Former Norman Hanger
Norman, Oklahoma

Remediation Final Report

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

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

The Oklahoma Department of Environmental Quality (DEQ) is pleased to present the University of Oklahoma with the Final Remediation Report for the former Norman Hanger.

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 Norman Hanger 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 and its contractors completed the following activities:

- Asbestos inspection, including:
  - Asbestos containing Thermal System Insulation (TSI) and floor tile and mastic.
- Asbestos abatement, including:
  - Removal of TSI and floor tile and mastic

TARGETED BROWNFIELD ASSESSMENT

In August 2011, DEQ provided a Phase I Targeted Brownfield Assessment to the University of Oklahoma. A copy of this report is available at http://www.deq.state.ok.us/lpdnew/scapIndex.htm

LEAD REMEDIATION

DEQ and its contractors completed the following activities:

- Lead-based paint (LBP) inspection
- Lead dust wipe sampling
- LBP abatement, including:
  - Scraping and sealing hanger doors
- HEPA vacuuming and wet washing of floors in the building
- Proper disposal of associated waste

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. cmullins\LPD\Armories_SCAP\ArmoryReports\NormanHanger. 6/2012.

1	Deeds and Legal Documents
2	Maintenance Plan
3	Inspection Reports
4	Scope of Work
5	Final Abatement Reports
6	Confirmation Sampling

DEEDS AND LEGAL DOCUMENTS

Doc#:R 2012 27778
Bk&Pg:RB 5031 34-36
Filed:07-23-2012 BB
03:41:24 PM NO
Cleveland County, OK

17/I

NOTICE OF REMEDIATION
FORMER NORMAN HANGER
NORMAN, 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.

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 May 7, 2010, indicated that there was asbestos, lead-based paint, and lead dust in the building.

AFFECTED PROPERTY: The Affected Property is the former Norman Hanger located at 2232 Goddard Avenue, Norman, Cleveland County, Oklahoma.

The legal description is as follows:

The subject property is located in Cleveland County, Oklahoma, in the SE of the Northeast Quarter (SE ¼ NE ¼ NE) of Section 24, Township 9N, and Range 3W. The armory building's legal location is described as 1259.4 feet south and 100.8 feet west of the NE corner of section 24 for a true bearing of 733.0 feet West, 250 feet North, 872.0 feet East and 487.5 feet South to the point of beginning of original plat.

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

The remedy included abatement of lead-based paint and dust, and removal of lead contaminated water. The remedy was completed on October 20, 2011.

For more detailed information please refer to *former Norman Hanger, Oklahoma Remediation Final Report.* To obtain a copy of the report, contact:

Oklahoma Department of Environmental Quality
Central Records

Mailing Address
P.O. Box 1677
Oklahoma City, Oklahoma 73101

Physical Address
707 N Robinson
Oklahoma City, OK 73102

Electronic Address
http://www.deq.state.ok.us/lpdnew/scapIndex.htm

DISCLAIMER

(A) Lead: 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.

(B) Asbestos: DEQ did not test all building materials inside and outside of the building, therefore there is a potential for asbestos at the affected property.

CONTINUING OPERATION, MAINTENANCE AND MONITORING

(A) Lead-based paint encapsulant: Lead-based paint encapsulant was applied over lead-based paint on non-friction surfaces. These areas should be periodically inspected and maintained as appropriate.

(B) Sealant: Following cleanup, sealant was applied to the room floors where lead-based paint abatement was performed. Sealant should be inspected on a periodic basis and maintained as appropriate.

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.

CHANGING LAND USE RESTRICTIONS: Changes to land use restrictions must be approved by the DEQ or its successor agency. The person requesting the change in land use must demonstrate to the DEQ'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.

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.

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

7-16-12
Date

ACKNOWLEDGMENT

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

Before me, a Notary Public, in and for said County and State, on this 16 day of July, 2012, personally appeared Steven A. Thompson to me known to be the identical person who executed the within and foregoing instrument and acknowledged to me that executed the same as free and voluntary act and deed for the uses and purposed therein set forth.

In Testimony Whereof, I have hereunto set my hand and official seal the day and year above written.

My Commission expires:

2/2, 2013.

Notary Public

Filed: 05-20-1998 09:41:51 AM Doc Number: R 1998 19452 Book: RB 2949 Page:1267

Doc#:R 1998 19452
Bk&Pg:RB 2949 1267-1268
Filed:05-20-1998 LT
09:41:51 AM LR
Cleveland County, OK

RELEASE OF LEASE

Whereas on the 15th day of April, 1953 a certain lease agreement was entered into by and between the Board of Regents of the University of Oklahoma, a body corporate under the name Regents of the University of Oklahoma, as Lessor, and the Oklahoma National Guard, a department of the State of Oklahoma, as Lessee, covering certain described premises situated in Cleveland County, State of Oklahoma, said lease extending for a term of twenty-five (25) years, with the privilege of renewal by the Lessee, from said date: and,

Whereas it is desire of the parties thereto to cancel and release the remaining portions of the premises, said portion to be released being leased by said instrument, more particularly described as follows:

TRACT NO. 1. BEGINNING at a point one thousand two hundred fifty-nine and four-tenths feet (1,259.4') south and one hundred and eight-tenths feet (100.8') west of the northeast corner of Section 24, T9N, R3W, Indian Meridian, thence on a true bearing of S 89 degrees - 30 minutes W for a distance of seven hundred thirty-three and no-tenths feet (733.0'), thence on a true bearing of N 59 degrees - 14 minutes W for a distance of two hundred fifty and no-tenths feet (250.0'), thence on a true bearing of N 38 degrees - 23 minutes E for a distance of eight hundred seventy-two and no-tenths feet (872.0'), thence on a true bearing of S 32 degrees - 25 minutes E for a distance of four hundred eighty-seven and five-tenths feet (487.5'), thence on a true bearing of S 28 degrees - 54 minutes E for a distance of three hundred eighty-six and seven-tenths feet (386.7'), thence on a true bearing of S 13 degrees - 47 minutes W for a distance of seventy-five and five tenths feet (75.5') to the point of beginning, being 10.1 acres, more or less.

Now, therefore, in consideration for the sum of one dollar ($1.00) in hand paid, the receipt of which is hereby acknowledged, the said Oklahoma National Guard, a department of the State of Oklahoma, Lessee in said lease, does hereby releases, relinquish, and surrender all of its right, title and interest in and to the premises describe above effective the first day of April, 1998, and the said Regents of the University of Oklahoma, a body politic, Lessor in said lease, does hereby accept said release and surrender all of the premises above describes and hereby consents and agrees to the cancellation of said lease as affecting the premises above described and releases said Oklahoma National Guard, a department of the State of Oklahoma, its successors and assigns of and from all obligations and liabilities arising thereunder.

731 Elm ave
Robertson Hall 318
Norman, OK 73019-0233

PAGE 1 OF 2

Cleveland County Clerk's Office

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in duplicate this 15th day of May, 1998.

REGENTS OF THE UNIVERSITY OF OKLAHOMA

By _____
Vice President for Administrative Affairs

Before me, the undersigned, a Notary Public, in Cleveland County and State of Oklahoma on this 15th day of May, 1998, Russell W. Driskell, Vice President for Admin. Affs. of the University of Oklahoma, personally appeared, known to me to be the identical person who signed the foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes set forth.

Virginia Rollins My Commission Expires: 11-21-99

OFFICIAL SEAL
Virginia Rollins
Notary Public in Oklahoma
Cleveland County
My Commission Expires Nov 21, 1999

ATTEST:

_____
OKLAHOMA NATIONAL GUARD

BY _____
Stephen P. Cortright, Adjutant General

The Adjutant General of the State of Oklahoma, Major General Stephen P. Cortright, acting as trustee for the Oklahoma National Guard for the State of Oklahoma.

Before me, the undersigned, a Notary Public, in Oklahoma County and State of Oklahoma on the 16 day of March, 1998, Stephen P. Cortright, personally appeared, known to me to be the identical person who signed the foregoing instrument and acknowledged to me that they executed the same as their free and voluntary act and deed for the uses and purposes set forth.

Mary M. Straler My Commission Expires: My Commission Expires Feb. 17, 1999

MAINTENANCE PLAN

MAINTENANCE PLAN
FORMER NORMAN HANGER ARMORY
NORMAN, OKLAHOMA

The Armory located at 2232 Goddard Ave, Norman, Oklahoma 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 May 7, 2010, indicated that there was asbestos, lead-based paint, and lead dust in the building. Remediation activities at the Affected Property included abatement of asbestos, lead-based paint, and lead dust. The remedy was completed on October 20, 2011. The following maintenance plan is to be completed by the owner of the Affected Property. 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 of the metal sections of the hanger doors 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

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

INSPECTION REPORTS

NORMAN HANGAR

Asbestos Inspection

Prepared For:

Oklahoma Department of Environmental Quality

Land Protection Division

P.O. Box 1677

Oklahoma City, Oklahoma 73101

Prepared By:

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100

Oklahoma City, Oklahoma 73159

TABLE OF CONTENTS

CERTIFICATION

This is to certify that, on May 7, 2010 Marshall Environmental Management, Inc was contracted by the State of Oklahoma, Department of Central Services to conduct an Asbestos Inspection of the Norman Hangar, located at 2232 Goddard Avenue in Norman, Oklahoma, for the State of Oklahoma Department of Environmental Quality, Land Protection Division. This Asbestos Inspection was performed by a Licensed, Oklahoma Department of Labor, Asbestos Hazard Emergency Response Act, Asbestos Inspector Jamie Marshall, of Marshall Environmental Management, Inc, under the direction of a Licensed, Oklahoma Department of Labor, Asbestos Hazard Emergency Response Act, Management Planner Dr. Charles L. Marshall, Certified Industrial Hygienist and President of Marshall Environmental Management, Inc. The findings and analytical data resulting from this Asbestos Inspection are believed to accurately, depict the condition(s) and location(s) of material(s) that contain(s) asbestos on the date this Inspection was conducted.

7-26-10

Dr. Charles L. Marshall, CIH, CSP **Date**

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	Asbestos Inspector	#400517
	Management Planner	#500396
	Project Designer	#2415
ODOL License	Project Designer	#OKMP-0028
	Management Planner	#OKMP-0246
	Asbestos Inspector	#OK-150343

7-26-10

Jamie Marshall, B.S., Industrial Hygiene Associate **Date**

Oklahoma Department of Labor License	Asbestos Inspector	#OK-158090

LABORATORY ANALYSIS PERFORMED BY

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, A-100
Oklahoma City, OK 73159

NORMAN HANGAR

ASBESTOS INSPECTION

EXECUTIVE SUMMARY

On May 7, 2010, as part of the Oklahoma Department of Environmental Quality, Land Protection Division, Site Cleanup Assistance Program and Armory Cleanup Program Marshall Environmental Management, Inc. (MEM) completed an Asbestos Inspection of the Norman Hangar located at 2232 Goddard Avenue in Norman, Oklahoma. This Asbestos Inspection was accomplished so that strategy, which follows the regulations set forth by the Environmental Protection Agency (EPA), may be prepared for the abatement of Asbestos Containing Materials (ACM) that may be present within the Norman Hangar. The analytical results correlating with the samples that were collected as part of this Asbestos Inspection identified the presence of asbestos containing floor tile and floor-tile mastic within rooms six and five as well as asbestos containing pipefitting insulation in room three. At the time this Inspection was conducted, all ACM discovered were in good condition.

The asbestos concentrations identified in the floor tile and floor-mastic were greater than 1-percent (>1%), however, because the asbestos containing floor tile and floor-tile mastic are considered non-friable, that which can be rendered to a powder via had pressure, these materials are categorized as "Category I non-friable ACM." As such, the abatement of the floor tile and floor-tile mastic is not regulated by the Oklahoma Department Of Labor (ODOL). Although, recommendations will include that the non-friable floor tile and floor-tile mastic be abated by an ODOL Licensed Asbestos Abatement Contractor to ensure that Occupational Safety and Health Administration (OSHA) and EPA compliant methods are utilized.

Since the asbestos concentrations detected within the pipefitting insulation are >1% and because this material is considered friable the pipefitting insulation is classified as a "Regulated" ACM. Therefore, as required by EPA regulations to ensure that OSHA and EPA compliance methods are utilized the abatement and disposal of the pipefitting insulation is required to be treated as a regulated response action, which must be accomplished by a Licensed ODOL Asbestos Abatement Contractor. Furthermore, given that the abatement of individual quantities of asbestos containing insulation will require more than one "Glove-bag" containment a Project Design must be submitted and approved by the ODOL. Additionally, a National Emission Standard for Hazardous Air Pollutants (NESHAP) Notification must be submitted to the Oklahoma Department of Environmental Quality (ODEQ) 10-business days prior to the commencement of abatement activities.

Although various asbestos containing floor tile, floor-tile mastic and pipefitting insulation exist within the Norman Hangar no action is required as long as these ACM remain in good condition and undisturbed and when required proper signage is posted. The remainder of this Report is comprised of the Sampling Strategy and Methodology, the Observations and Findings, Abatement Response Actions, the Regulatory Review, Limitations of the Survey and the Appendix to this Report.

SAMPLING STRATEGY AND METHODOLOGY

Each accessible area throughout the Norman Hangar was systematically inspected in order to collect samples of building materials suspected of containing asbestos. The sample collection process includes thoroughly

documenting the location, condition, classification and the estimated quantity of material(s) suspected of containing asbestos. Suspect ACM that are uniform in color and texture and believed to be applied during the same period are described as "Homogenous". A specified number of samples are collected from a homogenous material and if laboratory analyses determine that the material contains asbestos, the entirety of the homogenous material is considered asbestos containing. The following are examples of the types of materials that were visually inspected and sampled during this Asbestos Inspection:

Surfacing Materials

- Examples include but are not limited to blown on or troweled on surfacing material commonly observed on ceilings, walls or structural steel.

Thermal System Insulation

- Examples include but are not limited to insulation on piping on hot or cold water lines, steam lines, thermal process or Heating Ventilation and Air Conditioning (HVAC) equipment and components.

Miscellaneous Materials

- Examples include but are not limited to floor tiles, mastics, ceiling tiles, vinyl sheet flooring and wallboard, wallboard-tape, wallboard-mud or joint compounds.

"Asbestos Containing Materials" are any materials, which consist of >1% asbestos as defined by the EPA Approved Analytical Method: 40 Code of Federal Regulations (CFR) Chapter I, Part 763, Subpart F, Appendix C, referred to as "Interim Method for determination of Asbestos in Bulk Insulation Samples," using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982. Each sample collected was submitted for analysis in accordance with the EPA authorized Method: 600 49 CFR Part 61 Subpart M, Asbestos NESHAP Rules.

OBSERVATIONS AND FINDINGS

The hangar portion of the Norman Hangar is a single story structure comprised of concrete exterior walls and sheet-metal doors with a pitched roof that was constructed on a concrete slab in approximately 1965. The office section of the Norman Hangar is a single story structure with a brick façade and a pitched roof, which was constructed on a concrete slab circa 1965. The following table summarizes the ACM discovered during this Asbestos Inspection. Additionally, a floor plan diagram identifying the materials that contain asbestos and their estimated quantities is included in the Appendix of this Report.

TABLE 1: ASBESTOS CONTAINING MATERIALS

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	% ASBESTOS	TYPE OF ASBESTOS	TYPE OF MATERIAL	CONDITION OF MATERIAL
0044-01	ROOM 6	9"x9" FLOOR TILE	3%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-02	ROOM 6	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-03	ROOM 5	9"x9" FLOOR TILE	5%	CHRYSOTILE	MISCELLANEOUS	GOOD

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	% ASBESTOS	TYPE OF ASBESTOS	TYPE OF MATERIAL	CONDITION OF MATERIAL
0044-04	ROOM 5	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-09	ROOM 4	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-31	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD
0044-32	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD
0044-33	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD

TABLE II: ASBESTOS CONTAINING HOMOGENOUS AREAS

SAMPLE LOCATION	SAMPLE MATERIAL	TOTAL QUANTITY
ROOM 6	9"x9" FLOOR TILE & FLOOR-TILE MASTIC	~210-ft²
ROOM 5	9"x9" FLOOR TILE & FLOOR-TILE MASTIC	~113-ft²
ROOM 4	FLOOR MASTIC	~233-ft²
ROOM 3	PIPEFITTING INSULATION	~8-glovebags

HISTORICAL OVERVIEW OF ASBESTOS ACTIVITIES

Historical records were not provided for review nor was there evidence or information that would suggest that a prior asbestos inspection occurred.

ABATEMENT RESPONSE ACTIONS

- Although the abatement of the Category I non-friable floor tile and mastic is not regulated by the ODOL, the abatement and disposal of the floor tile and mastic is recommended to be carried-out by a Licensed ODOL Asbestos Abatement Contractor.
- In accordance with the ODOL, the abatement of the regulated, asbestos containing pipefitting insulation is required to be performed by a Licensed ODOL Asbestos Abatement Contractor.
- Since the abatement of the pipefitting insulation will require more than one glove-bag containment, the submittal of a Project Design to be approved by the ODOL in addition to a NESHAP notification submitted to the ODEQ 10-business days prior to the commencement of any abatement activities is required.

REGULATORY REVIEW

Prior to 1980 asbestos was commonly utilized during construction in addition to being found in various building materials. In 1994, OSHA required employers to identify 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 Inspections, owners and/or operators must treat suspected ACM as asbestos. The ODOL defines an ACM as any material that contains asbestos in concentrations of 1% or greater, whereas the EPA defines an ACM as any material that contains concentrations of asbestos >1%.

The 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 in the Oklahoma Asbestos Control Act (OAC) 380 Chapter 45:
http://www.ok.gov/odol/documents/Asbestos_law_rules.pdf

Specific provisions of the Standard (OAC: 45-15-1) address asbestos notifications and labeling requirements. The labeling requirements specify that pipe insulation and various equipment insulation containing asbestos as well as rooms where asbestos is present 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 are used in acoustical materials on ceilings and walls this type of ACM is referred to as Surfacing Material.

The EPA requires asbestos inspections in school buildings in grades K through 12, as part of the Asbestos Hazard Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. If asbestos is present within School Facilities grades K-12, an Asbestos Management Plan is required by the Local Educational Authority (LEA). The AHERA inspection protocol requires a thorough sampling of all forms of friable and non-friable asbestos. The types of ACM to be assessed as part of an AHERA Inspection include:

Surfacing Materials

- Examples include but are not limited to blown on or troweled on surfacing material commonly observed on ceilings, walls or structural steel.

Thermal System Insulation

- Examples include but are not limited to insulation on piping on hot or cold water lines, steam lines, thermal process or Heating Ventilation and Air Conditioning (HVAC) equipment and components.

Miscellaneous Materials

- Examples include but are not limited to floor tiles, mastics, ceiling tiles, vinyl sheet flooring, wallboard or wallboard-tape and wallboard-mud or joint compounds.

The AHERA sampling protocol addresses the systematic sampling of each type of ACM and the identification of friable ACM, that which can be rendered to a powder by hand pressure. Category I non-friable ACM such as floor tiles and mastic and Category II non-friable ACM such as cement asbestos tiles. The AHERA Inspection must also evaluate the condition and the potential for disturbance of ACM.

In addition to AHERA, the EPA also regulates commercial asbestos abatement activities. A NESHAP Notice is required for abatement whenever the quantities of ACM meet or exceed 160-square feet, 260-linear feet or 35-cubic feet. All required NESHAP Notifications must be submitted to the DEQ 10-business days prior to any abatement, renovation or demolition activities. Instruction of how to file and comply with DEQ and NESHAP notification requirements are provided on the DEQ web site at: http://www.deq.state.ok.us/aqdnew/asbestos/index.htm

Land disposal requirements are also regulated by the EPA through State Landfill Permits. These efforts are now administered by the ODEQ Air Quality and Land Protection regulations. The ODEQ requires the filing of advance notices for any demolition or renovation activities these notices are referred to as a NESHAP Notification. Both historical and future asbestos abatement response actions track asbestos removal to an ODEQ approved landfill on a project-by-project basis as part of this NESHAP notification process.

The ODOL regulates Asbestos Abatement. The ODOL Asbestos Division implements the ODOL Rules governing the abatement for friable asbestos. 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 ODOL. It should be noted that the ODOL Asbestos Rules are currently undergoing a review for pending rule change. The ODOL Rules are available on the ODOL web site at:
http://www.ok.gov/odol/

LIMITATIONS OF SURVEY

This Asbestos Inspection was limited to certain aspects of the building construction these limitations may have restricted or prevented the complete inspection of hidden or inaccessible building materials; therefore, inaccessible building materials were not inspected. Furthermore, locations presenting a hazard to bystanders or the Inspector were not assessed.

The findings resulting from this Inspection are valid as of the date this Asbestos Inspection was performed; however, changes in the conditions of a property may certainly occur with the passage of time whether due to natural processes or the works of man. Additionally, changes in applicable or appropriate standards may also occur possibly resulting from legislation or the expansion of knowledge.

Our Investigation was conducted using the degree of care and skill ordinarily exercised by professional consultants under similar circumstances practicing in this or similar localities. Professional services have been performed; results associated with this Asbestos Inspection were 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. It should also be noted that as-built plans were not available for review or use in the planning of this Asbestos Inspection.

1601 SW 89th St. Ste. A-100
Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

Phone: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy.melton@dcs.state.ok.us	E-mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area (bldg, bedroom, etc.)	Location of Sample (corner of room, ceiling, etc.)	Sample Composition (ceiling tile, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time		Calibrated Flow Rate		Total Volume Units: Area	Analysis/ Parameters
0036-050710-JFJ-PLM-1	5/7/2010	B-1	Room 6		9"x9" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-2	5/7/2010	B-2	Room 6		Black Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-3	5/7/2010	B-3	Room 5		9"x9" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-4	5/7/2010	B-4	Room 5		Black Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-5	5/7/2010	B-5	Room 2	North	Ceiling Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		

Samples Collected By	Jamie Marshall (print)	Date	5/7/2010	Samples Relinquished By	(print)	Date		Method of Shipment		Page 1 of 9
	(signature)	Time	17:00		(signature)	Time				
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes		
	(signature)	Time			(signature)	Time				
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt		
	(signature)	Time			(signature)	Time		Turn-Around Time		

Sample Media	
Micro Vacuum	MV
Wipe Tape	WT
Bulk	BU
Swab	SW
Other	OL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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Oklahoma City, OK 73159

Chain of Custody
Marshall Environmental Management, Inc.

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0063-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy.melton@dcs.state.ok.us	E-mail Address	

Laboratory Identification	Date Collected	Field Identification	Sample Area (by bldg, section, etc.)	Location of Sample (corner of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time		Calibration Flow Rate		Total Volume/ Units/Area	Analysis/ Parameters
0036-050710-JFJ-PLM-6	5/7/2010	B-6	Room 2	South	Ceiling Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-7	5/7/2010	B-7	Room 2	Center	Ceiling Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-8	5/7/2010	B-8	Room 4		9"x9" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-9	5/7/2010	B-9	Room 4		Black Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-10	5/7/2010	B-10	Room 2	North	12"x12" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		

Samples Collected By	Jamie Marshall (print)	Date	5/7/2010	Samples Relinquished By	(print)	Date		Method of Shipment	
	(signature)	Time	17:00		(signature)	Time			
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes	
	(signature)	Time			(signature)	Time		Condition Upon Receipt	
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date		Turn Around Time	
	(signature)	Time			(signature)	Time			

Page 2 of 2

Sample Media	
Micro-Vacuum	MV
Wipe Place	MP
Swab Test	ST
Swab	SW
Paint Chip	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy.melton@dcs.state.ok.us	E-mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bathroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheet, floor tile, etc.)	Sample Matrix	Sample Media (soil, wood)	Sample Time		Calculated Flow Rate		Total Volume Units: Area	Analysis / Parameters
0036-050710-JFJ-PLM-11	5/7/2010	B-11	Room 2	North	Yellow Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-12	5/7/2010	B-12	Room 2	Center	12"x12" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-13	5/7/2010	B-13	Room 2	Center	Yellow Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-14	5/7/2010	B-14	Room 2	South	12"x12" Floor Tile	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		
0036-050710-JFJ-PLM-15	5/7/2010	B-15	Room 2	South	Yellow Mastic	NA	Bulk	Duration	NA	Pre	NA	NA	AB PLM
									NA	Post	NA		

Samples Collected By	(print) Jamie Marshall	Date	5/7/2010	Samples Relinquished By	(print)	Date	Method of Shipment		Page 3 of 3
	(signature)	Time	17:00		(signature)	Time			
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date	Sample Notes		
	(signature)	Time			(signature)	Time			
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date	Condition Upon Receipt		
	(signature)	Time			(signature)	Time	Turn Around Time		

Sample Media	
Micro-Vacuum	MV
Bulk Floor	BF
Dust Trap	DT
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn Around Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy.melton@dcs.state.ok.us	E-mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area (Bldg, Bedroom, etc.)	Location of Sample (room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0036-050710-JFJ-PLM-16	5/7/2010	B-16	Room 1	Center	Ceiling Tile	NA	Bulk	NA / NA	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-17	5/7/2010	B-17	Room 4	Center	Ceiling Tile	NA	Bulk	NA / NA	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-18	5/7/2010	B-18	Room 5	Center	Ceiling Tile	NA	Bulk	NA / NA	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-19	5/7/2010	B-19	Room 1	North	Drywall	NA	Bulk	NA / NA	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-20	5/7/2010	B-20	Room 2	North	Drywall	NA	Bulk	NA / NA	NA / NA	NA	AB PLM

Samples Collected By	Jamie Marshall (print) [signature] (signature)	Date Time	5/7/2010 17.00	Samples Relinquished By	(print) (signature)	Date Time		Method of Shipment	
Samples Received By	(print) (signature)	Date Time		Samples Relinquished By	(print) (signature)	Date Time		Sample Notes	
Samples Received By	(print) (signature)	Date Time		Samples Relinquished By	(print) (signature)	Date Time		Condition Upon Receipt	
								Turn-Around-Time	

Sample Media	
Micro Vacuum	MV
Mini Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn Around Time	
Standard	5-7 Business Days
Push	Next Day
Immediate	Same Day

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy melton@dcs.state.ok.us	E-mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area (dorm, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see types)		Sample Time		Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0036-050710-JFJ-PLM-21	5/7/2010	B-21	Room 4		Drywall	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-22	5/7/2010	B-22	Room 3		Original Ceiling Material	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-23	5/7/2010	B-23	Room 3		Vapor Barrier	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-24	5/7/2010	B-24	Room 4		Original Ceiling Material	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-25	5/7/2010	B-25	Room 4		Vapor Barrier	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM

Samples Collected By	Jamie Marshall (print) [signature] (signature)	Date 5/7/2010 Time 1700	Samples Relinquished By	(print) (signature)	Date Time	Method of Shipment		Page 5 of 6
Samples Received By	(print) (signature)	Date Time	Samples Relinquished By	(print) (signature)	Date Time	Sample Notes		
Samples Received By	(print) (signature)	Date Time	Samples Relinquished By	(print) (signature)	Date Time	Condition Upon Receipt		
						Turn-Around-Time		

Sample Media	
Micro Vacuum	MV
Maid Plate	MF
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-521-4805	Phone Number	405-702-5115
Phone Number		E-mail Address	cindy.melton@dcs.state.ok.us	E-mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area (facility, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media		Sample Time		Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0036-050710-JFJ-PLM-26	5/7/2010	B-26	Room 5		Original Ceiling Material	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-27	5/7/2010	B-27	Room 5		Vapor Barrier	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-28	5/7/2010	B-28	Room 10 - HVAC Closet		Bedding Tape	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-29	5/7/2010	B-29	Room 10 - HVAC Closet		Bedding Mud	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM
0036-050710-JFJ-PLM-30	5/7/2010	B-30	Room 10 - HVAC Closet		Drywall	NA	Bulk	Duration	NA / NA	Pre / Post	NA / NA	NA	AB PLM

Samples Collected by	Jamie Marshall (print)	Date	5/7/2010	Samples Relinquished by	(print)	Date		Method of Shipment	
	(signature)	Time	17:00		(signature)	Time			
Samples Received by	(print)	Date		Samples Relinquished By	(print)	Date		Sample Notes	
	(signature)	Time			(signature)	Time		Condition Upon Receipt	
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date			
	(signature)	Time			(signature)	Time		Turn-Around Time	

Sample Media	
Micro-Vacuum	MV
Wild Plate	MP
...e Trap	ST
wab	SW
ape Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn Around Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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Marshall Environmental Management, Inc.

