A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

ASBESTOS ABATEMENT CLOSEOUT REPORT

Air Force Plant 3, Building 6

3300 North 85th East Avenue
Tulsa, Oklahoma 74115

A & M Project Number 2320-002

August 20, 2020

Prepared For:

CITY OF Tulsa
A New Kind of Energy.

City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103
Michelle Barnett, P.E. (Deputy Chief of Economic Development)
Email: mbarnett@cityoftulsa.org
Phone: (918) 596-7457

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Ms. Michelle Barnett, P.E.,
Office of the Mayor
Deputy Chief of Economic Development
City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103

A & M Project Number 2320-002

Email: mbarnett@cityoftulsa.org
Phone: (918) 596-7457

REF: Asbestos Abatement Closeout Report for Air Force Plant 3, Building 6 Located at 3300 North 85th East Avenue, Tulsa, Oklahoma 74115.

Dear Ms. Barnett:

A & M Engineering and Environmental Services, Inc. (A & M) had prepared the enclosed Asbestos Abatement Closeout Report for asbestos abatement activities conducted at the above referenced facility. This report is to be maintained by the Building Owner as a permanent file of asbestos abatement records to include air monitoring during abatement documenting the absence of potential personnel exposure risk outside regulated work areas and the disposal of asbestos waste in an EPA-approved landfill.

Thank you for choosing A & M. If you have any questions, please feel free to contact us at (918) 665-6575 or via email.

Respectfully,
A & M Engineering and Environmental Services, Inc.

Jeffrey Jenkins
Senior Industrial Hygienist
Oklahoma Project Designer #143988
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Jeff Elbert
Director of Compliance
jelbert@aandmengineering.com

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APPENDICES

1.0 PROJECT BACKGROUND

The Air Force Plant 3(AFP3) facility is composed of numerous areas with different building numbers. Many of these may be contiguous to one another. Building 6 was a 2-story building and was the focus of this abatement so that it can be leased out and occupied.

Asbestos surveys were done during the 1990s and was the basis for identifying the extent of the asbestos. Building 6 was primarily insulation on a couple of Heating, Ventilation, and air conditioning (HVAC) units and piping throughout the entire Building 6. A & M Engineering and Environmental Services, Inc. (A & M) recently conducted an Asbestos of the property which identified:

A Project Design (PD) dated August 9, 2019 was developed by A & M to provide a prudent course of action for handling the abatement of asbestos-containing ceiling texture at the subject facility. The PD was submitted to the Oklahoma Department of Labor (ODOL) for approval as required. ODOL provided their approval on September 3, 2019. Specific governing regulations affecting this work include, but are not limited to, 29 CFR 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos NESHAP) and OAC 380:50 (Oklahoma Rules for Abatement of Friable Asbestos).

The City of Tulsa selected Asbestos Handlers, Inc. as the abatement contractor. A & M provided third-party monitoring and oversight on behalf of the city of Tulsa. Asbestos Handlers contracted with Environmental Hazard control, Inc. (EHCI) to provide personnel monitoring to meet part of their minority business usage requirement.

Required Notifications were filed by Asbestos Handlers and work at the site commenced on June 22, 2020 with prep work. ODOL conducted the pre-inspection on June 26, 2020 and asbestos abatement continued until July 29, 2020 when ODOL conducted the final inspection.

2.0 PROJECT RECORD DOCUMENT REQUIREMENTS

The Building Owner is required to maintain a permanent file of asbestos abatement records that include air monitoring during abatement to document the potential exposure of persons outside regulated work areas to airborne asbestos fibers and the disposal of asbestos waste in an EPA-approved landfill. The air monitoring records indicate the airborne fibers concentrations on the workers removing the asbestos, the concentrations inside the regulated work area and the concentrations outside the work area while work is in progress. They also document the concentrations inside the work area following completion of abatement to indicate that the area is safe for re-occupancy or work by others. These records are important to the Building Owner in the event subsequent claims of exposure are made by individuals in the building during the abatement process. The waste disposal manifests provide documentation that the asbestos waste removed from the building was deposited in an EPA-approved landfill. Since the asbestos is the property of the Building Owner, it is important to maintain copies of the waste disposal manifests in the event a mandated cleanup of the disposal site is ever required. In the past, some waste disposers have ended up paying for waste disposed by others because they could not document that for which they were responsible. These records are also required to be submitted to the ODOL at the completion of all abatement projects by the asbestos abatement contractor, so duplicate records may be requested by the Building Owner should he ever lose his record copy. The ODOL also maintains copies of all project designs, work plans and approvals. The ODOL performs work area consultations, preparatory inspections, in-

progress inspections, visual and final inspections on asbestos abatement projects. Their checklists include all items necessary to ensure that all personnel are properly licensed, medically fit and properly equipped for abatement work at the start of each job.

