

Re: DCS Project No. 08066 – Asbestos Abatement in 5 National Guard Armories

Dustin,

Enclosed please find waste disposal manifests, air clearance results and D.O.L. inspection report forms for the above referenced project.

This project was completed in accordance with all D.O.L. and D.E.Q. rules and regulations and Marshall Environmental's project design dated 2/12/07.

If you have any further questions, please feel free to contact me.

Sincerely,

Jon Sumners
President

JS/nv
Encl.

Post Office Box 773 • Broken Arrow, OK 74013-0773
(918) 251-2504 • (800) 256-2096 • FAX (918) 251-3852

Marshall Environmental
1145 Southwest 74th Street, Suite 300
Oklahoma City, Oklahoma 73139
Office: (405) 616-0401
Fax: (405) 972-0525

12/11/2007

Niosh 7400: X Other Specify:

Personal Protection: Full Face/Tyvek

Present Activity: Clearances

Date Collected: 12/7/2007

Date Analyzed: 12/7/2007

Project: Allen Armory
903 N Paul St
Allen Oklahoma

Contact Person: Mike Tate

Phone Number:

CERTIFICATE OF ANALYSIS

	Sample Number	Name/Location	Beginning Time	Ending Time	Total Time	Flow Rate Begin	Flow Rate End	Average Flow Rate	Total Volume	Pump Number	Fiber Count	Fiber Fields	F/MM2	F/cc	L.C.L.	U.C.L.	Detection Limit
c	CL1	Area 1 Room 2	11:02	14:46	224.00	10.00	10.00	10.000	2240.00	1	4	100	5.0955	B.D.L	B.D.L	0.0040	0.0022
c	CL2	Area 2 Room 4	11:02	14:46	224.00	10.00	10.00	10.000	2240.00	2	8	100	10.1911	B.D.L	B.D.L	0.0040	0.0022
c	CL3	Area 3 Room 5	11:02	14:46	224.00	10.00	10.00	10.000	2240.00	5	9.5	100	12.1019	B.D.L	B.D.L	0.0040	0.0022
c	CL4	Area 4 Room 9	11:02	14:46	224.00	10.00	10.00	10.000	2240.00	19	6	100	7.6433	B.D.L	B.D.L	0.0040	0.0022
c	CL5	Area 5 Men's Room	11:02	14:46	224.00	10.00	10.00	10.000	2240.00	7	4	100	5.0955	B.D.L	B.D.L	0.0040	0.0022
	B1	Blank									0						

B.D.L. = Below Detection Limit

Sampled By: Jamie Marshall Sampling Location: Clearances Date: 12/7/2007 Time: 11:00-15:00

Analyst: Jamie Marshall Microscope: Field Area: 0.00785 Filter Area: 385

Marshall Environmental
1145 Southwest 74th Street, Suite 300
Oklahoma City, Oklahoma 73139
Office: (405) 616-0401
Fax: (405) 972-0525

Niosh 7400: X Other Specify:

Personal Protection: Full Face/Tyvek

Present Activity: Removal

Date Collected: 12/7/2007

Date Analyzed: 12/7/2007

Project: Allen Armory

Contact Person: Mike Tate

Phone Number:

CERTIFICATE OF ANALYSIS

	Sample Number	Name/Location	Beginning Time	Ending Time	Total Time	Flow Rate Begin	Flow Rate End	Average Flow Rate	Total Volume	Pump Number	Fiber Count	Fiber Fields	F/MM2	F/cc	L.C.L.	U.C.L.	Detection Limit
c	P-1	Bruce Wilson 429-13-2958	8:05	10:40	155.00	2.50	2.50	2.500	387.50	464	9	100	11.4650	B.D.L	B.D.L	0.0229	0.0127
c	P-2	Steve Riggs 441-64-9905	8:05	10:40	155.00	2.50	2.50	2.500	387.50	5	5.5	100	7.0064	B.D.L	B.D.L	0.0229	0.0127
c	A-3	Inside Area	8:06	10:42	156.00	2.50	2.50	2.500	390.00	3	6	100	7.6433	B.D.L	B.D.L	0.0227	0.0126
c	A-4	Outside Area/Load Out	8:07	10:43	156.00	2.00	2.00	2.000	312.00	457	4	100	5.0955	B.D.L	B.D.L	0.0284	0.0157
c	A-5	Clean Room	8:08	10:44	156.00	2.00	2.00	2.000	312.00	412	2.5	100	3.1847	B.D.L	B.D.L	0.0284	0.0157
c	A-6	Neg Air	8:09	10:45	156.00	2.00	2.00	2.000	312.00	453	3	100	3.8217	B.D.L	B.D.L	0.0284	0.0157
c	A-7	Blank									0						

B.D.L. = Below Detection Limit

Sampled By: Jamie Marshall Sampling Location: Allen Date: 12/7/2007 Time:

Analyst: Jamie Marshall Microscope: Field Area: 0.00785 Filter Area: 385

Dec 11 07 12:57p Marshall Environmental (405)972-0525 p.3

1145 Southwest 74th Street, Suite 300
Oklahoma City, Oklahoma 73139
Office: (405) 616-0401
Fax: (405) 972-0526

Project: Allen Armory

Niosh 7400: X Other Specify:

Personal Protection:

Present Activity: Glovebag

Contact Person: Mike Tate

Date Collected: 12/6/2007

Phone Number:

Date Analyzed: 12/6/2007

CERTIFICATE OF ANALYSIS

	Sample Number	Name/Location	Beginning Time	Ending Time	Total Time	Flow Rate Begin	Flow Rate End	Average Flow Rate	Total Volume	Pump Number	Fiber Count	Fiber Fields	F/MM2	F/cc	L.C.L.	U.C.L.	Detection Limit
c	P-1	Bruce Wilson 429-13-2858	13:56	20:24	388.00	2.50	2.50	2.500	970.00	454	7	100	8.9172	B.D.L.	B.D.L.	0.0091	0.0051
c	P-2	Steve Riggs 441-84-9905	13:56	20:24	388.00	2.50	2.50	2.500	970.00	5	5	100	6.3694	B.D.L.	B.D.L.	0.0091	0.0051
c	A-3	Paul Gibson 442-72-2174	13:56	20:24	388.00	2.50	2.50	2.500	970.00	3	5	100	6.3694	B.D.L.	B.D.L.	0.0091	0.0051
c	A-4	Inside Area	13:58	20:26	388.00	2.00	2.00	2.000	776.00	457	3	100	3.8217	B.D.L.	B.D.L.	0.0114	0.0063
c	A-5	Outside Area/Load Out	14:02	20:28	386.00	2.00	2.00	2.000	772.00	412	4	100	5.0955	B.D.L.	B.D.L.	0.0115	0.0064
c	A-6	Clean Room	14:03	20:31	388.00	2.00	2.00	2.000	776.00	453	1	100	1.2739	B.D.L.	B.D.L.	0.0114	0.0063
c	A-7	Neg Air	14:06	20:34	388.00	2.00	2.00	2.000	776.00	413	2	100	2.5478	B.D.L.	B.D.L.	0.0114	0.0063
c	A-8	Blank									0						

B.D.L. = Below Detection Limit

Sampled By: Brice Semrad Sampling Location: Allen Date: 12/6/2007 Time:

Analyst: Brice Semrad Microscope: Field Area: 0.00785 Filter Area: 385

1145 Southwest 74th Street, Suite 300
Oklahoma City, Oklahoma 73139
Office: (405) 616-0401
Fax: (405) 972-0525

Project: Allen Armory

903 N Paul St
Allen Oklahoma

Niosh 7400: X Other Specify:

Personal Protection: Full Face/Tyvek

Present Activity: Prep

Date Collected: 12/5/2007

Date Analyzed: 12/5/2007

Contact Person:

Phone Number:

CERTIFICATE OF ANALYSIS

	Sample Number	Name/Location	Beginning Time	Ending Time	Total Time	Flow Rate Begin	Flow Rate End	Average Flow Rate	Total Volume	Pump Number	Fiber Count	Fiber Fields	F/MM2	F/cc	L.C.L.	U.C.L.	Detection Limit
c	PP1	Steve Riggs 441-84-9905	8.16	14.26	370.00	2.00	2.00	2.000	740.00	1	3	100	3.8217	B.D.L.	B.D.L.	0.0120	0.0066
c	PP2	Bruce Willison 429-13-2958	8.16	14.26	370.00	2.00	2.00	2.000	740.00	2	6.5	100	8.2803	B.D.L.	B.D.L.	0.0120	0.0066
c	A3	Area 1 Room 7	8.27	14.28	361.00	2.00	2.00	2.000	722.00	5	5	100	6.3694	B.D.L.	B.D.L.	0.0123	0.0068
c	A4	Area 2 Room 9	8.30	14.31	361.00	2.00	2.00	2.000	722.00	6	2.5	100	3.1847	B.D.L.	B.D.L.	0.0123	0.0068
c	A5	Area 3 Room 5	8.34	14.33	359.00	2.00	2.00	2.000	718.00	12	1	100	1.2739	B.D.L.	B.D.L.	0.0123	0.0068
c	B6	Blank									0						
c																	
c																	
c																	

B.D.L. = Below Detection Limit

Sampled By: Jamie Marshall Sampling Location: Prep Date: 12/5/2007 Time: 8.00-14.30

Analyst: Jamie Marshall Microscope: Field Area: 0.00785 Filter Area: 385

1145 Southwest 74th Street, Suite 300
Oklahoma City, Oklahoma 73139
Office: (405) 616-0401
Fax: (405) 972-0525

Project: Allen Armory

903 N Paul St
Allen Oklahoma

Niosh 7400: X Other Specify:

Personal Protection: N/A

Present Activity: Background

Date Collected: 12/4/2007

Contact Person:

Date Analyzed: 12/5/2007

Phone Number:

CERTIFICATE OF ANALYSIS

	Sample Number	Name/Location	Beginning Time	Ending Time	Total Time	Flow Rate Begin	Flow Rate End	Average Flow Rate	Total Volume	Pump Number	Fiber Count	Fiber Fields	F/MM2	F/cc	L.C.L.	U.C.L.	Detection Limit
c	BG1	Area 1 Room 7	11:13	14:20	187.00	10.00	10.00	10.000	1870.00	5	4	100	5.0955	B.D.L.	B.D.L.	0.0047	0.0026
c	BG2	Area 2 Room 9	11:15	14:22	187.00	10.00	10.00	10.000	1870.00	6	4	100	5.0955	B.D.L.	B.D.L.	0.0047	0.0026
c	BG3	Area 3 Room 5	11:17	14:25	188.00	10.00	10.00	10.000	1880.00	1	2	100	2.5478	B.D.L.	B.D.L.	0.0047	0.0026
c	B1	Blank									0						
c																	
c																	
c																	
c																	
c																	

B.D.L. = Below Detection Limit

Sampled By: Jamie Marshall Sampling Location: Background Date: 12/4/2007 Time: 9:00-17:30

Analyst: Jamie Marshall Microscope: Field Area: 0.00785 Filter Area: 385

Do not staple!

WASTE MANAGEMENT

Manifest NO: .....
(For Generator Use)

Quarry Landfill
4041 N. 141st East Ave
Tulsa, OK 74116
FAX (918) 437-7805
Phone (918) 428-7535

NESHAP ADMINISTRATOR
Air Quality Control (405) 702-1000
Oklahoma Dept of Environmental Quality
707 N. Robinson
Oklahoma City, OK 73101

Profile # QO-16978

NON-HAZARDOUS SPECIAL WASTE MANIFEST

Generator: [illegible] Job Name: Same after Hours

Address: [illegible] Address: [illegible]

Phone: [illegible] Phone: [illegible]

QUANTITY AND DESCRIPTION

Proper Shipping Name: Asbestos Pipe Ins. Quantity: 2 C yds

DOT Hazard Class: N/A
Identification Number: N/A
Reportable Quantity: N/A Asbestos Pipe Ins. 2C yds

DRUM ☐ BAG ☐ CARTON ☐ TRUCK ☐ TONS ☐ CUBIC YARDS ☐ OTHER .....