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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5115
Phone Number		E mail Address	cindy.melton@dcs.state.ok.us	E mail Address	[illegible]

Laboratory Identification	Date Collected	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/ Parameters
0036-050710-JFJ-PLM-31	5/7/2010	B-31	Room 3		Hardpack Elbow	NA	Bulk	Duration NA / NA	Pre NA / Post NA	NA	AB PLM
0036-050710-JFJ-PLM-32	5/7/2010	B-32	Room 3		Hardpack Elbow	NA	Bulk	Duration NA / NA	Pre NA / Post NA	NA	AB PLM
0036-050710-JFJ-PLM-33	5/7/2010	B-33	Room 3		Hardpack Elbow	NA	Bulk	Duration NA / NA	Pre NA / Post NA	NA	AB PLM
0036-050710-JFJ-PLM-34	5/7/2010	B-34	West Window		Caulk	NA	Bulk	Duration NA / NA	Pre NA / Post NA	NA	AB PLM
0036-050710-JFJ-PLM-35	5/7/2010	B-35	Northeast Hangar Window		Caulk	NA	Bulk	Duration NA / NA	Pre NA / Post NA	NA	AB PLM

Samples Collected By	Jamie Marshall (print) / [signature] (signature)	Date 5/7/2010 Time 17:00	Samples Relinquished By	(print) (signature)	Date Time		Method of Shipment	
Samples Received By	(print) (signature)	Date Time	Samples Relinquished By	(print) (signature)	Date Time		Sample Notes	
Samples Received By	(print) (signature)	Date Time	Samples Relinquished By	(print) (signature)	Date Time		Condition Upon Receipt	
							Turn Around Time	

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

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Chain of Custody
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PROJECT		INVOICE TO		REPORT TO	
Project Number	0064-AB-050710-JM	Client	Oklahoma Department of Central Services	Client	Oklahoma Department of Environmental Quality
Project Name	Norman Hangar	Attention	Cindy Melton	Attention	Dustin Davidson
Project Type	Asbestos Inspection				
Address	2232 Goddard Avenue Norman OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	PO Box 1677 Oklahoma City, OK
Site Contact	Kim Fairbanks	Phone Number	405-522-4805	Phone Number	405-702-5105
Phone Number		E-mail Address	cindy melton@dcs.state ok us	E-mail Address	

Laboratory Identification	Date Collected	Field Identification	Sample Area	Location of Sample	Sample Composition	Sample Matrix	Sample Media	Sample Time	Calibrated Flow Rate	Total Volume Units/Area	Analysis/Parameters
0036-050710-JFJ-PLM-36	5/7/2010	B-36	Southeast Hangar Windows		Caulk	NA	Bulk	Duration: NA / NA	Pre: NA / Post: NA	NA	AB PLM
										NA	AB PLM
										NA	AB PLM
										NA	AB PLM
										NA	AB PLM

Samples Collected By	(print) Jamie Marshall	Date 5/7/2010	Samples Relinquished By	(print)	Date	Method of Shipment		
	(signature) [signature]	Time 17:00		(signature)	Time			
Samples Received By	(print)	Date	Samples Relinquished By	(print)	Date	Sample Notes		
	(signature)	Time		(signature)	Time	Condition Upon Receipt		
Samples Received By	(print)	Date	Samples Relinquished By	(print)	Date	Turn-Around-Time		
	(signature)	Time		(signature)	Time			

Page 1 of 1

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn Around Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

Bulk Asbestos Analysis

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PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	3064-A3-050710-AM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P O Box 53448 Oklahoma City, OK 73152-3448	Address	P O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Forhanes	Phone	405-522-4305	Phone #	405-702-5115
Phone	405-325-0530	Fax	405-522-0951	Fax #	
Cell	405-642-3528	Other		Cell #	
email	kimf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		5% ASBESTOS DETECTED			
0044-050710-JFJ-PLM-01	May 7, 2010	Room 6	COLOR	Brown	5%	Chrysotile	95%	Vinyl Aggregate
		9"x9" Floor Tile	CONDITION	Good				
			TYPE	Miscellaneous				
			NOTE					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		8% ASBESTOS DETECTED			
0044-050710-JFJ-PLM-02	May 7, 2010	Room 6	COLOR	Black	8%	Chrysotile	92%	Tar
		Floor Mastic	CONDITION	Good				
			TYPE	Miscellaneous				
			NOTE					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		5% ASBESTOS DETECTED			
0044-050710-JFJ-PLM-03	May 7, 2010	Room 5	COLOR	Brown	5%	Chrysotile	95%	Vinyl Aggregate
		9"x9" Floor Tile	CONDITION	Good				
			TYPE	Miscellaneous				
			NOTE					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		8% ASBESTOS DETECTED			
0044-050710-JFJ-PLM-04	May 7, 2010	Room 5	COLOR	Black	8%	Chrysotile	92%	Tar
		Floor Mastic	CONDITION	Good				
			TYPE	Miscellaneous				
			NOTE					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED			
0044-050710-JFJ-PLM-05	May 7, 2010	Room 2 - North	COLOR	White			100%	Foam
		Ceiling Tile	CONDITION	Good				
			TYPE	Miscellaneous				
			NOTE					

James Marshall	Jame Marshall, B.S., Industrial Hygiene Associate	May 28, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Stereo Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

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PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0064-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbank	Phone	405-522-4828	Phone #	405-702-5115
Phone	405-325-0430	Fax	405-522-6051	Fax #	
Cell	405-642-3528	Other		Cell #	
email	kmf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0064-050710-JM-PLM-06	May 7, 2010	Room 2 - South	COLOR	White		100%	Foam
		Ceiling Tile	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0064-050710-JM-PLM-07	May 7, 2010	Room 2 - Center	COLOR	White		100%	Foam
		Ceiling Tile	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0064-050710-JM-PLM-08	May 7, 2010	Room 4	COLOR	Beige		100%	Vinyl Aggregate
		9"x9" Floor Tile	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		8% ASBESTOS DETECTED		
0064-050710-JM-PLM-09	May 7, 2010	Room 4	COLOR	Black	8%	Chrysotile	95% Tar
		Flow Master	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0064-050710-JM-PLM-10	May 7, 2010	Room 2 - North	COLOR	Beige		100%	Vinyl
		12"x12" Floor Tile	CONDITION	Good			
			TYPE	Miscellaneous			
			NOTE				

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Stereo Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982

Lab Accreditation:
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100
Oklahoma City, OK 73159
Phone: (405) 616-0401 Fax: (405) 681-6753
marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0904-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4805	Phone #	405-702-5115
Phone	405 325 0530	Fax	405-522-0051	Fax #	
Cell	405-642 3578	Other		Cell #	
email	kmf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0944-050710-JM3-PLM-11	May 7, 2010	Room 2 - North	COLOR	Yellow	100%	Adhesive
		Floor Mastic	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0944-050710-JM2-PLM-12	May 7, 2010	Room 2 - Center	COLOR	Beige	100%	Vinyl
		12"x12" Floor Tile	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0944-050710-JM1-PLM-13	May 7, 2010	Room 3 - Center	COLOR	Yellow	100%	Adhesive
		Floor Mastic	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0944-050710-JF4-PLM-14	May 7, 2010	Room 3 - South	COLOR	Beige	100%	Vinyl
		12"x12" Floor Tile	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0944-050710-JF3-PLM-15	May 7, 2010	Room 2 - South	COLOR	Yellow	100%	Adhesive
		Floor Mastic	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM) US EPA 600/M4-82-020 1982

Lab Accreditation:
AIHA PAT ID# 102534

Bulk Asbestos Analysis

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marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0064-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P O Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4805	Phone #	405-702 5115
Phone	405-325-0530	Fax	405-522-0651	Fax #	
Cell	405-642-3538	Other		Cell #	
email	kimf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JFJ-PLM-16	May 7, 2010	Room 1	COLOR	Beige	20%	Calcareous Material
		Ceiling Tile	CONDITION	Good	50%	Cellulose
			TYPE	Miscellaneous	20%	Fibrous Glass
			NOTE		10%	Glass Beads
0044-050710-JFJ-PLM-17	May 7, 2010	Room 4	COLOR	Beige	20%	Calcareous Material
		Ceiling Tile	CONDITION	Good	50%	Cellulose
			TYPE	Miscellaneous	20%	Fibrous Glass
			NOTE		10%	Glass Beads
0044-050710-JFJ-PLM-18	May 7, 2010	Room 5	COLOR	Beige	20%	Calcareous Material
		Ceiling Tile	CONDITION	Good	50%	Cellulose
			TYPE	Miscellaneous	20%	Fibrous Glass
			NOTE		10%	Glass Beads
0044-050710-JFJ-PLM-19	May 7, 2010	Room 1- North	COLOR	White	95%	Calcareous Material
		Drywall	CONDITION	Good	5%	Fibrous Glass
			TYPE	Miscellaneous		
			NOTE			
0044-050710-JFJ-PLM-20	May 7, 2010	Room 2 North	COLOR	White	95%	Calcareous Material
		Drywall	CONDITION	Good	5%	Fibrous Glass
			TYPE	Miscellaneous		
			NOTE			

ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED
Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982

Lab Accreditation:
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100
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marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0044-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2212 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4845	Phone #	405-702-5115
Phone	405-325-0330	Fax	405-522-0051	Fax #	
Cell	405-642-3533	Other		Cell #	
email	kmf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JF-PLM-21	May 7, 2010	Room 4	COLOR	White	95%	Calcareous Material
		Drywall	CONDITION	Good	5%	Fibrous Glass
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JF-PLM-22	May 7, 2010	Room 4	COLOR	Beige	15%	Calcareous Material
		Original Ceiling Material	CONDITION	Good	85%	Wood
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JF-PLM-23	May 7, 2010	Room 3	COLOR	Black	40%	Cellulose
		Vapor Barrier	CONDITION	Good	60%	Tar
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JF-PLM-24	May 7, 2010	Room 4	COLOR	Beige	15%	Calcareous Material
		Original Ceiling Material	CONDITION	Good	85%	Wood
			TYPE	Miscellaneous		
			NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JF-PLM-25	May 7, 2010	Room 4	COLOR	Black	40%	Cellulose
		Vapor Barrier	CONDITION	Good	60%	Tar
			TYPE	Miscellaneous		
			NOTE			

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100
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Phone: (405) 616-0401 Fax: (405) 681-6753
marshem@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0064-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-325-0530	Fax	405-522-0951	Fax #	
Cell	405-642-3548	Other		Cell #	
email	kmf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JM-26	May 7, 2010	Room 5	COLOR	Beige	15%	Calcareous Material
		Original Ceiling Material	CONDITION	Good	85%	Wood
			TYPE	Miscellaneous		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JM-27	May 7, 2010	Room 5	COLOR	Black	40%	Cellulose
		Vapor Barrier	CONDITION	Good	60%	Tar
			TYPE	Miscellaneous		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JM-28	May 7, 2010	Room 10 - HVAC Closet	COLOR	Beige	100%	Cellulose
		Bedding Tape	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JM-29	May 7, 2010	Room 10 - HVAC Closet	COLOR	White	100%	Calcareous Material
		Bedding Mud	CONDITION	Good		
			TYPE	Surfacing		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JM-30	May 7, 2010	Room 10 - HVAC Closet	COLOR	Green	95%	Calcareous Material
		Drywall	CONDITION	Good	5%	Fibrous Glass
			TYPE	Miscellaneous		
			NOTE			

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method.
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982

Lab Accreditation
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100
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marshenv@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	0064-AB-0307[illegible]	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2220 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4895	Phone #	405-702-5115
Phone	405-325-0830	Fax	405-522-0051	Fax #	
Cell	405-642-3358	Other		Cell #	
email	kimf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		10% ASBESTOS DETECTED	
0044-050710-JFI-PLM-31	May 7, 2010	Room 3	COLOR	Beige	10% Chrysotile	40% Calcareous Material
		Hard Pack Elbow	CONDITION	Good		50% Fibrous Glass
			TYPE	Thermal System Insulation		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		10% ASBESTOS DETECTED	
0044-050710-JFI-PLM-32	May 7, 2010	Room 2	COLOR	Beige	10% Chrysotile	40% Calcareous Material
		Hard Pack Elbow	CONDITION	Good		50% Fibrous Glass
			TYPE	Thermal System Insulation		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		10% ASBESTOS DETECTED	
0044-050710-JFI-PLM-33	May 7, 2010	Room 2	COLOR	Beige	10% Chrysotile	40% Calcareous Material
		Hard Pack Elbow	CONDITION	Good		50% Fibrous Glass
			TYPE	Thermal System Insulation		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JFI-PLM-34	May 7, 2010	West Window	COLOR	Grey		100% Calcareous Material
		Caulk	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0044-050710-JFI-PLM-35	May 7, 2010	Northeast Hangar Windows	COLOR	Grey		100% Calcareous Material
		Caulk	CONDITION	Good		
			TYPE	Miscellaneous		
			NOTE			

Jamie Marshall	Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for Determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020, 1982

Lab Accreditation:
AIHA PAT ID# 102334

Bulk Asbestos Analysis

Marshall Environmental Management, Inc.

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marsheny@swbell.net

PROJECT LOCATION		INVOICE TO		REPORT TO	
Project Id.	9064-AB-050710-JM	Client	State of Oklahoma Department of Central Services	Client	Oklahoma Dept. of Environmental Quality Land Protection Division
Project	Norman Hangar Asbestos Inspection	Attention	Cindy Melton Administrative Programs Officer	Attention	Dustin Davidson
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73152-3448	Address	P.O. Box 1677 Oklahoma City, OK 73101
Contact	Kim Fairbanks	Phone	405-522-4805	Phone #	405-702-5115
Phone	405-325-0530	Fax	405-522-6051	Fax #	
Cell	405-642-3508	Other		Cell #	
email	kimf@ou.edu	email	Cindy.melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED
9036-050710-JF-HPL-M-36	May 7, 2010	Southeast Hangar Windows Caulk	COLOR	Beige	100% Calcareous Material
			CONDITION	Good	
			TYPE	Miscellaneous	
			NOTE		

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		
			COLOR		
			CONDITION		
			TYPE		
			NOTE		

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		
			COLOR		
			CONDITION		
			TYPE		
			NOTE		

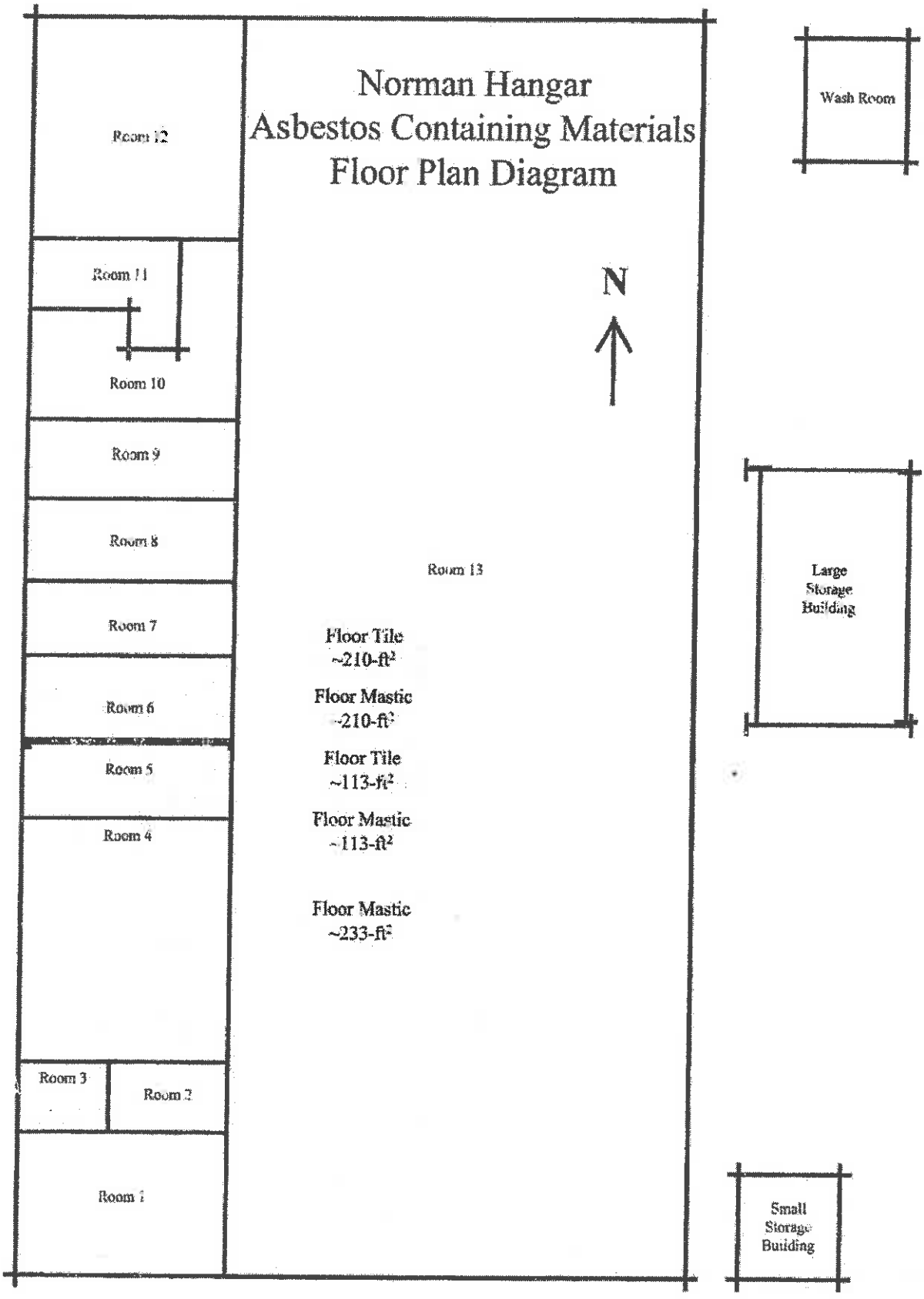
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		
			COLOR		
			CONDITION		
			TYPE		
			NOTE		

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		
			COLOR		
			CONDITION		
			TYPE		
			NOTE		

ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED
Jamie Marshall	[signature] Jamie Marshall, B.S., Industrial Hygiene Associate	May 28, 2010

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334


Norman Hangar
Asbestos Containing Materials
Floor Plan Diagram
Room 12
Room 11
Room 10
Room 9
Room 8
Room 7
Room 6
Room 5
Room 4
Room 3
Room 2
Room 1
Room 13
N
Floor Tile
~210-ft²
Floor Mastic
~210-ft²
Floor Tile
~113-ft²
Floor Mastic
~113-ft²
Floor Mastic
~233-ft²
Wash Room
Large
Storage
Building
Small
Storage
Building
Pipe-fitting
Insulation
~8-Glove-bags

FEE: $0.00

Oklahoma Department of Labor

Charles Marshall

has filed in the office of the Commissioner of Labor of the State of Oklahoma
an application for a Limited Asbestos Contractor's license for

AHERA PROJECT DESIGNER

Now, therefore, The Commissioner of Labor of the State of Oklahoma, by virtue of
the power vested in him by law hereby issues to the
applicant license **No. OK-PD140028.**

Lloyd L Fields

LLOYD L. FIELDS
Commissioner of Labor

April 23, 2010
Date of Issuance

EXPIRES: March 05, 2011

NORMAN HANGAR

DCS Contract Number: ID009139-4

Lead-Based Paint Inspection & Settled-Dust Sampling

Prepared For:

Oklahoma Department of Environmental Quality

Land Protection Division

707 North Robinson

Oklahoma City, Oklahoma 73102

Prepared By:

Marshall Environmental Management, Inc.

1601 Southwest 89th Street, Suite A-100

Oklahoma City, Oklahoma 73159

TABLE OF CONTENTS

CERTIFICATION

This is to certify that, Marshall Environmental Management, Inc. was contracted by the State of Oklahoma, Department of Central Services to conduct a Lead-Based Paint Inspection in addition to collecting samples of settled dust of the Norman Hangar located at 2232 Goddard Avenue in Norman, Oklahoma for the State of Oklahoma Department of Environmental Quality, Land Protection Division. All services performed on May 7, 2010 were conducted by a Certified, Oklahoma Department of Environmental Quality, Lead-Based Paint Inspector/Risk Assessor, Jacob Jones, representative of Marshall Environmental Management, Inc., under the direction of Dr. Charles L. Marshall Certified Industrial Hygienist and President of Marshall Environmental Management, Inc. The analytical results associated with this Lead-Based Paint Inspection and settled dust sampling are believed to accurately, reflect the concentrations of lead in paint and settled dust that were present at the time this Inspection was accomplished.

CURRENT OWNER INFORMATION

State of Oklahoma

CERTIFIED LEAD-BASED PAINT INSPECTOR/RISK ASSESSOR

Jacob Jones 7/25/2010

Jacob Jones, B.S., Industrial Hygiene Associate **Date**

Oklahoma Department of Environmental Quality Certification Number: OKRASR13457

CERTIFIED LEAD-BASED PAINT FIRM

Marshall Environmental Management, Inc.
1601 SW 89th Street, Suite A-100
Oklahoma City, OK 73159
Oklahoma Department of Environmental Quality Certification Number: OKFIRM11160

XRF INFORMATION

Analyzer Make: Niton XLp Spectrum Analyzer
Analyzer Model: #XLp 300A
Analyzer Serial Number: 12585
Source Date: November 11, 2006

INFORMATION REVIEWED AND APPROVED BY

7-25-10

Dr. Charles L. Marshall, C.I.H., C.S.P. **Date**

NORMAN HANGAR

LEAD-BASED PAINT INSPECTION

EXECUTIVE SUMMARY

Marshall Environmental Management, Inc. (MEM) performed a Lead-Based Paint (LBP) Inspection, in addition to collecting samples of settled dust on May 7, 2010 at the Norman Hangar located 2232 Goddard Avenue in Norman, Oklahoma. This LBP Inspection and sampling event were accomplished as part of the Oklahoma Department of Environmental Quality (ODEQ), Land Protection Division (LPD) Site Cleanup Assistance Program and Armory Cleanup Program for the purpose of establishing the presence of lead-based paint and lead-laden dust, if present, so that a strategy may be prepared for remediation and/or abatement activities.

The analytical data resulting from the surfaces that were analyzed and the samples that were collected during this Lead-Based Paint Inspection and settled dust sampling event did identify lead-based paint and lead-leaden dust on various surfaces throughout the Norman Hangar. As such, the remainder of this Report is comprised of the Scope of Service, the Analytical Findings, which include specific sampling locations and corresponding analytical data, information regarding the obligation to disclose the results of this LBP Inspection as well as information regarding lead-based paint.

SCOPE OF SERVICE

This LBP Inspection and settled dust sampling were conducted in accordance with the United States Department of Housing and Urban Development (HUD) Guidelines, "*Guidelines for the Evaluation of Lead-Based Paint Hazards in Housing,*" in addition to the requirements set forth by the Environmental Protection Agency (EPA), "*Requirements for Lead-based Paint Activities in Target Housing and Child-occupied Facilities,*" 40 Code of Federal Regulations (CFR) Part 745.

LEAD-BASED PAINT

All painted surfaces within the Hangar were representatively sampled and analyzed for lead content excluding non-fixed and factory painted items utilizing an X-Ray Fluorescence (XRF), direct reading, data logging instrument. The street facing side of the Hangar was labeled as Side A and going in a clockwise direction, the remaining sides were categorized as Side B, Side C and Side D respectively. Each door and window within the Hangar was given a sequential number that corresponds with the associated analytical data indicated on the floor plan diagram included in the Appendix of this Report. Additionally, miscellaneous surfaces that were coated with "lead-based paint" are specified on the floor plan diagram attached with the Appendix to this Report.

LEAD-LADEN DUST

Settled dust collected from randomly selected floor surfaces throughout the Hangar were sampled and analyzed for lead content. The settled dust is collected by placing a template of a known dimension firmly against the selected surface; next, the area within the template is wiped in a specific pattern utilizing a particular wipe; each wipe is then placed in an approved container for transportation purposes. The

laboratory data resulting from the analysis of the surface samples coincides with the sampling locations indicated on the floor plan diagram attached with the Appendix to this Report.

ANALYTICAL FINDINGS

LEAD-BASED PAINT

According to HUD/EPA "Lead-Based Paint" is characterized as paint that contains concentrations of lead greater than or equal to 1-milligram per square centimeter (≥1-mg/cm^2). The following tables list and categorize the painted surfaces in which the lead concentrations exceeded 1-mg/cm^2 therefore characterizing the surfaces listed below as positive for lead-based paint. Additionally, the analytical data, including the start and stop times and calibration checks, and the floor plan diagram, that illustrates room equivalents and specific sampling locations, are attached in the Appendix to this Report. Due to the windows being painted with a factory finish and because none of the doors, excluding the miscellaneous hangar doors, were positive for LBP the Appendix does not include a diagram associated with the windows and doors.

TABLE 1: LEAD-BASE PAINTED MISCELLANEOUS SURFACES

LOCATION	SIDE	COMPONENT	SUBSTRATE	COLOR
EXTERIOR	A	HANGAR DOOR	METAL	WHITE
EXTERIOR	A	HANGAR DOOR WINDOW	METAL	WHITE
EXTERIOR	C	HANGAR DOOR	METAL	WHITE
EXTERIOR	C	HANGAR DOOR WINDOW	METAL	WHITE
ROOM 13	A	HANGAR DOOR TRACK WHEEL	METAL	GREY
ROOM 13	C	HANGAR DOOR TRACK WHEEL	METAL	GREY
ROOM 13	A	HANGAR DOOR INTERIOR PANEL ABOVE WINDOWS	METAL	GREY
ROOM 13	C	HANGAR DOOR INTERIOR PANEL ABOVE WINDOWS	METAL	GREY

LEAD-LADEN DUST

In accordance with HUD/EPA, settled dust containing concentrations of lead equal to or greater than 40-µg/ft^2 represent lead contamination; this action level applies to all surfaces within the Hangar. As follows, the table below reflects the lead concentrations present in the settled dust that was collected throughout the Hangar. The "Bolded" data represents lead concentrations, which exceeded their respective clearance level. The laboratory results as well as the floor plan diagram, which indicates where the samples were collected, are attached in the Appendix to this Report.

TABLE 3: SETTLED-DUST SURFACE WIPES

LAB ID	SAMPLE ID	LOCATION	CONCENTRATION	CLEARANCE LEVEL
1	0065-1	ROOM 13	**4241.74**	40-µg/ft^2
2	0065-2	ROOM 13	**3n8.60**	40-µg/ft^2
3	0065-3	ROOM 13	**931.33**	40-µg/ft^2
4	0065-4	ROOM 12	44.29	40-µg/ft^2
5	0065-5	ROOM 4	35.32	40-µg/ft^2

LAB ID	SAMPLE ID	LOCATION	CONCENTRATION	CLEARANCE LEVEL
6	0065-6	ROOM I	325.32	40-ug/ft²

HISTORICAL OVERVIEW OF LEAD-BASED PAINT ACTIVITIES

Historical records were not provided for review nor was there evidence or information that would suggest that a prior LBP Inspection or Risk Assessment occurred at the Norman Hangar.