Contractual documents, such as bonds, insurance, bid solicitation, evaluation of bids, abatement contracts, change orders, and other project contractual and financial records are maintained by the Building Owner in a separate file and are not included in this report. The minimum records required to be maintained by the Building Owner are included as appendices.

At times during abatement projects, certain issues arise that are not a part of the abatement project, but related to issues with tenants, subcontractors or other entities that may be related to work in a building where asbestos is present but not part of the abatement project. Such issues may or may not be directly related to abatement work in progress in a building. When investigation or air monitoring is performed in conjunction with an issue raised by a tenant, subcontractor or other work-related entity, such records are not maintained by ODOL or other agency and must be retained by the Building Owner. Therefore, when such occur, the documentation is included in the Project Record Documents.

3.0 REGULATORY NOTIFICATIONS

Projects exceeding the threshold amounts set forth in the National Emission Standard for Hazardous Pollutants (NESHAP) require that a written notification to the Oklahoma Department of Environmental Quality (ODEQ) at least ten working days prior to commencement of abatement. This notification is the responsibility of the Building Owner, although in practice, it is generally filed by the abatement contractor as the owner's agent. The NESHAP threshold is 160 square feet (SF), 260 linear feet (LF) or 35 cubic feet (CF) of ACM. Projects involving less than these amounts do not require notification, although a courtesy notification is sometimes filed with ODEQ. The NESHAP notifications filed for AFP3, Building 6 are included in Appendix A.

4.0 PROJECT DESIGN

Projects exceeding the threshold amounts set forth in the National Emission Standard for Hazardous Pollutants (NESHAP) require that the abatement contractor file a written project notification to the ODOL with a copy of the NESHAP notification filed with ODEQ. A Project Design is required to be prepared and submitted to the ODOL for review and approval for all projects requiring a NESHAP notification. Projects involving less than the NESHAP threshold amounts require a Work Plan to be submitted to the ODOL for review and approval. A Project Design Review Form or fax memo may be issued by the ODOL denoting approval or disapproval of the Project Design; however, the presence of an ODOL Inspector on site to perform a work area preparatory inspection constitutes approval of the Project Design or Work Plan. Project Designs that are disapproved by ODOL must be revised to obtain ODOL approval. A copy of the project design and ODOL approval is provided in Appendix B.

5.0 REGULATORY INSPECTIONS

The ODOL inspects the job setup, equipment, enclosures, etc., prior to start of abatement, may perform periodic inspections, and visually inspects prior to final clearance sampling. During the ODOL area preparation inspection, the records of all contractor personnel onsite and the Air Monitoring Technician are reviewed to assure that all are properly licensed, have been fit-tested for their respirator, and are physically fit to wear a respirator. These records are maintained by the employer. Copies of the ODOL inspections are provided in Appendix C

6.0 AIR SAMPLING AND ANALYTICAL

Air sampling records and analysis results were performed both for the Contractor for his compliance with regulations governing employee exposure monitoring and for the Owner as a quality control measure on the Contractor and an independent sampling of areas inside and outside the work area to document the air quality in the event any claims of exposure to asbestos are alleged to have occurred during the abatement process. Both personal and area air monitoring are required by state and federal regulations. Copies of the air monitoring reports are included in Appendix D. Air monitoring reports include work-in-progress and clearance sampling.

7.0 WASTE DISPOSAL DOCUMENTS

Chain of custody documents for asbestos-containing materials that were removed from the facility, transported to the landfill, and accepted at the landfill. All friable asbestos waste and asbestos-contaminated materials must be properly packaged, labeled and transported by an ODOL-licensed asbestos waste transporter to an EPA-approved landfill authorized to accept asbestos waste. A Waste Generator Label is required to be included in each waste container (bagged or wrapped item) that lists the building name, address and owner. The Building Owner is required to maintain a copy of the waste disposal manifests in a permanent building records file. A copy of the Waste Disposal records is provided in Appendix E.