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 *(unless supported with profile reflects free liquid)* or any applicable state law, is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

[illegible] [illegible] 12-11-17
Generator Authorized Agent Signature Shipment Date

Transporter: Abatement Systems

Address: PO Box 773 Broken Arrow, OK 74013-0773 Phone: 918-251-2504

Driver: [illegible] Truck No: ..... Tag # /State: [illegible]

[illegible] 12-11-17 [illegible] 12-11-17
Signature Shipment Date Driver Signature Delivery Date

I hereby certify that the above material was picked up from generator listed above

I hereby certify that the above named material was delivered without incident to the site listed below

Received at Quarry Landfill 4041 N. 141st East Ave. Tulsa, OK
I hereby certify that the above named material has been accepted and to the best of my knowledge, the above is correct

Signed: [illegible] Ticket: [illegible]

Date [illegible]

WASTE SHIPMENT RECORD

GENERATOR

1. Work Site Name & Mailing Address (Generator)	Owner's Name	Owner's Telephone
Allen Armory 903 N. Paul St, Allen, OK 74825	State of OK OCS	(405) 521-2112

2. Remover's Name & Address	Remover's Telephone
Abatement Systems, Inc., P. O. Box 773, Broken Arrow, OK 74013-0773	**(918) 251-2504**

3. Waste Disposal Site (WDS)	WDS's Telephone
Quarry Landfill 4041 N. 141st E. Ave Tulsa, OK 74116	**(918) 437-7773**

4. Name & Address of EP Office local, state or regional
Tulsa City- County Health Dept 4616 E. 15th St Tulsa, OK 74112

5. HM	Desc. Of Material	Hazard Class	ID Number	Packing Group #	6. Containers No. Type	7. Total Quantity

8. Special Handling Instruction & 24 Hrs Emergency Response Telephone Number (provided by Generator)

9. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. NOTE: Generator must retain a copy of this form

Print/Type Name & Title	Signature	Date
Nancy Vacin Office Manager	Nancy Vacin	12-18-07

TRANSPORTER

10. Transporter 1 (Acknowledgement of Receipt of Materials) Note: Transporter must retain a copy of this form

Print/Type Name, Title, Address & Telephone Number	Signature/Date
Abatement Systems, Inc. **P. O. Box 773** **Broken Arrow, OK 74013-0773 (918) 251-2504**	Paul Dibrell 12-18-07

11. Transporter 2 (Acknowledgement of Receipt of Materials) Note: Transporter must retain a copy of this form

Print/Type Name, Title, Address & Telephone Number	Signature/Date

12. Problems with Containment or Packaging	Rejected Yes/No

DISPOSAL

13. WASTE DISPOSAL SITE OWNER OR OPERATOR:
Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.

Print/Type Name & Title	Signature	Date
Kari Kincaid Quarry Landfill Scale Clerk	Kari Kincaid	12.18.07

Note: The Waste Disposal Site must retain a completed copy of this form and send a completed copy to the Remover listed in Item #2

943288

Notice of Inspection

Oklahoma Department of Labor

www.okdol.state.ok.us

Oklahoma City
4001 North Lincoln
Oklahoma City, OK 73105
405-528-1500
888-269-5353
Fax 405-524-6793

Tulsa
440 South Houston, Suite 300
Tulsa, OK 74127
918-581-2400
Fax 918-581-2431

1. INVESTIGATION IDENTIFICATION			2. TIME	3. COMPANY NAME
DATE	INSPECTOR NO.	DAILY SEQ NO.		
12-6-07	OK101	1	1300	ASI

3. INSPECTOR ADDRESS	4. COMPANY ADDRESS
4001 North Lincoln OKC OK 73105	PO Box 723 Broken Arrow OK 74013

REASON FOR INSPECTION

Under the authority of Section 11 of the Toxic Substances Control Act:

☑ For the purpose of inspecting (including taking samples, photographs, statements and other inspection activities) an establishment, facility or other premises in which chemical substances or mixtures or articles containing same are manufactured, processed or stored, or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyance being used to transport chemical substances, mixtures or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls and facilities) bearing on whether the requirements of the Act applicable to the chemical substances, mixtures or articles within or associated with such premises or conveyance have been complied with.

☐ In addition, this inspection extends to (*check appropriate boxes*):

- ☐ A. Financial data
- ☐ B. Sales data
- ☐ C. Pricing data
- ☐ D. Personnel data (40 CFR Part 763 Subpart E)
- ☐ E. Research data

The nature and extent of inspection of such data specified in A through E above is as follows:

CERTIFICATION

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

INSPECTOR SIGNATURE		RECIPIENT SIGNATURE	
David H Carter		Mike Tate	
NAME		NAME	
DAVID H Carter		MIKE TATE	
TITLE	DATE SIGNED	TITLE	DATE SIGNED
Inspector	12-6-07	Supervisor	12-6-07

OKLAHOMA DEPARTMENT OF LABOR
ASBESTOS DIVISION

4001 Lincoln Boulevard
Oklahoma City, Oklahoma 73105-5212
(405) 528-1500
FAX (405) 524-6793

440 South Houston, Suite 300
Tulsa, Oklahoma 74127-8920
(918) 581-2400
FAX (918) 581-2431

Visual/Final Inspection Form

DoLProject #: _____

Facility: OKI Allen Armory **Date:** 12-11-07 **Time:** 13:30

Contractor No.: _____ **County No.:** _____ **FY No.:** 7

Address/Location: 903 North Main **Address/City:** Allen

Owner/Occupant: DES **Contractor:** ASI

Contact Person: Mike Tate **Contractor's Rep.:** Mike Tate

Facility Phone #: 918 271-0365 **Contractor's Phone #:** 918 271-0365

---

1. Description of Area: Shed Cleaning, TSI Piping

2. Areas requiring further cleaning: None

3. Air Counts (PCM/TEM) On Site?: All Acceptable

4. DOL Recommendations: _____

5. Will a FINAL inspection be required?: Yes

6. Notes: Remove All Poly, Tape, Tacked Down Areas.

Visual on 50 Glovebags, One Containment Shed Cleaning Accepted.

7. Note any Violations cited: 380:50-

380:50-

380:50-

8. Contractor's Comments: _____

Delt Cook
Inspector's Signature

Mike Tate
Contractor's Signature

Revised April 1, 1998 White Copy: D.O.L. Yellow Copy: Consultant Pink Copy: Contractor, Owner

Oklahoma Accreditation Plan (OAP) Inspection Form

Oklahoma Department of Labor

www.okdol.state.ok.us

Oklahoma City
4001 North Lincoln
Oklahoma City, OK 73105
405-528-1500
888-269-5353
Fax 405-524-6793

Tulsa
440 South Houston, Suite 300
Tulsa, OK 74127
918-581-2400
Fax 918-581-2431

Name of facility: Allen Armory
Facility address: 903 North Paul
City: Allen OK Zip: 74825
DOL Project No., if applicable:
Owner name: State OS OK
Owner address: 2401 North Lincoln
Owner phone: (405) 521-2121
Contact person: Mike Tate

Date: 12-06-07 Time: 1300
Reason for inspection: Routine ☑ Citizen Complaint ☐
Response Action ☐ Other
Contractor: ASI
Contractor address: Po Box 773
City: Broken Arrow OK Zip: 74013
Contractor office phone: (918)-251-2504
Contact person: Mike Tate

Abatement Project Description (size of project, type of material, methods used, etc.):
50 Glovebags TSI Sheet Cleaning.

OPENING CONFERENCE

Personnel present and interviewed:
Name: Mike Tate Title: Supervisor
Name: Title:
Name: Title:

ODOL inspector accompanied by other State or Federal employee(s):
Yes ☐ No ☑
Name: Title:
Name: Title:

Credentials presented to:
Name: Mike Tate Title: Supervisor
Name: Title:

Notice of Inspection signed and a copy provided to official?
Yes ☑ No ☐

INSPECTION

Was the building *initially* inspected for asbestos?
Yes ☑ No ☐
Name of inspector: Charles Marshall
License No.: Exp. Date:
Date of Inspection: June 07

AIR MONITORING DATA

Name of laboratory: Marshall Environmental
Address: 1145 SW 74
City: OKC OK Zip: 73139
License No.: 157704 Exp. Date: 9-5-08
On-site air tech contact: B Semrad Phone: 306-3763
Type of analysis: TEM ☐ PCM ☑

ACCREDITATION OF CONTRACTORS & WORKERS

Contractor/Supervisors:
Name: Mike Tate License No.: 263688
Issue date: 2-13-07 Exp. Date: 2-8-08
Name: License No.:
Issue date: Exp. Date:
Name: License No.:
Issue date: Exp. Date:

ACCREDITATION OF CONTRACTORS & WORKERS, cont.

Workers:
Name: Steve Riggs License No.: 272060
Issue date: 11-9-07 Exp. Date: 11-6-08
Name: Paul Gibson License No.: 273624
Issue date: 3-26-07 Exp. Date: 3-6-08
Name: Bruce Wilson License No.: 278031
Issue date: 11-9-07 Exp. Date: 11-6-08
Name: License No.:
Issue date: Exp. Date:
Name: License No.:
Issue date: Exp. Date:
Name: License No.:
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Issue date: Exp. Date:
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Issue date: Exp. Date:
Name: License No.:
Issue date: Exp. Date:
Name: License No.:
Issue date: Exp. Date:

Certificates Only:
Name: Accred. No.:
Date: Training provider:
Address:
Name: Accred. No.:
Date: Training provider:
Address:

Definition of Public and Commercial Building:
The interior space of any building, excluding residential apartment buildings of fewer than six (6) units or detached single-family homes. The term includes, but is not limited to industrial and office buildings, residential apartment buildings and condominiums of six (6) or more dwelling units, government-owned buildings, colleges, school buildings, museums, airports, hospitals, churches, preschools, stores, warehouse, and factories. Interior space includes exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

Recommendations & Remarks

Orders

Inspector: [signature]

Contractor or Representative: Mike Tate

ODOL Asbestos 2003 Jan. White Copy: ODOL Yellow Copy: Contractor/Owner

Oklahoma Department of Labor

Asbestos Division
4001 North Lincoln Blvd. Oklahoma City, Oklahoma 73105 405-528-1500

Abatement Preparation Inspection Form

Abatement Project Allen Armory **Date** 12-06-07 **Time** 13:30

Project No. 20- **Phase** Glovebags, Sheet Flooring

Project address/location 903 North Paul **Contractor:** AS I **#:**

City Allen **Zip Code:** 74825 **Contact person** Mike

Project phone (405) 521-2121 **Cntr home off ph** (918) 271-0365

Project owner State of Ok **Owners Rep.** Mike Tate

(A = Acceptable) (D = Denied; must be corrected and re-inspected before asbestos removal is begun) (N/A = Not applicable to this project) (X = Deficiencies which must be corrected before asbestos removal begins. If the only deficiencies are the "X" type, after correction, asbestos abatement may begin. ** Beginning asbestos removal before the deficiencies are corrected shall constitute a Serious Violation.**)

	A	D	N/A	X
(1) Work site barriers and warning signs	✓			
(2) Toilet facilities provided	✓			
(3) Worker licenses	✓			
(4) Emergency telephone numbers	✓			
(5) OSHA forms, posters (min. wage, workers comp, equal opportunity)	✓			
(6) Air mon. results from prior phases, if applicable	✓			
(7) Respirator program and project design on site	✓			
(8) Respirator, air system., and equipment manuals			✓	
(9) Compressor does not discharge oil			✓	
(10) CO monitor, high temp. and low pressure alarm tested on-site			✓	
(11) Cascade system secure and certificate of air quality			✓	
(12) Automatic back-up air of proper quantity, in full containers			✓	
(13) Bull hoses and respirators free of oil residue			✓	
(14) In-line pressure gauge at manifold			✓	
(15) NIOSH approved respirators, clean, parts in working order	✓			
(16) Electric panel outside work area. GFI	✓			
(17) Temporary wiring installed by licensed electrician. Lic#: GFI			✓	
(18) Temporary panel boards properly grounded			✓	
(19) Ground fault interruption provided from outside work area	✓			
(20) Live electrical requirement met	✓			
(21) Extension cords in acceptable condition	✓			
(22) Equipment properly grounded	✓			
(23) Tension relief on electric cords	✓			
(24) De-con firmly constructed, opaque, with triple flaps	✓			
(25) De-con trailers properly grounded			✓	
(26) Storage lockers for workers and ODOL inspectors' street clothes	✓			
(27) Shower with hot water supply, stable nonskid surface, lights	✓			
(28) Shower drains, filter, proper water disposal	✓			
(29) Soap from dispenser, and towels provided		✓		
(30) Hearing protection provided if required	✓			
(31) Hard hats provided, if required	✓			
(32) Appropriate footwear/ safety shoes provided, if required	✓			
(33) Electrical system in abatement area locked out/ tagged out	✓			
(34) Ventilation serving or passing through the abatement area deactivated	✓			
(35) Critical barriers in place	✓			
(36) Neg. air quantity and pressure drop, confirmed on-site with recording manometer			✓	
(37) Neg. air machine(s) have properly installed filters, clean pre-filters	✓			
(38) Prep. work secure with negative air on	✓			
(39) Make-up air sources provide adequate circulation and air cleaning	✓			
(40) Access controlled	✓			
(41) Scaffolding over 10' high has 42" side-rails and 4" toeboards			✓	
(42) Scaffolding from 4' to 10' high, but less than 42" wide, has side rails			✓	
(43) Scaffolding with people working under has mesh or solid barrier on platform			✓	
(44) Scaffolding floorboards in good condition and secured			✓	
(45) Aerial lifts have full-body harness with shock lanyards			✓	
(46) Ladders are non-conducting and stable	✓			
(47) Heat stress monitors in place			✓	
(48) HEPA vacuum is clean with filters properly installed	✓			
(49) Temporary lighting is adequate and properly wired and grounded	✓			
(50) 10 # ABC fire extinguishers inspected	✓			
(51) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up	✓			
(52) Acceptable amended water sprayers and chemicals provided	✓			
(53) Load-out sealed unless needed for make-up air	✓			
(54) Disposal bags and/or barrels provided and properly labeled	✓			
(55) Disposal vehicle properly lined	✓			
(56) Disposal vehicle properly tagged and marked	✓			
(57) Area monitoring locations identified	✓			

20	# OF GLOVEBAGS	1	# OF FULL CONTAINMENTS		# OF MINI CONTAINMENTS

Recommendations & Remarks #29 Place Soap In Shower
#33 Elect. must be off within Arms Reach
or below Glovebags
Prop Accepted.

Orders

Nick Coats
Inspector

Mike Tate
Contractor or Representative

Issued 10/09/89---*Revised 06/2006* *White Copy: ODOL* *Yellow Copy: Consultant* *Pink Copy: Contractor/Owner*

Oklahoma Accreditation Plan (OAP) Inspection Form

Oklahoma Department of Labor

www.okdol.state.ok.us

Oklahoma City
4001 North Lincoln
Oklahoma City, OK 73105
405-528-1500
888-269-5353
Fax 405-524-6793

Tulsa
440 South Houston, Suite 300
Tulsa, OK 74127
918-581-2400
Fax 918-581-2431

Name of facility Allen Armory
Facility address 903 North Paul
City Allen OK **Zip** 74825
DOL Project No., if applicable _____
Owner name State OF OK
Owner address 2401 North Lincoln
Owner phone (405) 521-2121
Contact person Mike Tate

Date 12-06-07 **Time** 1300
Reason for inspection: **Routine** ☑ **Citizen Complaint** ☐
Response Action ☐ **Other** _____
Contractor AS I
Contractor address Po Box 773
City Broken Arrow OK **Zip** 74013
Contractor office phone (918)-251-2500
Contact person Mike Tate

Abatement Project Description (size of project, type of material, methods used, etc.):
50 Glovebags TSI Sheet Flooring.