DISCLAIMER AND STANDARD OF CARE

The hangar portion of the Norman Hangar is a single story structure comprised of concrete exterior walls and sheet-metal doors with a pitched roof that was constructed on a concrete slab in approximately 1965. The office section of the Norman Hangar is a single story structure with a brick façade and a pitched roof, which was constructed on a concrete slab circa 1965. Additionally, the large shed and the wash room located east of the Hangar are constructed of sheet metal exteriors with flat roofs, and the small shed located southeast of the Hangar is constructed of a brick exterior with a flat roof. Although paint on various surfaces does not contain lead in concentrations that exceed the federal standard, a hazard could be presented if painted surfaces are disturbed. Occupational Safety and Health Administration (OSHA) regulations covering worker safety and health may apply when painted surfaces, lead-based paint or not, are disturbed. For any renovation that may disturb more than 2-square feet (2-ft^2) of painted surface in a facility built before 1978 the EPA pre-renovation rule requires that the contractor provide a copy of the booklet "*Protect Your Family From Lead in Your Home*" or "*Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.*" If renovation of any kind takes place the contractor should provide a copy of "*Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.*" This Report was generated utilizing HUD/EPA protocols referenced in the Scope of Service, the analytical results associated with this LBP Inspection are only applicable on the date(s) this Inspection was performed and future activities could alter these results. At the time these services were completed, no deviations from the Scope of Service took place.

DISCLOSURE STATEMENT AND OWNERS LEGAL OBLIGATION

Under Federal law (24 CFR part 35 and 40 CFR part 745) to the extent this facility would be covered by HUD/EPA, this LBP Inspection Report must be disclosed and made available to prospective tenants before becoming obligated under a lease or sales contract where lead-based paint is present. If an Inspection finds that lead-based paint is not present in certain individual units, which are to be leased, the individual unit(s) is exempt from disclosure requirements. However, under federal law **even if no lead-based paint is identified** the owner is still required to fulfill certain legal responsibilities when the property is sold not leased. Property owners and sellers are also required to distribute an educational pamphlet and include standard warning language in their leases or sales contracts to ensure that information is provided in order to protect children from lead-based paint hazards.

Information regarding the legal obligation to disclose results associated with lead-based paint inspections and/or risk assessments to tenants and/or purchasers can be obtained from the National Lead Information Center Clearinghouse (1-800-424-LEAD). This information is specified in 24 CFR, part 35 and 40 CFR, part 745 (published in the *Federal Register*, Volume 61, Number 45, April 6, 1996, beginning on p. 9064).

LEAD-BASED PAINT INFORMATION

You may contact the National Lead Information Center Clearinghouse (1-800-424-LEAD) to obtain HUD and EPA brochures, question and answer booklets, the regulations mentioned in this report and other information regarding lead-based paint disclosure.

APPENDIX

XRF ANALYTICAL DATA

(CALIBRATION CHECKS & START & STOP TIMES)

SURFACE WIPES CHAIN OF CUSTODY & ANALYTICAL DATA

FLOOR PLAN DIAGRAMS

LEP MISCELLANEOUS SURFACES

SURFACE WIPES

DIGITAL PHOTOGRAPHS

CERTIFICATIONS

Marshall Environmental Management Inc.
1601 SW 89th Street, Suite A100
Oklahoma City, OK 73159

Index	Time		Units	Component	Substrate	Side	Color	Results	Action Level	PbK
2	2010-05-07	09:37	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.60
3	2010-05-07	09:39	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.75
4	2010-05-07	09:40	mg / cm ^2			CALIBRATE		Positive	1.00	< LOD : 0.60
5	2010-05-07	09:59	mg / cm ^2	HANGAR DOOR	METAL	A	WHITE	Negative	1.00	< LOD : 4.69
6	2010-05-07	10:03	mg / cm ^2	HANGAR DOOR	METAL	A	WHITE	Positive	1.00	5.70 ± 3.50
7	2010-05-07	10:06	mg / cm ^2	HANGAR DOOR WINDOW	METAL	A	WHITE	Positive	1.00	< LOD : 13.20
8	2010-05-07	10:07	mg / cm ^2	DOOR 1	METAL	B	GRY	Negative	1.00	< LOD : 4.50
9	2010-05-07	10:08	mg / cm ^2	DOOR FRAME 1	METAL	B	GRY	Negative	1.00	< LOD : 3.94
10	2010-05-07	10:10	mg / cm ^2	DOOR FRAME 1 (flap)	METAL	B	RED	Negative	1.00	< LOD : 4.56
11	2010-05-07	10:11	mg / cm ^2	DOOR 2	METAL	B	WHITE	Negative	1.00	< LOD : 3.25
12	2010-05-07	10:12	mg / cm ^2	DOOR FRAME 2	METAL	B	WHITE	Negative	1.00	< LOD : 3.75
14	2010-05-07	10:13	mg / cm ^2	WINDOW 3	METAL	B	WHITE	Negative	1.00	< LOD : 2.24
15	2010-05-07	10:13	mg / cm ^2	WINDOW 4	METAL	B	WHITE	Negative	1.00	< LOD : 5.16
16	2010-05-07	10:15	mg / cm ^2	HANGAR DOOR	METAL	C	WHITE	Positive	1.00	< LOD : 11.10
17	2010-05-07	10:16	mg / cm ^2	HANGAR DOOR WINDOW	METAL	C	WHITE	Negative	1.00	< LOD : 5.20
18	2010-05-07	10:16	mg / cm ^2	HANGAR DOOR WINDOW	METAL	C	WHITE	Negative	1.00	< LOD : 5.24
19	2010-05-07	10:16	mg / cm ^2	HANGAR DOOR WINDOW	METAL	C	WHITE	Positive	1.00	< LOD : 15.75
20	2010-05-07	10:18	mg / cm ^2	POST	WOOD	C	WHITE	Negative	1.00	< LOD : 2.26
21	2010-05-07	10:19	mg / cm ^2	WALL	CONCRETE	D	WHITE	Negative	1.00	< LOD : 2.58
22	2010-05-07	10:20	mg / cm ^2	COLUMN	CONCRETE	D	BLUE	Negative	1.00	< LOD : 2.19
23	2010-05-07	10:21	mg / cm ^2	ROOF DRAIN 1	METAL	D	BROWN	Negative	1.00	< LOD : 5.52
25	2010-05-07	10:22	mg / cm ^2	DOOR	METAL	D	BEIGE	Negative	1.00	< LOD : 3.44
26	2010-05-07	10:22	mg / cm ^2	DOOR FRAME	METAL	D	WHITE	Negative	1.00	< LOD : 3.75
27	2010-05-07	10:23	mg / cm ^2	ROOF DRAIN 2	METAL	D	BROWN	Negative	1.00	< LOD : 5.55
28	2010-05-07	10:24	mg / cm ^2	ROOF DRAIN 3	METAL	D	BROWN	Negative	1.00	< LOD : 0.90
31	2010-05-07	10:25	mg / cm ^2	ROOF DRAIN 4	METAL	D	BROWN	Negative	1.00	< LOD : 5.25
32	2010-05-07	10:26	mg / cm ^2	ROOF DRAIN 5	METAL	D	BROWN	Negative	1.00	< LOD : 1.74
33	2010-05-07	10:29	mg / cm ^2	DOOR 2	METAL	D	grey	Negative	1.00	< LOD : 3.08
34	2010-05-07	10:29	mg / cm ^2	DOOR FRAME 2	METAL	D	WHITE	Negative	1.00	< LOD : 4.71
35	2010-05-07	10:31	mg / cm ^2	WALL	CONCRETE	ROOM 1 A	BEIGE	Negative	1.00	< LOD : 2.12
36	2010-05-07	10:32	mg / cm ^2	WALL	CONCRETE	ROOM 1 B	BEIGE	Negative	1.00	< LOD : 2.24
38	2010-05-07	10:34	mg / cm ^2	WALL	DRYWALL	ROOM 2 A	BEIGE	Negative	1.00	< LOD : 2.18
39	2010-05-07	10:34	mg / cm ^2	WALL	DRYWALL	ROOM 2 B	BEIGE	Negative	1.00	< LOD : 1.95
40	2010-05-07	10:35	mg / cm ^2	WALL	CONCRETE	ROOM 2 C	BEIGE	Negative	1.00	< LOD : 2.49
41	2010-05-07	10:35	mg / cm ^2	WALL	DRYWALL	ROOM 2 D	BEIGE	Negative	1.00	< LOD : 1.83
42	2010-05-07	10:36	mg / cm ^2	DOOR	METAL	2	BEIGE	Negative	1.00	< LOD : 5.05
43	2010-05-07	10:37	mg / cm ^2	DOOR FRAME	METAL	2	BEIGE	Negative	1.00	< LOD : 3.84
44	2010-05-07	10:30	mg / cm ^2	WALL	CONCRETE	ROOM 3 D	WHITE	Negative	1.00	< LOD : 2.16
46	2010-05-07	10:41	mg / cm ^2	WALL	CONCRETE	ROOM 3 A	WHITE	Negative	1.00	< LOD : 2.06
47	2010-05-07	10:41	mg / cm ^2	WALL	CONCRETE	ROOM 3 B	WHITE	Negative	1.00	< LOD : 2.26

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Index	Time	Units	Component	Substrate	Side	Color	Results	Action Level	PbK
48	2010-05-07 10:42	mg / cm ^2	WALL	CONCRETE	ROOM 5 C	WHITE	Negative	1.00	< LOD : 2.41
49	2010-05-07 10:43	mg / cm ^2	DOOR	METAL	3	GREY	Negative	1.00	< LOD : 3.26
50	2010-05-07 10:43	mg / cm ^2	DOOR FRAME	METAL	3	GREY	Negative	1.00	< LOD : 4.94
51	2010-05-07 10:44	mg / cm ^2	DOOR FRAME (DUP)	METAL	3	GREY	Negative	1.00	< LOD : 5.10
52	2010-05-07 10:44	mg / cm ^2	WALL	CONCRETE	ROOM 3 C	RED	Negative	1.00	< LOD : 4.45
53	2010-05-07 10:48	mg / cm ^2	DOOR	METAL	1	RED	Negative	1.00	< LOD : 2.04
54	2010-05-07 10:48	mg / cm ^2	DOOR FRAME	METAL	1	RED	Negative	1.00	< LOD : 3.56
55	2010-05-07 10:51	mg / cm ^2	DOOR FRAME	METAL	1	RED	Negative	1.00	< LOD : 5.10
56	2010-05-07 10:51	mg / cm ^2	DOOR	METAL	1	RED	Negative	1.00	< LOD : 4.25
57	2010-05-07 10:52	mg / cm ^2	WALL	CONCRETE	ROOM 4 B	WHITE	Negative	1.00	< LOD : 1.89
58	2010-05-07 10:59	mg / cm ^2	DOOR	METAL	6	BROWN	Negative	1.00	< LOD : 4.41
59	2010-05-07 10:59	mg / cm ^2	DOOR FRAME	METAL	6	BROWN	Negative	1.00	< LOD : 5.89
60	2010-05-07 11:00	mg / cm ^2	WALL	CONCRETE	ROOM 5 B	WHITE	Negative	1.00	< LOD : 1.87
61	2010-05-07 11:03	mg / cm ^2	WALL	CONCRETE	ROOM 6 B	WHITE	Negative	1.00	< LOD : 1.73
62	2010-05-07 11:06	mg / cm ^2	WINDOW FRAME	WOOD	ROOM 6 B	WHITE	Negative	1.00	< LOD : 2.29
63	2010-05-07 11:06	mg / cm ^2	DOOR	METAL	13	WHITE	Negative	1.00	< LOD : 2.90
64	2010-05-07 11:07	mg / cm ^2	DOOR FRAME	METAL	13	WHITE	Negative	1.00	< LOD : 4.65
65	2010-05-07 11:09	mg / cm ^2	DOOR FRAME	METAL	7	BROWN	Negative	1.00	< LOD : 5.10
66	2010-05-07 11:10	mg / cm ^2	DOOR	METAL	7	BROWN	Negative	1.00	< LOD : 4.72
68	2010-05-07 11:11	mg / cm ^2	WALL	CONCRETE	ROOM 7 B	WHITE	Negative	1.00	< LOD : 2.28
69	2010-05-07 11:14	mg / cm ^2	WALL	CONCRETE	ROOM 8 B	WHITE	Negative	1.00	< LOD : 2.06
70	2010-05-07 11:16	mg / cm ^2	WALL	CONCRETE	ROOM 9 B	WHITE	Negative	1.00	< LOD : 1.90
71	2010-05-07 11:17	mg / cm ^2	WALL	CONCRETE	ROOM 10 B	WHITE	Negative	1.00	< LOD : 2.19
72	2010-05-07 11:19	mg / cm ^2	WALL	CONCRETE	ROOM 12 B	WHITE	Negative	1.00	< LOD : 2.06
73	2010-05-07 11:22	mg / cm ^2	WALL	CONCRETE	ROOM 12 C	WHITE	Negative	1.00	< LOD : 2.05
74	2010-05-07 11:24	mg / cm ^2	WALL	CONCRETE	ROOM 13 C	WHITE	Negative	1.00	< LOD : 4.67
75	2010-05-07 11:27	mg / cm ^2	DOOR	METAL	15	BEIGE	Negative	1.00	< LOD : 2.72
76	2010-05-07 11:28	mg / cm ^2	DOOR FRAME	METAL	15	BEIGE	Negative	1.00	< LOD : 2.84
77	2010-05-07 11:30	mg / cm ^2	WALL	CONCRETE	ROOM 13 B	WHITE	Negative	1.00	< LOD : 2.25
79	2010-05-07 11:32	mg / cm ^2	WALL	CONCRETE	ROOM 12 B	RED	Negative	1.00	< LOD : 1.98
80	2010-05-07 11:33	mg / cm ^2	SUPPORT COLUMN	CONCRETE	ROOM 13 B	WHITE	Negative	1.00	< LOD : 2.83
81	2010-05-07 11:36	mg / cm ^2	HANGAR DOOR WAINBOARD	WOOD	ROOM 13 A	WHITE	Negative	1.00	< LOD : 2.83
82	**2010-05-07 11:36**	**mg / cm ^2**	**HANGAR DOOR TRACK WHEEL**	**METAL**	**ROOM 13 A**	**GREY**	**Positive**	**1.00**	**< LOD : 14.25**
83	2010-05-07 11:41	mg / cm ^2	SUPPORT COLUMN	CONCRETE	ROOM 15 D	WHITE	Negative	1.00	< LOD : 2.59
84	2010-05-07 11:43	mg / cm ^2	WALL	CONCRETE	ROOM 15 D	WHITE	Negative	1.00	< LOD : 2.07
85	2010-05-07 11:44	mg / cm ^2	WALL	CONCRETE	ROOM 13 D	RED	Negative	1.00	< LOD : 2.30
86	2010-05-07 11:44	mg / cm ^2	PIPE	METAL	ROOM 13 D	WHITE	Negative	1.00	< LOD : 3.68
87	2010-05-07 11:45	mg / cm ^2	ELECTRICAL BOX	METAL	ROOM 13 D	BLUE	Negative	1.00	< LOD : 3.59
88	2010-05-07 11:51	mg / cm ^2	FLOOR	CONCRETE	ROOM 13	WHITE	Negative	1.00	< LOD : 2.13
89	2010-05-07 11:52	mg / cm ^2	FLOOR	CONCRETE	ROOM 13	YELLOW	Negative	1.00	< LOD : 2.11
90	2010-05-07 11:53	mg / cm ^2	FLOOR	CONCRETE	ROOM 15	BLACK	Negative	1.00	< LOD : 1.98

Marshall Environmental Management Inc.
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Index	Time	Units	Component	Substrate	Side	Color	Results	Action Level	PbK
91	2010-05-07 12:54	mg / cm ^2	FLOOR	CONCRETE	ROOM 13	YELLOW STRIPING	Negative	1.00	< LOD : 1.39
92	2010-05-07 12:55	mg / cm ^2	FLOOR	CONCRETE	ROOM 13	RED	Negative	1.00	< LOD : 1.32
93	2010-05-07 12:56	mg / cm ^2	HANGR DOOR WALLBOARD	WOOD	ROOM 13 C	WHITE	Negative	1.00	< LOD : 2.76
94	**2010-05-07 12:01**	**mg / cm ^2**	**HANGR DOOR TRACK WHEEL**	**METAL**	**ROOM 13 C**	**WHITE**	**Positive**	**1.00**	**< LOD : 14.70**
95	2010-05-07 12:11	mg / cm ^2	WALL	METAL	STORAGE RM SIDE A	RED	Negative	1.00	< LOD : 2.97
96	2010-05-07 12:12	mg / cm ^2	WALL	METAL	STORAGE RM SIDE B	RED	Negative	1.00	< LOD : 3.52
97	2010-05-07 12:13	mg / cm ^2	WALL	METAL	STORAGE RM SIDE C	RED	Negative	1.00	< LOD : 3.81
98	2010-05-07 12:14	mg / cm ^2	WALL	METAL	STORAGE RM SIDE D	RED	Negative	1.00	< LOD : 2.47
100	2010-05-07 12:15	mg / cm ^2	FOUNDATION	CONCRETE	STORAGE RM SIDE A	RED	Negative	1.00	< LOD : 1.86
101	2010-05-07 12:19	mg / cm ^2	FOUNDATION	CONCRETE	STORAGE RM INT SIDE C	RED	Negative	1.00	< LOD : 3.90
102	2010-05-07 12:22	mg / cm ^2	WALL	CONCRETE	EAST STORAGE BLDG A	RED	Negative	1.00	< LOD : 1.86
103	2010-05-07 12:22	mg / cm ^2	WALL	CONCRETE	EAST STORAGE BLDG B	RED	Negative	1.00	< LOD : 2.64
105	2010-05-07 12:24	mg / cm ^2	WALL	CONCRETE	EAST STORAGE BLDG C	RED	Negative	1.00	< LOD : 2.15
106	2010-05-07 12:24	mg / cm ^2	WALL	CONCRETE	EAST STORAGE BLDG D	RED	Negative	1.00	< LOD : 1.07
108	**2010-05-07 12:26**	**mg / cm ^2**	**HANGAR DOOR PANELING**	**METAL**	**ROOM 13 A**	**GREY**	**Positive**	**1.00**	**< LOD : 21.30**
109	**2010-05-07 12:28**	**mg / cm ^2**	**HANGAR DOOR PANELING**	**METAL**	**ROOM 13 C**	**GREY**	**Positive**	**1.00**	**< LOD : 20.10**
110	**2010-05-07 12:31**	**mg / cm ^2**			**CALIBRATE**		**Positive**	**1.00**	**< LOD : 0.90**
111	**2010-05-07 12:32**	**mg / cm ^2**			**CALIBRATE**		**Positive**	**1.00**	**< LOD : 0.90**
114	**2010-05-07 12:36**	**mg / cm ^2**			**CALIBRATE**		**Positive**	**1.00**	**0.70 ± 0.40**

1601 SW 89th St. Ste. A-100
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Chain of Custody
Marshall Environmental Management, Inc. 184554

Phone: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

PROJECT		INVOICE TO		REPORT TO	
Project Number	0065-LBP-030710-JJ	Client		Client	
Project Name		Attention		Attention	
Project Type					
Address		Address		Address	
Site Contact		Phone Number		Phone Number	
Phone Number		E-mail Address		E-mail Address	

Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (tile/stock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time		Calibrated Flow Rate		Total Volume Units/Area	Analysis/ Parameters
0065-1	5/7/2010	1	Room 13	South	NA	Dust	Wipe	Duration	NA	Pre	NA	ft²	Total Pb
									NA	Post	NA		
0065-2	5/7/2010	2	Room 13	Center	NA	Dust	Wipe	Duration	NA	Pre	NA	ft²	Total Pb
									NA	Post	NA		
0065-3	5/7/2010	3	Room 13	North	NA	Dust	Wipe	Duration	NA	Pre	NA	ft²	Total Pb
									NA	Post	NA		
0065-4	5/7/2010	4	Room 12	West	NA	Dust	Wipe	Duration	NA	Pre	NA	ft²	Total Pb
									NA	Post	NA		
0065-5	5/7/2010	5	Room 4	Center	NA	Dust	Wipe	Duration	NA	Pre	NA	ft²	Total Pb
									NA	Post	NA		

Samples Collected By	Jacob Jones (print)	Date	5/7/2010	Samples Relinquished By	Jacob Jones (print)	Date	7/8/2010	Method of Shipment		Page 1 of 2
	(signature)	Time	13:00		(signature)	Time	12:00			
Samples Received By	(print)	Date	7/8/10	Samples Relinquished By	(print)	Date		Sample Notes		
	(signature)	Time	12:51		(signature)	Time				
Samples Received By	(print)	Date		Samples Relinquished By	(print)	Date		Condition Upon Receipt		
	(signature)	Time			(signature)	Time		Turn-Around-Time		

Sample Media	
Micro-Vacuum	MV
Air/Bulk Plate	MP
Spore Trap	ST
Swab	SW
Tape-Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	5-7 Business Days
Rush	Next Day
Immediate	Same Day

1601 SW 89th St. Ste. A-100
Oklahoma City, OK 73139

Chain of Custody
Marshall Environmental Management, Inc.

184554

Phone: (405, -0401
Fax: (405) 681-6753
marshenv@swbell.net

PROJECT		INVOICE TO		REPORT TO	
Project Number	0065-1.8P-050710-JJ	Client		Client	
Project Name		Attention		Attention	
Project Type					
Address		Address		Address	
Site Contact		Phone Number		Phone Number	
Phone Number		E-mail Address		E-mail Address	

Laboratory Identification	Date Collected	Field Identification	Sample Area (lobby, bedroom, etc.)	Location of Sample (center of room, ceiling, etc.)	Sample Composition (sheetrock, floor tile, etc.)	Sample Matrix	Sample Media (see legend)	Sample Time		Calibrated Flow Rate		Total Volume Units/Area	Analysis/ Parameters
0065-6	5/7/2010	6	Room 1	South	NA	Dust	Wipe	Pre-Sample	NA	Pre	NA	ft²	Total Pb
								Post	NA	Post	NA		

Samples Collected By	Jacob Jones	(print)	Date	5/7/2010	Samples Relinquished By	Jacob Jones	(print)	Date	7/8/2010	Method of Shipment	
		(signature)	Time	13:00			(signature)	Time	12:00		
Samples Received By		(print)	Date	7/8/10	Samples Relinquished By		(print)	Date		Sample Notes	
		(signature)	Time	11:51			(signature)	Time			
Samples Received By		(print)	Date		Samples Relinquished By		(print)	Date		Condition Upon Receipt	
		(signature)	Time				(signature)	Time		Turn-Around-Time	

Page 2 of 2

Sample Media	
Micro-Vacuum	MV
Mold Plate	MP
Spore Trap	ST
Swab	SW
Tape Lift	TL

Phase Contrast Microscopy	PCM
Polarized Light Microscopy	PLM

Turn-Around-Time	
Standard	(5-7 Business Days)
Rush	Next Day
Immediate	Same Day

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 184554
Date Received: 07/08/10
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: LA
Date of Report: 7/14/2010

AIHA ID: 101352

Client: Marshall Environmental Management, Inc.
1601 SW 89th Street, Ste. A-100
Oklahoma City, OK 73159

Acct. No.: A331

Project: N/A
Location: N/A
Project No.: 0065-LBP-050710-JJ

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	0065-1	Wipe	Lead	4241.74	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100
002	0065-2	Wipe	Lead	368.60	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100
003	0065-3	Wipe	Lead	931.33	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100
004	0065-4	Wipe	Lead	44.29	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100
005	0065-5	Wipe	Lead	35.32	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100
006	0065-6	Wipe	Lead	325.32	16.00	ug/sq. Ft.	07/14/10 12:28	EPA 3051 / NIOSH 9100

Authorized Signature: Leigh Armstrong
Leigh Armstrong, Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of client and are not to be reproduced without specific written permission.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

Supplemental Report
QAQC Results

QA ID: 7721 **Date:** 7/14/2010 **Lab Number:** 184554
Test: Lead **Matrix:** Wipe **Approved By:** Leigh Armstrong
Date Approved: 7/14/2010

Notes:

Blank Data:

Type of Blank	Blank Value
Initial	0
Continuing	0
Final	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	225	261	275
FCV	225	266	275
ICV	22.5	22.6	27.5
RLVS	12.8	21.8	19.2

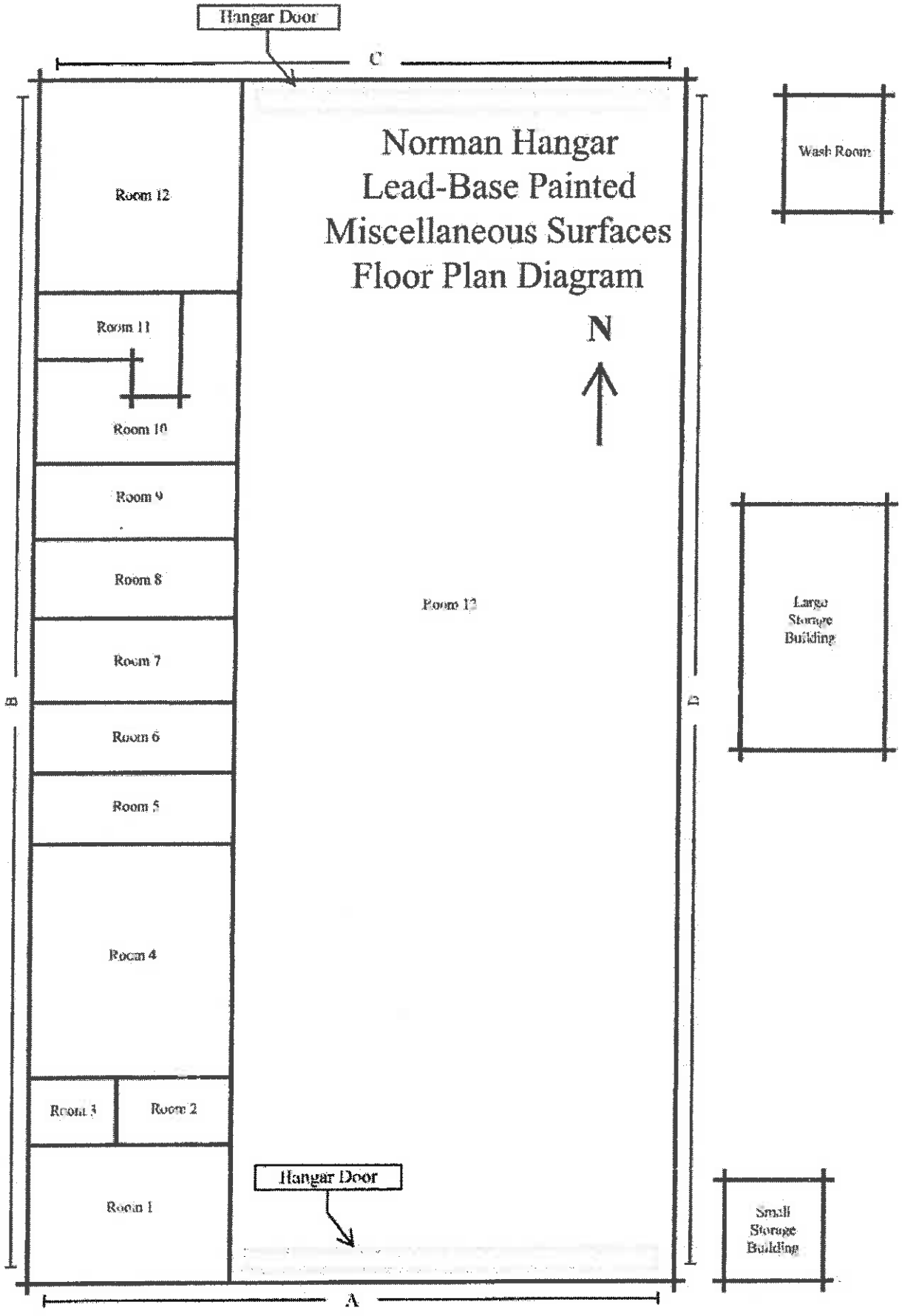
Duplicate Data:

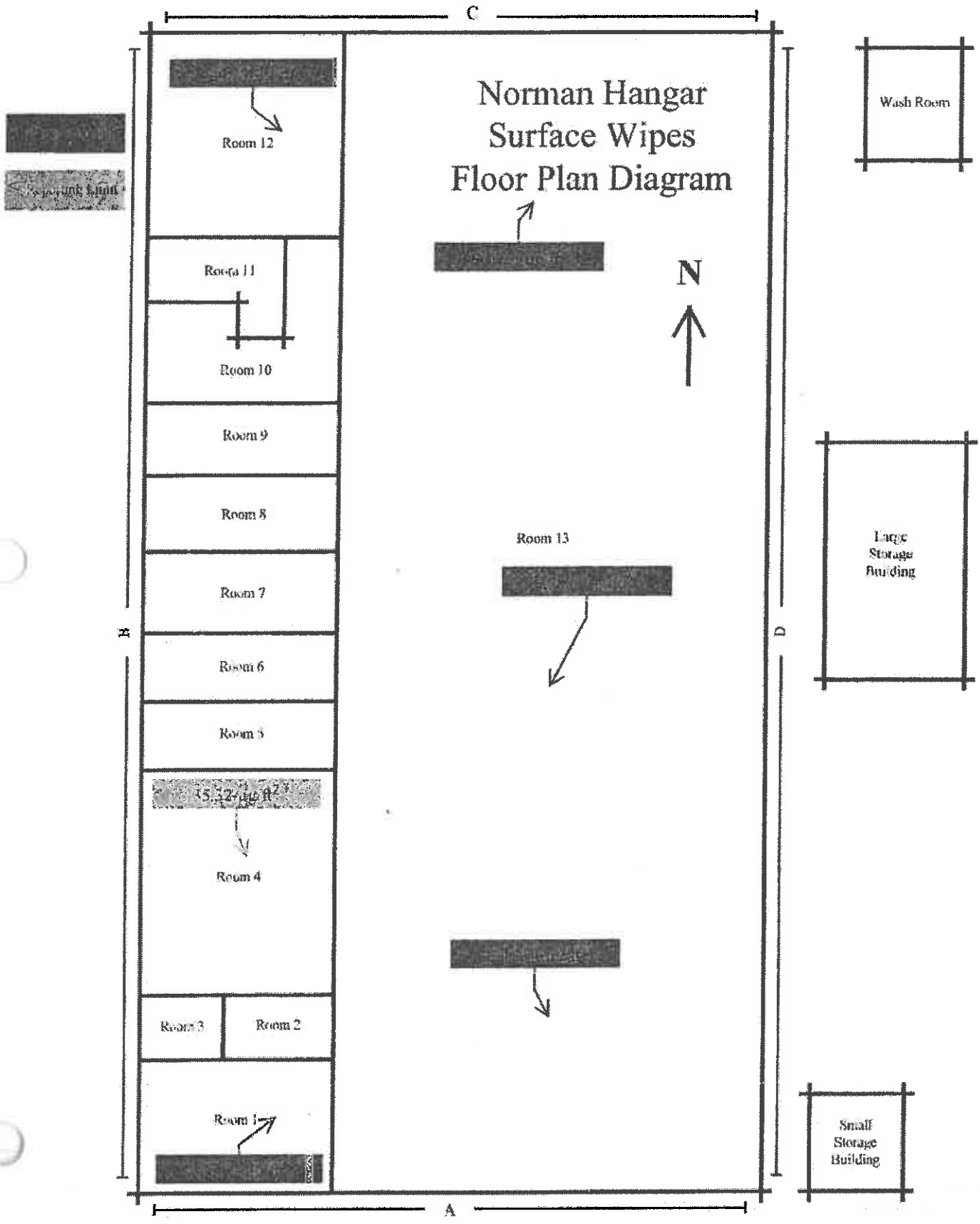
Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MSW 3	0.000	5369.000	5324.400	99.2	4717.000	87.9	12.1

Authorized Signature: Leigh Armstrong

Leigh Armstrong, Analyst


Hangar Door
C
Norman Hangar
Lead-Base Painted
Miscellaneous Surfaces
Floor Plan Diagram
N
Room 12
Room 11
Room 10
Room 9
Room 8
Room 7
Room 6
Room 5
Room 4
Room 3
Room 2
Room 1
Room 12
Hangar Door
B
B
A
Wash Room
Large
Storage
Building
Small
Storage
Building


C
Norman Hangar
Surface Wipes
Floor Plan Diagram
Wash Room
Room 12
Room 11
Room 10
Room 9
Room 8
Room 7
Room 6
Room 5
Room 4
Room 3
Room 2
Room 1
Room 13
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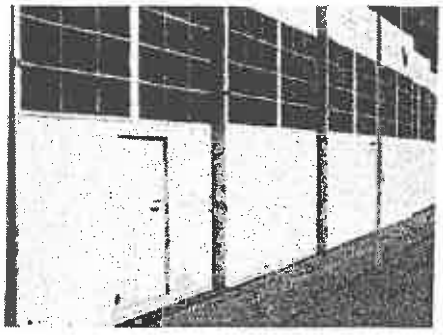
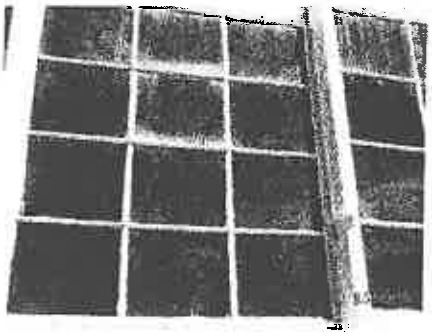
Building
Small
Storage
Building
B
D
A

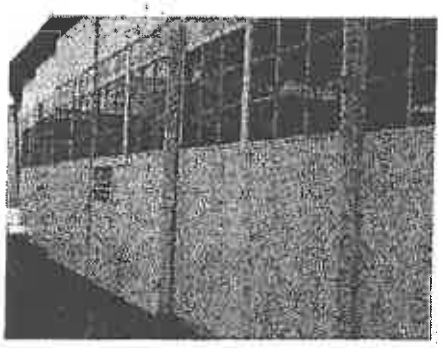


Hangar Door – Side A

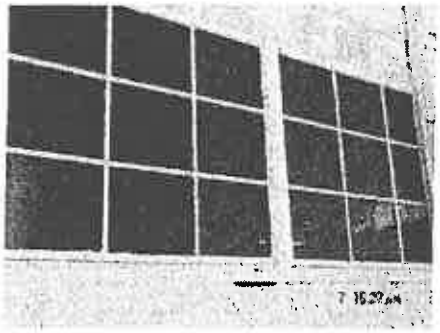
Red Soffit – Side A (Untested)



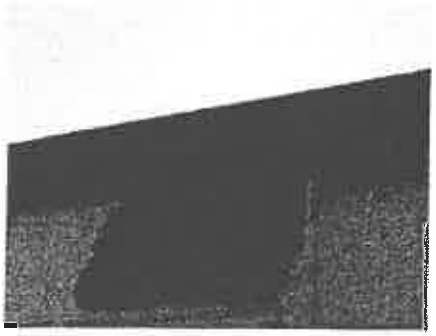
Hangar Door Window - Side A



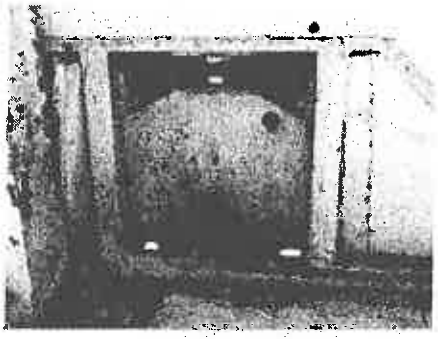
Hangar Door – Side C



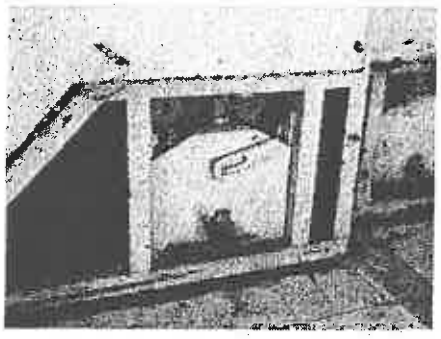
Hangar Door Window - Side C



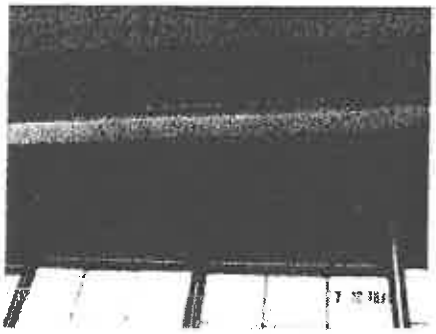
Red Soffit – Side C (Untested)



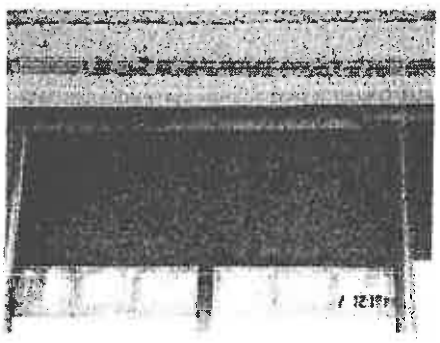
Hangar Door Track Wheel - Side A



Hangar Door Track Wheel – Side C



Room 13 Hangar Door Interior Panel Above Windows – Side A



Room 13 Hangar Door Interior Panel Above Windows – Side C

Department of Environmental Quality

This is to Certify That

MARSHALL ENVIRONMENTAL MANAGEMENT

has met the qualifications 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 provided by law.

Issued on: 4/1/2010 Expires on: 3/31/2011

Division Director
Air Quality Division

Randall L. West

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to certify that

JACOB JONES

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR13457

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

Issued on: **4/1/2010** Expires on: **3/31/2011**

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

SCOPES 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: February 7, 2011

Addendum Number: 01

DCS Project Number: Norman Hanger Lead Paint and Asbestos Remediation

Project Name: 11173

TO ALL BIDDERS OF CONCERN:

Item #1: Do to the threat of severe weather the mandatory pre-bid for DCS# 11173 will be rescheduled to March 2, 2011.

Item #2: The bid opening date has been rescheduled to March 10, 2011. Time and location to remain the same.

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

Rebekah Richardson
Project Manager
Oklahoma Department of Central Services - CAP

STATEMENT OF WORK
For
Remediation of Lead and Asbestos Contamination at the Norman Hanger

The Oklahoma Department of Environmental Quality (DEQ) is requesting bids from qualified bidders for remediation services at a former Airplane Hanger located in Norman, Oklahoma. This statement of work (SOW) describes the abatement of lead-based paint located on surfaces throughout the building, remediation of lead contaminated dust, and removal and proper disposal of asbestos containing material. 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 mandatory site visit and walk through will be held to give a better understanding of the site. A floor plan map of the Norman Hanger is attached for review **(Attachment 1)**.

The building is located at 2232 Goddard Avenue, Norman, Oklahoma 73069. The building **does** have available water and electricity to use during remediation.

SPECIAL PROVISIONS:

1. Work Schedule: The Contractor shall schedule all work to be complete within sixty (60) calendar days after date of the written "Notice to Proceed".
    a. A pre-construction meeting shall be held at the site after the Notice to Proceed date to review Scope of Work and answer any questions the contractor may have.
    b. 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 applicable State and Federal regulations.
    b. The contractor shall perform this 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 firm license and have a certified lead-based paint supervisor in order to perform lead-based paint abatement;
- Posses a current Oklahoma Department of Labor (ODOL) Asbestos Abatement Contractor License in order to perform asbestos abatement;
- Follow all appropriate OSHA requirements;
- 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 firm license;
- Copy of lead-based paint supervisor license;
- Copy of ODOL Asbestos Abatement Contractor 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;

SEQUENCE OF EVENTS

The remediation of the building shall be as follows:

1. First – The asbestos and lead-based paint abatement shall be completed.
2. Second – Marshall Environmental shall be contacted to confirm all asbestos has been appropriately removed and DEQ shall be contacted to confirm lead-based paint abatement has been appropriately performed.
3. Third -- All floors of the entire building shall be cleaned.
4. Fourth -- Enercon Services Inc. shall be contacted to perform third party confirmation sampling to confirm all floors have been appropriately remediated.

ASBESTOS ABATEMENT INSTRUCTIONS

- Friable and regulated asbestos containing material (ACM) shall be removed as described in the attached project design **(Attachment 2)**.

- Non-friable and/or non-regulated ACM shall be removed as described in the instructions listed below.

- Once Asbestos Abatement is complete, Marshall Environmental shall be contacted to confirm abatement has been appropriately performed and all asbestos has been removed.

    - **Remove** floor tile and mastic from room 4. The quantity of floor tile and floor mastic is approximately 233 ft^2 in room 4.

    - **Remove** floor tile and mastic from room 5. The quantity of floor tile and floor mastic is approximately 113 ft^2 in room 5.

    - **Remove** floor tile and mastic from room 6. The quantity of floor tile and floor mastic is approximately 210 ft^2 in room 6.

    - **There is a total of 556 ft^2 of floor tile and mastic that shall be removed from the building.**

LEAD-BASED PAINT ABATEMENT INSTRUCTIONS

1. Hanger Doors

The Norman Hanger has hanger doors located on the north and south side of the building. Each side consists of six sliding doors for a total of 12 doors. All metal parts of the doors and tracks contain lead-based paint. The Lead-Based Paint and Settled Dust Sampling Report is attached **(Attachment 5)**.

- Prior to abatement, all wood and insulation shall be removed from the interior side of the hanger doors and properly disposed.
- The hanger door tracks shall have all paint removed. Once paint is removed, tracks shall be painted with a white colored primer.
- The hanger doors shall be wet scraped and encapsulated with DEQ approved lead-based paint encapsulant. A list of DEQ approved encapsulants is attached **(Attachment 4)**.
- The metal around each window pane shall be wet scraped and encapsulated with DEQ approved encapsulant. Any caulking that is removed shall be replaced.
- Once abatement is complete, all interior panels of the doors shall have new insulation and wood placed in each panel. The insulation and wood shall be equivalent to what was removed. Once installed, all wood shall be painted white to match doors.
- Once lead-based paint has been removed from surfaces, DEQ will perform a visual inspection to confirm lead-based paint has been removed appropriately before surfaces are painted or sealed.

2. Sampling and Disposal

- DEQ assumes that all lead-based paint chips removed from surfaces are considered hazardous waste. Lead-based paint removed from surfaces shall be disposed as hazardous waste.
    - If Contractor uses a paint stripper that exhibits a characteristic of hazardous waste, or contains hazardous waste constituents, it is the Contractor's responsibility to characterize this waste under 40 CFR 262.11 and if they are determined to be hazardous waste, disposing of them as such. The Final Report shall contain all relevant information regarding the waste determination.
    - A completed and signed waste manifest, Land Disposal Notification Form, and Certificate of Disposal demonstrating that the paint chips were properly disposed at a hazardous waste facility must be included in the Final Report.

LEAD DUST REMEDIATION INSTRUCTIONS

1. Lead Dust Remediation

The Lead-Based Paint and Settled Dust Sampling Report is Attached for review (**Attachment 5**).

- Surfaces above the floors such as walls, shelves, etc. may have accumulated dust that has settled. This accumulation shall be removed prior to the cleaning of the floors. This shall be done to prevent recontamination of the floors after they are cleaned.

- Floors of the entire building shall require lead dust remediation;
  - Remove dust from all equipment, shelving, trash, etc, and remove these items from room before remediation begins;
  - Remove dust from all carpet, remove carpet from rooms, and dispose of all carpet as non-hazardous waste before lead dust remediation of floor begins;
  - Dispose any materials, determined by the DEQ to be trash, as non-hazardous waste;
  - HEPA vacuum and wet wash floors of entire building;
    - Lead levels on the floor are high in some areas of the building and lead contaminated dust may be ground into the pores and cracks of the concrete. It may be necessary to clean floors several times or use alternate cleaning methods after HEPA vacuuming and wet washing to remove the lead dust from the concrete and get the lead levels down to 40 micrograms per square foot (ug/SF).
  - Contact Enercon Services. Inc. to 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). See Section C (Confirmation and Clearance Sampling) for additional information;
  - Areas above 40 ug/SF shall be re-cleaned and re-tested until results are at or below 40 ug/SF;
  - Lead dust and appropriate cleaning materials shall be disposed as appropriate.
  - Wash Water Disposal
    - All wash water from the building shall be filtered and stored on site in containers;
    - The wash water will be sampled for total lead and total phosphorus; Total lead shall be run by ICP and total phosphorus shall be run by method 365.3;
    - Sample results shall be submitted to DEQ to determine if wash water can be disposed at the local Waste Water Treatment Facility;
    - Wash water shall be disposed appropriately.

2. Confirmation and Clearance Sampling

- Enercon Services, Inc. (ESI) will be responsible for taking all post remediation samples.
- ESI shall be notified five (5) days prior to each sampling event.
- Contact Information: Enercon Services, Inc.
  6525 North Meridian, Suite 400
  Oklahoma City, Oklahoma 73116
  Contact: Bill Muenker
  Phone: (405) 722-7693
- The third-party sampling shall not be included in the contractors base bid;
- All post remediation and clearance sampling will be performed after all initial abatement, remediation, and cleaning are complete.

FINAL REPORT

- Write final report and submit to DEQ;
  - Final report shall include asbestos and lead-based paint abatement;
- Final report shall include:
  - A detailed summary of work including any warranties and data;
  - sample results;
  - waste manifests; and
  - photo documentation of work;
    - Photo documentation of work will have color digital photos with captions describing photo;
    - Photos will show before and after photos of work completed.
- Final report will be submitted in hard copy and electronically on disc.

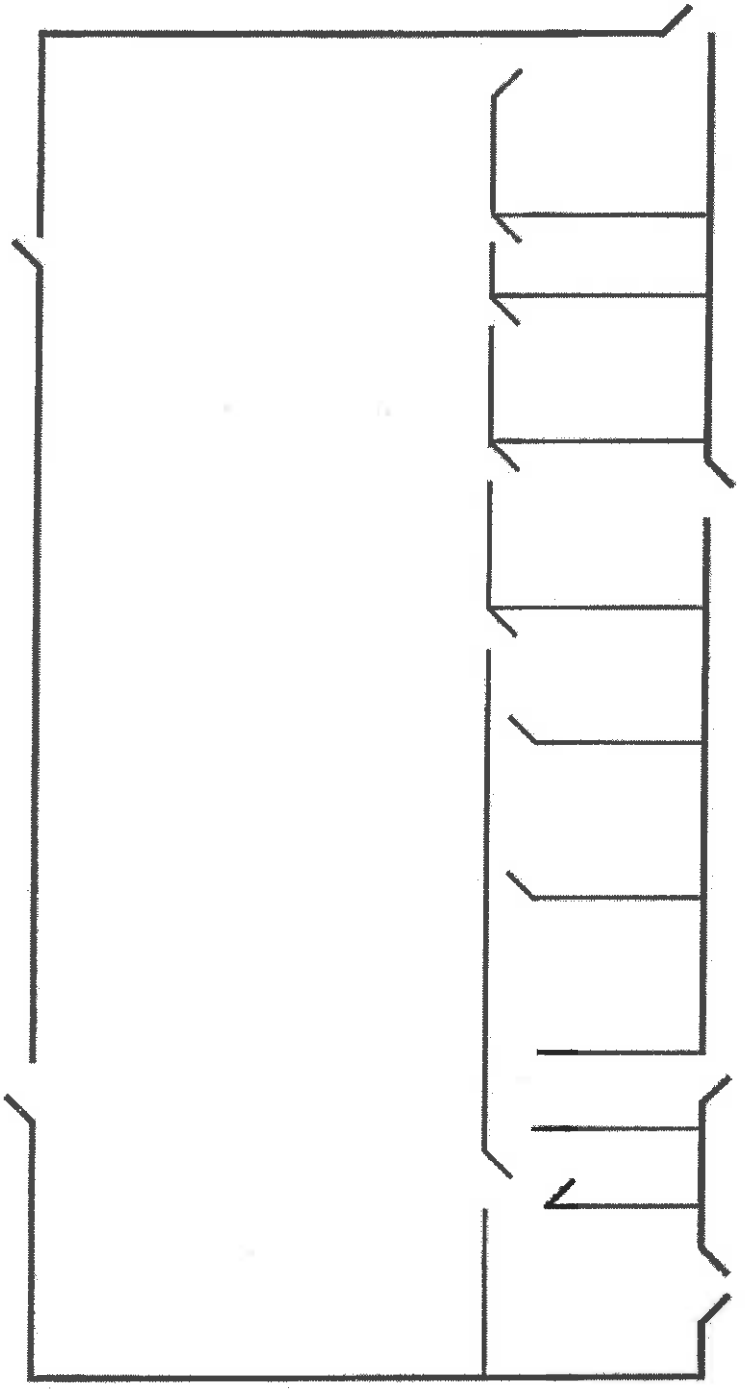
OWNER REPRESTATIVE

Owner's Representative: Dustin Davidson
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5115 (Office)
(405) 702-5101 (Fax)
E-Mail: Dustin.Davidson@deq.state.ok.us

ATTACHMENT 1

Floor Plan Map

Norman Hangar Armory



Not to scale
Floor plan approximate

ATTACHMENT 2

Norman Hanger Asbestos Project Design
And
Scope of Work

RECEIVED OCT 22 2010

Project Design Review Form

Approved: __X__

Disapproved: ______

Oklahoma Department of Labor

Asbestos Division

3017 N. Stiles, Oklahoma City, OK 73105

Phone - 405.521.6464 Fax - 405.521-6025

DEPARTMENT OF ENVIRONMENTAL QUALITY

Project Name: Norman Hanger Armory

Project No: 10-6352 Date: 09-10-10

Project Designer: Charles L. Marshall OKPD# 140025

	ITEM	ACCEPTED	REJECTED	COMMENTS
1.	A statement that DOL Abatement of Friable Materials Rules apply.	X		Oklahoma Department of Labor (Title 40 Sections 451-457) OAC 380:50 and Abatement of Friable Materials Rules 29 CFR 1926 Construction Industry Standards
2.	Sequencing and phasing of work.	X		One Phase
3.	Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.	X		1 abc 10lbs fire extinguisher shall be provided for each 3000 sf of work area. Workers will be trained in the use of fire extinguishers, emergency egress plains, basic fire safety, and emergency reporting procedures prior to work beginning.
4.	The quantity, type, percentage with bulk analysis unless presumed and a diagramed location of asbestos materials to be abated.	X		Approximately 34 lf of T.S.I. on plumbing lines (Mud on seams, joints, and elbows).
5.	Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.	X		380:50-13
6.	Details of personal and area air monitoring samples.	X		3 Background samples. At least 2 Personals samples or 25% of the work force and 100% during the removal of the asbestos. 1 30 min. excursion. 1 sample in the work area. 1 sample outside the clean room. 1 sample at load-out during load-out actives. 1 sample at neg-air discharge. One sample adjacent to the work area.
7.	Numbers and locations of Clean Test samples and type of analysis to be employed.	X		Clearance samples shall follow OAC 380:50-11-2 A minimum of 5 PCM samples collected for a minimum of 2 hours and a minimum of 1200 liters.
8.	Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.	X		1 Neg-air at decon (equipment room) vented externally
9.	Details of project containment(s), glove bag or mini-containments, including drawings. Details shall include all applicable subchapters, including but not limited to scaffolding and live electric isolation.	X		A glovebag method. Pop up for workers to don on clean suit.
10.	Details of decontamination system(s).	X		A centralized decontamination unit. *With Negative Air Machine.*
11.	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	
12.	Special materials or methods required to protect objects in the work area should be detailed, (plywood over carpeting or hardwood floors to prevent damage from scaffolds and/or falling materials.		N/A	
13.	Any variances from the Abatement of Friable Asbestos Materials Rules.	X		*PAPR NOT REQUIRED ON GLOVEBAGS*

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: 9-16-10 REVIEWED BY: [signature] DATE: 9/16/10

RECEIVED 09/15/2010 15:27 405-631-6755 MARSHALL ENV NO. 0429

ASBESTOS PROJECT DESIGN

AND

SCOPE OF WORK

RELATED TO THE

ASBESTOS ABATEMENT

AT THE

DEQ OKLAHOMA ARMORY RESTORATION PROJECTS

DCS Project # _____
(DCS Bid Packet Project #)

ODOL Project # _____

Norman Hanger Armory Facility

August 31, 2010
(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.
1601 SW 89th Street Suite A-100
Oklahoma City, Oklahoma 73159
(405) 616-0401

TABLE OF CONTENTS

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's (LPD), Oklahoma Armory Restoration Projects. This Asbestos Abatement Project will receive a Project Number that is to be assigned by the Oklahoma Department of Labor (ODOL).

This Project Design will be used to address the removal of friable ACM from the Norman Hanger, herein referred to as the Armory. The scheduled for abatement will be determined by the DEQ LPD. The Project Design includes the Scope of Work for the Abatement of Friable Asbestos and the approximate locations and quantities of friable ACM to be abated at the Armory. Once hired, an ODOL Licensed Asbestos Abatement Contractor will file the individual notifications required by ODOL and DEQ (NESHAP). The information on the Armory floor plan and the estimated quantities and types of ACM is provided in the Appendix.

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

The identified friable ACM present in this Armory consists of Thermal System Insulation (TSI) on plumbing lines. The approximate locations and approximate quantities are identified in the Table provided in the Appendix of this Project Design.

The Licensed Asbestos Contactor will also be authorized by the DEQ LPD to conduct the removal of non-friable asbestos floor tile and mastic. The removal of non-friable ACM is not to be considered a part of the Project Design for ODOL notification purposes. The estimated quantities of non-friable ACM to be removed are identified in the Table provided in the Appendix of this Project Design. The Licensed Asbestos Contactor shall indicate the quantity of non-friable ACM to be abated on the Project's NESHAP Notice. The abatement of non-friable floor tile and mastic shall be consistent with the requirements of the Occupational Safety and Health Administration regulations 29 CFR 1910.1101 and the recommendations of the Resilient Floor Tile Institute.

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).

Upon completion of the asbestos removal work, the Asbestos Contractor shall complete any required re-insulation work for TSI (plumbing pipe re-insulation) as specified in the Oklahoma State Department of Central Services (DCS) Bid Packet.