OPENING CONFERENCE

Personnel present and interviewed:
Name: Mike Tate Title: Supervisor
Name: _____ Title: _____
Name: _____ Title: _____

ODOL inspector accompanied by other State or Federal employee(s):
Yes ☐ No ☑
Name: _____ Title: _____
Name: _____ Title: _____

Credentials presented to:
Name: Mike Tate Title: Supervisor
Name: _____ Title: _____

Notice of Inspection signed and a copy provided to official?
Yes ☑ No ☐

INSPECTION

Was the building *initially* inspected for asbestos?
Yes ☑ No ☐
Name of inspector: Charles Marshall
License No.: _____ Exp. Date: _____
Date of Inspection: June 07

AIR MONITORING DATA

Name of laboratory: Marshall Environmental
Address: 1116 SW 74
City OKC OK Zip 73139
License No.: 157041 Exp. Date: 9-5-08
On-site air tech contact: B Sprouse Phone: 306-3763
Type of analysis: TEM ☐ PCM ☑

ACCREDITATION OF CONTRACTORS & WORKERS

Contractor/Supervisors:
Name: Mike Tate License No.: 263688
Issue date: 2-13-07 Exp. Date: 2-8-08
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____

ACCREDITATION OF CONTRACTORS & WORKERS, cont.

Workers:
Name: Steve Riggs License No.: 227061
Issue date: 11-9-07 Exp. Date: 11-6-08
Name: Paul Gibson License No.: 223624
Issue date: 3-26-07 Exp. Date: 3-6-08
Name: Bruce W. Ison License No.: 225031
Issue date: 11-9-07 Exp. Date: 11-6-08
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
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Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____
Name: _____ License No.: _____
Issue date: _____ Exp. Date: _____

Certificates Only:
Name: _____ Accred. No.: _____
Date: _____ Training provider: _____
Address: _____
Name: _____ Accred. No.: _____
Date: _____ Training provider: _____
Address: _____

Definition of Public and Commercial Building:
The interior space of any building, excluding residential apartment buildings of fewer than six (6) units or detached single-family homes. The term includes, but is not limited to industrial and office buildings, residential apartment buildings and condominiums of six (6) or more dwelling units, government-owned buildings, colleges, school buildings, museums, airports, hospitals, churches, preschools, stores, warehouse, and factories. Interior space includes exterior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

Recommendations & Remarks _____

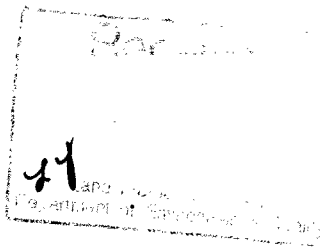
Orders _____

Inspector _____ **Contractor or Representative** Mike Tate

ODOL Asbestos 2003 Jan. *White Copy: ODOL* *Yellow Copy: Contractor/Owner*

LEAD

LEAD-BASED PAINT INSPECTION REPORT



LEAD-BASED PAINT INSPECTION REPORT
FOR

Allen Armory

903 North Paul Street

Allen, Oklahoma

October 26, 2006

Services Provided for:
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102

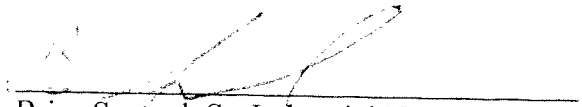
Certified Industrial Hygiene Services Provided By:
Marshall Environmental Management, Inc.
1145 SW 74th Street, E-300
Oklahoma City, OK 73139
(405) 616-0401

CERTIFICATION

This is to certify that the Lead-Based Paint Inspection conducted at the Allen Armory Located at 903 North Paul Street in Allen Oklahoma (Year of Construction: 1953) on October 26, 2006 was conducted in accordance with *"Good Industrial Hygiene Practice."* The results of the testing accurately reflect the condition of the property at the time the sampling was performed.

Current Owner Information
State of Oklahoma

Certified Lead Based Paint Risk Assessor/Inspector



Brice Semrad, Sr. Industrial Hygienist
Certified Lead-Based Paint Inspector/Risk Assessor OKRASR13046

Certified Lead-Based Paint Firm #OKFIRM11160
Marshall Environmental Management, Inc.
1145 SW 74th E-300
Oklahoma City, Oklahoma 73139
(405) 616-0401

XRF Information
Niton XLp Spectrum Analyzer
Model #XLp 300A
Serial #12585
Source: 40 mCi

Executive Summary:

Sampling Methodology:

Lead based paint (LBP) testing was done to determine lead levels on painted structural building components at the Allen Armory. Each room of the Building was numbered on a floor plan that is provided in the Appendix. The front side of the Armory Building was marked "Side A" and going in a clockwise motion the remaining sides were categorized as Sides B, C, and D, respectively.

The building is a one-story structure constructed on a concrete slab foundation with an asphalt composite flat roof over half and transite pitched roof over the Drill Floor. Concrete brick covers the side of the Building. All of the upper trims are wood. All of the windows are metal. Throughout the building were concrete floors, walls, and windowsills. The roof was constructed with wood rafters and decking with asphalt on top.

The findings from the XRF testing indicated that there is lead-based paint in amounts greater than the EPA Standard for XRF readings or equal to 1.0 mg/cm^2 located on the Building components.

The following locations contain lead-based paint:

1. Site #17 Old Motor Pool Overhead Door and Frame
2. Site #18 Drill Floor Overhead Door and Frame
3. Site #18 Drill Floor Overhead Silver Structural Steel

Please note that the following items were not tested in this inspection:

1. Non-painted floors
2. Non-fixed Items on the property

ROOM LEGEND

Site	Current Use
1	Supply Room
2	Vault
3	Storage Behind Vault
4	Secretary Office
5	Office
6	Main Entrance Hall
7	Office
8	Classroom
9	Classroom
10	Activity Room
11	Men's Restroom
12	Men's Shower
13	Hallway
14	House Keeping
15	Woman's Restroom
16	Tool Room
17	Old Motor Pool
18	Drill Floor
Blank	Outside

CERTIFICATES

Department of Environmental Quality

This is to Certify That

BRICE SEMRAD

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13046

This certificate is valid from the date of issuance and expires as prescribed by law.

Issued on: **4/1/2006** Expires on: **3/31/2007**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

MARSHALL ENVIRONMENTAL MANAGEMENT

has met the specifications of the Oklahoma Lead-Based Paint Management Act
and is certified as a Lead-Based Paint

FIRM

Certification # OKFIRM11160

This certificate is valid from the date of issuance and expires as prescribed by law.

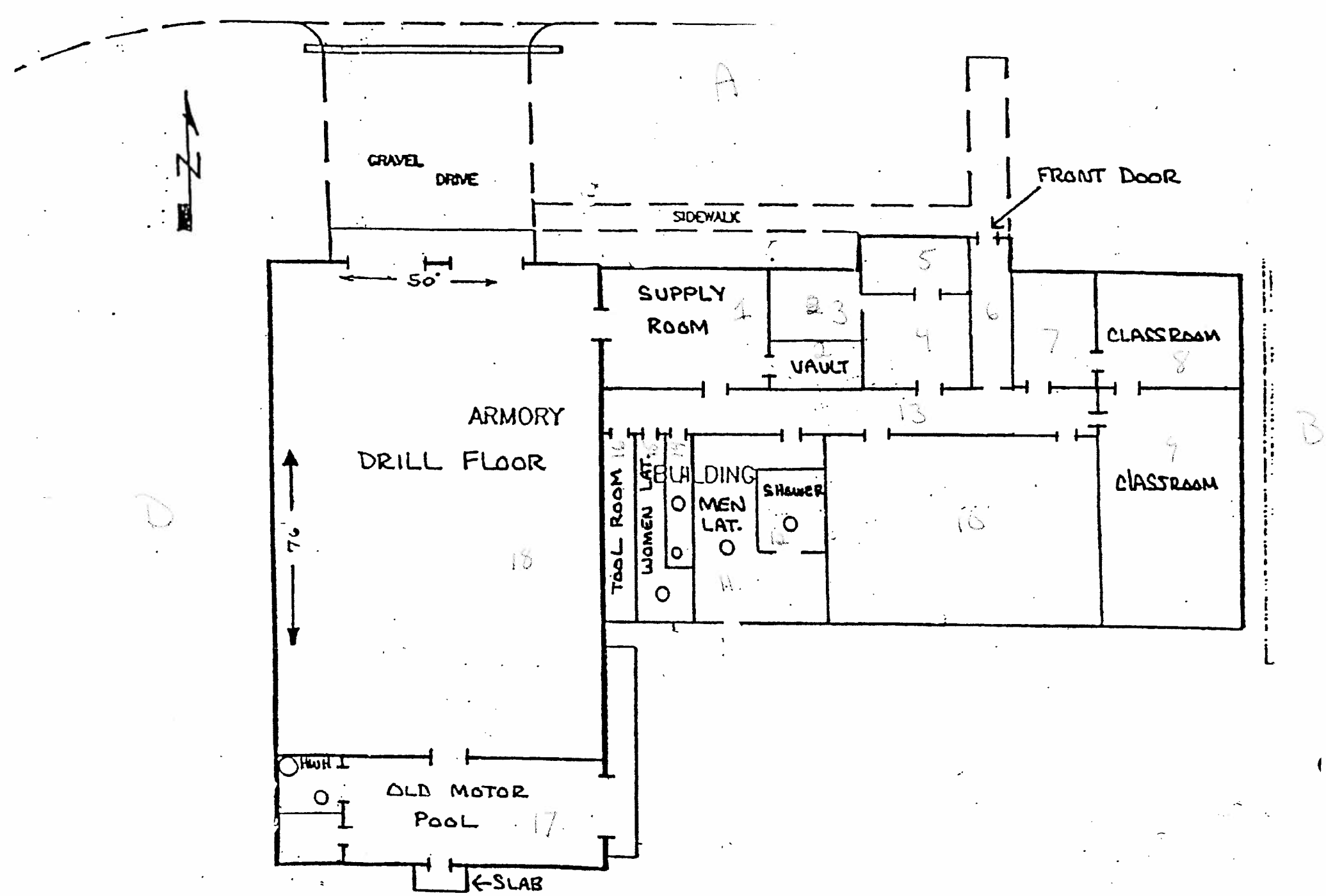
Issued on: **4/1/2006** Expires on: **3/31/2007**

Division Director
Air Quality Division

OKLAHOMA

Environmental Programs Manager
Air Quality Division

SITE MAP


N
GRAVEL DRIVE
SIDEWALK
FRONT DOOR
50'
SUPPLY ROOM
VAULT
CLASSROOM
CLASSROOM
ARMORY
DRILL FLOOR
75'
TOOL ROOM
WOMEN LAT.
BUILDING
MEN LAT.
SHOWER
HWH
OLD MOTOR
POOL
SLAB

XRF READINGS

NITON Corporation
900 Middlesex Turnpike
Billerica, MA 01821

Reading #	Type	Component	Substrate	Side	Condition	Color	Floor	Room	Result	Alpha Energy	PPC	TDK
1	PAINT			CALIBRATE					Positive	1.00	1.20 ± 0.20	< LOD : 1.05
2	PAINT			CALIBRATE					Positive	1.00	1.10 ± 0.10	0.80 ± 0.50
3	PAINT			CALIBRATE					Positive	1.00	1.10 ± 0.10	< LOD : 0.75
4	PAINT	WALL	CONCRETE	A	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 0.03	< LOD : 2.50
5	PAINT	WALL	DRYWALL	B	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 1.19	< LOD : 1.19
6	PAINT	WALL	DRYWALL	C	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 0.03	< LOD : 2.11
7	PAINT	WALL	DRYWALL	D	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 0.08	< LOD : 2.01
8	PAINT	DOOR	DRYWALL	D	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 0.07	< LOD : 4.63
9	PAINT	CEILING	DRYWALL	D	INTACT	TAN	2	VAULT	Negative	1.00	< LOD : 0.03	< LOD : 1.94
10	PAINT	WALL	CONCRETE	A	INTACT	TAN	1	SUPPLY	Negative	1.00	< LOD : 0.03	< LOD : 2.14
11	PAINT	WALL	CONCRETE	B	INTACT	TAN	1	SUPPLY	Null	1.00	< LOD : 0.03	< LOD : 2.58
12	PAINT	WALL	CONCRETE	C	INTACT	TAN	1	SUPPLY	Negative	1.00	< LOD : 0.03	< LOD : 2.49
13	PAINT	WALL	CONCRETE	D	INTACT	TAN	1	SUPPLY	Negative	1.00	< LOD : 0.04	< LOD : 2.12
14	PAINT	DOOR FRAME	METAL	D	INTACT	BLUE	1	SUPPLY	Negative	1.00	< LOD : 0.22	< LOD : 4.03
15	PAINT	DOOR	METAL	D	INTACT	BLUE	1	SUPPLY	Negative	1.00	< LOD : 0.16	< LOD : 3.36
16	PAINT	DOOR	METAL	A	INTACT	BLUE	1	SUPPLY	Negative	1.00	< LOD : 0.11	< LOD : 3.66
17	PAINT	DOOR FRAME	METAL	C	INTACT	BLUE	1	SUPPLY	Negative	1.00	< LOD : 0.18	< LOD : 4.20
18	PAINT	CEILING	WOOD	UPPER	INTACT	WHITE	1	SUPPLY	Negative	1.00	< LOD : 0.07	< LOD : 1.57
19	PAINT	WALL	CONCRETE	A	INTACT	WHITE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.05	< LOD : 0.99
20	PAINT	WALL	CONCRETE	B	INTACT	WHITE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.03	< LOD : 2.62
21	PAINT	WALL	CONCRETE	C	INTACT	WHITE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.03	< LOD : 2.08
22	PAINT	WALL	CONCRETE	D	INTACT	WHITE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.05	< LOD : 1.05
23	PAINT	DOOR	METAL	B	INTACT	BLUE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.10	< LOD : 4.06
24	PAINT	DOOR FRAME	METAL	B	INTACT	BLUE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.12	< LOD : 4.04
25	PAINT	CEILING	WOOD	UPPER	INTACT	WHITE	3	STORAGE BEHIND VA	Negative	1.00	< LOD : 0.05	< LOD : 1.74
26	PAINT	CEILING	WOOD	UPPER	INTACT	WHITE	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.04
27	PAINT	WALL	CONCRETE	A	INTACT	WHITE	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.08
28	PAINT	WALL	CONCRETE	B	INTACT	WHITE	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.84
29	PAINT	WALL	CONCRETE	C	INTACT	WHITE	4	SECRETARY ROOM	Null	1.00	< LOD : 0.04	< LOD : 5.25
30	PAINT	WALL	CONCRETE	C	INTACT	WHITE	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.02
31	PAINT	WALL	CONCRETE	D	INTACT	WHITE	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.03	< LOD : 2.52
32	PAINT	DOOR	METAL	C	INTACT	BLACK	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.11	< LOD : 3.85
33	PAINT	DOOR FRAME	METAL	C	INTACT	BLACK	4	SECRETARY ROOM	Negative	1.00	< LOD : 0.12	< LOD : 4.58
34	PAINT	DOOR FRAME	METAL	C	INTACT	BLUE	5	OFFICE	Negative	1.00	< LOD : 0.16	< LOD : 4.54
35	PAINT	DOOR	METAL	C	INTACT	BLUE	5	OFFICE	Negative	1.00	< LOD : 0.10	< LOD : 4.02
36	PAINT	WALL	CONCRETE	A	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.03	< LOD : 2.50
37	PAINT	WALL	CONCRETE	B	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.03	< LOD : 2.94

NITON Corporation
900 Middlesex Turnpike
Billerica, MA 01821

Reading No	Type	Component	Substrate	Side	Condition	Color	Floor	Room	Results	Action Level	PbC	PbK
38	PAINT	WALL	CONCRETE	C	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.05	< LOD : 2.34
39	PAINT	WALL	CONCRETE	D	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.03	< LOD : 2.80
40	PAINT	WINDOW	METAL	B	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.21	< LOD : 4.01
41	PAINT	INTERIOR WIDOW	WOOD	C	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.75	< LOD : 1.58
42	PAINT	CEILING	TILE	UPPER	INTACT	WHITE	5	OFFICE	Negative	1.00	< LOD : 0.03	< LOD : 0.90
43	PAINT	CEILING MOLDING	WOOD	UPPER	INTACT	WHITE	6	ENTRANCE HALL	Negative	1.00	< LOD : 1.52	< LOD : 1.52
44	PAINT	CEILING	WOOD	UPPER	INTACT	WHITE	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.17	< LOD : 1.74
45	PAINT	WALL	CONCRETE	A	INTACT	BEIGE	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.03	< LOD : 1.75
46	PAINT	WALL	CONCRETE	B	INTACT	BEIGE	6	ENTRANCE HALL	Negative	1.00	< LOD : 1.02	< LOD : 1.02
47	PAINT	WALL	CONCRETE	C	INTACT	BEIGE	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.04	< LOD : 2.04
48	PAINT	WALL	CONCRETE	D	INTACT	BEIGE	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.03	< LOD : 1.68
49	PAINT	DOOR	METAL	A	INTACT	BLACK	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.23	< LOD : 4.08
50	PAINT	DOOR FRAME	METAL	A	INTACT	BLACK	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.28	< LOD : 3.78
51	PAINT	DOOR FRAME	METAL	C	INTACT	BLACK	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.22	< LOD : 3.70
52	PAINT	DOOR	METAL	C	INTACT	BLACK	6	ENTRANCE HALL	Negative	1.00	< LOD : 0.16	< LOD : 3.99
53	PAINT	DOOR	METAL	C	INTACT	BLACK	7	OFFICE	Negative	1.00	< LOD : 0.09	< LOD : 3.60
54	PAINT	DOOR FRAME	METAL	C	INTACT	BLACK	7	OFFICE	Negative	1.00	< LOD : 0.11	< LOD : 3.96
55	PAINT	WALL PANEL	WOOD	A	INTACT	TAN	7	OFFICE	Negative	1.00	< LOD : 0.06	< LOD : 1.98
56	PAINT	WALL PANEL	WOOD	B	INTACT	TAN	7	OFFICE	Negative	1.00	< LOD : 0.10	< LOD : 1.84
57	PAINT	WALL PANEL	WOOD	C	INTACT	TAN	7	OFFICE	Negative	1.00	< LOD : 0.08	< LOD : 1.95
58	PAINT	WALL PANEL	WOOD	D	INTACT	TAN	7	OFFICE	Null	1.00	< LOD : 0.17	< LOD : 6.06
59	PAINT	WALL PANEL	WOOD	D	INTACT	TAN	7	OFFICE	Negative	1.00	< LOD : 0.13	< LOD : 1.95
60	PAINT	WALL PANEL	WOOD	A	INTACT	TAN	8	CLASSROOM	Negative	1.00	< LOD : 0.16	< LOD : 2.14
61	PAINT	WALL PANEL	WOOD	B	INTACT	TAN	8	CLASSROOM	Null	1.00	< LOD : 0.17	< LOD : 5.70
62	PAINT	WALL PANEL	WOOD	B	INTACT	TAN	8	CLASSROOM	Negative	1.00	< LOD : 0.10	< LOD : 1.80
63	PAINT	WALL PANEL	WOOD	C	INTACT	TAN	8	CLASSROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.79
64	PAINT	WALL PANEL	WOOD	D	INTACT	TAN	8	CLASSROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.78
65	PAINT	DOOR	WOOD	C	INTACT	STAIN	8	CLASSROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.61
66	PAINT	DOOR FRAME	METAL	C	INTACT	BLACK	8	CLASSROOM	Negative	1.00	< LOD : 0.07	< LOD : 2.95
67	PAINT	DOOR FRAME	WOOD	B	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.12
68	PAINT	DOOR	WOOD	B	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.28
69	PAINT	WALL PANEL	WOOD	A	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.89
70	PAINT	WALL PANEL	WOOD	B	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.10	< LOD : 1.65
71	PAINT	WALL PANEL	WOOD	C	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.13	< LOD : 1.80
72	PAINT	WALL PANEL	WOOD	D	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.04	< LOD : 1.80
73	PAINT	WALL PANEL	WOOD	D	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.10	< LOD : 1.80
74	PAINT	WINDOW	METAL	C	INTACT	TAN	9	CLASSROOM	Negative	1.00	< LOD : 0.20	< LOD : 4.28

Reading No.	Type	Component	Substrate	Side	Condition	Color	Floor	Room	Results	Action Level	Pb%	Pb/A
75	PAINT	WALL	CONCRETE	A	INTACT	WHITE	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.27	< LOD : 2.59
76	PAINT	WALL	CONCRETE	B	INTACT	WHITE	10	ACTIVITY ROOM	Null	1.00	< LOD : 0.37	< LOD : 5.40
77	PAINT	WALL	CONCRETE	B	INTACT	WHITE	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.21	< LOD : 2.35
78	PAINT	WALL	CONCRETE	C	INTACT	WHITE	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.45	< LOD : 1.80
79	PAINT	WALL	CONCRETE	D	INTACT	WHITE	10	ACTIVITY ROOM	Negative	1.00	0.30 ± 0.17	< LOD : 1.88
80	PAINT	DOOR	METAL	D	INTACT	BLACK	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.15	< LOD : 3.91
81	PAINT	DOOR FRAME	METAL	D	INTACT	BLACK	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.16	< LOD : 3.77
82	PAINT	FLOOR	CONCRETE	D	INTACT	BLUE	10	ACTIVITY ROOM	Negative	1.00	< LOD : 0.07	< LOD : 2.57
83	PAINT	WALL	CONCRETE	A	INTACT	YELLOW	11	MENS RESTROOM	Negative	1.00	0.50 ± 0.10	< LOD : 1.11
84	PAINT	WALL	CONCRETE	B	INTACT	YELLOW	11	MENS RESTROOM	Negative	1.00	0.23 ± 0.07	< LOD : 1.20
85	PAINT	WALL	CONCRETE	C	INTACT	YELLOW	11	MENS RESTROOM	Null	1.00	< LOD : 1.20	< LOD : 10.80
86	PAINT	WALL	CONCRETE	C	INTACT	YELLOW	11	MENS RESTROOM	Negative	1.00	< LOD : 0.75	< LOD : 0.75
87	PAINT	WALL	CONCRETE	D	INTACT	YELLOW	11	MENS RESTROOM	Negative	1.00	0.28 ± 0.06	< LOD : 0.90
88	PAINT	WINDOW	METAL	C	CRACKED	YELLOW	11	MENS RESTROOM	Negative	1.00	< LOD : 0.23	< LOD : 4.55
89	PAINT	STALL DEVIDER	METAL	C	INTACT	BROWN	11	MENS RESTROOM	Negative	1.00	0.50 ± 0.30	< LOD : 3.26
90	PAINT	FLOOR	CONCRETE	LOWER	INTACT	BLUE	11	MENS RESTROOM	Negative	1.00	< LOD : 0.26	< LOD : 2.19
91	PAINT	WALL	CONCRETE TILE	A	INTACT	TAN	13	MENS SHOWER	Negative	1.00	< LOD : 0.09	< LOD : 2.02
92	PAINT	BENCH	WOOD	B	INTACT	BLUE	13	MENS SHOWER	Negative	1.00	< LOD : 0.45	< LOD : 1.65
93	PAINT	FLOOR	WOOD	LOWER	INTACT	BLUE	13	MENS SHOWER	Negative	1.00	< LOD : 0.03	< LOD : 2.62
94	PAINT	WALL	CONCRETE	A	INTACT	BEIGE	14	MAIN HALL	Negative	1.00	0.29 ± 0.08	< LOD : 1.20
95	PAINT	WALL	CONCRETE	B	INTACT	BEIGE	14	MAIN HALL	Negative	1.00	0.28 ± 0.14	< LOD : 1.87
96	PAINT	WALL	CONCRETE	C	INTACT	BEIGE	14	MAIN HALL	Negative	1.00	0.08 ± 0.04	< LOD : 0.90
97	PAINT	WALL	CONCRETE	D	INTACT	BEIGE	14	MAIN HALL	Negative	1.00	0.22 ± 0.08	< LOD : 1.07
98	PAINT	DOOR	METAL	D	INTACT	BLUE	14	MAIN HALL	Negative	1.00	< LOD : 0.21	< LOD : 3.83
99	PAINT	DOOR FRAME	METAL	D	INTACT	BLUE	14	MAIN HALL	Negative	1.00	< LOD : 0.23	< LOD : 3.97
100	PAINT	RETURN GRILL	METAL	C	INTACT	BLUE	14	MAIN HALL	Negative	1.00	< LOD : 0.05	< LOD : 4.13
101	PAINT	RETURN GRILL	METAL	C	INTACT	WHITE	14	MAIN HALL	Negative	1.00	< LOD : 0.03	< LOD : 3.55
102	PAINT	WALL	CONCRETE	A	INTACT	WHITE	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.08	< LOD : 1.80
103	PAINT	WALL	CONCRETE	B	INTACT	WHITE	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.08	< LOD : 1.98
104	PAINT	WALL	CONCRETE	C	INTACT	WHITE	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.13	< LOD : 1.80
105	PAINT	WALL	CONCRETE	D	INTACT	WHITE	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.16	< LOD : 2.29
106	PAINT	WATER PIPE	INSULATION	C	INTACT	GREEN	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.14	< LOD : 1.85
107	PAINT	FLOOR	CONCRETE	LOWER	INTACT	BLUE	14	HOUSE KEEPING ROO	Negative	1.00	< LOD : 0.17	< LOD : 2.08
108	PAINT	WALL	CONCRETE	A	INTACT	YELLOW	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.05	< LOD : 1.87
109	PAINT	WALL	CONCRETE	B	INTACT	YELLOW	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.03	< LOD : 2.87
110	PAINT	WALL	CONCRETE	C	INTACT	YELLOW	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.83
111	PAINT	WALL	CONCRETE	D	INTACT	YELLOW	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.70