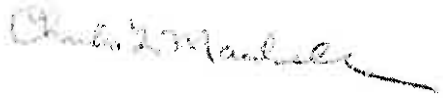
II. RESPONSIBLE PARTIES AND CONSULTANTS

Licensed Contractor:

An ODOL Licensed Asbestos Contractor is to be selected based on a successfully bid submittal. The Oklahoma Department of Central Services (DCS) Construction and Properties Division 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.
1601 SW 89th Street Suite A-100
Oklahoma City, Oklahoma 73159
(405) 616-0401 (Office)
(405) 820-1656 (Mobile)
(405) 681-6753 (Fax)
marshenv@swbell.net



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

Owner's Representative:

Dustin Davidson, Environmental Programs Specialist
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson
Oklahoma City, OK 73102
(405) 702-5115 (Office)
(405) 702-5101 (Fax)
dustin.davidson@deq.ok.gov

Department of Central Services:

DCS Project Manager
To be identified by DCS in the Bid Packet.

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 types of the response actions to be taken, methods for removal, quantities, dates and responsible parties performing the abatement, air monitoring and waste disposal landfill locations shall 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.

The ODOL Asbestos Division will assign this Armory Project. The ODOL will utilize the approved Project Design, and any subsequent Project Design Amendments, as a basis to assess the Project's required scope of work, sequence of events, abatement procedures, air monitoring, clearance sampling and any other related requirements of ODOL Rules.

The asbestos abatement will include removal of all asbestos containing TSI on plumbing lines throughout the Armory. All TSI on plumbing lines is to be abated by the Licensed Asbestos Contractor. The quantity of plumbing lines containing TSI, consisting of "air-cell" and associated mud on seams, joints and elbows, is approximately 34 linear feet (estimated at approximately 8 glovebags). The ACM can contain 10% Chrysotile. These quantities are only estimates and the actual quantity, which the Contractor must verify, may vary. Regardless of variations in quantity, all of the TSI shall to be abated by the Licensed Asbestos Contractor and all associated costs shall be included in their turnkey bid.

The Asbestos Abatement Contractor shall remove all non-friable asbestos containing floor tiles and mastics. These response actions are not governed by the ODOL rules but will require a negative exposure assessment and clearance monitoring to be evaluated by the DEQ and the Project Designers Representative.

The amounts and types of ACM are provided as an Appendix to this Project Design. Questions regarding the Scope of Work shall be addressed in writing to the DCS Constructions and Properties Division (DCS) Representative.

IV. SEQUENCE OF EVENTS, PROJECTED DATES AND DURATION

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 approved by the DEQ LPD at the 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. Prep the floors under each glovebag with 6-mil polyethylene sheeting.
10. Seal all openings in the vicinity of the glovebag work area/room with critical barriers.
11. If necessary, remove the any ceiling tiles to access the TSI on plumbing lines
12. Perform any pre-cleaning of loose ACM, if necessary, to complete the Prep.
13. Hang all required negative pressure glovebags per ODOL Rules.
14. Provide adequate negative pressure HEPA Filter exhaust machines to establish a negative pressure to the Central Decon Facility and/or if preferred any attached decon & loadout facilities to be used for this work.
15. Schedule an ODOL Prep Inspection.
16. Perform asbestos abatement and loadout all wastes.
17. Schedule any interim ODOL visual inspections per ODOL Inspector requirements.
18. Upon completion of final cleaning call, for ODOL visual inspection.
19. Conduct clearance sampling and schedule final inspection with ODOL
20. Schedule any final ODOL inspection that may be required.
21. Schedule the non-friable ACM with the Owners Representative.
22. Conduct a final inspection to verify the completion of the Scope of Work with the Project Designer's representative.
23. Tear down prep work and critical barriers and demobilize after approval by the ODOL and Owner's Representative (DEQ LPD).
24. 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 and DCS.

The Project duration is estimated to take less than less than five days to complete friable ACM abatement. Clearance testing will be conducted per ODOL rules or as specified in the approved Project Design or any subsequent Project Specific Project Design Amendments.

V. GENERAL REQUIREMENTS

A. Asbestos Contractor

The DCS Bid Packet will be used to select an ODOL Licensed Asbestos Abatement Contractor for use by the DEQ on this Oklahoma Armory Remediation Project. The ODOL Licensed Asbestos Contractor shall perform the asbestos abatement work in accordance with the ODOL Rules, this Project Design, any Project 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. OAC 380:50 (All-inclusive), Oklahoma Rules for Abatement of Friable Asbestos Materials.
7. 49 CFR (USDOT) Hazardous Material Transportation Regulations.
8. All Applicable State Statutes, County and City Codes/Ordinances
9. OAC 252:100-40, Air Pollution Control Rules, Control of Emission of Friable Asbestos during Demolition and Renovation Operations (replaces OAC 252:100-41-16).
10. OAC 252:515-19, Management of Solid Wastes (DEQ Asbestos Land Protection Division Asbestos Disposal Requirements).
11. Resilient Floor Covering Institute (RFCI) Recommended Work Practices for Removal of Resilient Floor Covering. http://www.rfci.com/files/pdf/RFCIRecommended9-04.pdf

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) and its representatives in advance of consideration by the authority having jurisdiction.

C. Notifications

The Asbestos Abatement Contractor, prior to any abatement work, shall be required to file a Notifications of Asbestos Removal with both the ODOL Asbestos Division and the DEQ NESHAP Division (per Subchapter 9 ODOL Rules). These processes require ten days, unless the Agency waves the waiting period due 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.

A copy of the required NESHAP Notice can be obtained at the following DEQ website: http://www.deq.state.ok.us/aqdnew/asbestos/NESHAPfm.pdf

A copy of the ODOL Asbestos Project Check list can be obtained from the following ODOL web site:
http://www.ok.gov/odol/documents/AsbestosProjectChecklist.pdf

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 40 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 an enclosed and properly placarded waste storage unit and/or waste disposal trailer or roll-off bin, which is to be 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 enclosed 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. The trailer or storage unit shall 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 – Norman Hanger Armory Project – Address – date of waste generation).

The list of DEQ Approved Landfills that can accept Asbestos Waste can be found on the DEQ Land Protection web site at the following web site link: http://www.deq.state.ok.us/lpdnew/SW/MSWLFsAcceptingAsbestos.htm

E. Insurance

The Asbestos Abatement Contractor performing the asbestos abatement and any related contract services (e.g. re-insulation), shall provide the DCS and the DEQ LPD with copies of current Certificates of Insurance. Use of any sub-contracts shall require written approval by the DCS Construction and Properties Division. The Contractor's General Liability Insurance, Worker Compensation, Hired and Non-Owned Auto Insurance shall meet the requirements of the DCS 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 Asbestos 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 Asbestos Abatement Contractor for any required submittals upon completion of the clearance sampling.

Upon completion of the job, the Licensed Asbestos Abatement Contractor shall provide the Owner's Representative with copies of ODOL inspections, copy of:

1. Asbestos supervisor's daily reports
2. List the names of all Licensed Asbestos Personnel and other site workers, visitors and/or other employees with their valid ODOL License Numbers and valid State ID or valid Driver License Numbers.
3. Any electrical engineers safety instructions (if required)
4. All air monitoring results.
5. Final clearance testing results.
6. Copies of negative pressure recording devices (if required) tapes.
7. All signed asbestos disposal manifests.
8. Copies of all ODOL Inspector Forms and Approval for the Project.

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 been removed and clearance sampling has conducted and the final visual inspection has been approved by the ODOL.

A daily log must be maintained by the Licensed Asbestos Abatement Contractor, which includes the names of all Licensed Asbestos Personnel and other site workers, visitors and/or other employees with their valid ODOL License Numbers and valid State ID or valid Driver License Numbers.

The Owner's Representative shall be responsible to see that all required lockout-tagout of electrical lines are preformed in accordance with the OSHA Standards 29 CFR 1910.147 and 29 CFR 1926.417 and applicable Armory Policy. The Licensed Asbestos Contractor will perform lockout-

tagout to de-energize all electrical circuits necessary to ensure worker safety. If an electrical engineers statement is required to work around live electrical circuits, it will be the responsibility of the Licensed Asbestos Contractor to obtain one in accordance with ODOL Rules. Based on the pre-abatement inspection, no live electricity is anticipated to be left on in the abatement work areas located within the Armory.

The Owner's Representative will be responsible for any required hazard communication notifications of all applicable Armory personnel. Access to the abatement work areas, "the regulated work area", is to be kept to licensed personnel. Access to other areas of the Armory is to be 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 wastewater disposal. Also, some armories do not have an active electrical supply hook-up with the local electric utility authority. Those Armories that do not have utilities for electricity, potable water and sewer connections will be identified by the Owner's Representative at the pre-bid site visit or Project walk-through by the DEQ Representative. 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 to seal off adjacent doorways, windows, heating and air conditioning duct openings and any other openings from the work area.
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. If necessary, remove the ceiling tiles to access the TSI on plumbing.
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. Prep the floor directly under each glovebag with polyethylene sheeting.
11. Prepare any rooms requiring abatement with negative pressure glovebags per ODOL Rules 380:50-17-4, except that the decon and load out shall not be attached, as a Central Decon will be used, and negative air machines shall be provided as specified in this Project Design.
12. Provide adequate negative pressure HEPA Filter exhaust machines to establish a negative pressure to any central Decon facility and/or attached decon and loadout facilities.
13. When prep is completed, schedule an ODOL Prep Inspection.

VII. ABATEMENT PROCEDURES

Phasing: The phasing of asbestos removal for glovebag work shall be indicated on Contractor's initial ODOL notification for scheduling purposes. **The Friable Asbestos Removal for this Project is to be conducted in One (1) Phase.**

Notice: The quantity for the Friable ACM work does not exceed 160 square feet. However, the Contractor must file a **Courtesy NESHAPS Notice with DEQ** Air Quality Division, which requires a 10-day notice prior to the start of asbestos removal activities.

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. Glove Bag Removal

Note: (See Quantities in the Appendix)

Prior to beginning any removal of TSI from the plumbing lines, the Asbestos Abatement Contractor shall have drained the water from all water lines for the associated plumbing and turned off and locked out the water supply valves to the associated plumbing to prevent flooding.

Prior to beginning any removal of TSI from the plumbing lines, the Asbestos Abatement 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 line 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.

VIII. ENGINEERING CONTROLS

A. Glove Bag Operations

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

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.

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).

The Abatement Contractor shall have sufficient work clothing and associated PPE on-site so as to supply these items to the Project Designer's Representative and Air Monitoring Firm Representative as needed to assist them in their work.

Workers may need to use a "double suit" protocol whenever they egress from a work area room after conducting abatement work in order to walk to the central decon or loadout through an adjacent hallway.

X. DECONTAMINATION AND WASTE LOAD-OUT

A. Decon and Loadout.

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

During glovebag removal, 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 from the glovebag operations will put on an additional asbestos suit inside the popup change room before exiting the work area to walk to the central decon. 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 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.

A Floor Plan Diagram is provided in the Appendix to the Project Design that give the approximate location for the Central Decon, Loadout and negative pressure exhaust equipment (when required).

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

XI. AIR MONITORING AND CLEARANCE TESTING

Sampling Requirements

A. Background Samples

At least three background air samples will be collected in the Armory asbestos abatement work area prior to the start of any asbestos abatement.

B. Personal Monitoring

1. During Preparation for Abatement

A minimum of 25% of the workers will be monitored during preparation of the containment 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 Negative Pressure Glove Bag Removal

100% of the workers will be monitored during the abatement activities for all negative pressure glovebag work. Personal monitoring is required during these phases to assure adequate respirator protection factors are applied in respirator selection.

3. Excursion (30-minute sampling)

One or more 30-minute excursion sample will be collected during the removal of the asbestos for representative work conducted for each work

activity that may generate a potential for worker exposure in excess of the OSHA PEL for the 30 minute Excursion Limit or 1.0 f/cc as specified in 29 CFR 1926.1101.

The Contractor may use prior air monitoring for compliance with the requirement to collect an excursion sample whenever the representative sampling was conducted for work conducted in the previous 12 months as specified in 29 CFR 1926.1101(f)(2)(iii)(B). ODOL has no excursion limit requirement, therefore it the Contractor responsibility to see that appropriate excursion sampling is conducted by the Third Party Air Monitoring firm.

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 inside work area sample will be placed in a representative work area during each day of the glovebag removal work.

One outside area sample shall be collected adjacent to the work area in the entrance areas to the Armory's abatement work area (e.g. hallways) and at any of the Building's Drill Floor Entrance Area (if the Armory has a Drill Floor.

One outside area sample will be collected outside the Clean Room for the Decon Facility for each shift that the Decon is in use.

One sample will be collected at the negative air exhaust while work is being conducted

One area sample will be collected outside the Loadout during the loading out of wastes.

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 a minimum of five (5) PCM samples collected for a minimum of 2 hours and a minimum of 1200 liters. A minimum of one clearance sample shall be collected inside each room or Hallway of the Armory where asbestos removal activities have taken place.

The Clearance Testing can be scheduled once a visual inspection has been approved by ODOL. If conducted in advance, it must be approved by the ODOL Inspector and may need to be repeated if the visual inspection fails.

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-fibers/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.

Whenever the Armory is governed by an AHERA Asbestos Management Plan of a Local Educational Authority (LEA) for school activities grades K-12, the Asbestos Abatement Contractor's Third Party Air Monitoring Firm shall conduct the Clearance Testing using an AHERA protocol, which when the quantities exceed 160 square feet or 260 linear feet required Transmission Electron Microscopy (TEM) analysis and the collection of a total of 5 PCM samples per each response action location/phase of work for a minimum volume of 1200 liters (i.e. Federal AHERA requirements).

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 the Third Party Air Monitoring Firm hired by the Licensed Asbestos Abatement Contractor. The Third Party Air Monitoring Firm shall be identified on the ODOL and NESHAPS Notification Forms.

Notice: It is the Contractors Responsibility to include all costs for Third Party Air Monitoring in the DCS Bid Amount. The DEQ LPD is not responsible for providing any Third Party or other Air Monitoring as a part of any of the Scope of Work for the Project Awarded.

Air monitoring personnel will have an ODOL Asbestos Worker category and/or Asbestos 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. The Lab or air monitoring firm shall be 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. Bulk Asbestos analysis labs shall be a participant in the AIHA/RTI Bulk Asbestos Proficiency Analytical Testing Program (PAT) or NVLAP Lab.

TEM - Transmission Electron Microscopy Analysis – QUANTEM LABS, OKC

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

XII. LOAD-OUT 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 indicating the Armory Name Address and date of waste generation. Then each bag will be transported by the workers to the prepared storage unit, waste trailer or roll-off bin. Work personal air monitoring and an area air sample, in the vicinity of the loadout, shall be performed during each loadout activity.

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

XIII. SAFETY ISSUES, ELECTRICAL, 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 routes from the Armory building work areas will be clearly marked with a sign and red 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 a #10 A:B:C rated.

A minimum of one fire extinguisher will be in the glovebag work area.

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.

A variance from starting the glovebag work in Type "C" supplied air is requested. The Contractor may start the initial shift of work in Powered Air Purifying Respirators (PAPP) and then down grade to full face APR's once a full shift of air monitoring shows asbestos fiber counts are below <0.50 fibers/cc UCL. Alternatively, the Asbestos Abatement Contractor may submit to ODOL a request to start the glovebag and/or containment work in full face APR's based on air monitoring records from previous projects where similar work practices maintained the fiber count exposure level below <0.50 fiber/cc UCL.

No other variances were anticipated at the Pre-abatement Bid Conference.

XV. SPECIAL MATERIALS OR METHODS AND ASBESTOS IN SOIL

Soil:

No soil removal of Asbestos in soil is anticipated for this Project. Therefore, this Project does not require the removal of any soils contaminated with ACM.

Air Craft Safety:

The portion of the Armory location selected for this asbestos abatement project is to be unoccupied during the asbestos removal work. Occupancy issues are to be communicated by the DEQ LPD and OU Officials handing tenant use, such as relocating air craft. **At no time are any persons associated with this project to touch, climb on or cover any of the aircraft in the Hanger**. OU Officials handing tenant use of the Hanger will see that aircraft are safely managed, when necessary, during the abatement phase of 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 Project Design Amendment for consideration by the ODOL.

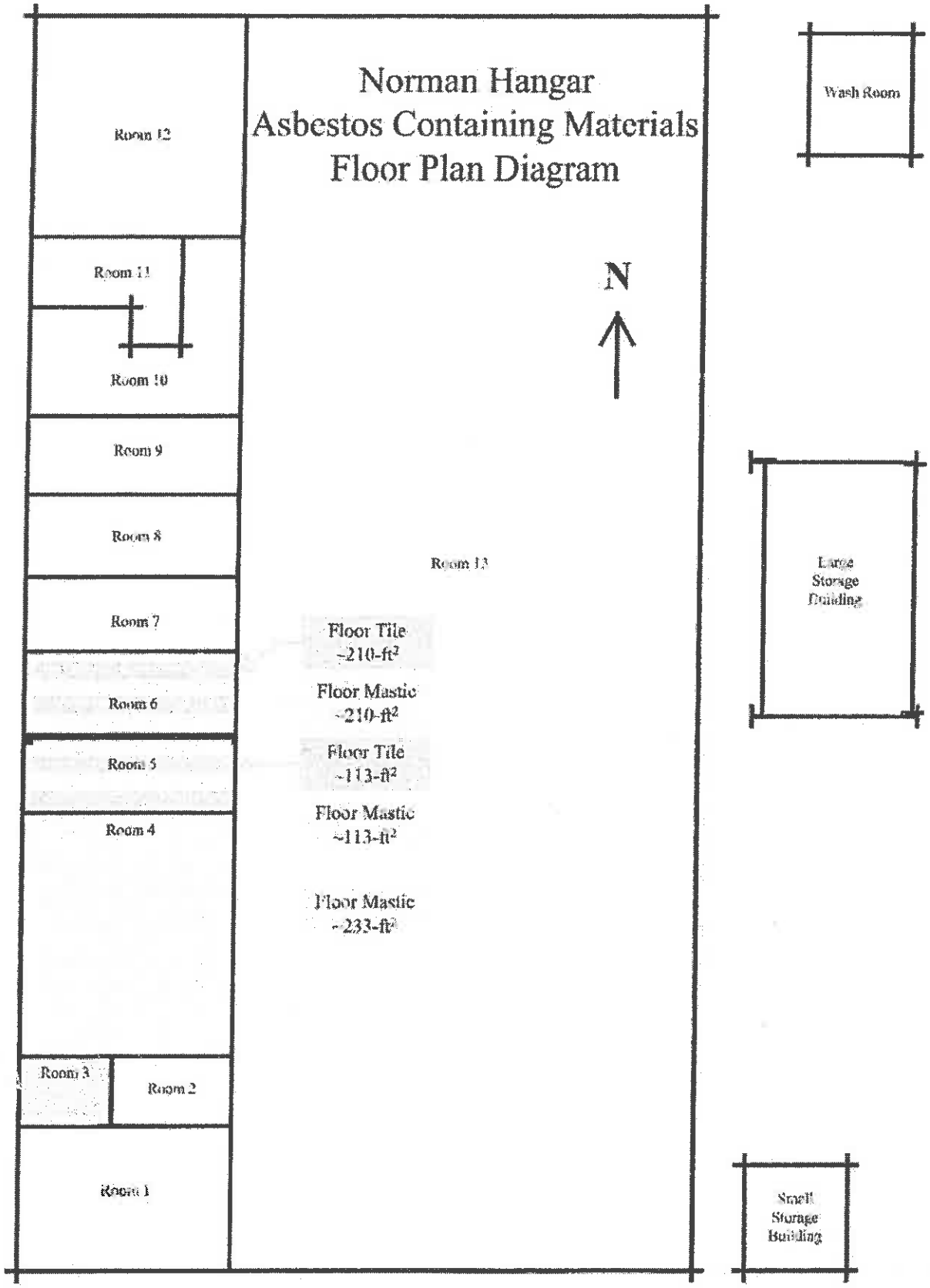
APPENDIX

Armory Floor Plan Diagram

Armory Estimated Quantities of ACM

Asbestos Inspection Report and Bulk Asbestos Test Results

Project Designer License


Norman Hangar
Asbestos Containing Materials
Floor Plan Diagram
Room 12
Room 11
Room 10
Room 9
Room 8
Room 7
Room 6
Room 5
Room 4
Room 3
Room 2
Room 1
Room 13
N
Floor Tile
~210-ft²
Floor Mastic
~210-ft²
Floor Tile
~113-ft²
Floor Mastic
~113-ft²
Floor Mastic
~233-ft²
Wash Room
Large
Storage
Building
Small
Storage
Building
Pipe-fitting
Insulation
~8-Glove-bags

Appendix

Location, Estimated Quantities and Types of ACM at Norman Hanger Armory Project Design

TABLE I: ASBESTOS CONTAINING MATERIALS

SAMPLE NUMBER	SAMPLE LOCATION	SAMPLE DESCRIPTION	% ASBESTOS	TYPE OF ASBESTOS	TYPE OF MATERIAL	CONDITION OF MATERIAL
0044-01	ROOM 6	9"x9" FLOOR TILE	5%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-02	ROOM 6	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-03	ROOM 5	9"x9" FLOOR TILE	5%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-04	ROOM 5	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-09	ROOM 4	FLOOR MASTIC	8%	CHRYSOTILE	MISCELLANEOUS	GOOD
0044-31	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD
0044-32	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD
0044-33	ROOM 3	HARD PACK ELBOW	10%	CHRYSOTILE	THERMAL SYSTEM INSULATION	GOOD

TABLE II: ASBESTOS CONTAINING HOMOGENOUS AREAS

SAMPLE LOCATION	SAMPLE MATERIAL	TOTAL QUANTITY
ROOM 6	9"x9" FLOOR TILE & FLOOR TILE MASTIC	~210-ft²
ROOM 5	9"x9" FLOOR TILE & FLOOR TILE MASTIC	~113-ft²
ROOM 4	FLOOR MASTIC	~233-ft²
ROOM 3	PIPEFITTING INSULATION	~8-ft/or elbows

ATTACHMENT 3

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*

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 4

DEQ Approved Lead-Based Paint Encapsulants List

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

ATTACHMENT 5

Lead-Based Paint Inspection and Settled Dust Sampling Report For Norman Hanger

FINAL ABATEMENT REPORTS

OCTOBER 3, 2011

Norman Hanger Lead Paint and Asbestos Remediation DCS No. 11-173

Norman Hanger
2232 Goddard Avenue
Norman, OK 73069

CRYSTAL CREEK
ENVIRONMENTAL SOLUTIONS, INC.

LEAD-BASED PAINT REMEDIATION AND ASBESTOS ABATEMENT

LOCATION:
Norman Hanger
2232 Goddard Avenue
Norman, OK 73069

PREPARED FOR:
Oklahoma Department of Environmental Quality
Agency Contact: Dustin Davidson
707 North Robinson
Oklahoma City, Ok 73102
(405) 702-5115

Prepared By:

Crystal Creek Environmental Solutions, Inc.
1401 Cornell Parkway
Oklahoma City, OK 73108
(405) 942-2233

Report Date:
October 3, 2011

SUMMARY

Crystal Creek Environmental Solutions, Inc. (Crystal Creek) prepared preformed Asbestos Abatement and Lead Remediation under contract with the Department of Central Services with oversight from the Oklahoma Department of Environmental Quality at the Norman Hanger. The purpose for the abatement and remediation was to provide for safe re-use of the facility with unrestricted use such as aircraft hanger, storage and office space.

All lead based-paint (LBP) remediation efforts were preformed in accordance with the Guidelines for Rehabilitation and Conversion of Indoor Firing Ranges, November 3, 2006, Department of the Army and Air Force, National Guard Bureau and in accordance with OSHA Lead in Construction Interim Final Standard (29 CFR 1926.62) for lead based paint abatement, indoor firing range remediation and lead dust remediation. All LBP work was performed by skilled, Licensed Lead Based Paint Workers, licensed by the State of Oklahoma, Department of Environmental Quality.

Asbestos Abatement was completed according to the Oklahoma Rules for Abatement of Friable Asbestos Materials, OAC 380:50 (Oklahoma Department of Labor Rules)

All asbestos work was performed by skilled, licensed asbestos workers and supervisors, licensed by the State of Oklahoma, Department of Labor.

LOCATION:

2232 Goddard Avenue, Norman, Oklahoma 73069

Table of Contents

SECTION 1

Contract Documents
And
Change Orders

Purchase Order

Dispatch via Print

Purchase Order	Date	Revision	Page
2929014119	03/30/2011		1
Payment Terms	**Freight Terms**		**Ship Via**
0 Days	Free on board at Destination		Common
Buyer	**Phone**		**Currency**
Sheila Killingsworth (58 405/522-0047			USD

Dept of Environmental Quality
OK DEPT OF ENVIRONMENTAL QUALITY
SHIPPING & RECEIVING
707 N ROBINSON
OKLAHOMA CITY OK 73102

Ship To: OK DEPT OF ENVIRONMENTAL QUALITY
SHIPPING & RECEIVING
707 N ROBINSON
OKLAHOMA CITY OK 73102

Vendor: 0000237377
CRYSTAL CREEK ENVIRONMENTAL SOLUTIONS
1401 CORNELL PARKWAY
OKLAHOMA CITY OK 73108-1811

Bill To: OK DEPT OF ENVIRONMENTAL QUALITY
ADMINISTRATIVE SERVICES
PO BOX 1677
OKLAHOMA CITY OK 73101-1677

Tax Exempt? N **Tax Exempt ID:**

Line-Sch	Item Id	Description	Quantity	UOM	PO Price	Extended Amt	Due Date
1- 1	1000002278	ENV REMEDIATION SERVICES:Task XXV Per Diem Unit Cost Rate~Environmental Remediation Services. Furnish All Labor, Materials & Equipment Necessary Task XXV. Per diem unit cost rate	1.0000 SOM		55,154.0000	55,154.00	03/30/2011

LEAD AND ASBESTOS REMEDIATION FOR THE NORMAN HANGAR

.

PRICE AND VENDOR TO BE DETERMINED AFTER BIDS RECEIVED BY DCS

Total PO Amount 55,154.00

COMMENTS:

.

FY 2011

.

PROJECT: SITE CLEANUP ASSISTANCE PROGRAM - NORMAN LEAD REMEDIATION AND ASBESTOS ABATEMENT BIDDING

.

JUSTIFICATION: UNDER THE SITE CLEANUP ASSISTANCE PROGRAM THE DEQ WILL HIRE A LICENSED PROFESSIONAL TO ABATE ASBESTOS, ABATE LEAD-BASED PAINT, AND REMEDIATE LEAD CONTAMINATED DUST FROM THE FLOORS OF THE NORMAN HANGAR.

.

(FOR AGENCY USE ONLY)

.

CONTACT: KAREN RUMSEY/ASD/(405)702-1168
MARY JOHNSON/LPD/(405)702-5100
AGENCY PROJECT CONTACT: DUSTIN DAVIDSON/LPD(405)702-5115

.

DEQ IS AN EQUAL OPPORTUNITY EMPLOYERS.

.

FUNDING 493

.

REQUISITION #2920003042 - PLEASE RETURN PO TO MARY JOHNSON

.

12/28/10

.

DCS#11173
REBEKAH RICHARDSON-PROJECT MANAGER
405-522-0050

Authorized Signature

State of Oklahoma
Department of Central Services
Construction and Properties Division

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AGREEMENT made as of the 15th day of March, 2011.