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900 Middlesex Turnpike
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Reading No	Use	Component	Substrate	Side	Condition	Color	Site	Room	Results	Action Level	Pb-L	Pb-K
112	PAINT	STALL DIVIDER	METAL	B	INTACT	BROWN	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.11	< LOD : 5.33
113	PAINT	FLOOR	CONCRETE	LOWER	INTACT	BLUE	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.21	< LOD : 2.11
114	PAINT	DOOR	METAL	A	INTACT	BLUE	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.10	< LOD : 4.02
115	PAINT	DOOR FRAME	METAL	A	INTACT	BLUE	15	WOMENS RESTROOM	Negative	1.00	< LOD : 0.23	< LOD : 4.11
116	PAINT	DOOR FRAME	METAL	A	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.21	< LOD : 3.90
117	PAINT	DOOR	METAL	A	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.60	< LOD : 3.94
118	PAINT	WALL	CONCRETE	A	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.72
119	PAINT	WALL	CONCRETE	B	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.09
120	PAINT	WALL	CONCRETE	C	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.03	< LOD : 1.92
121	PAINT	WALL	CONCRETE	D	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.04	< LOD : 1.20
123	PAINT			CALIBRATE					Positive	1.00	1.20 ± 0.20	< LOD : 0.90
124	PAINT			CALIBRATE					Positive	1.00	1.30 ± 0.30	< LOD : 1.87
125	PAINT			CALIBRATE					Positive	1.00	1.10 ± 0.10	< LOD : 0.75
127	PAINT			CALIBRATE					Positive	1.00	1.20 ± 0.20	< LOD : 0.01
128	PAINT			CALIBRATE					Positive	1.00	1.20 ± 0.10	< LOD : 0.01
129	PAINT			CALIBRATE					Positive	1.00	1.10 ± 0.10	< LOD : 0.01
130	PAINT	CEILING	WOOD	UPPER	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.01	< LOD : 0.01
131	PAINT	WATER PIPE	METAL	UPPER	INTACT	WHITE	16	TOOL ROOM	Negative	1.00	< LOD : 0.21	< LOD : 0.01
132	PAINT	FLOOR	CONCRETE	LOWER	INTACT	RED	16	TOOL ROOM	Negative	1.00	< LOD : 0.52	< LOD : 0.01
133	PAINT	WALL	DRYWALL	A	CRACKED	WHITE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.01	< LOD : 0.01
134	PAINT	WALL	CONCRETE	B	CRACKED	WHITE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.21	< LOD : 0.01
135	PAINT	WALL	DRYWALL	C	CRACKED	WHITE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.20	< LOD : 0.01
136	PAINT	WALL	DRYWALL	D	CRACKED	BLUE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.27	< LOD : 0.01
137	PAINT	DOOR	METAL	C	CRACKED	BLUE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.01	< LOD : 0.01
138	PAINT	DOOR JAM	METAL	C	CRACKED	BLUE	17	OLD MOTOR POOL	Negative	1.00	< LOD : 0.70	< LOD : 0.01
139	PAINT	OVERHEAD DOOR FRA	METAL	B	CRACKED	RED	17	OLD MOTOR POOL	Positive	1.00	5.20 ± 3.00	< LOD : 0.01
140	PAINT	OVERHEAD DOOR FRA	METAL	B	CRACKED	RED	18	DRILL FLOOR	Positive	1.00	< LOD : 7.50	< LOD : 0.01
141	PAINT	WALL FIRE EX AREA	CONCRETE	B	INTACT	RED	18	DRILL FLOOR	Negative	1.00	< LOD : 0.08	< LOD : 0.01
142	PAINT	FIRE DOOR	METAL	C	INTACT	SILVER	18	DRILL FLOOR	Positive	1.00	< LOD : 7.80	< LOD : 0.01
143	PAINT	FIRE DOOR FRAME	METAL	C	INTACT	SILVER	18	DRILL FLOOR	Negative	1.00	< LOD : 0.41	< LOD : 0.01
144	PAINT	FLOOR STRIPE	CONCRETE	LOWER	INTACT	YELLOW	18	DRILL FLOOR	Negative	1.00	< LOD : 0.12	< LOD : 0.01
145	PAINT	DOOR	METAL	A	FAIR	WHITE	18	DRILL FLOOR	Negative	1.00	< LOD : 0.70	< LOD : 0.01
146	PAINT	DOOR FRAME	METAL	A	FAIR	WHITE	18	DRILL FLOOR	Negative	1.00	< LOD : 0.01	< LOD : 0.01
147	PAINT	OVERHEAD DOOR FRA	METAL	A	POOR	RED	18	DRILL FLOOR	Positive	1.00	5.00 ± 3.20	< LOD : 0.01
148	PAINT	OVERHEAD DOOR FRA	METAL	A	POOR	YELLOW	18	DRILL FLOOR	Negative	1.00	< LOD : 0.01	< LOD : 0.01
149	PAINT	OVERHEAD DOOR FRA	METAL	A	POOR	YELLOW	18	DRILL FLOOR	Negative	1.00	< LOD : 0.01	< LOD : 0.01
150	PAINT	OVERHEAD DOOR FRA	METAL	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01

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Billerica, MA 01821

Reading No	Type	Component	Substrate	Side	Condition	Color	Site	Room	Results	Action Level	PbC	PbL
151	PAINT	OVERHEAD DOOR FRA	METAL	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
152	PAINT	DOOR	METAL	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
153	PAINT	DOOR FRAME	METAL	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
154	PAINT	WINDOW SILL	CONCRETE	A	FAIR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
155	PAINT	WINDOW SILL	METAL	A	FAIR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
156	PAINT	TRIM	WOOD	A	POOR	WHITE		OUTSIDE	Negative	1.00	< LOD : 0.60	< LOD : 0.01
157	PAINT	TRIM PORCH	WOOD	A	POOR	WHITE		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
158	PAINT	WINDOW	CONCRETE	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
159	PAINT	WINDOW	METAL	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
160	PAINT	PORCH LOGO FLOOR	CONCRETE	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
161	PAINT	PORCH LOGO FLOOR	CONCRETE	A	POOR	RED		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
162	PAINT	PORCH LOGO DOOR	CONCRETE	A	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.01	< LOD : 0.01
164	PAINT			CALIBRATE					Positive	1.00	1.10 ± 0.10	< LOD : 0.75
165	PAINT			CALIBRATE					Null	1.00	1.00 ± 0.10	0.80 ± 0.30
166	PAINT			CALIBRATE					Positive	1.00	1.30 ± 0.30	< LOD : 1.80
167	PAINT	CEILING BEAMS	METAL	UPPER	FAIR	SILVER	18	DRILL ROOM	Positive	1.00	< LOD : 5.70	< LOD : 22.20
168	PAINT	CEILING BEAMS	METAL	UPPER	FAIR	SILVER	18	DRILL ROOM	Positive	1.00	< LOD : 6.90	< LOD : 26.70
169	PAINT	CEILING BEAMS BRA	METAL	UPPER	FAIR	SILVER	18	DRILL ROOM	Positive	1.00	6.10 ± 4.00	< LOD : 25.95
170	PAINT	CEILING BEAMS	METAL	UPPER	FAIR	SILVER	18	DRILL ROOM	Positive	1.00	2.90 ± 1.40	< LOD : 11.25
171	PAINT	TRIM	WOOD	C	POOR	WHITE		OUTSIDE	Positive	1.00	1.50 ± 0.50	1.50 ± 0.50
172	PAINT	TRIM	WOOD	C	POOR	WHITE		OUTSIDE	Negative	1.00	0.50 ± 0.30	< LOD : 2.10
173	PAINT	TRIM	WOOD	C	POOR	WHITE		OUTSIDE	Negative	1.00	0.70 ± 0.30	< LOD : 1.65
174	PAINT	FENCE	WOOD	C	POOR	RED		OUTSIDE	Negative	1.00	< LOD : 0.03	< LOD : 1.55
175	PAINT	FENCE	WOOD	C	POOR	RED		OUTSIDE	Negative	1.00	< LOD : 0.04	< LOD : 1.59
176	PAINT	OVERHEAD DOOR FRA	METAL	C	POOR	WHITE		OUTSIDE	Positive	1.00	< LOD : 6.75	< LOD : 6.75
177	PAINT	OVERHEAD DOOR FRA	METAL	C	POOR	WHITE		OUTSIDE	Positive	1.00	< LOD : 7.50	< LOD : 7.50
178	PAINT	OVERHEAD DOOR FRA	METAL	C	POOR	WHITE		OUTSIDE	Positive	1.00	4.20 ± 2.70	< LOD : 7.80
179	PAINT	WINDOW	METAL	C	POOR	WHITE		OUTSIDE	Negative	1.00	< LOD : 0.23	< LOD : 3.68
180	PAINT	GREEN HOUSE FRAME	METAL	C	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.03	< LOD : 1.88
181	PAINT	GREEN HOUSE FRAME	METAL	C	POOR	YELLOW		OUTSIDE	Negative	1.00	< LOD : 0.07	< LOD : 2.59
182	PAINT			CALIBRATE				OUTSIDE	Positive	1.00	1.20 ± 0.10	< LOD : 0.90
183	PAINT			CALIBRATE				OUTSIDE	Positive	1.00	1.10 ± 0.10	< LOD : 0.60
184	PAINT			CALIBRATE				OUTSIDE	Positive	1.00	1.00 ± 0.10	0.60 ± 0.20

LEAD SCOPE OF WORK

State of Oklahoma
Department of Central Services
Construction and Properties Division

This addendum forms a part of the contract document and modifies the original specifications as noted below. Please acknowledge receipt of this addendum in the space provided on the bid form. Failure to do so may subject bidders to disqualification.

Date of Issue: January 9, 2008

Addendum Number: 1

DCS Project Number: 08211

Project Name: Lead Remediation in Allen & Hartshorne Armory

TO ALL BIDDERS OF CONCERN:

Item #1: Attached one (1) 8-1/2" x 11" page supercedes all other Statement of Work issued prior to this document.

ALL OTHER DOCUMENTS, SPECIFICATIONS AND DRAWINGS ARE TO REMAIN THE SAME AND INTACT.

David Mahn FOR

John W. Morrison, AIA
State Construction Administrator

Lead Remediation in Allen & Hartshorne Armories
Bid Package Corrections

Allen

- When sealing the beams on the drill floor, overspray will be allowed on the roofing system but not on the walls.
- Items hanging from beams such as rope and chains shall be removed prior to lead-based paint abatement.
- A neutral color will be required for the lead-based paint sealant.
- Use unpainted pressure treated lumber for exterior trim replacement.
- Any items removed during trim replacement shall be reinstalled to match current conditions.

Hartshorne

- DEQ will have all materials inside storage shed removed prior to lead remediation.

State of Oklahoma
Department of Central Services
Construction and Properties Division

DCS Project No. 08211
Lead Remediation in Allen & Hartshorne Armory
Allen, OK and Hartshorne, OK

Department of Environmental Quality

Construction & Properties Division

Project Manager: David Mihm
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Oklahoma City, OK. 73105-4402
or
P.O. Box 53448
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Consultant

Consultant Not Required

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STATEMENT OF WORK

For

Remediation of Lead Contamination at Hartshorne and Allen Armories

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from qualified bidders for remediation services at former National Guard armories in Oklahoma. This statement of work (SOW) describes the cleanup of lead contamination associated with lead dust and lead-based paint at former National Guard armories. This work must be performed to provide for safe re-use of the facility with unrestricted use such as storage areas, classrooms, or office space. A site visit and walk through will be held to give a better understanding of the site. Site specific conditions and sample results are attached for review (**Attachment 1**).

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within forty five (45) calendar days after date of the written "Notice to Proceed".
    a. All on-site work shall be completed by the Contractor five (5) days prior to the scheduled contract completion date, with the remaining five (5) days utilized for final inspection and correction of all deficiencies.
2. Conditions of Work: The following conditions of work will apply in accomplishment of this contract:
    a. All work shall be performed in accordance with all State and Federal regulations.
    b. The contractor shall perform his work in such a manner as to cause a minimum of interruption to normal work being performed in the contract area.
    c. Coordination of work areas shall be scheduled with DEQ.
    d. Disposal of Removed Materials: All materials removed by the Contractor under this contract shall be disposed of in accordance with State and Federal regulations. DEQ will sign as generator, if necessary.

CONTRACTOR SHALL:

- Attend mandatory pre-bid meeting and site walk through;
- Posses a current lead-based paint license and have a certified lead-based paint supervisor in order to perform lead based paint abatement;
- Send samples to a EPA accredited laboratory for analysis;
- Read Guidelines for Rehabilitation and Conversion of Indoor Firing Ranges, November 3, 2006, Departments of the Army and Air Force, National Guard Bureau (**Attachment 4**), and refer to this document as a reference and guideline for remediating IFR lead contamination;
- Follow OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead based paint abatement, indoor firing range remediation, and lead dust remediation;

Submit With Bid:

- Copy of lead based paint license;
- Three references with name, type of project, phone number, and location of similar work in the last three years;

Submit After Contract Award:

- A Work Plan with planned activities and schedule to DEQ for approval;
- Name of independent third-party firm that will be collecting the confirmation lead wipe samples;

LEAD REMEDIATION INSTRUCTIONS:

- Lead-based Paint Abatement (See **Attachment 1**)
  - Remove all deteriorated lead-based paint inside building and properly dispose. Use EPA approved elastomeric encapsulant when appropriate;
  - Building surfaces, with the exception of impact and friction surfaces, will be wet scraped and encapsulated.
  - Lead-based paint from impact and friction surfaces will be properly abated. This may include removing lead-based paint from surfaces, removing and replacing surfaces, etc.
  - Once lead-based paint abatement is complete and after room floors are cleaned, third party post abatement clearance wipe sampling will be performed in these areas;
  - If samples do not meet EPA and HUD standards for lead dust (40ug/SF for floors), areas shall be re-cleaned and re-sampled;
- Lead Dust Remediation (See **Attachment 1**)
  - HEPA vacuum and wet wash room floors where lead contamination has been found
  - Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;
  - Dispose any materials, determined by the DEQ to be trash, as nonhazardous waste;
  - Perform independent third-party post remediation wipe sampling to confirm that room floors with lead contamination have been appropriately remediated to 40 micrograms per square foot (ug/SF);
  - Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
  - Wash water, lead dust, and appropriate cleaning materials shall be disposed as appropriate;
- General Housekeeping (**Not Required in Allen Armory**)
  - Perform general housekeeping in Hartshorne armory, which includes HEPA vacuuming and moping the floors of the entire armory;
  - Wash water, dust, and appropriate cleaning materials shall be disposed as appropriate;

CONFIRMATION SAMPLING

- The contractor shall be responsible for acquiring independent third-party sampling. This shall be included in the contractors base bid;
- All confirmation and clearance wipe sampling done outside the indoor firing range will be performed after all initial abatement, remediation, and cleaning is complete;
- See Confirmation Sampling Instructions (**Attachment 3**);

FINAL REPORT

- Write final report including: summary of work, post-remediation sampling analytical data, waste manifests (if any), and photo documentation of work;

OWNER REPRESTATIVE

Owner's Representative:

Dustin Davidson
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5119 (Office)
(405) 702-5101 (Fax)
E-Mail: Dustin.Davidson@deq.state.ok.us

Heather Mallory
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5138 (Office)
(405) 702-5101 (Fax)
E-Mail: Heather.Mallory@deq.state.ok.us

ATTACHMENT 1

Site Specific Conditions and Sample Results

LEAD REMEDIATION
SPECIFIC SITE CONDITIONS
ALLEN ARMORY

These conditions must be reviewed and included in your bid in order for your firm to be considered responsive.