BETWEEN the Owner: State of Oklahoma
Construction and Properties Division
Department of Central Services
Will Rogers Office Building
2401 N. Lincoln, Suite 106
Oklahoma City, OK 73152-3448

On behalf of: **Oklahoma Department of Environmental Quality**
707 N. Robinson
Oklahoma City, OK 73102

RECEIVED
MAR 21 2011
Department of Central Services
Construction & Properties

And the Contractor: **Crystal Creek Environmental**
1401 Cornell Parkway
Oklahoma City, OK 73108

The Project is: **Norman Hanger Lead Paint and Asbestos Remediation**
Norman, OK

The Consultant is: **N/A**

RECEIVED
MAR 28 2011
Department of Central Services
Construction & Properties

The Owner and the Contractor agree as follows:

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications and Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement; these form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than Modifications, appears in Article 8.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

3.2 The Contract Time shall be measured from the date of Work Order.

3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than __60__ days from the date of commencement, or as follows: **None**, subject to adjustments of this Contract Time as provided in the Contract Documents.

ARTICLE 4 CONTRACT SUM

4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be __Fifty-Five Thousand, One Hundred Fifty-Four Dollars and 00 Cents__ $__55,154.00__, subject to additions and deductions as provided in the Contract Documents.

4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner. **NONE**

4.3 Options. The following options shall remain available for 30 days after the contract date. After the expiration date, the cost of the option may be negotiated by the Owner and Contractor. **NONE**

4.4 Unit prices, if any, are as follows: **NONE**

ARTICLE 5 PAYMENTS

5.1 PROGRESS PAYMENTS

5.1.1 The Contractor shall follow the current Rules and Procedures established by the Construction and Properties Division of the Department of Central Services, State of Oklahoma to ensure compliance with state statutes.

5.1.2 Based upon Applications for Payment submitted to the Consultant by the Contractor and Certificates for Payment issued by the Consultant, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

5.1.3 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month or as follows: (Insert other date)

5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Consultant may require. This schedule, unless objected to by the Consultant, shall be used as a basis for reviewing the Contractor's Application for Payment.

5.1.5 Applications for Payment shall indicate the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedules of values, less retainage of five percent (5%). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Subparagraph 7.3.8 of CAP Document A201-General Conditions;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of five percent (5%).

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Consultant has withheld or nullified a Certificate for Payment as provided in Paragraph 9.5 of CAP Document A201-1997.

5.1.7 The progress payment amount determined in accordance with Subparagraph 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Consultant and Owner shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (stat other requirements if any).

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Subparagraph 9.10.3 of CAP Document A201-General Conditions.

5.1.8 Reduction or limitation of retainage, if any, shall be as follows:
Refer to CAP Form A201 General Conditions Section 9.3.1.1.

5.2 FINAL PAYMENT

5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when:

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Subparagraph 12.2.2 of CAP Document A201-General Conditions, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Consultant and accepted by the Owner.

5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Consultant's final Certificate for Payment.

ARTICLE 6 TERMINATION OR SUSPENSION

6.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of CAP Document A201-General Conditions.

6.2 The Work may be suspended by the Owner as provided in Article 14 of CAP Document A201-General Conditions.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 Where reference is made in this Agreement to a provision of CAP Document A201-General Conditions or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Document.

7.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the legal state rate.

7.3 The Owner's representative is: **John W. Morrison AIA**
State Construction Administrator
Construction and Properties Division
Department of Central Services
P. O. Box 53448
Oklahoma City, OK 73152-3448

7.4 The Contractor's representative is: **Michael Jenkinson.**

7.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

7.6 AUDITS AND RECORDS CLAUSE: As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form. In accepting any contract with the State, the Contractor agrees any pertinent State or Federal agency will have the right to examine and audit all records relevant to execution of the resultant contract. The contractor is required to retain all records relative to this contract for the duration of the contract term and for a period of three years following completion and/or termination of the contract. If an audit, litigation, or other action involving such records are started before the end of the three year period, the records are required to be maintained for three years from the date that all issues arising out of the action are resolved or until the end of the three year retention period, whichever is later.

7.7 The Contractor certifies that it and all proposed subcontractors, whether known or unknown at the time this contract is executed or awarded, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employee Verification Program (E-Verify) available at www.dhs.gov/E-Verify.

7.8 Other provisions: **None**

ARTICLE 8 ENUMERATION OF CONTRACT DOCUMENTS

8.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated as follows:

8.1.1 The Agreement is this executed edition of the Standard Form of Agreement Between Owner and Contractor, CAP Document A101.

8.1.2 The General Conditions are the current edition of the General Conditions of the Contract for Construction, CAP Document A201, as incorporated in the Project Manual.

8.1.3 The Supplementary and other Conditions of the Contract are those contained in the Project Manual dated and are as follows:

Document	Title	Date
As Specified		

8.1.4 The Specifications are those contained in the Project Manual dated as in Subparagraph 8.1.3, and are as follows:

Number	Title	Date
As Specified		

8.1.5 The Drawings are as follows, and are dated unless a different date is shown below:

Number	Title	Date
As Specified		

8.1.6 The Addenda, if any, are as follows:

Number	Date	Pages
(1) One	**February 7, 2011**	**(1) One**

8.1.7 Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 8.

8.1.8 Other documents, if any, forming part of the Contract Documents are as follows:

This agreement is entered into as of the day and year first written above and is executed in at least three original copies, of which one is to be delivered to the Contractor, one to the Consultant for use in the administration of the Contract, and the remainder to the Owner.

This Agreement entered into as of the day and year written above.

STATE OF OKLAHOMA
DEPARTMENT OF CENTRAL SERVICES

Owner (Signature)

John W. Morrison AIA
State Construction Administrator
Construction and Properties Division

Crystal Creek Environmental
Oklahoma City, OK

Contractor (Signature)

Michael Jenkinson, President
(Printed name and title) FEI # 731462665

The Using Agency certifies that funds are available and dedicated to complete the contract sums stated in this Contract. The Using Agency agrees to pay all project related costs including but not limited to work related to unknown site conditions, remediation of discovered environmental conditions, legal expenses, judgments and any reasonable project related expense.

Oklahoma Department of Environmental Quality

Using Agency Authorized Representative (Signature)

WENDY CAPERTON, DIR. ADMIN. SERV. DIV
(Printed name and title)

State of Oklahoma
Department of Central Services
Construction and Properties Division

Non-Collusion Affidavit

RECEIVED
MAR 23 2011
Department of Central Services
Construction & Properties

The statement below must be signed and notarized before this contract will become effective

Michael B Jenkins, of lawful age, being first duly sworn, on oath says that (s)he is the agent authorized by Contractor to submit the above Contract to the State of Oklahoma.

Affiant further states that contractor has not paid, given, or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in the procuring of the Contract.

Contractor Crystal Creek Env. Sol.

Michael B Jenkins
(Printed name and title) President

Subscribed and sworn to before me this 22nd day of March, 2011.

NOTARY SEAL PUBLIC
GINA L. BAKER
Notary Public
State of Oklahoma
Commission # 10007752 Expires 09/17/14

Notarial Officer

Commission Number: 10007752

My Commission Expires: 9/17/14

State of Oklahoma
Department of Central Services
Construction and Properties Division

Bond #OKC607437

Performance Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable. This document may not be altered or modified.

CONTRACTOR (Name and Address):
Environmental Solutions Specialists, Inc. &/or
Crystal Creek Environmental Solutions, Inc.
1401 Cornell Parkway, #100
Oklahoma City, OK 73108

SURETY (Name and Principal Place of Business):
American Safety Casualty Insurance Co.
100 Galleria Parkway SE, #700
Atlanta GA 30339

OWNER: Construction and Properties Division
Department of Central Services
State of Oklahoma
P.O. Box 53448
Oklahoma City, OK. 73152-3448

CONSTRUCTION CONTRACT

Date: March 15th, 2011

Amount: $55,154.00

Description (Name and Location): Norman Hanger Lead Paint and Asbestos Remediation, Norman OK

BOND:

Date (Not earlier than Construction Contract Date): March 17th, 2011

Amount: $55,154.00

CONTRACTOR (Representative):

Signature:

Name and Title: Mike Jenkinson, President

SURETY (Representative):

Signature:

Name and Title: John Gipson, Attorney-in-fact

(FOR INFORMATION ONLY-Name, Address and Telephone)

AGENT or BROKER:
The Insurance Center Agency, Inc.
709 Wall Street
Norman, OK 73069
(405) 321-2727

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3 The Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than ten (10) days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor's Default; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than seven (7) days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions.

4.1 Arrange for a Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for which it may be liable to the Owner, and as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

.2 Deny liability in whole or in part and notify the Owner citing reasons therefor.

5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fourteen (14) days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

8 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

9 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provisions in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

10 DEFINITIONS

10.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in Settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

10.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

10.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

10.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract.

State of Oklahoma
Department of Central Services
Construction and Properties Division

Bond #OKC607437

Payment Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable. This document may not be altered or modified.

CONTRACTOR (Name and Address):
Environmental Solutions Specialists, Inc. &/or
Crystal Creek Environmental Solutions, Inc.
1401 Cornell Parkway, #100
Oklahoma City, OK 73108

SURETY (Name and Principal Place of Business):
American Safety Casualty Insurance Co.
100 Galleria Parkway SE #700
Atlanta GA 30339

OWNER: Construction and Properties Division
Department of Central Services
State of Oklahoma
P.O. Box 53448
Oklahoma City, OK. 73152-3448

CONSTRUCTION CONTRACT

Date: March 15th, 2011

Amount: $55,154.00

Description (Name and Location): Norman Hanger Lead Paint and Asbestos Remediation, Norman OK

BOND:

Date (Not earlier than Construction Contract Date): March 17th, 2011

Amount: $55,154.00

CONTRACTOR (Representative):

Signature:

Name and Title: Mike Jenkinson, President

SURETY (Representative):

Signature:

Name and Title: John Gipson, Attorney-in-fact

(FOR INFORMATION ONLY-Name, Address and Telephone)

AGENT or BROKER:
The Insurance Center Agency, Inc.
709 Wall St
Norman, OK 73069

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2 With respect to the Owner, this obligation shall be null and void if the Contractor:

2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4 The Surety shall have no obligation to Claimants under this Bond until:

4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2 Claimants who do not have a direct contract with the Contractor:

.1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

.2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

.3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5 If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2 Pay or arrange for payment of any undisputed amounts.

7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

10 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

11 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

12 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deem incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

13 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

14 DEFINITIONS

14.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

14.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

14.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract.

State of Oklahoma
Department of Central Services
Construction and Properties Division

Bond #OKC607437

Statutory Defect Bond

61 O.S. 1991, Section 113 (B)(3)

KNOW ALL MEN BY THESE PRESENTS :

That Environmental Solutions Specialists, Inc. &/or Crystal Creek Environmental Solutions, Inc., as Principal and American Safety Casualty Insurance Co. a corporation organized under the laws of the State of Georgia and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto the State of Oklahoma in the penal sum of Fifty Five Thousand One Hundred Fifty-Four and no/cents Dollars ($ 55,154.00) in lawful money of the United States of America, said sum being equal to One Hundred percent (100%) of the Contract price, for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents:

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written contract with the State of Oklahoma, dated March 15th, 2011 for Norman Hanger Lead Paint and Asbestos Remediation, Norman OK

DCS Project Number 11173

all in compliance with the plans and specifications therefore, made a part of said contract and on file in the Department of Central Services, Construction and Properties Division, 2401 N. Lincoln Blvd., Suite 106, Oklahoma City, Oklahoma 73105.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the State of Oklahoma all damage, loss, and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of one (1) year from and after the acceptance of said project by the State of Oklahoma; then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney- in-fact, duly authorized so to do, the day and year set forth below.

DATED this 17th day of March 20 11

ATTEST: _____

Principal: Environmental Solutions Specialists, Inc. &/or Crystal Creek Environmental Solutions, Inc.

By: _____

Mike Jenkinson (Title) President

Surety: American Safety Casualty Insurance Co.

(Attorney-in-fact)

By: _____

Name: John Gipson

Address: 709 Wall Street

City: Goldsby State: OK

Telephone: (405) 321-2727

NUMBER
OKC607437

AMERICAN SAFETY INSURANCE

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that American Safety Casualty Insurance Company has made, constituted and appointed, and by these presents does make, constitute and appoints

John Cate, Harold Stockstill, Dee Lyles, John Gipson, Christy Walck of Norman, OK

its true and lawful attorney-in-fact, for it and its name, place, and stead to execute on behalf of the said Company, as surety, bonds, undertaking and contracts of suretyship to be given to

ALL OBLIGEES

provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of

*** TWO MILLION*** ($2,000,000.00) DOLLARS***

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of the Company of the 6th day of August, 2009.

RESOLVED, that the President in conjunction with the Secretary or any Assistant Secretary may appoint attorneys-in-fact or agents with authority as defined or limited in the instrument evidencing the appointment in each case, for and on behalf of the Company, to execute and deliver and affix the seal of the Company to bands, undertakings, recognizances, and suretyship obligations of all kinds; and said officers may remove any such attorney-in-fact or agent and revoke any power of attorney previously granted to such persons.

RESOLVED FURTHER, that any bond, undertaking, recognizance, or suretyship obligation shall be valid and binding upon the company when: (i) when signed by the President or any Vice-President and attested and sealed (if a seal is required) by any Secretary or Assistant Secretary or (ii) when signed by the President or any Vice-President or Secretary or Assistant Secretary, and counter-signed and sealed (if a seal is required) by a duly authorized attorney-in-fact or agent; or (iii) when duly executed and sealed (if a seal is required) by one or more attorney-in-fact or agents pursuant to and within the limits of the authority evidenced by the power of attorney issued by the Company to such person or persons.

RESOLVED FURTHER, that the signature of any authorized officer and the seal of the Company may be affixed by facsimile to any power of attorney or certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company; and such signature and seal when so used shall have the same force and effects as though manually affixed.

IN WITNESS WHEREOF, American Safety Casualty Insurance Company has caused its official seal to be hereunto affixed, and these presents to be signed by its President and attested by its Secretary this 6th day of August, 2009.

Attest:

Ambuj Jain

SEAL

Joseph D. Scollo, Jr.

STATE OF GEORGIA)

COUNTY OF COBB)

On this 6th day of August, 2009, before me personally came Joseph D. Scollo, Jr., to me known, who, being by me duly sworn, did depose and say that he is the President of American Safety Casualty Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that is was so affixed by order of the Board of Directors of said corporation and that he signed his name thereto by like order.

JAMI BAILEY
Notary Public Hall Co., GA
My Commission Expires Aug. 13, 2012

Jami Bailey, Notary Public

I, the undersigned, Secretary of American Safety Casualty Insurance Company, an Oklahoma corporation, DO HEREBY CERTIFY, that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and furthermore that the Resolution of the Board of Directors, set forth in the said Power of Attorney, is now in force.

Signed and sealed in the City of Atlanta, in the State of Georgia. Dated this 17th day of March 2011

SEAL

Ambuj Jain

ORIGINALS OF THIS POWER OF ATTORNEY ARE PRINTED WITH RED NUMERICAL NUMBERS
DUPLICATES SHALL HAVE THE SAME FORCE AND EFFECT AS AN ORIGINAL ONLY WHEN ISSUED IN CONJUNCTION WITH THE ORIGINAL

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/17/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER The Insurance Center Agency, Inc. 709 Wall Street Norman OK 73069-6303	CONTACT NAME: Dee Lyles CISR PHONE (A/C, No, Ext): (405) 928-7533 FAX (A/C, No): (405) 928-7534 E-MAIL ADDRESS: dee@ticokc.com PRODUCER CUSTOMER ID #: 00020287
INSURED Environmental Solutions Specialists, Inc. and Crystal Creek Environmental Solutions, Inc. 1401 Cornell Parkway #100 Oklahoma City OK 73108	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: America Safety Indemnity Comp INSURER B: CompSource Oklahoma INSURER C: Hanover INSURER D: INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] Contractor Pollution GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC			ENV013101-10-05	4/3/2010	4/3/2011	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 50,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
	AUTOMOBILE LIABILITY [ ] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $
A	[X] UMBRELLA LIAB [X] OCCUR [ ] EXCESS LIAB [ ] CLAIMS-MADE [ ] DEDUCTIBLE [X] RETENTION $ 10,000			ENU019014-10-03	4/3/2010	4/3/2011	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		01327788 11 1	3/1/2011	3/1/2012	[X] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Professional Liability			ENV013101-10-05	4/3/2010	4/3/2011	Limit	$1,000,000
C	Rented/Leased Equipment			IHT2908731-06	03/10/11	03/10/12	Limit	$300,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Microbiological Decontamination and Microbiological Contamination consulting coverage is on a claims made form with each having a $5,000 per claim SIR. General Liability has a $5,000 deductible per occurrence. Professional liability is on a claims made form and has a $5,000 deductible per claim.

CERTIFICATE HOLDER

Department of Central Services
Construction & Properties Division
P O Box 53448
Oklahoma City, OK 73152-3448

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

John Gipson/ADM

SECTION 2

Statement of Work
And
Addendums

SECTION 3

Norman Photos

Norma Hanger

South hanger door pre-abatement.

South hanger door post abatement

North hanger door pre-abatement.

North hanger door post abatement.

Asbestos pipe fittings prepared for removal.

Asbestos removal complete and inspected by ODOL.

	
. Asbestos pipe fittings prepared for removal	Asbestos removal complete and inspected by ODOL.
	
Asbestos mastic prepped for removal.	Concrete floor after asbestos mastic removed.
	
Asbestos mastic prepped for removal.	Concrete floor after asbestos mastic removed.

Hanger door before LBP abatement.

Hanger door during LBP abatement.

Hanger door during LBP abatement.

Hanger door after LBP abatement.

Hanger door during LBP abatement.

Hanger door tracks after paint is removed.

	
Hanger door tracks after LBP abatement.	Hanger door tracks after LBP abatement.
	
Interior hanger door during LBP abatement	Interior hanger door after LBP is encapsulated.
	
Interior hanger door with new insulation and wood panels.	Exterior hander door with LBP paint encapsulated.

	
Exterior hander door with LBP paint encapsulated.	Exterior hander door and track with LBP paint encapsulated.
	
Exterior hander door with LBP paint encapsulated.	Exterior hander door with LBP paint encapsulated.
	
Interior hanger door with new insulation and wood panels.	Interior hanger door with new insulation and wood panels.

SECTION 4

Norman Asbestos Abatement Information

Crystal Creek, Inc.
1401 Cornell Parkway
Suite 100
Oklahoma City, Oklahoma

TRANSMITTAL LETTER

Crystal Creek/ Environmental Solutions Inc. Office: 405.942.2233 – Fax 405.949.5482

To: ODOL-Dave Robison 521.6025
Jamie Marshall-681.6753
ODEQ- Dustin Davidson 702.5101

Date: 21 April 2011
Project: Norman Hanger Project
2232 Goddard, Norman, Oklahoma

We are sending the attached:

☐ Plans	☐ Specifications	☐ Disposal Manifest Submittals	☐ Final Report
☐ Addendum	☐ Quotation	☐ Air Monitoring	☐ Other
☒ NESHAP Notification	☐ Change Order	☐ Payment Request	☐ Other

These are transmitted as checked below:

☒ For your information	☐ For comment	☐ For review & comment	☐ Other
☐ For approval	☒ As per your request	☐ Prints returned after loan to us	☐ Your file

Remarks:
Thank You

Jamie - schedule as necessary.

Copies To:

Sincerely,

Jim Gaylor, CHMM

Oklahoma Department of Labor
Mark Costello, Commissioner
www.labor.ok.gov

Oklahoma City
3017 N Stiles Suite 100
Oklahoma City OK 73105
405-521-6464
888-269-5353
Fax 405-521-6025

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

ASBESTOS PROJECT CHECKLIST

☒ Initial Notification ☐ Revised Notification ☐ Emergency Notification

	NAME	ADDRESS	CITY	PHONE
Job Site:	Norman Hanger	2232 Goddard Ave.	Norman	
Contractor:	Crystal Creek, Inc.	1401 Cornell Parkway, Suite 100	Oklahoma City	942.2233
Site Owner:	State of Oklahoma, DCS	Will Rogers Buildng 2401 Lincoln Blvd	Oklahoma City	
Gen. Contractor:	N/A			
Project Designer:	Marshall Environmental Management	1001 SW 89th, Street A-100	Oklahoma City	616.0401
Air Monitoring Firm:	Marshall Environmental Management	1001 SW 89th, Street, A-100	Oklahoma City	616.0401
Air Monitoring Firm:				
Landfill:	Waste Connections, Inc.	7500 SW 15th	Oklahoma City	745.3098
Hauler:	Lauder Transportation	42401 Westech Road	Shawnee, OK	475.8538

MOBILIZATION DATE: 20 April 2011 SCHEDULED DATE OF ASBESTOS REMOVAL: 29 April 2011

PROJECT COMPLETION DATE: 30 April 2011 RENOVATION: ☒ DEMOLITION: ☐ EMERGENCY: ☐

Type and percentage asbestos (attach lab reports): 10% Chrysotile See Marshall Project Design

,OUNT OF ASBESTOS TO BE ABATED: ~ 8 square ft (8 Glove Bags)

ABATEMENT TECHNIQUES: Standard Negative Pressure Glove bag procedures.

SUBMITTALS NECESSARY BEFORE ABATEMENT MAY BEGIN. CHECK OFF ONLY THOSE ATTACHED TO THIS CHECKLIST OR WHICH ARE ON FILE AT THE OKLAHOMA STATE DEPARTMENT OF LABOR.

☒ NESHAPS Notification (Copy)
☒ Project specifications
☐ Bonds and/or Insurance Certificates
☒ Plans for Decontamination Facilities
☒ Respirator Program
☐ Employee Physicals
☐ Permission from owner for all rented vehicles/trailers used to haul asbestos-containing material.

Variances

____ # of Mini-containments
8 # of Glovebags
____ # of Containments
____ # of Phases

FEES
** $600.00 Per containment.*
** $200.00 Per project not part of a definite containment.*
** $200.00 Per project with multiple glovebags or mini-containments, plus $5.00 per such glovebag or mini-containment.*

Comments: Non friable floor tile will be removed prior to the glove bag removal.

Contractor/Responsible Party Signature — 20 April 2011 Date

Revised: 01/10/2010

EPA NOTIFICATION OF DEMOLITION OR RENOVATION

OFFICE USE ONLY: DATE RECEIVED: _____ *JOB / PERMIT / ID NUMBER* _____

****

I. FACILITY INFORMATION:

OWNER: State of Oklahoma. DCS PHONE NUMBER: ( )

STREET ADDRESS: 2232 Goddard Ave CITY: Norman STATE: OK ZIP: _____

FACILITY REPRESENTATIVE: Dustin Davidson, DEQ Land Protection Div PHONE: 405.702.5115

ASBESTOS ABATEMENT CONTRACTOR: Crystal Creek Inc.

STREET ADDRESS: 1401 Cornell Parkway CITY: OKC STATE: OK ZIP: 73108

REPRESENTATIVE: Jim Gaylor PHONE: (405) 942.2233

PAGER: ( ) MOBILE PHONE: (405) 831.9670

AIR MONITORING FIRM OR OTHER OPERATOR: Marshall Environmental

STREET ADDRESS: 1001 SW 89th Street CITY: OKC STATE: OK ZIP: _____

REPRESENTATIVE: Jamie Marshall PHONE: (405) 616.0401

II. TYPE OF NOTIFICATION: (O = ORIGINAL) OR (R = REVISED) **Original**

III. TYPE OF OPERATION: (D = DEMOLITION) (R = RENOVATION) (ER = EMERGENCY RENOVATION): R

IV. IS ASBESTOS CONTAINING MATERIAL (ACM) PRESENT ? YES [X] NO [ ] DON'T KNOW [ ]

V. FACILITY / BUILDING DESCRIPTION (BE SPECIFIC AND DETAILED AS TO NAME, # FLOORS, EXACT ACM LOCATION, ROOM NUMBERS, ETC.)

FACILITY: Norman Hanger ADDRESS: 2232 Goddard Ave

CITY: Norman STATE: OK ZIP CODE: _____ COUNTY: Cleveland

WHERE IS ACM LOCATED ? TSI on pipe elbows on water lines

BUILDING SIZE: SQ. FT.: Approx. 8000 ft^2 AGE: UKN YRS. # FLOORS: One

PRESENT USE: Hanger Office Space PREVIOUS USE: Hanger Office Space

VI. PROCEDURES USED TO DETERMINE PRESENCE OF ACM INCLUDING ANALYTICAL METHODS :

On site inspection and sampling. Analytical analysis by EPA 600/M4-82-020 1982

NAME OF EPA ACCREDITED INSPECTOR WHO PERFORMED INSPECTION AND SAMPLING INCLUDING AFFILIATION AND OKLAHOMA DOL LICENSE NUMBER:

mie Marshall OK-158090

EPA NOTIFICATION OF DEMOLITION OR RENOVATION CONTINUED

II. AMOUNTS OF REGULATED ASBESTOS CONTAINING MATERIAL (RACM) TO BE REMOVED; ALSO AMOUNTS OF CATEGORY I OR II MATERIALS WHICH WILL / WILL NOT BE REMOVED (circle one):

PIPES – LINEAR FEET: 8 ; SURFACING AREA – SQUARE FEET: _____ ; OFF FACILITY COMPONENT - CUBIC FEET: _____ ; CATEGORY I – SQ. FT. _____ ; CATEGORY II – SQ. / LIN. FT. 323Ft^2 Fl. Tile ;

VIII. SCHEDULED DATES OF ASBESTOS REMOVAL: START: 29 April 2011 FINISH: 30 April 2011

IX. SCHEDULED DATES OF DEMO / RENO: START: _____ FINISH: _____

X. DESCRIPTION OF THE PLANNED ASBESTOS REMOVAL TECHNIQUES TO BE EMPLOYED (e.g. gross removal, glove bagging, manual scrape, etc.)

Negative Pressure Glove Bag Removal of Eight Pipe Elbows & Joints

XI. DESCRIPTION OF THE CONTROLS AND WORK PRACTICES TO BE USED TO PREVENT ASBESTOS FIBER EMISSIONS (e.g. full containment with negative pressure, adequate wetting):

Negative Pressure Glove Bags and Wet Removal Methods

XII. LICENSED ASBESTOS WASTE TRANSPORTER: Lowder Transportation

ADDRESS: 42401 Westech Road CITY: Shawnee STATE: OK ZIP: _____

EPRESENTATIVE: Tom Lowder PHONE: (475.8538)

XIII. STATE PERMITTED ASBESTOS WASTE DISPOSAL SITE: Waste Connections

ADDRESS: 7500 SW 15th CITY: OKC STATE: OK ZIP: _____

REPRESENTATIVE: Bryan Barney PHONE: 405.745.3091

XIV. IS DEMOLITION ORDERED BY A GOVERNMENT AGENCY? YES: ☐ NO: X☐

NAME OF AGENCY: NA REPRESENTATIVE: _____

DATE OF ORDER: _____ DATE DEMOLITION IS TO START: _____

XV. IS THIS RENOVATION REQUIRED DUE TO AN EMERGENCY: YES: ☐ NO: X

DATE OF EMERGENCY: _____ HOUR OF DAY EMERGENCY OCCURRED: _____

DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT CAUSING THE EMERGENCY: _____

NA

EXPLANATION OF HOW THIS CAUSED 1) UNSAFE CONDITIONS; 2) SERIOUS DISRUPTION OF NORMAL BUILIDNG OPERATIONS; AND / OR 3) IMPOSES AN UNREASONABLE FINANCIAL BURDEN? (be specific and detailed):

NA

EPA NOTIFICATION OF DEMOLITION OR RENOVATION CONTINUED

XVI. **DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NON-FRIABLE ASBESTOS BECOMES FRIABLE** (crumbled, pulverized, abraided, or reduced to powder, etc.):

All work will stop. The area will be isolated and clean up will begin. The Oklahoma Department of Labor will be contacted.

****

XVII. **I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40CFR, PART 61, SUBPART M – NESHAP) WILL BE ON SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE OF HIS/HER TRAINING AND CERTIFICATION / LICENSING WILL BE AVAILABLE (OR BE POSTED) FOR INSPECTION DURING BUSINESS HOURS:**

SIGNATURE OF OWNER / OPERATOR: _____ **DATE:** 20 April 2011

PRINTED NAME: Jim Gaylor, CHMM

****

XVIII. **I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT TO THE BEST OF MY KNOWLEDGE:**

SIGNATURE OF OWNER / OPERATOR: _____ **DATE:** 20 April 2011

PRINTED NAME: Jim Gaylor, CHMM

****

DEFINITION: OWNER OR OPERATOR: Any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation or both.

****

ADDITIONAL COMMENTS: This asbestos removal consist of both friable and non-friable asbestos containing material.

EPA NESHAP AUTHORITY: **OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**
Air Quality Div., 707 N. Robinson, P.O. Box 1677
OKC, OK 73101-1677
or
Tulsa Regional Office, 3105 E. Skelly Drive, Suite 200, Tulsa, OK 74105

NOTE: Please submit your Notification to the DEQ office closest to your job site.

Oklahoma Department of Labor
Lloyd L. Fields, Commissioner
www.labor.ok.gov

Oklahoma City
3017 North Stiles, Suite 100
Oklahoma City, OK 73105
405-521-6464
888-269-5353
Fax 405-521-6025

Tulsa
440 South Houston, Suite 330
Tulsa, OK 74127
918-581-2400
Fax 918-581-2431

Oklahoma Accreditation Plan (OAP) Inspection Form

Name of Facility _____ Date _____ Time _____

Facility Address _____ Reason for Inspection: ☐ Routine ☐ Citizen Complaint

City _____ Zip _____ ☐ Response Action ☐ Other _____

ODOL Project Numb, if applicable _____ Contractor _____

Owner name _____ Contractor address _____

Owner address _____ City _____ Zip _____

Owner phone _____ Contractor office phone _____

Contact person _____ Contact person _____

Abatement Project Description (size of project, type of material, methods used, etc.)

_____

_____

_____

OPENING CONFERENCE

Personnel present and interviewed:

Name _____ Title _____

Name _____ Title _____

Name _____ Title _____

ODOL Inspector accompanied by other State or Federal employee(s)

Yes ☐ No ☐

Name _____ Title _____

Name _____ Title _____

Credentials presented to:

Name _____ Title _____

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 _____

License # _____ Exp. Date _____

Date of Inspection _____

AIR MONITORING DATA

Name of Laboratory _____

Address _____

City _____ Zip _____

License # _____ Exp. Date _____

On - site air tech contact _____ Phone _____

Type of analysis TEM ☐ PCM ☐

ACCREDITATION OF CONTRACTORS & WORKERS

Contractors/Supervisors:

Name _____ License# _____

Issue Date _____ Exp. Date _____

Name _____ License# _____

Issue Date _____ Exp. Date _____

Name _____ License#. _____

Issue Date _____ Exp. Date _____

ACCREDITATION OF CONTRACTORS & WORKERS, cont.

Workers:

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

Name _____ License #: _____

Issue Date _____ Exp. Date _____

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 interior hallways connecting buildings, porticos, and mechanical systems used to condition interior space.

Recommendations & Remarks _____

Orders _____

Inspector: _____ **Contractor or Representative:** _____

Oklahoma Department of Labor
Mark Costello, Commissioner
www.labor.ok.gov

Oklahoma City
3017 North Stiles, Suite 100
Oklahoma City, OK 73105
405-521-6464
888-269-5353
Fax 405-521-6025

Tulsa
440 South Houston, Suite 309
Tulsa, OK 74127
918-581-2400
Fax 918-581-2431

Abatement Preparation Inspection Form

Abatement Project: _____ Date: ____ - 29 - ____ Time: ____ : ____

Project No.: _____ Phase: _____

Project Address Location: _____ City: _____ Zip: _____

Contractor: _____ Contact Person: _____

Project Phone No.: _____ Contractor's Home Office Phone No.: 341 9670

Project Owner: _____ Owner's Rep.: _____

A = Acceptable.
D = Denied; must be correct 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 correct shall constitute a Serious Violation. **

	A	D	NA	X
(1) Work site barriers and warning signs	☐	☐	☐	☐
(2) Toilet facilities provided	☐	☐	☐	☐
(3) Worker licenses	☐	☐	☐	☐
(4) Emergency telephone #'s	☐	☐	☐	☐
(5) OSHA forms, poster (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) Electrical panel outside work area	☐	☐	☐	☐
(17) Temporary wiring installed by licensed electrician LIC #: _____	☐	☐	☐	☐
(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" siderails and 4" toeboards	☐	☐	☐	☐
(42) Scaffolding from 4' to10' 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 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	☐	☐	☐	☐

☐ # OF GLOVEBAGS ☐ # OF FULL CONTAINMENTS ☐ # OF MINI CONTAINMENTS

Recommendation & Remarks: _____

Orders: _____

_____ _____
Inspector's Signature **Contractor's or Representative's Signature**

White Copy: ODOL Yellow Copy: Consultant Pink Copy: Contractor/Owner

Notice of Inspection

Oklahoma Department of Labor

Mark Costello, Commissioner

www.labor.ok.gov

Oklahoma City
3017 North Stiles, Suite 100
Oklahoma City, OK 73105
405-521-6464
888-269-5353
Fax 405-521-6025

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.		
4-29-11	[illegible]	[illegible]	14:20	Crystal Creek

3. INSPECTOR ADDRESS	4. COMPANY ADDRESS
3017 N Stiles OKC OK 73105	1151 Cornell Parkway, Suite 200 OKC, OK

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:

Verify licenture of supervisor, workers and Air Tech at Norman Hangar
2232 Goddard Ave
Norman, OK

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	
[illegible]		[illegible]	
NAME		NAME	
[illegible]		[illegible]	
TITLE	DATE SIGNED	TITLE	DATE SIGNED
Inspector	4-29-11	[illegible]	4-29-11

ODOL Asbestos Inspection Notice 1/10/2011

Marshall Environmental Management, Inc.
Certificate of Analysis

Project		Report To		Invoice To	
Lab Log Number	0036-042911-PCM	Client	State of Oklahoma - Department of Central Services Construction and Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division
Project Id.	0047-AB-042911	Attention	Cindy, Melton Administrative Programs Officer	Attention	Dustin Davidson Environmental Programs Specialist
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73102	Address	P.O. Box 1677 Oklahoma City, OK 73102
Site Contact	Jim Gaylor	Phone #	405-522-4805	Phone #	405-702-5115
Phone #	405-831-9670	Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Laboratory Identification	Date Sampled	Field Identification	Sampling Location	Pump Number	Start Time	End Time	Total Time	Start Flow	End Flow Rate	Average Flow	Total Volume	Fiber Count	Fields	F/mm^2	F/cc	L.C.L.	U.C.L.	Detection Limit
0036	4/29/2011	-01	Background East	1	9:23	12:13	170.00	10.0	10.0	10.0	1700.0	1	100	1.2739	B.D.L.	0.0001	0.0005	0.0029
0036	4/29/2011	-02	Background West	5	9:24	12:13	169.00	10.0	10.0	10.0	1690.0	1.5	100	1.9108	B.D.L.	0.0001	0.0008	0.0029
0036	4/29/2011	-03	Background Center	3	9:26	12:13	167.00	10.0	10.0	10.0	1670.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0029
0036	4/29/2011	-06	Field Blank									0	100					
0036	4/29/2011	-07	Transportation Blank									0	100					

Jacob Jones		May 1, 2011
Analyst Name (Print)	Analyst Signatrue	Date Analyzed

Jacob Jones
Samples Collected By (Print)

Analytical Method:	NIOSH 7400
Lab Accreditation:	AIHA PAT ID# 102334
Microscope:	Olympus BH-2
Filter Area:	385
Field Area:	0.01

B.D.L.	Below Detection Limit
L.C.L.	Lower Confidence Limit
U.C.L.	Upper Confidence Limit
F/cc	Fibers per Cubic Centimeter
F/mm^2	Fibers per Millimeter Squared

Present Activity:
Background Air
Monitoring

Personal Protective Equipment
NA

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-100
Oklahoma City, OK 73159
Office: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

Marshall Environmental Management, Inc.
Certificate of Analysis

Project		Report To		Invoice To	
Lab Log Number	0036-042911-PCM	Client	State of Oklahoma - Department of Central Services Construction and Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division
Project Id.	0047-AB-042911	Attention	Cindy, Melton Administrative Programs Officer	Attention	Dustin Davidson Environmental Programs Specialist
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73102	Address	P.O. Box 1677 Oklahoma City, OK 73102
Site Contact	Jim Gaylor	Phone #	405-522-4805	Phone #	405-702-5115
Phone #	405-831-9670	Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Laboratory Identification	Date Sampled	Field Identification	Sampling Location	Pump Number	Start Time	End Time	Total Time	Start Flow Rate	End Flow Rate	Average Flow Rate	Total Volume	Fiber Count	Fields	F/mm^2	F/cc	L.C.L.	U.C.L.	Detection Limit
0036	4/29/2011	-01	T. Brown 400091	LF2	13:34	15:18	104.00	2.0	2.0	2.0	208.0	3	100	3.8217	B.D.L.	0.0014	0.0128	0.0236
0036	4/29/2011	-02	J. Tiger 400273	LF4	13:33	15:18	105.00	2.0	2.0	2.0	210.0	1.5	100	1.9108	B.D.L.	0.0007	0.0063	0.0234
0036	4/29/2011	-03	Inside Area	3	13:25	15:15	110.00	2.0	2.0	2.0	220.0	3	100	3.8217	B.D.L.	0.0013	0.0121	0.0223
0036	4/29/2011	-04	Outside Area	5	13:26	15:18	112.00	2.0	2.0	2.0	224.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0219
0036	4/29/2011	-05	Neg Air - 1	8	13:29	15:19	110.00	2.0	2.0	2.0	220.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0223
0036	4/29/2011	-06	Neg Air - 2	7	13:30	15:20	110.00	2.0	2.0	2.0	220.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0223
0036	4/29/2011	-07	Outside Clean Room	6	13:30	15:22	112.00	2.0	2.0	2.0	224.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0219
0036	4/29/2011	-08	Load Out	4	13:30	15:23	113.00	2.0	2.0	2.0	226.0	1	100	1.2739	B.D.L.	0.0004	0.0039	0.0217
0036	4/29/2011	-09	Field Blank									0	100					
0036	4/29/2011	-10	Transportation Blank									0	100					

Jacob Jones		May 1, 2011
Analyst Name (Print)	Analyst Signature	Date Analyzed

Jacob Jones
Samples Collected By (Print)

Analytical Method:	NIOSH 7400
Lab Accreditation:	AIHA PAT ID# 102334
Microscope:	Olympus BH-2
Filter Area:	385
Field Area:	0.01

B.D.L.	Below Detection Limit
L.C.L.	Lower Confidence Limit
U.C.L.	Upper Confidence Limit
F/cc	Fibers per Cubic Centimeter
F/mm^2	Fibers per Millimeter Squared

Present Activity:
Glovebag Removal

Personal Protective Equipment
Full Face
Tyvek

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-100
Oklahoma City, OK 73159
Office: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

Marshall Environmental Management, Inc.
Certificate of Analysis

Project		Report To		Invoice To	
Lab Log Number	0036-042911-PCM	Client	State of Oklahoma - Department of Central Services Construction and Properties Division	Client	Oklahoma Department of Environmental Quality Land Protection Division
Project Id.	0047-AB-042911	Attention	Cindy, Melton Administrative Programs Officer	Attention	Dustin Davidson Environmental Programs Specialist
Project Address	2232 Goddard Avenue Norman, OK 73069	Address	P.O. Box 53448 Oklahoma City, OK 73102	Address	P.O. Box 1677 Oklahoma City, OK 73102
Site Contact	Jim Gaylor	Phone #	405-522-4805	Phone #	405-702-5115
Phone #	405-831-9670	Fax #	405-522-0051	Fax #	
Cell #		Cell #		Cell #	
email		email	cindy_melton@dcs.state.ok.us	email	dustin.davidson@deq.ok.gov

Laboratory Identification	Date Sampled	Field Identification	Sampling Location	Pump Number	Start Time	End Time	Total Time	Start Flow	End Flow Rate	Average Flow	Total Volume	Fiber Count	Fields	F/mm^2	F/cc	L.C.L.	U.C.L.	Detection Limit
0036	4/29/2011	-08	Clearance East	2	15:33	17:42	129.00	10.0	10.0	10.0	1290.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0038
0036	4/29/2011	-09	Clearance West	4	15:34	17:43	129.00	10.0	10.0	10.0	1290.0	1	100	1.2739	B.D.L.	0.0001	0.0007	0.0038
0036	4/29/2011	-10	Clearance North	3	15:36	17:43	127.00	10.0	10.0	10.0	1270.0	2.5	100	3.1847	B.D.L.	0.0002	0.0017	0.0039
0036	4/29/2011	-11	Clearance South	5	15:38	17:44	126.00	10.0	10.0	10.0	1260.0	0	100	0.0000	B.D.L.	0.0000	0.0000	0.0039
0036	4/29/2011	-12	Clearance Center	8	15:39	17:45	126.00	10.0	10.0	10.0	1260.0	2	100	2.5478	B.D.L.	0.0002	0.0014	0.0039
0036	4/29/2011	-13	Field Blank									0	100					
0036	4/29/2011	-14	Transportation Blank									0	100					

Jacob Jones		May 1, 2011
Analyst Name (Print)	Analyst Signatrue	Date Analyzed

Jacob Jones
Samples Collected By (Print)

Analytical Method:	NIOSH 7400
Lab Accreditation:	AIHA PAT ID# 102334
Microscope:	Olympus BH-2
Filter Area:	385
Field Area:	0.01

B.D.L.	Below Detection Limit
L.C.L.	Lower Confidence Limit
U.C.L.	Upper Confidence Limit
F/cc	Fibers per Cubic Centimeter
F/mm^2	Fibers per Millimeter Squared

Present Activity:
Glovebag Removal
Clearance

Personal Protective Equipment
Full Face
Tyvek

Marshall Environmental Management, Inc.
1601 Southwest 89th Street, Suite A-100
Oklahoma City, OK 73159
Office: (405) 616-0401
Fax: (405) 681-6753
marshenv@swbell.net

SECTION 5

Norman Lead Clearance Testing Results

SECTION 6

Norman Disposal Testing Results

Environmental Testing Inc. 488-2400
4619 N. Santa Fe, OKC, OK 73118 - (405) 488-2400 - (405) 488-2404 fax

Analytical Report

Report Date:	09/09/2011
Order #	2011090116
Project #	11-012

Laboratory Certificate # 7211

Client: **Mr. Michael Jenkinson**
Crystal Creek Environmental Solutions
1401 Cornell Parkway
Oklahoma City, OK 73127

Project: Norman

Analytical Results

Client Sample ID: **T2** ETI ID: **1**
Sample Collected : **09/08/2011 @ 18:01** Matrix: **Aqueous**

Parameter	Result	Units	Analyzed On	Analyst	Method
Phosphorus, Total	16.0	mg/L	09/09/2011 10:20:00 AM	DS	4500-P B 5

Respectfully Submitted:

Russell Britten
President

Unless ETI receives prior notification, all sample material not consumed in analysis will be retained for a period of 30 days before disposal.

Environmental Testing Inc. 488-2400
4619 N. Santa Fe, OKC, OK 73118 - (405) 488-2400 - (405) 488-2404 fax

Quality Control Report

Report Date: 09/09/2011
Order # 2011090116

Laboratory Certificate # 7211

Quality Control

Aqueous

Blank

Parameter	QC Value	Units	ETI ID
Phosphorus, Total	<0.150	mg/L	1

LCS

Parameter	QC Value	Units	ETI ID
Phosphorus, Total	102	% rec.	1

Matrix Spike

Parameter	QC Value	Units	ETI ID
Phosphorus, Total	105	% rec.	1

Matrix Spike Dup

Parameter	QC Value	Units	ETI ID
Phosphorus, Total	105	% rec.	1

E = Estimated Value (above linear range)
M = Out of Control Due to Matrix Effect
D = Surrogate or Matrix Spike Diluted Out
Q = Outside of QC Limits on Both Original and Rerun
C = Possible Laboratory Contamination
* = Out of Control

J = Estimated Value (below linear range)
*TA = Lab ID: 9412
*ER = Lab ID: 8727

Environmental Testing Inc. 488-2400
4619 N. Santa Fe, OKC, OK 73118 - (405) 488-2400 - (405) 488-2404 fax

Analytical Report

Report Date:	09/07/2011
Order #	2011090031
Project #	11-017

Laboratory Certificate # 7211

Client: **Mr. Michael Jenkinson**
Crystal Creek Environmental Solutions
1401 Cornell Parkway
Oklahoma City, OK 73127

Project: Norman

Analytical Results

Client Sample ID: **Tanks S1** ETI ID: **1**
Sample Collected : **09/02/2011 @ 12:10** Matrix: **Aqueous**

Parameter	Result	Units	Analyzed On	Analyst	Method
Lead	0.162	mg/L	09/07/2011 02:02:23 PM	JZ	200.7

Respectfully Submitted:

Russell Britten
President

Unless ETI receives prior notification, all sample material not consumed in analysis will be retained for a period of 30 days before disposal.

Environmental Testing Inc. 488-2400
4619 N. Santa Fe, OKC, OK 73118 - (405) 488-2400 - (405) 488-2404 fax

Quality Control Report

Report Date: 09/07/2011
Order # 2011090031

Laboratory Certificate # 7211

Quality Control

Aqueous

Blank

Parameter	QC Value	Units	ETI ID
Lead	<0.01	mg/L	1

Duplicate

Parameter	QC Value	Units	ETI ID
Lead	1.9	% dif.	1

LCS

Parameter	QC Value	Units	ETI ID
Lead	102	% rec.	1

Matrix Spike

Parameter	QC Value	Units	ETI ID
Lead	108	% rec.	1

Matrix Spike Dup

Parameter	QC Value	Units	ETI ID
Lead	106	% rec.	1

E = Estimated Value (above linear range)
M = Out of Control Due to Matrix Effect
D = Surrogate or Matrix Spike Diluted Out
Q = Outside of QC Limits on Both Original and Rerun
C = Possible Laboratory Contamination
* = Out of Control

J = Estimated Value (below linear range)
*TA = Lab ID: 9412
*ER = Lab ID: 8727

CHAIN OF CUSTODY RECORD

ETI
ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2401

Oilab

SAMPLE SERIES #: 20110910031

DUE DATE: ____ - ____ - ____

COMPANY: Crystal Creek
1401 Carroll Parkway
OKC, OK 73108

PHONE#: 942-2233

P.O. #:

CLIENT CONTACT: M. Jackson

PROJECT #: 11-017 / MANAGER:

SITE LOCATION: Norman

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P - PLASTIC
G - GLASS
V - VOA
O - OTHER
T - TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSES: Level I Total	LAB COMMENTS
	Tank 51	1	250L	P	1	9-2-11	1210			

SAMPLE CONDITION: RCVD @ 9.2°C
COOL

SAMPLER:

FIELD PH:
TIME:
CALIB: 4 7 10
TEMP:
COND:

RELINQUISHED BY:
DATE: 9-2-11
TIME: 1315

RELINQUISHED BY:
DATE: 9/7/11
TIME: 1455 1555

RELINQUISHED BY:
DATE:
TIME:

RECEIVED BY:

RECEIVED BY:

RECEIVED BY:

DATE: 9-2-11
TIME: 13:15
DATE: 9/7/11
TIME: 1455 1555
DATE:
TIME:

SPECIAL INSTRUCTIONS
☐ RUSH DATE REQUIRED
(ADDITIONAL COST MAY APPLY)
☐ REGULAR

COMMENTS:

SECTION 7

Waste Manifest

WASTE CONNECTIONS INC.
Connect with the Future

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV.
If waste is NOT asbestos waste, complete only Sections I, II and III.

No. 041890

Section I GENERATOR (Generator completes all of Section I)

a. Generator Name: ODEQ
b. Generating Location: NORMAN HANGER

c. Address: ~~[illegible]~~ 707 N Robinson OKC, OK 73102
d. Address: 2232 Goddard Ave
Norman Oklahoma, 73069

e. Phone No.:
f. Phone No.:

If owner of the generating facility differs from the generator, provide:

g. Owner's Name:
h. Owner's Phone No.:

i. WC WASTE CODE [illegible]

j. Description of Waste: RQ, Asbestos, 9, NA2212, PGIII

k. Quantity Units Containers No. TYPE

TYPE	
DM	METAL DRUM
DP	PLASTIC DRUM
B	BAG
BA	6 MIL. PLASTIC BAG or WRAP
T	TRUCK
O	OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

UNITS	
P	POUNDS
Y	YARDS
M^3	CUBIC METERS
Y^3	CUBIC YARDS
O	OTHER

[illegible] Generator Authorized Agent Name — [signature] Signature — 5 / 4 / 11 Shipment Date

Section II TRANSPORTER (Generator complete a-d; Transporter II complete h-l)

TRANSPORTER I

a. Name: [illegible] Transportation Co., Inc.
b. Address: P. O. Box 1307
Shawnee, OK 74802

Driver Name/Title: [illegible] Driver (PRINT/TYPE)

d. Phone No.: [illegible] e. Truck No.: 108

f. Vehicle License No./State: [illegible]

Acknowledgment of Receipt of Materials:

g. [signature] Driver Signature — 5 / 4 / 11 Shipment Date

TRANSPORTER II

h. Name:
i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgment of Receipt of Materials:

n. Driver Signature — Shipment Date

Section III DESTINATION (Generator completes a-d, destination site completes e-f)

a. Site Name: Waste Connections, Inc.
c. Phone No.: [illegible]

b. Physical Address: [illegible]
OKC, OK [illegible]
d. Mailing Address:

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

f. [illegible] Name of Authorized Agent — Signature — Receipt Date

Section IV ASBESTOS (Generator complete a-d, f, g. Shipper completes e.)

a. Shippers's* Name: Capital [illegible]
b. Shippers's* Phone No.: 405-[illegible]

c. Shippers's* Address: [illegible] Parkway OKC, OK 73108

d. Shippers's* Special Handling Instructions and additional information:

CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

e. Shippers's* Name & Title: [illegible]
b. Shipper's* Phone No.: — 5 / 4 / 11 Date

Name and Address of Responsible Agency: ODEQ, 707 N.Robinson, OKC,OK.73101

g. ☒ Friable: ☐ Non-friable: ☐ Both ______ % friable ______ % nonfriable

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WC1000 (Rev. 5/05)

RETURN TO OPERATOR

GENERATOR	Norman Hanger	ODEQ	Page 1 of 1
GENERATOR	Generating Facility Name & Physical Address Norman Hanger 2232 Goddard Ave. Norman, OK Generator's Phone (405)	Agent's (Consultant) Name & Mailing Address Michael Jenkinson, Crystal Creek Environmental Sol., Inc. 1401 Cornell Parkway Oklahoma City, OK 73108 Agent's Phone (405)942-2233	
GENERATOR	Transporter Company Name Victory Transport	State Transporter's ID NA	Transporter's Phone 405-942-2233
GENERATOR	Disposal/Recycler Facility Name/Site Address Hammer SWD 25th + High OKC OK	Facility's State (ODEQ) Permit No. N/A Facility Contact & Phone Mark Lete 361 9530	OCC PSTD Purchase Order No.

GENERATOR	US DOT Description (Including proper shipping name, hazard class & ID number) Check all that apply		Removed from site as: Drum (No.)	Bulk	Total Quantity	Unit Wt/Vol
GENERATOR	☐	Petroleum-Impacted Waste Solids, TPH < 1,000 ppm, Class III, UN 9189				
GENERATOR	☐	Petroleum-Impacted Waste Solids, TPH > 1,000 ppm, Class III, UN 9189				
GENERATOR	☑	Non-Hazardous Waste Water	2	Tanks	500	Gallons
GENERATOR	☐					
GENERATOR	Product mostly contains:					
GENERATOR	☐	Gasoline Fuel				
GENERATOR	☐	Diesel Fuel				
GENERATOR	☐	Transmix				
GENERATOR	☑	Hampton Laundry Wash Water				
GENERATOR	☐	Construction Debris				

GENERATOR — Additional Descriptions for Materials Listed Above

Wash water from cleaning hanger after lead paint abatement.
Waste water low conentration of lead.

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 national government regulations.

GENERATOR	Printed/Typed Name	Signature	Month/Day/Year
	Michael Jenkinson		9-14-11

Transporter's Acknowledgement of Receipt of Materials

	Printed/Typed Name	Signature	Month/Day/Year
	Victor Reyes	Victor Reyes	9-14-11

FACILITY	Discrepancy Indication Space	Facility Fee Rate Price	Per	Unit
			☐	Ton
			☐	Cubic Yard
			☑	Gallon
			☐	Other

Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted above

FACILITY	Printed/Typed Name	Signature	Month/Day/Year

Consultant's Verification Signature _____ Date 9-14-11

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 918-583-2021	4. Manifest Tracking Number 004356456 FLE

GENERATOR

5. Generator's Name and Mailing Address
Oklahoma Department of Environmental Quality
PO Box 1677
Oklahoma City, Oklahoma 73101-1677
Generator's Phone: 405-702-1001

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
YSR INC.
U.S. EPA ID Number
OKD000003459

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Systech Environmental Corp.
1420 S. Cement road
Ferdonia, KS 66736
U.S. EPA ID Number
KSD980633259
Facility's Phone: (800) 776-7224

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. (RQ100f) Waste Flammable Liquid, N.O.S. 3,UN1993, PGII,(D001,F003,F005)(ERG#128)	3	DM	165	G	D001	F003	F005
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
N.A.

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Mike Jenkinson
Signature
Month: 7 Day: 9 Year: 11

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Terrell E. Enoch
Signature
Month: 7 Day: 9 Year: 11

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month: Day: Year:

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Oil Transfer Report

Victory Services, LTD., Co.
P.O. Box 1003, Noble, OK 73068
Telephone: (405)
Cell: (405) 694-0468

DATE 9-14-11

COMPANY Crystal Creek

LEASE NAME & NO. Mayman - [illegible]

LEGAL ______ COUNTY Cleveland

TIME DISPATCHED ______ A.M. ______ P.M. ______

TIME LOADED ______ A.M. ______ P.M. ______

TIME UNLOADED ______ A.M. ______ P.M. ______

TIME RE-DISPATCHED ______ A.M. ______ P.M. ______

DISPOSAL / DESTINATION [illegible]

TRUCK SIZE ______

PRODUCT: MUD Water [illegible] BBLS ______ PPG

WATER Empty 2 Stock BBLS

OTHER Tanks

TANK SIZE	TOP GAUGE	BOTTOM GAUGE	BBLS
1st			
2nd			

TRUCK NUMBER & DRIVER'S NAME #1 Victor

WEATHER CONDITIONS ______

CUSTOMER APPROVAL ______

4298

CONFIRMATION SAMPLING

ARMORY LEAD CONFIRMATION SAMPLING
NORMAN ARMORY HANGAR
2332 GODDARD AVENUE
NORMAN, OKLAHOMA

Prepared For:
Oklahoma Department of Environmental Quality
Land Protection Division
707 N. Robinson Avenue
Oklahoma City, OK 73102

September 13, 2011

ENERCON
ENERCON SERVICES, INC.
6525 North Meridian, Suite 400
Oklahoma City, Oklahoma 73116
(405) 722-7693 Fax: (405) 722-7694

Prepared by:

Marshall L. Branscum
Lead-Based Paint Inspector
OKINSR13415

Reviewed by:

Emmett W. Muenker, M.E.
Lead-Based Paint Inspector/Risk Assessor
OKRASR-11260

TABLE OF CONTENTS

APPENDICES

1.0 PURPOSE AND SCOPE

This clearance sampling was requested by the Oklahoma Department of Environmental Quality, Land Protection Division, in order to confirm that lead remediation at the Norman Armory Hangar, 2332 Goddard Avenue, Norman, Oklahoma, had been satisfactorily completed. Enercon was contracted to conduct confirmation wipe samples following remediation using the sampling protocols described in the Scope of Work provided in Appendix A.