Rooms with documented lead contamination on floor
N/A

Lead Based Paint Contamination
The overhead door frames, drill floor overhead structural steel, white trim on the exterior side C of the building, and fire door contain lead-based paint that is not in intact condition.

- The fire door shall be removed, wrapped in 6 mil poly sheeting, and properly disposed. This door shall not be replaced.
- The exterior trim on side C of the building shall be removed and replaced.

General Housekeeping Requirements
N/A

Soil Remediation Requirements
N/A – No soil contamination was found at this armory

AVAILABLE UTILITIES
Water: Yes
Electric: Yes

ATTACHMENT 2

Health & Safety Aspects to Consider

Health & Safety Aspects to Consider

Project Goal: To ensure that former National Guard Armories are free of lead dust. Specifically, indoor firing ranges (IFR's) and other areas that contain lead contamination.

Please Note: the following information is from the Departments of the Army and the Air Force, National Guard Bureau, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges (**Attachment 4**).

Health and Medical Aspects

Health Effects

29 Code of Federal Regulations (CFR) 1910.1025, Appendix A, identifies lead as a highly toxic metal. Elemental lead is indestructible and common in the environment. Lead can enter the body by inhalation (breathing) or ingestion (eating). In addition, lead is a cumulative poison. It accumulates in the blood, bones, and organs, including the kidneys, brain and liver. Effects include nervous and reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes, and hypertension. Symptoms include loss of appetite, difficulty sleeping, irritability, fatigue, headache, and inability to concentrate. It can stay in the bones for decades. Worker awareness and training are important to ensure that employees can recognize the symptoms of exposure and get prompt medical attention.

Medical Surveillance for occupational Exposure to Lead

a. 29 CFR 1910.1025(j)(i-ii), Medical Surveillance - General: "The employer shall institute a medical surveillance program for all employees who are or may be exposed above the action level for more than 30 days per year. The employer shall assure all medical examinations and procedures are performed by or under the supervision of a licensed physician."

b. The DOD 6055.5-M, Occupational Medical Surveillance Manual - Table 2-I lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

Personal Protective Equipment

29 CFR 1910.1025(f)(2),for housekeeping and rehabilitation the employer shall select respirators from among those approved for protection against dust, fume, and mist by the National Institute for Occupational Safety and Health (NIOSH), under the provision of 42 CFR part 84. The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134(b), (d), (e), and (f). As a minimum, personnel conducting the decontamination of the range shall be provided with the following personal protective equipment.

a. Under 29 CFR 1910.1025 (g). For employees engaged in range rehabilitation and/or range conversion, the employer shall provide at no cost to the employee, and ensure that the employee uses appropriate protective work clothing and equipment such as, but not limited to:

(1) Protective coveralls with hood and shoe covers or disposable Tyvek ™ full body suit.

(2) Disposable rubber gloves; and disposable shoe coverlets (If necessary).

(3) Full-face air purifying respirator with P-100 cartridges.

b. The employer shall provide the clothing required in a clean and dry condition at least daily to employees engaged in the conversion of IFRs.

c. The employer shall provide for the cleaning, laundering, or disposal of used or contaminated protective clothing and equipment.

d. The employer shall assure that all protective clothing is removed at the completion of a work shift only in areas designated for that purpose (Change Areas or Change Rooms).

e. The employer shall ensure that contaminated protective clothing that is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area that seals sufficiently enough to prevent dispersion of lead dust.

f. The employer shall further inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.

g. The employer shall ensure that the containers of contaminated protective clothing and equipment are labeled as follows: CAUTION: *CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.*

Education, Maintenance, Cleaning and Conversion

Worker Education

a. 29 CFR 1910.1025, Appendix 13, requires an information and training program for **all employees exposed** to lead above the action level **or** who may suffer skin or eye irritation from lead. The program must inform the employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. In addition you must make readily available to all employees, including those exposed below the action level, a copy of this standard and its appendices. This training program shall be repeated annually for personnel in range cleanup operations.

b. The supervisor shall ensure that each individual employee is informed of the following:

(1) The content of the standard and its appendices.

(2) The specific nature of operations that could result in exposure to lead above the action level.

(3) The purpose, proper selection, fitting, use, and limitations of respirators.

(4) The purpose and a description of medical surveillance program.

(5) Eating and drinking are prohibited in lead contaminated areas.

(6) Smoking and smoking materials shall not be permitted in contaminated areas.

(7) Employees must wash their hands and other exposed skin whenever they leave the work area.

(8) The engineering controls and work practices associated with the individual's job assignment.

(9) The contents of any compliance plan in effect.

(10) Instructions to employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

REFERENCES

Section 1 Required Publications

There are no entries in this section

Section II Related Publications

ASTM E1792-03
Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

29 CFR, Part 1910
Occupational Safety and Health Administration, Department of Labor

National Institute for Occupational Safety and Health (NIOSH) 76-130
Lead Exposure and Design Considerations for Indoor Firing Ranges, Department of Health, Education and Welfare

NGR 385-15
Policy and Responsibilities for Inspection, Evaluation and Operation Army National Guard National Guard Indoor Firing Ranges (IFRs).

NGR 415-5
Army National Guard Military Construction Program Development and Execution

NGR 420-10
Construction and Facilities Management Office Operations

Technical Manual, 5th Edition
Occupational Safety and Health Administration, Department of Labor Section III

ATTACHMENT 3

Confirmation Sampling Instructions

Confirmation Sampling Instructions

Protocol for Collecting Wipe Samples

1. Prepare a rough sketch of the area(s) or room(s), which are to be wipe sampled.
2. A new set of clean, impervious gloves should be used for each sample to avoid contamination of the media by previous samples and to prevent contact with the substance.
3. Wipe Samples
    a. If using Ghost Wipes ™, tear open the individually sealed package. Remove the moistened wipe. Unfold the wipe.
    b. If using a dry media such as MCE or Whatman ™ filter, moisten the filter with distilled or deionized water prior to sampling.
4. Place a 12 inch by 12 inch, 1 foot square, template on the area to be wiped.
5. Apply uniform firm pressure while wiping the area inside the template.
6. To insure that all portions of the partitioned area are wiped, start at the outside edge and progress toward the center making concentric squares decreasing in size.
7. After collecting a sample, fold the filter or wipe inward and place into a container and number it. Note the number at the sample location on the sketch.
8. At least one blank filter treated in the same fashion but without wiping, should be submitted to the laboratory with every 10 samples.

Confirmation Sampling Instructions

Areas with Elevated Lead Dust on Floor

1. A 3 section by 3 section grid system shall be used. Samples shall not be collected on all one section or end of a grid. A total of 3 samples shall be collected per 3 section by 3 section grid.
    - Each floor surface less than 50 feet in length shall be divided into a 3 section by 3 section grid. (Figure 1 and Figure 2)
    - Each floor surface more than 50 feet in length shall be divided in half and a 3 section by 3 section grid shall be established on each half. (Figure 3 and Figure 4)
2. Sample results in excess of **40 ug/SF** are considered to have failed. If a sample fails, the entire 3 section by 3 section grid shall be re-cleaned and re-sampled.
3. DEQ reserves the right to take additional confirmation samples.

Figure 1. **ACCEPTABLE FOR SURFACES LESS THAN 50 FEET**

Wipe Sample		
	Wipe Sample	
		Wipe Sample

Figure 2. **NOT ACCEPTABLE FOR SURFACES LESS THAN 50 FEET**

Wipe Sample	**OR** Wipe Sample	Wipe Sample
Wipe Sample		
Wipe Sample		

Figure 3. **ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET**

Wipe Sample					Wipe Sample
	Wipe Sample		Wipe Sample		
		Wipe Sample		Wipe Sample	

Surface Center

Figure 4. **NOT ACCEPTABLE FOR SURFACES GREATER THAN 50 FEET**

				Wipe Sample	
Wipe Sample	Wipe Sample	Wipe Sample		Wipe Sample	
				Wipe Sample	

Surface Center

ATTACHMENT 4

Guidelines for Rehabilitation and

Conversion of Indoor Firing Ranges

Departments of the Army and the Air Force
National Guard Bureau
Arlington, VA 22202-3231
3 November 2006

***NG Pam 420-15**

Facilities Engineering

Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges

By Order of the Secretaries of the Army and the Air Force:

H STEVEN BLUM
Lieutenant General, USA
Chief, National Guard Bureau

Official:

GEORGE R. BROCK
Chief, Plans and Policy Division

History. This printing publishes a revision of NG Pam (AR) 385-16/ANGPAM 91-101.

Summary. This pamphlet prescribes policy for rehabilitation and conversion of National Guard Indoor Firing Ranges (IFR).

Applicability. This guidance applies to all persons responsible for the operation of National Guard IFRs. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted so as to ensure compliance with all applicable Federal and State laws and regulations.

Proponent and exception authority. The proponent of this regulation is Chief, NGB-SG-IH. The proponent has the authority to approve exceptions to this regulation that are consistent with controlling law and regulation.

Suggested Improvements. Users of this pamphlet are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to NGB-SG-IH, 1411 Jefferson Davis Highway, Arlington, VA 22202-3231.

Distribution. A.

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* This publication supersedes NP Pam (AR) 385-16/ANGPAM 91-101, dated 31 January 1994.

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Glossary

1-1. Purpose
This pamphlet establishes the policy and procedures for rehabilitation and conversion, of National Guard IFRs.

1-2. References
Required and related publications and referenced and prescribed forms are listed in Appendix A.

1-3. Explanation of abbreviations and terms
Abbreviations and special terms used in this publication are listed in the glossary.

1-4. Policy and Procedures
Indoor firing ranges can be safely rehabilitated or converted for other uses, such as a storage area, classrooms or office space, provided the following –

a. Prior to conversion active ranges must be thoroughly decontaminated and cleaned to acceptable levels. *All ranges converted prior to the publication date of this pamphlet, must be inspected and evaluated to determine lead contamination.* This will be accomplished by a certified National Guard Industrial Hygienist (IH) or a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs.

b. The level of cleanliness is to be determined by sampling. The Occupational Safety and Health Administration's (OSHA) Technical Manual, 5th Edition, provides guidance on the methods and techniques needed to collect wipe samples (Appendix B).

(1) Wipe samples must be collected and analyzed prior to and after cleaning.

(2) Post-cleaning surface wipe sample results must be less than 200 micrograms per square foot (ug/ft^2) (40 micrograms in the case of child exposure). The sampling strategy, which is the amount and location of wipe samples to be collected, is provided in Appendix C.

c. Equipment/Items previously stored in the range must be decontaminated and cleaned to acceptable levels as determined by a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs.

(1) Samples must be collected from equipment/items stored in the range. Sample selection is critical, because the number of items stored, length of storage, and level of contamination differs from range to range. The amount and location of the samples should be representative of the areas where lead dust is most likely to accumulate. The more samples collected, the better the statistical comparison of the results.

(2) Samples must be collected from the smooth surfaces of the equipment/items, as much as possible. Results of samples collected from a rough surface will be inaccurate due to the minimal surface contact of the media. Further, the likelihood of tearing the media filter is greater on rough surfaces.

(3) Samples should also be collected on items stored the longest period of time, and which have not been disturbed. Items stored closest to the bullet trap and firing line are likely to have higher concentrations of lead dust.

1-5. Goal
To ensure that every IFR is free of lead dust which means to test less than 200 micrograms and to reduce the number of unsafe National Guard IFRs.

1-6. Deviation
Deviations from this guidance will require a written exception to policy from your Regional Industrial Hygiene Office. Questions and/or comments regarding this subject should be directed to your Regional Industrial Hygiene Office or Chief, National Guard Bureau, Office of the Joint Surgeon, ATTN: NGB-SG-IH, 1411 Jefferson Davis Highway, Arlington, VA 22202-3231.

Chapter 2
Health and Medical Aspects

2-1. Health Effects
29 Code of Federal Regulations (CFR) 1910.1025, Appendix A, identifies lead as a highly toxic metal. Elemental lead is indestructible, and common in the environment. Lead can enter the body by inhalation (breathing) or

ingestion (eating). In addition, lead is a cumulative poison. It accumulates in the blood, bones, and organs, including the kidneys, brain and liver. Effects include nervous and reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes, and hypertension. Symptoms include loss of appetite, difficulty sleeping, irritability, fatigue, headache, and inability to concentrate. It can stay in the bones for decades. Worker awareness and training are important to ensure that employees can recognize the symptoms of exposure and get prompt medical attention.

2-2. Medical Surveillance for Occupational Exposure to Lead (Pb)

a. Per 29 CFR 1910.1025 (j)(i-ii), Medical Surveillance - General, "The employer shall institute a medical surveillance program for all employees who are or may be exposed above the action level for more than 30 days per year. The employer shall assure all medical examinations and procedures are performed by or under the supervision of a licensed physician."

b. The DOD 6055.5-M, Occupational Medical Surveillance Manual - Table 2-1 lists medical surveillance criteria for employees "who are or may be exposed above the action level for 30 days/year."

2-3. Air Monitoring

Worker breathing zone air samples must be collected to ensure that personnel are not overexposed to airborne lead during the cleanup phase. Daily air samples will be collected from all personnel involved in the cleanup operation. These exposure levels will be used to evaluate work practices and medical surveillance requirements.

2-4. Wipe Sampling Protocol and Media

A template measuring 10 centimeters by 10 centimeters square, approximately 4 inches square, should be used to accurately measure and mark the area before collecting wipe samples. Samples should be staggered to different areas of the range. A grid system should be utilized. Samples should not be collected all on one section of a wall, or end of the building. OSHA Technical Manual provides the necessary guidance on the technique needed to collect wipe samples (Appendix B). Only distilled or deionized water will be used to saturate dry sample media. At least one field blank must be submitted with every 10 samples. The field blank must be from the same lot, and labeled as a blank.

2-5. Personal Protective Equipment

29 CFR 1910.1025 (f) (2), for housekeeping and rehabilitation the employer shall select respirators from among those approved for protection against dust, fume, and mist by the National Institute for Occupational Safety and Health (NIOSH), under the provision of 42 CFR part 84. The employer shall institute a respiratory protection program in accordance with 29 CFR 1910.134 (b), (d), (e) and (f). As a minimum, personnel conducting the decontamination of the range will be provided with the following personal protective equipment.

a. Under 29 CFR 1910.1025 (g). For employees engaged in range rehabilitation and/or range conversion, the employer shall provide at no cost to the employee, and ensure that the employee uses appropriate protective work clothing and equipment such as, but not limited to:

(1) Protective coveralls with hood and shoe covers or disposable Tyvek ™ full body suit.
(2) Disposable rubber gloves; and disposable shoe coverlets (If necessary).
(3) Full-face air purifying respirator with P-100 cartridges.

b. The employer shall provide the clothing required in a clean and dry condition at least daily to employees engaged in the conversion of IFRs.

c. The employer shall provide for the cleaning, laundering, or disposal of used or contaminated protective clothing and equipment.

d. The employer shall assure that all protective clothing is removed at the completion of a work shift only in areas designated for that purpose (Change Areas or Change Rooms).

e. The employer will ensure that contaminated protective clothing that is to be cleaned, laundered, or disposed of, is placed in a closed container in the change area that seals sufficiently enough to prevent dispersion of lead dust.

f. The employer will further inform in writing any person who cleans or launders protective clothing or equipment of the potentially harmful effects of exposure to lead.

g. The employer will ensure that the containers of contaminated protective clothing and equipment are labeled as follows: CAUTION: *CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.*

Chapter 3
Education, Maintenance, Cleaning and Conversion

3-1. Worker Education

a. 29 CFR 1910.1025, Appendix B, requires an information and training program for all employees exposed to lead above the action level or who may suffer skin or eye irritation from lead. The program must inform the employees of the specific hazards associated with their work environment, protective measures which can be taken, the danger of lead to their bodies (including their reproductive systems), and their rights under the standard. In addition you must make readily available to all employees, including those exposed below the action level, a copy of this standard and its appendices. This training program will be repeated annually for personnel in range cleanup operations.

b. The commander/supervisor will ensure that each soldier or Army National Guard (ARNG) employee is informed of the following:

(1) The content of the standard and its appendices.
(2) The specific nature of operations that could result in exposure to lead above the action level.
(3) The purpose, proper selection, fitting, use and limitations of respirators.
(4) The purpose and a description of medical surveillance program.
(5) Eating and drinking are prohibited in lead contaminated areas.
(6) Smoking and smoking materials will not be permitted in contaminated areas.
(7) Soldiers and ARNG employees must wash their hands and other exposed skin whenever they leave the work area.
(8) The engineering controls and work practices associated with the individual's job assignment.
(9) The contents of any compliance plan in effect.
(10) Instructions to soldiers and ARNG employees that chelating agents should not routinely be used to remove lead from their bodies and should not be used at all except under the direction of a licensed physician.

3-2. Range Cleaning Instructions

a. Written procedures, such as a scope of work, or standing operating procedure that complies with all Federal, State and local regulations must be established prior to decontamination operations.

b. The range ventilation system will be in operation during range cleaning to ensure that a negative pressure environment is maintained. In the absence of mechanical ventilation system, all doors and windows will be sealed to eliminate fugitive emissions.

c. A High Efficiency Particulate Air (HEPA) filtered vacuum system, which is designed to collect loose surface lead dust particles, is the preferred method of cleanup. If a HEPA filtered vacuum is not available, the range can be cleaned using a wet method.

d. Prohibited methods include:

(1) Wet cleaning using high-pressure systems, since this method may embed the lead into the substratum and generate large quantities of hazardous waste.
(2) Dry sweeping is not permitted.

e. All surface areas of the range must be cleaned. In addition, areas outside of the IFR where lead can be tracked must be cleaned.

f. The preferred progression of cleaning is from top to bottom and from behind the steel bullet trap to the firing line.

(1) Clean the steel bullet trap, areas in front of and behind the bullet trap, and the steel bullet trap plate(s), after removing the sand (if applicable).
(2) Clean the ceiling, floors, lights, baffles, retrieval system, heating system(s), and ventilation duct(s).
(3) Vacuum and remove acoustical material. *Painting over this material is not recommended.*
(4) Clean the floor the last, starting at the bullet trap and ending behind the firing line.

g. When using a HEPA filtered vacuum, vacuum all surface areas until no dust or residue is visible.

h. Any general purpose cleaning solutions can be used for the wet method. However, Spic and Span™ has been found to be an effective cleaning solution by other Army organizations. Mix new solutions of cleaning solution frequently. Wet wiping will require dual containers of water; one container for wetting the applicator (mops, rags, sponge, etc.) and the other container for rinsing the applicator after the dust has been wiped from the surfaces. After wet wiping all surfaces, permit the area to dry.

i. *Properly dispose of all hazardous waste. Do not place lead contaminated waste into the sewer system or onto the ground.*

(1) When placed in containers, wastewater should be left to evaporate.

(2) Mop-heads, sponges and rags will be discarded as hazardous waste following cleanup.

j. A thorough visual inspection to detect dust should be made following cleanup and prior to collecting post surface wipe samples.

k. Wood floors should receive a coat of deck enamel or urethane; concrete floors should be sealed with deck enamel.

l. As a variety of conditions exist in ranges, unique situation may arise and specific written guidance from your Regional Industrial Hygiene Office may be required.

m. Any cleaning activities must be under the supervision by a trained and competent personnel IAW with OSHA and other nationally accepted standards and the work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer. Cleaning must recognize that there likely will be "background" lead presence in the readiness center totally independent of the existence of an indoor range and that the method of cleaning is less important than achieving the goal of less than 200 micrograms (40 micrograms in the case of child exposure).

3-3. Cleaning Stored Contaminated Equipment

a. Equipment contaminated (sample result is higher than 200 ug/ft^2) with lead dust must be decontaminated before it is removed from the range.

b. Equipment located near the bullet trap and firing line should be cleaned first and then removed. The cleaning method depends on the size of the equipment and the material it is comprised of, i.e. metal, wood, concrete, porous, non-porous, smooth or rough finish etc. However, either HEPA vacuum or the wet wipe method will be used. Refer to paragraph 3-2 for additional guidance.

c. Every attempt should be made to clean and reclaim items since disposing of equipment, as hazardous waste is costly and wasteful. Only as a last resort will the item be discarded as hazardous waste. Porous items, such as office partitions and carpet that were present during firing should be considered grossly contaminated and be discarded unless analysis proves otherwise. Consult your State Environmental Office for the proper hazardous waste disposal methods.

3-4. Contaminated Sand and Lead Waste

Consult your State Environmental Office for specific disposal guidance to ensure compliance with local laws and regulations.

3-5. Range Rehabilitation

This chapter applies to all IFRs that have been identified as candidates for rehabilitation. It provides further guidance for cleaning and/or sampling that might be required prior to the start of rehabilitation.

a. The portion(s) of the range to under go rehabilitation must be sampled to determine the level of lead contamination. Wipe samples will be taken per the established sampling protocol. See Appendix B.

b. All personnel involved in range rehabilitation will wear a NIOSH approved respirator (P-100) and proper personal protective equipment as prescribed in paragraph 2-5 above.

c. Prior to the start of rehabilitation, the environmental office must be notified to determine the disposition of any debris containing hazardous materials (lead).

d. Supervision shall be by a person who is certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs. All work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer.

3-6. Conversion of Indoor Firing Ranges

Prior to the start of decontamination, employers must ensure that all procedures to be used comply with Federal, State, and local regulations. To ensure that all lead contamination is eradicated, the following procedure is established.

a. The State shall follow the project approval process as delineated in NGR 420-10 (or NGR 415-5 if the use of the military construction appropriation is required).

b. All ranges slated for conversion will be inspected and evaluated by the NGB Regional Industrial Hygiene Office.

c. All equipment stored in the range, if applicable, prior to the start of decontamination must be sampled, decontaminated, re-sampled and removed or turned in as lead contaminated material.

d. All acoustical tiles and/or sound proofing material (if applicable) must be removed and turned in as lead contaminated material through the environmental office.

e. The bullet trap, target retrieval system and firing line stations must be removed and turned in as lead containing material through the environmental office.

f. Light fixtures and ventilation system grills must be removed and decontaminated.

g. Ventilation system ducts need to be decontaminated or removed and replaced.

h. The exhaust fans and/or the complete ventilation air-handling unit (if applicable) must be decontaminated or removed to include roof fans.

i. Cover all openings of any component previously decontaminated prior to start of interior decontamination of the firing range.

j. Prior to start of washing, the interior of the range should be vacuumed with a HEPA filtered vacuum. The range should be washed using a cleaning solution of hot water and Spic and Span in five gallons of hot water. A progression of cleaning from top to bottom, and from back to front should be used. All surface areas of the range must be cleaned. Mix new solutions of water frequently. Washing will require dual containers of water; one container for wetting the applicators (mops, rags, sponges, etc.), and the other container for rinsing the applicators. Waste water placed into containers can be left to evaporate. *Properly dispose of all hazardous waste and do not place any lead contaminated waste into the sewer system or onto the ground.* Mop heads, sponges and rags will be discarded as hazardous waste following decontamination of the range. After completion of decontamination, and prior to taking clearance samples, the ventilation system must be run for a period of 36 hours. Wipe clearance samples will be taken from ceiling, walls and floors. The range will be considered clean if no clearance sample is greater than 200 ug/ft^2, if any sample is above 200 ug/ft^2, the range is not considered clean, the range will need to be re-washed until clearance samples are below 200 ug/ft^2.

k. The regional industrial hygienist will do quality assurance sampling as needed.

l After obtaining clearance, the walls of the range will be coated with a sealant (Not Paint), which is smooth, wood floors will receive a coat of deck enamel or urethane, concrete floors will be sealed with deck enamel. After sealing, floors will be tiled or covered with linoleum.

m. As a variety of conditions exist in ranges, unique situations may arise and specific written guidance from the Regional Industrial Hygiene Office may be required.

n. All personnel involved in the decontamination/conversion of IFRs as a minimum will be provided with the following personal protective equipment.

(1). Full Face air purifying respirator with HEPA cartridges. The requirements outline in 29 CFR 1910.134, must be met prior to placing workers in respiratory protection.

(2). Individuals will be provided personal protective equipment as required per paragraph 2-5, this pamphlet.

o. Any conversion must be supervised by a person certified to perform inspections, evaluations, and determinations of IFRs IAW with OSHA standards, other nationally accepted standards, and accepted IH practices for maintenance, cleaning, conversion, ventilation, and air sampling of IFRs. All work shall be according to current industry engineering standards under the control of the State Construction and Facilities Management Officer. Cleaning must recognize that there likely will be "background" lead presence in the readiness center totally independent of the existence of an indoor range and that the method of cleaning is less important than achieving the goal of less than 200 micrograms (40 micrograms in the case of child exposure).

p. After conversion, lead testing shall continue on an annual basis to verify that no lead migration from the substrate is occurring.

Appendix A
References

Section I
Required Publications

There are no entries in this section

Section II
Related Publications

ASTM E1792-03
Standard Specification for Wipe Sampling Materials for Lead in Surface Dust

AR 11-34
The Respiratory Protection Program

AR 40-5
Preventive Medicine

DODI 6055.5
Industrial Hygiene and Occupational Health

DOD 6055.5-M
Occupational Medical Surveillance Manual

29 CFR, Part 1910
Occupational Safety and Health Administration, Department of Labor

National Institute for Occupational Safety and Health (NIOSH) 76-130
Lead Exposure and Design Considerations for Indoor Firing Ranges, Department of Health, Education and Welfare

NGR 385-15
Policy and Responsibilities for Inspection, Evaluation and Operation Army National Guard National Guard Indoor Firing Ranges (IFRs).

NGR 415-5
Army National Guard Military Construction Program Development and Execution

NGR 420-10
Construction and Facilities Management Office Operations

Technical Manual, 5th Edition
Occupational Safety and Health Administration, Department of Labor

Section III
Prescribed Forms

There are no entries in this section

Section IV
Referenced Forms

There are no entries in this section

Appendix B
Protocol for Collecting Wipe Samples

B-1. If multiple samples are to be collected at the work site, prepare a rough sketch of the area(s) or room(s), which are to be wipe sampled.

B-2. A new set of clean, impervious gloves should be used for each sample to avoid contamination of the media by previous samples and to prevent contact with the substance.

B-3. Wipe Samples

a. If using Ghost Wipes™, tear open the individually sealed package. Remove the moistened wipe. Unfold the wipe.

b. If using a dry media such as MCE or Whatman™ filter, moisten the filter with distilled or deionized water prior to sampling.

B-4. Place a 10 centimeter by 10 centimeter template on the area to be wiped.

B-5. Apply uniform firm pressure while wiping the area inside the template.

B-6. To ensure that all portions of the partitioned area are wiped, start at the outside edge and progress toward the center making concentric squares decreasing in size.

B-7. After collecting a sample, fold the filter or wipe inward and place into a container and number it. Note the number at the sample location on the sketch.

B-8. At least one blank filter treated in the same fashion but without wiping, should be submitted to the laboratory.

Appendix C
Sampling Strategy for Collection of Wipe Samples

C-1. Prior to cleaning the ranges, three samples must be collected and analyzed for total lead dust on each surface, i.e., floor, ceiling, bullet trap, and wall to include the plenum wall, if applicable. In addition, a total of three samples should be collected from areas which have been least disturbed by airflow. Established walkways should be avoided.