2.0 BACKGROUND

The State of Oklahoma has determined that a number of armories located throughout the State are no longer needed and ownership is to be transferred. Prior to these transfers, environmental investigations were conducted by the Oklahoma Department of Environmental Quality to determine if there are any environmental issues associated with these armories. As a result, inspections for lead contamination and lead-based paint have been conducted, resulting in contracts for remediation of lead contamination by private contractors. In order to determine if the contamination has been satisfactorily remediated, confirmation testing is being done following remediation by firms licensed by the State to conduct Lead-Based Paint Inspections and Clearance Tests. These firms are independent of the remediation contractor. The remediation contractor for the Norman Armory Hangar was Crystal Creek Environmental Solutions, Inc., 1401 Cornell Parkway, Suite 100, Oklahoma City, Oklahoma 73108.

3.0 CONFIRMATION PROCEDURES

Confirmation of the adequacy of remediation is done by collecting wipe samples on the floors of the hangar on a room by room basis using the sampling criteria set forth in the Scope of Work (Appendix A). All wipe samples are collected by an Oklahoma-licensed LBP Inspector or Risk Assessor who is employed by an Oklahoma-licensed Lead-Based Paint Firm. Copies of these licenses are provided in Appendix B. The procedure involves using a floor plan layout of the hangar to mark all sample locations and collecting samples using a 12" by 12" template and lead wipes to collect the samples. In the aircraft hangar bay the floor was gridded using a 3x3 grid for rooms 50 feet long or longer. For rooms longer than 50 feet, the room was divided into two halves, with each half using a 3x3 grid for sampling. For other areas in the hangar, single wipe samples were collected from the floor in areas where lead-based paint abatement had been completed. For larger rooms, a 3x3 gridded area was sampled for elevated lead dust levels. For other sample locations outside the aircraft hangar bay, samples were collected within ten feet of the doorway for smaller rooms. The Inspector marked the

grid intersections and wipe sample locations with duct tape in preparation for sampling. Procedures for individual wipe samples as outlined for EPA/HUD dust wipe sampling protocols were used for this project.

4.0 CONFIRMATION SAMPLING

4.1 Results of Initial Confirmation Sampling Following Remediation - South Half of Building Offices and Hangar Bay

The initial round of clearance testing was conducted on May 31, 2011 following remediation in the south half of the building. The south half of the building included rooms 1-6 and 13S. Rooms 1-6 were offices and Room 13S was the south half of the hangar bay. The south half of the hangar was approximately 75 FT long; therefore, it was divided into two 37.5 FT long 3 x 3 gridded areas for wipe sampling. A total of 6 wipe samples were collected from the floor of the hangar bay. Five of the six samples collected from the hangar bay contained lead in excess of 40 $\mu g/ft^2$. Two of the six samples collected from the office area contained lead in excess of 40 $\mu g/ft^2$. Appendix C contains a sketch showing the areas that exceeded the threshold during the initial round of sampling in the south half of the building. The laboratory report and chain of custody are located in Appendix F with the results for the May 31, 2011, initial round of sampling.

4.2 Results of Second Confirmation Sampling Following Re-cleaning in South Half of Building Offices and Hangar Bay

The areas that failed the initial clearance testing in the south half of the building were re-cleaned and then re-sampled on June 6, 2011. A total of six wipe samples were collected in the Hangar Bay and a total of two wipe samples were collected in the office area. The two wipe samples collected in the office area were below the threshold level. One of the six samples collected from the hangar bay contained lead in excess of 40 $\mu g/ft^2$. Appendix D contains a sketch showing the areas that exceeded the threshold during the second round of sampling in the south half of the hangar bay. The laboratory report and chain of custody are in Appendix F for the June 6, 2011, re-sampling.

4.3 Results of Third Confirmation Sampling Following Re-cleaning in South Half of Hangar Bay

The areas that failed the second confirmation sampling following re-cleaning in the south half of the Hangar Bay were re-cleaned and then re-sampled on July 7, 2011. A total of three wipe samples were collected. All three of the samples were below the threshold of 40 $\mu g/ft^2$. A floor plan layout showing the location of the wipe samples is located in Appendix E and the laboratory report and

chain of custody are found in Appendix F.

4.4 Results of Initial Confirmation Sampling Following Remediation – North Half of Building Office Area and Hangar Bay

On August 15, 2011, initial confirmation wipe samples were collected in the North Half of the Hangar Bay and Office Areas. A total of 12 samples were collected, with no samples exceeding the 40 $\mu g/ft^2$ threshold. A floor plan layout showing the location of the wipe samples and those rooms/areas that were sampled is located in Appendix G, the laboratory report and chain of custody are found in Appendix H.

5.0 CONCLUSIONS

Based upon the foregoing confirmation sampling, it is concluded that the lead hazard associated with the floors in the Hangar Bay and Office Areas have been effectively mitigated.

APPENDIX A

SCOPE OF WORK
For
Armory Lead Confirmation Sampling

The Department of Environmental Quality will soon be hiring contractors to remediate lead-based paint and lead contaminated dust from former National Guard Armories located in Sulphur, Minco, Marlow, Pawhuska, Perry, and Kingfisher, Oklahoma. Once abatement is complete, confirmation wipe samples will need to be taken on floors in areas where lead-based paint abatement was performed and in rooms that previously tested high for lead dust on floors. Attached is the Confirmation Sampling Instructions (Attachment 1). Below is a detailed list of what will be required at each site.

- Perform each sampling event within five (5) days of notice from remediation contractor.
- Provide DEQ with sampling plan for approval prior to each sampling event. There will be up to five (5) sampling events per armory.
- Travel to the each site up to (5) times to take confirmation wipe samples.
- A total of 250 confirmation wipe samples will be taken per armory.
- A total of 1500 confirmation wipe samples will be taken for this project.
- Samples will be run with a 24 hour turnaround time and results with sample location map will be submitted to DEQ for review.
- Once all sampling is complete at an armory, a Confirmation Sampling Report will be submitted to DEQ for approval.
    - A total of six (6) Confirmation Sampling Reports shall be submitted.
    - One report will be submitted for each armory.

Confirmation Sampling Instructions

Protocol for Collecting Wipe Samples

1. Prepare a rough sketch of the area(s) or room(s), to be wipe sampled.
    a. Mark all sample locations on map before sample event starts.
    b. When possible DEQ will supply a floor plan map with sample locations marked.
2. A new set of clean, impervious gloves should be used for each sample to avoid cross contamination of samples.
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

Indoor Firing Range

1. To properly sample the IFR, 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 range surface less than 50 feet in length shall be divided into a 3 section by 3 section grid. (Figure 1 and Figure 2)
    - Each range 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. If a sample fails, the entire 3 section by 3 section grid shall be re-cleaned and re-sampled.
    - Confirmation samples taken ***after remediation*** are considered to have failed if results exceed **200 ug/ SF**.
    - Confirmation samples taken ***after sealing*** are considered to have failed if results exceed **40 ug/SF**.

3. If more than ten (10) confirmation samples fail, the entire IFR shall be re-cleaned.

4. DEQ reserves the right to take additional confirmation samples.

Areas Where Lead-Based Paint Abatement Has Been Performed

1. One (1) confirmation wipe sample shall be taken on the floor within ten feet of the abatement area.
    a. If a confirmation sample for lead dust is located within ten feet of the lead-based paint abatement area, this sample can count as both the lead-based paint and lead dust confirmation sample (See below for details on lead dust confirmation sampling).
2. Sample results in excess of **40 ug/SF** are considered to have failed. If a sample result fails, the area shall be re-cleaned and re-sampled.

Areas Outside IFR 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

APPENDIX B

Department of Environmental Quality

This is to Certify That

ENERCON SVC INC

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

FIRM

Certification #: OKFIRM11152

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

Issued on: 4/1/2011 Expires on: 3/31/2012

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

MARSHALL BRANSCUM

INSPECTOR

Certification #: OKINSR13415

Issued on: 4/1/2011 Expires on: 3/31/2012

Division Director
Air Quality Division

Environmental Programs Manager
Air Quality Division

Department of Environmental Quality

This is to Certify That

EMMETT MUENKER

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

INSPECTOR/RISK ASSESSOR

Certification #: OKRASR11260

This certificate is valid from the date of its issue and renewal as prescribed by law

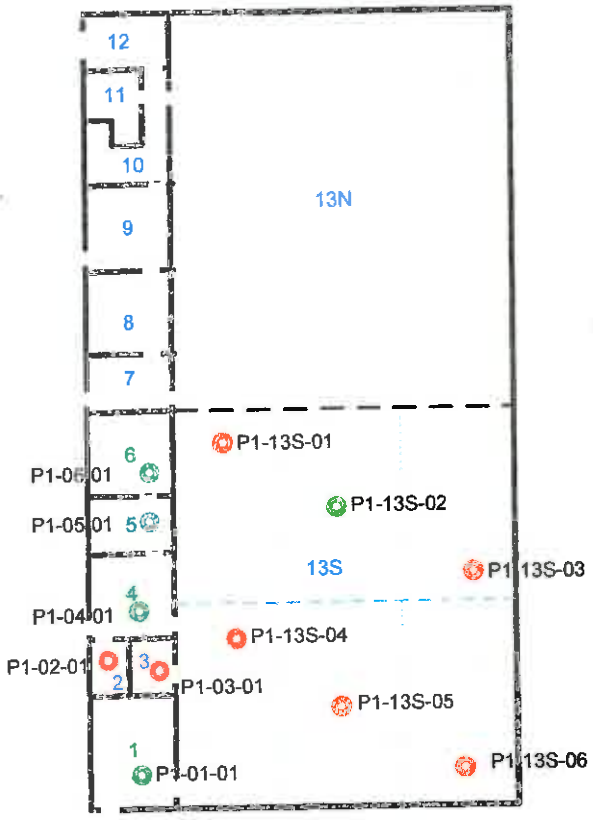
Issued on: 4/1/2011 Expires on: 3/31/2012

Division Director
Air Quality Division

DEQ OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Environmental Programs Manager
Air Quality Division

APPENDIX C



Legend

- Dust Wipe Sample Location-Positive- ≥ 40 ug / ft^2
- Dust Wipe Sample Location-Negative- < 40 ug / ft^2

National Guard Armory Hangar
2332 Goddard Avenue
Norman, Oklahoma

N

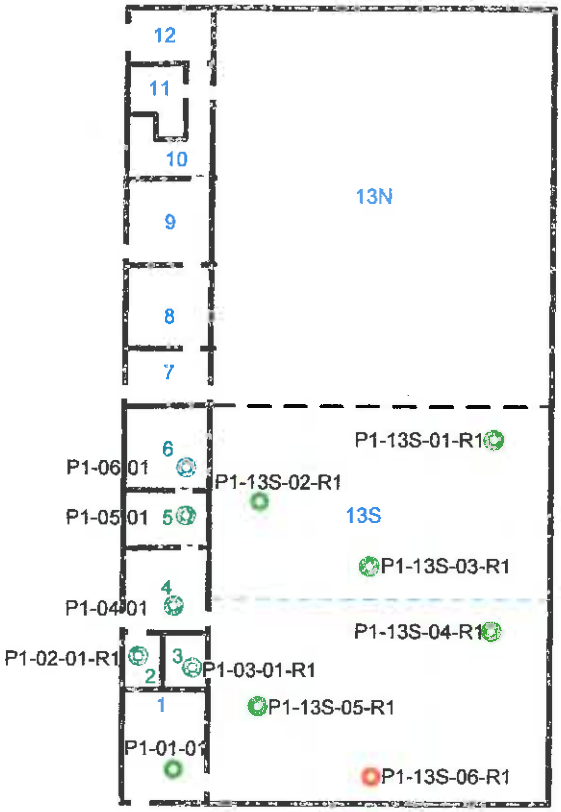
Scale: = 10 Ft.

ENERCON

FIGURE 1
South Half of Hangar
Dust Wipe Sample Results – 5-31-11

PROJECT NO: ENMISC2353

APPENDIX D



Legend

- Dust Wipe Sample Location-Positive- ≥ 40 ug / ft^2
- Dust Wipe Sample Location-Negative- < 40 ug / ft^2

National Guard Armory Hangar
2332 Goddard Avenue
Norman, Oklahoma

N

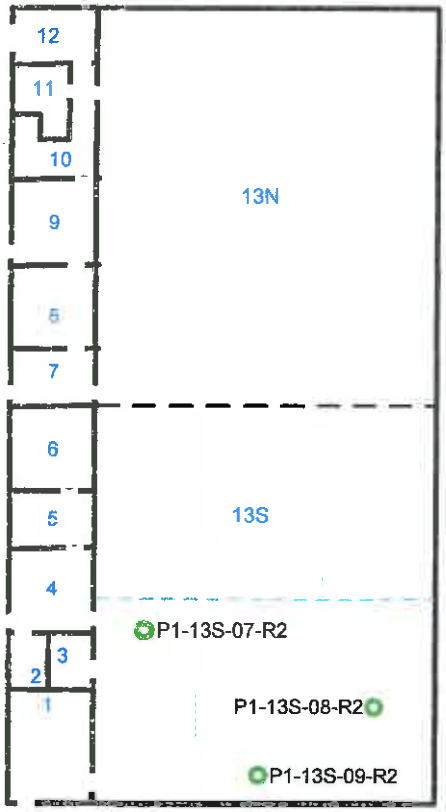
Scale: |—| = 10 Ft.

ENERCON

FIGURE 1
South Half of Hangar
Dust Wipe Resample 1 Results – 06-06-11

PROJECT NO: ENMISC2353

APPENDIX E



Legend

- Dust Wipe Sample Location-Positive- ≥ 40 ug / ft^2
- Dust Wipe Sample Location-Negative- < 40 ug / ft^2

National Guard Armory Hangar
2332 Goddard Avenue
Norman, Oklahoma

N

Scale: |—| = 10 Ft.

ENERCON

FIGURE 1
South Half of Hangar
Dust Wipe Resample 2 Results – 07-07-11

PROJECT NO: ENMISC2353

APPENDIX F

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 195679
Date Received: 05/31/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 6/1/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Norman Armory Hangar
Location: Norman, OK
Project No.: ENM-NAH

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	P1-135-01	Wipe	Lead	55.0	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
002	P1-135-02	Wipe	Lead	38.1	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
003	P1-135-03	Wipe	Lead	55.3	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
004	P1-135-04	Wipe	Lead	59.8	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
005	P1-135-05	Wipe	Lead	91.1	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
006	P1-135-06	Wipe	Lead	329	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
007	P1-01-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
008	P1-02-01	Wipe	Lead	95.7	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
009	P1-03-01	Wipe	Lead	52.1	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
010	P1-04-01	Wipe	Lead	37.7	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
011	P1-05-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)
012	P1-06-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/01/11 10:00	W EPA 7420 (1)

Authorized Signature:

Benton Miller, Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 8816
Test: Lead

Date: 6/1/2011
Matrix: Wipe

Lab Number: 195679
Approved By: Benton Miller
Date Approved: 6/1/2011

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	5	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.347	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.438	5.765	106.0	5.527	101.6	4.2
MS-W1	0.000	5.394	5.206	96.5	5.738	106.4	9.7
MS-W1	0.000	5.405	5.031	93.1	5.307	98.2	5.3

Authorized Signature: _____

Benton Miller, Analyst

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Page 1 of 1

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Lab No. 195679
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Company Name: Enercon Services Inc Acct.#: A845 Project Name: Norman Armory Hangar
Project Location: Norman OK Project Number: ENM-NAH

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Pb	PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M.	mg / cm²
1.	P1-135-01	WIPE SAMPLES	1ft sq ml	C	X					X		
2.	02	RM 13 Sump	↓	↓	↓					↓		
3.	03	↓	↓	↓	↓					↓		
4.	04	↓	↓	↓	↓					↓		
5.	05	↓	↓	↓	↓					↓		
6.	06	↓	↓	↓	↓					↓		
7.	P1-01-01	WIPE-RM 1	↓	↓	↓					↓		
8.	02-01	RM 2	↓	↓	↓					↓		
9.	03-01	RM 3	↓	↓	↓					↓		
10.	04-01	RM 4	↓	↓	↓					↓		
11.	05-01	RM 5	↓	↓	↓					↓		
12.	06-01	RM 6	↓	↓	↓					↓		

Sample Matrix Codes
- A - Soil
- B - Paint Chips
- C - Surface / Dust Wipes
- D - Bulk Miscellaneous
- E - Air Cassette
- F - Other (SPECIFY)

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME
- Same Day
- [X] 24 Hour
- 3-Day
- 5-day

CONTACT INFORMATION
Name:
Phone:
Report Results VIA (CHOOSE ONE):
- FAX:
- [X] QuanTEM WebSite
- E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date sampled	Sampled By
Bill Muenker	5/31/11 1450	Fed	CeCelia Van Eck	5/31/11 3:45	5/31/11	Bill Muenker
Relinquished By	Date/Time	VIA	Received By	Date/Time		

Saturday FedEx Shipping - CALL TO SCHEDULE
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Revision: May 2008

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Environmental Chemistry Analysis Report

QuanTEM Set ID: 195888
Date Received: 06/06/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: JLM
Date of Report: 6/7/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Norman Armory Hanger
Location: 2332 Goddard Avenue
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	P1-02-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
002	P1-03-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
003	P1-135-01-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
004	P1-135-02-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
005	P1-135-03-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
006	P1-135-04-R1	Wipe	Lead	21.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
007	P1-135-05-R1	Wipe	Lead	<16.0	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)
008	P1-135-06-R1	Wipe	Lead	141	16	ug/sq. Ft.	06/07/11 11:30	W EPA 7420 (1)

Note: Sample results have not been corrected for blank values.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 195888
Date Received: 06/06/11
Received By: Sherrie Leftwich
Date Sampled:
Time Sampled:
Analyst: JLM
Date of Report: 6/7/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Norman Armory Hanger
Location: 2332 Goddard Avenue
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method

Authorized Signature: Jamie Mills, Analyst

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 8832 **Date:** 6/7/2011 **Lab Number:** 195888
Test: Lead **Matrix:** Wipe **Approved By:** Jamie Mills
Date Approved: 6/7/2011

Notes:

Blank Data:

Type of Blank	Blank Value
ICB	0
FCB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	4.5	4.7	5.5
CCV	4.5	4.7	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.289	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.427	5.548	102.2	5.498	101.3	0.9
MS-W1	0.000	5.405	5.677	105.0	5.548	102.6	2.3

Authorized Signature: Jamie Mills, Analyst

Lead Chain-of-Custody

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Company Name: Enercon Services, Inc. Acct.#: Project Name: Norman Armory Hanger

Project Location: 2332 Goddard Avenue Project Number:

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M.	mg / cm²
1	P1-02-01-R1	Floor	144in²	C	X					X		
2	P1-03-01-R1											
3	P1-B5-01-R1											
4	-02-R1											
5	-03-R1											
6	-04-R1											
7	-05-R1											
8	-06-R1											

Sample Matrix Codes:
- A - Soil
- B - Paint Chips
- C - Surface / Dust Wipes
- D - Bulk Miscellaneous
- E - Air Cassette
- F - Other (SPECIFY)

LEGAL DOCUMENT
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TURNAROUND TIME
- [ ] Same Day
- [X] 24 Hour
- [ ] 3-Day
- [ ] 5-day

CONTACT INFORMATION
Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By / Date/Time	VIA	Received By / Date/Time	Date Sampled	Sampled By
Marshall L. Branscum 6-6-11 / 12:42pm	Hand	[illegible] 6/6 12:40	6-6	MLB

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

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Environmental Chemistry Analysis Report

QuanTEM Set ID: 197250
Date Received: 07/07/11
Received By: Barbara Holder
Date Sampled:
Time Sampled:
Analyst: BM
Date of Report: 7/8/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: 2332 Goddard Norman OK
Location: Bld 2232 Hanger National Guard Armory
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	P1-135-07-R2	Wipe	Lead	16.3	16	ug/sq. Ft.	07/08/11 12:00	W EPA 7420 (1)
002	P1-135-08-R2	Wipe	Lead	35.5	16	ug/sq. Ft.	07/08/11 12:00	W EPA 7420 (1)
003	P1-135-09-R2	Wipe	Lead	29.6	16	ug/sq. Ft.	07/08/11 12:00	W EPA 7420 (1)

Authorized Signature: _____

Benton Miller, Analyst

Note: Sample results have not been corrected for blank values.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 8933 **Date:** 7/8/2011 **Lab Number:** 197250
Test: Lead **Matrix:** Wipe **Approved By:** Benton Miller
Date Approved: 7/8/2011

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	4.7	5.5
ICV	0.8	1	1.2
RLVS	0.256	0.346	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.427	5.606	103.3	5.585	102.9	0.4
MS-W1	0.000	5.460	5.676	104.0	5.334	97.7	6.2

Authorized Signature: _____

Benton Miller, Analyst

Lead Chain-of-Custody

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Company Name: Envircon Services Inc Acct.#: _____ Project Name: 2332 Goddard Norman OK

Project Location: Bld 2232 Hangar National Guard Armory Project Number: _____

Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M	mg / cm²
P1-13S-07-R2	Wipe-Floor	144	C						X		
08-R2	"		C						X		
09-R2	"		C						X		

Sample Matrix Codes
A - Soil
B - Paint Chips
C - Surface / Dust Wipes
D - Bulk Miscellaneous
E - Air Cassette
F - Other (SPECIFY)

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME
- [ ] Same Day
- [X] 24 Hour
- [ ] 3-Day
- [ ] 5-day

CONTACT INFORMATION
Name:
Phone:
Report Results VIA (CHOOSE ONE)
- [ ] FAX:
- [X] QuanTEM WebSite
- [ ] E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
[signature]	7-7-11 1620	H	[signature] 420	7-7-11	7/7/11	RB
Relinquished By	Date/Time	VIA	Received By	Date/Time		

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for **Saturday FedEx only:** 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
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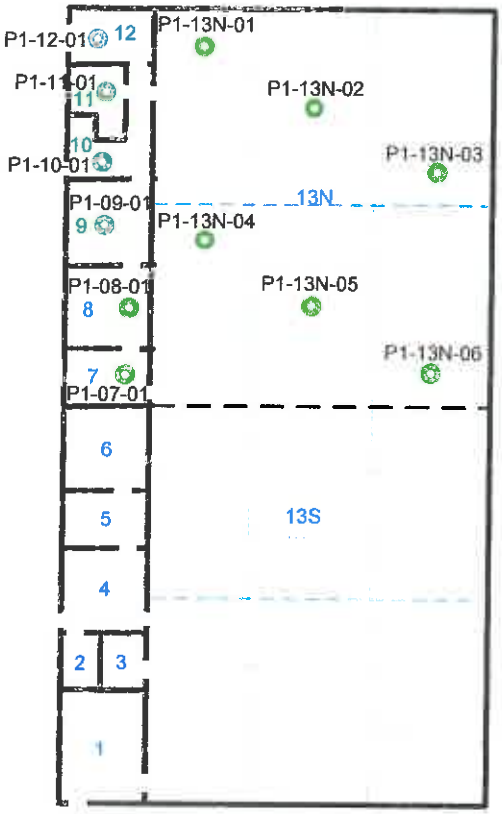
APPENDIX G



Legend

- Dust Wipe Sample Location-Positive- ≥ 40 ug / ft^2
- Dust Wipe Sample Location-Negative- < 40 ug / ft^2

National Guard Armory Hangar
2332 Goddard Avenue
Norman, Oklahoma

N

Scale: |—| = 10 Ft.

ENERCON

FIGURE 1
North Half of Hangar
Dust Wipe Results – 08-15-11

PROJECT NO: ENMISC2353

APPENDIX H

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 198751
Date Received: 08/15/11
Received By: CeCelia Van Eck
Date Sampled:
Time Sampled:
Analyst: RS
Date of Report: 8/16/2011

AIHA ID: 101352

Client: Enercon Services, Inc.
6525 N. Meridian, Suite 400
Oklahoma City, OK 73116

Acct. No.: A845

Project: Norman Hanger
Location: Norman Hanger
Project No.: EMNISC2111

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	P1-07-01	Wipe	Lead	32.3	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
002	P1-08-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
003	P1-09-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
004	P1-10-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
005	P1-11-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
006	P1-12-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
007	P1-13N-01	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
008	P1-13N-02	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
009	P1-13N-03	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
010	P1-13N-04	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
011	P1-13N-05	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)
012	P1-13N-06	Wipe	Lead	<16.0	16	ug/sq. Ft.	08/16/11 10:30	W EPA 7420 (1)

Authorized Signature: Rebecca Sparks
Rebecca Sparks, Analyst

Note: Sample results have not been corrected for blank values.

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

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7420 (1) = EPA 600/R-93/200 Preperation Modified. EPA 7420 Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preperation Modified. EPA 7082 Analysis Modified

Supplemental Report
QAQC Results

QA ID: 9061
Test: Lead

Date: 8/16/2011
Matrix: Wipe

Lab Number: 198751
Approved By: Rebecca Sparks
Date Approved: 8/16/2011

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	4.5	5	5.5
FCV	4.5	4.8	5.5
ICV	0.8	1.1	1.2
RLVS	0.256	0.341	0.384

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W2	0.000	5.427	5.772	106.4	5.760	106.1	0.2
MS-W1	0.000	5.394	5.214	96.7	5.459	101.2	4.6

Authorized Signature: Rebecca Sparks

Rebecca Sparks, Analyst

Lead Chain-of-Custody

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Page 1 of 1

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Company Name: Enercon Services, Inc Acct.#: Project Name: Norman Hanger

Project Location: Norman Hanger Project Number: ENMISC2111

	Sample Number	Sample Description	Volume of Area	Sample Matrix	Analysis: Pb	Units Requested: PPM	Wt %	mg / kg	mg / l	ug / sq. ft.	ug / cu. M.	mg / cm²
1-	P1-07-01	Floor	144 sq ft	C	X					X		
2-	-08-01											
3-	-09-01											
4-	-10-01											
5-	-11-01											
6-	-12-01											
7-	-13N-01											
8-	-13N-02											
9-	-13N-03											
10-	-13N-04											
11-	-13N-05											
12-	-13N-06											

Sample Matrix Codes

A - Soil
B - Paint Chips
C - Surface / Dust Wipes
D - Bulk Miscellaneous
E - Air Cassette
F - Other (SPECIFY)

LEGAL DOCUMENT
Please Print Legibly

TURNAROUND TIME

	Same Day
X	24 Hour
	3-Day
	5-day

CONTACT INFORMATION

Name: Marshall Branscum
Phone: 722-7693
Report Results VIA (CHOOSE ONE):
- FAX:
- X QuanTEM WebSite
- E-Mail:

Relinquished By	Date/Time	VIA	Received By	Date/Time	Date Sampled	Sampled By
Marshall L. Branscum	8-15-11 / 4:25pm	Hand	Celia Von Eek	8/15/11 4:25	8-15	MLB

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Saturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517
Mark Package 'HOLD FOR SATURDAY PICKUP'

Revision: May 2008