C-2. Samples should be collected from different areas of the range. A grid system should be utilized. Each range surface areas should be divided evenly into 3 by 3 sections. Samples should not be collected from only one section of a wall or end of the building.

Glossary

Section I
Abbreviations

ARNG
Army National Guard

CFR
Code of Federal Regulations

HEPA
High Efficiency Particulate Air

IFR
Indoor Firing Range

NIOSH
National Institute for Occupational Safety and Health

OSHA
Occupational Safety and Health Administration

ug/ft^2
Micrograms per square foot

Section II
Terms

Air monitoring
The sampling for and measuring of pollutants in the atmosphere.

Breathing zone
The imaginary globe of two feet radius surrounding the head.

General area
Collection of and later analysis of airborne contaminants in a given work environment. As the sampling pump and collection media are not attached to a worker, the concentrations found represent average concentrations in that area but may not representative of the actual exposure of the worker.

HEPA
Refers to high efficiency particulate air filter systems capable of capturing up to 99.97 percent of particles 0.3 microns in size or larger.

Lead-Contaminated Range
It is assumed that all IFRs, which have been fired in, are lead-contaminated.

Respirator
A device designed to provide the wearer with respiratory protection against inhalation of airborne contaminants.

Wipe Sample
The terms wipe, swipe, or smear samples are used synonymously to describe the techniques utilized for assessing lead surface contamination.

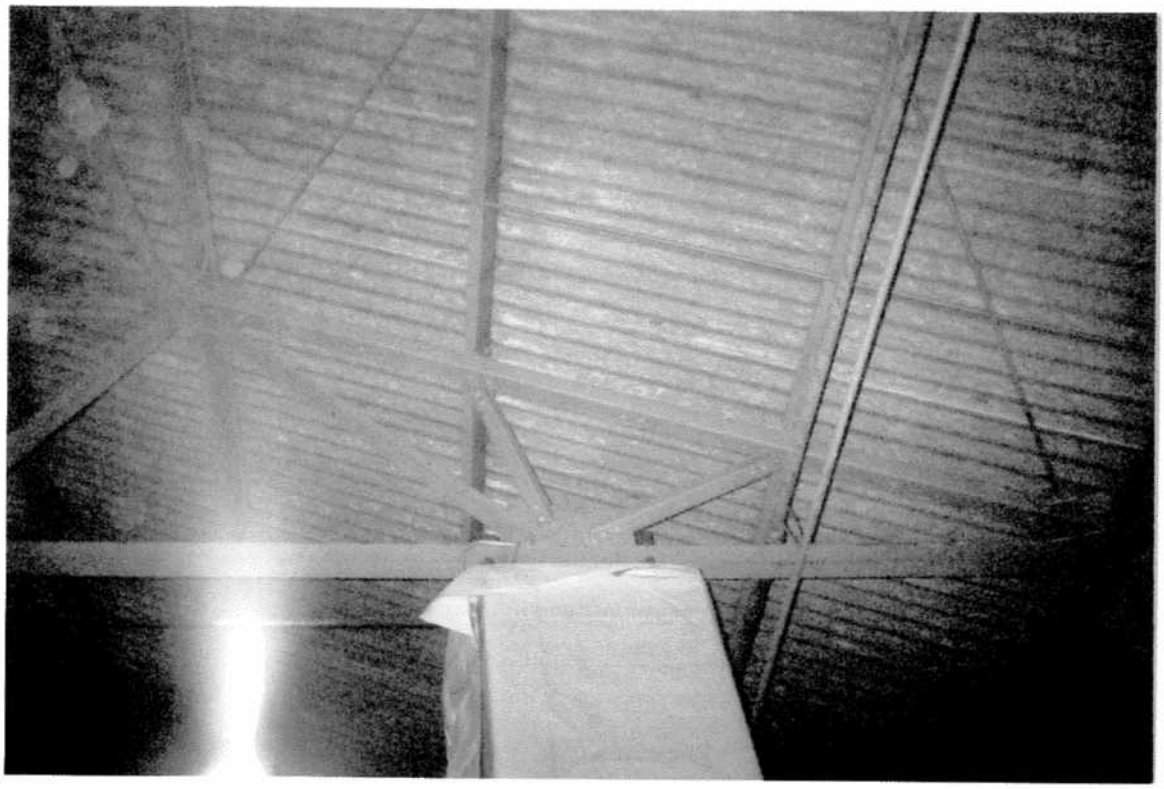
Section III
Special Abbreviations and Terms

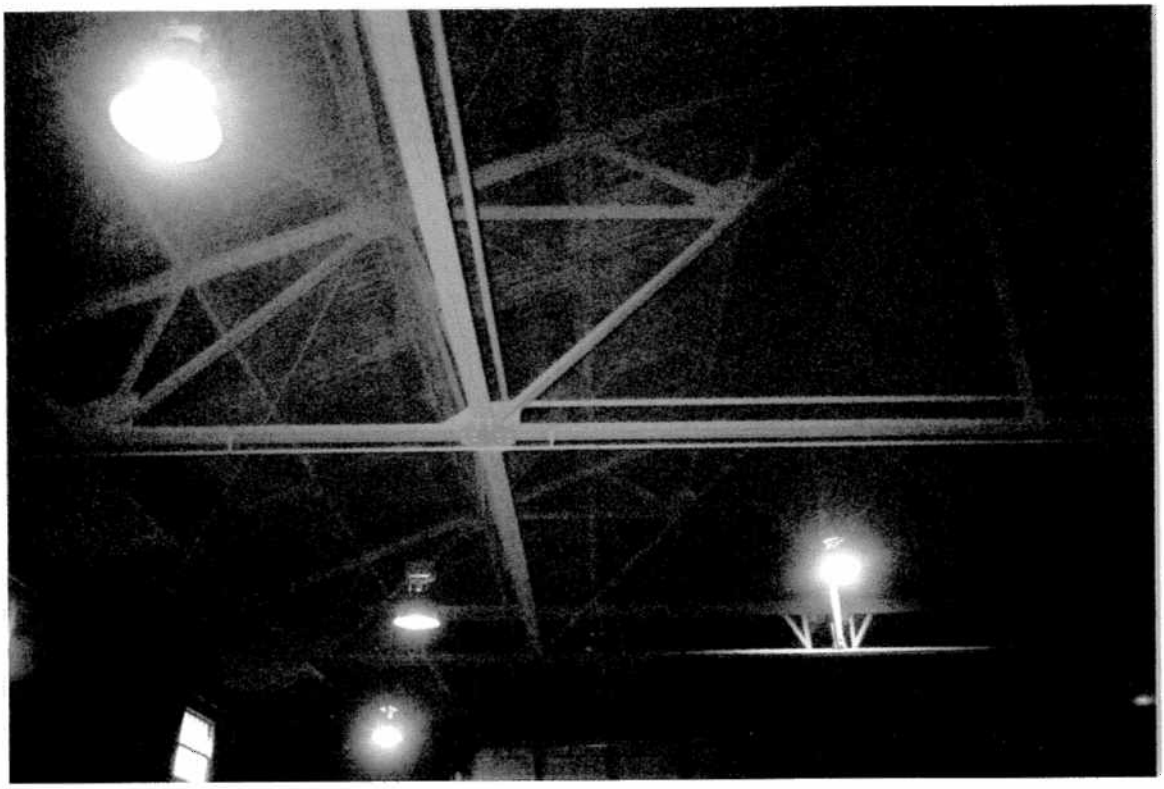
This section contains no entries

LEAD-BASED PAINT ABATEMENT REPORT

FINAL REPORT – ALLEN ARMORY

Abatement Systems, Inc. crew mobilized on 3/27/08 to begin prep work for the removal of loose and peeling LBP from the structural beams of the Drill Floor area. Areas removed and clearance sampling conducted (attached) by Joe Stevenson (per D. Davidson). Drill Floor mopped, outside wood trim replaced. DEQ acceptance 4/14/08. Photos attached.





CHAIN OF CUSTODY

Package Shipped From: Abatement Systems Date: 4-11-08

Address:

Phone #: 25/2504 Fax #: 25/3852 Contact: Jon Summers

Condition of package Upon Receipt:

Number of Samples Received: 3 Person Sampling: Joe S.

Project I.D.: ALLEN ARMORY Sample Type: LEAD Dust

NUMBER	RECEIVING SAMPLE	DESCRIPTION	AAL LOG NUMBER
1	1	ADF - 01	
2	2	ADF - 02	
3	3	ADF - 03	
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Comments: FINAL CLEARANCE SAMPLING - ALLEN ARMORY, ALLEN, OK.

Relinquished by: Jon Date: 4/11/08 Time: 325 pm Received by:

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

Relinquished by: Date: Time: Received by:

227

Allen Drill Floor
Sampled - 4-11-08
ADF-01
ADF-02
ADF-03

Outreach Laboratory
311 North Aspen
Broken Arrow, OK 74012
(918) 251-2515
(918) 251-0008

Client: Abatement Systems, Inc.
Client Project: Allen Armory
Lab Number: 20080337
Date Reported: 4/29/2008
Date Received: 4/15/08
Page Number: 1 of 1

Analytical Report

	Method	Result	Units	DL	Prep Date	Analysis Date	Analyst
Lab ID:	**20080337-01**						
Client ID:	**ADF-01**						
Date Sampled:	**4/11/2008**						
Matrix:	**Other**						
	Metals Analyses						
Lead	EPA 6010B/200.7	2.7	ug/ft2	1.5	4/25/2008	4/28/2008	RE
Lab ID:	**20080337-02**						
Client ID:	**ADF-02**						
Date Sampled:	**4/11/2008**						
Matrix:	**Other**						
	Metals Analyses						
Lead	EPA 6010B/200.7	13.8	ug/ft2	1.3	4/25/2008	4/28/2008	RE
Lab ID:	**20080337-03**						
Client ID:	**ADF-03**						
Date Sampled:	**4/11/2008**						
Matrix:	**Other**						
	Metals Analyses						
Lead	EPA 6010B/200.7	10	ug/ft2	1.5	4/25/2008	4/28/2008	RE

QC Report

Parameter	Blank	LCS %REC	LCSD %REC	LCSD RPD	DUP RPD	MS %REC	MSD %REC	MSD RPD	Date
Lead	0.0	98.0				99.0	102.0	2.7	4/28/2008

Lab Approval:

BDL = Below Detection Limit

CHAIN OF CUSTODY

Package Shipped From: Abatement Systems Date: 4-11-08

Address: _____

Phone #: 251-2504 Fax #: 251-3852 Contact: Jon Summers

Condition of package Upon Receipt: _____

Number of Samples Received: 3 Person Sampling: Joe S.

Project I.D.: ALLEN ARMORY Sample Type: LEAD DUST

NUMBER	RECEIVING SAMPLE	DESCRIPTION	AAL LOG NUMBER
1	1	ADF - 01	
2	2	ADF - 02	
3	3	ADF - 03	
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Comments: FINAL CLEARANCE SAMPLING - ALLEN ARMORY, ALLEN, OK.

Relinquished by: JON **Date:** 4/11/08 **Time:** 3:25 pm **Received by:** _____

Relinquished by: _____ **Date:** _____ **Time:** _____ **Received by:** _____

Relinquished by: _____ **Date:** _____ **Time:** _____ **Received by:** _____

Relinquished by: _____ **Date:** _____ **Time:** _____ **Received by:** _____

LEAD MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER ALLEN ARMORY
ALLEN, OKLAHOMA

The Armory located at 903 North Paul Street, Allen, was contaminated with materials that required remediation pursuant to State and Federal environmental laws and regulations. Please refer to Attachment 1 for land use restrictions. Sampling performed by DEQ contractors, conducted on October 26, 2006, indicated that there was asbestos and lead-based paint in the building. The following maintenance plan is to be completed by the owner of the Affected Property. The remedy was completed on April 14, 2008. DEQ recommends inspection of remediated areas every 5 years. During site inspections the owner should note any signs of disrepair or improper maintenance. Continuing operation, maintenance and monitoring should include:

1. All overhead door frames and drill floor overhead structural steel were scrapped and encapsulated with lead-based paint encapsulant. These surfaces need to be re-encapsulated if lead-based paint encapsulant shows signs of deterioration, damage, or flaking.

Note – A list of DEQ approved acrylic sealant and elastomeric encapsulants is attached (Attachment 2). DEQ did not test every painted surface and all building materials inside and outside of the building, therefore there is a potential for lead-based paint and asbestos at the affected property.

If you have any questions or concerns feel free to contact me at (405) 702-5115.

Sincerely,

Dustin Davidson
Environmental Programs Specialist
DEQ Land Protection Division
Site Cleanup Assistance Program

ATTACHMENT 1

Land use Restrictions

LAND USE RESTRICTIONS: The land use restrictions at the above-described Affected Property are:

a. No residential use of the property by children age 6 or under. Residential use is defined as having a child present at the Affected Property for more than sixteen (16) hours within one twenty four (24) hour period.

These land use restrictions apply to the entirety of the Affected Property described herein above.

ATTACHMENT 2

DEQ Approved Sealants and Encapsulants List

Acrylic Sealant approved by DEQ

KM-669 Acrylic

Lead-Based Paint Encapsulants approved by DEQ

Encapsulant Manufacturer	Encapsulant Product(s)
Coronado Paint Company	LEAD BLOCK™
Dumond Chemicals	LEAD STOP™
Dynacraft Industries, Inc.	Back to Nature Protect-A-Coat
Encap Systems Corporation	EncapSeal™ I
Encap Systems Corporation	EncapSeal™ II
Fiberlock Technologies, Inc.	Child GUARD interior/exterior
Fiberlock Technologies, Inc.	L-B-C® Type III
Global Encasement, Inc.	LeadLock™
Grace Construction Products	Lead Seal®
Grace Construction Products	Barrier Coat® II
Insl-x Products Corporation	INSL-CAP™
SAFE Encasement Systems	SE-120 Protective Skin
Specification Chemicals, Inc.	NU-WAL® #2500 Coating