8.0 ASBESTOS SURVEY DOCUMENTS

Prior to abatement of facilities, a survey or inspection of areas of a building that will be affected by renovation or demolition activities must be completed by an Oklahoma-licensed Asbestos Inspector. This survey is mandated by federal and State regulations to prevent exposure of workers, building occupants and the general public to airborne asbestos fibers. It is also required to protect the environment from asbestos contamination during renovation/demolition activities. Since there is no regulatory requirement to remove asbestos from a building unless it will be disturbed during renovation/demolition, many renovation projects involve abatement only in those areas of the building that will be disturbed during the renovation process. It is essential that the Building Owner be cognizant of the location of known asbestos-containing materials remaining in his building following an asbestos abatement project that does not remove all asbestos-containing materials from the building. A copy of the asbestos survey report, which was available, is included in Appendix F.

9.0 ASBESTOS ABATEMENT LICENSES

All abatement workers must be properly licensed by the ODOL. The Workers licenses #'s are:

Name	License Class	License #	Expiration Date
Matt Gibson	Supervisor	400541	5/5/2021
David Lasker	Supervisor	402401	10/24/2020
Jesus Chauca	Worker	402105	11/12/2020
Stephanie Checa	Worker	402264	2/18/2021
Alexei L. sarduy	Worker	402012	12/7/2020
Ulises L. Romero	Worker	402298	6/6/2021
Roberto G. Cabrales	Worker	402299	5/11/2021
Luis Figeroa Pagen	Worker	402466	6/6/2021
Juan Checa	Worker	402374	2/18/2021
Carlos Sosa	Worker	402652	11/16/2020
Karina Checa	Worker	402265	9/7/2020
Johnathan M. Jimenez	Worker	401458	6/6/2021
Luis Pizarro Ramos	Worker	401421	10/5/2020
Juan Carlos Parra	Worker	402112	1/4/2021
Christopher Rhodes	Worker	402655	12/6/2020

Appendix A

Regulatory Notifications

Oklahoma Department of Labor
www.labor.ok.gov

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

Asbestos Project Checklist

☒ Initial Notification ☐ Revised Notification ☐ Emergency Notification

	NAME	ADDRESS	CITY	PHONE
Job Site:	Air Force Plant #3 Bldg. 6	3300 N Mingo Rd	Tulsa	
Contractor:	Asbestos Handlers, Inc.	6920 E Reading Pl	Tulsa	918-836-5585
Site Owner:	City of Tulsa Oklahoma	175 E 2nd St	Tulsa	918-596-7559
Gen. Contractor:				
Project Designer:	A&M Engineering	10010 E 16th St	Tulsa	918-665-6575
Air Monitoring Firm:	EHCI	2301 S Sheridan	Tulsa	918-747-1330
Air Monitoring Firm:				
Landfill:	American Environmental Landfill	212 N 177th W Ave	Sand Springs	918-245-7786
Hauler:	Asbestos Handlers, Inc.	6920 E. Reading Pl.	Tulsa	918-836-5585

MOBILIZATION DATE: 6/15/20 SCHEDULED DATE OF ASBESTOS REMOVAL: 6/22/20

PROJECT COMPLETION DATE: 8/21/20 RENOVATION: ☒ DEMOLITION: ☐ EMERGENCY: ☐

Type and percentage asbestos (attach lab reports): Included in PD

AMOUNT OF ASBESTOS TO BE ABATED: 2800 LF/ 11000 SF

ABATEMENT TECHNIQUES: Gross/Glovebag

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

X Variances
See PD

☐ Permission from owner for all rented vehicles/trailers used to haul asbestos-containing material.

_____ # of Mini-containments
TBD # of Glovebags
2 # of Containments
3 # 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:

John Malloy
Contractor/Responsible Party Signature

6/4/20
Date

Emailed 6/4/2020

Revised: 03/01/2016

EPA NOTIFICATION OF DEMOLITION OR RENOVATION

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

****

I. FACILITY INFORMATION:

OWNER: City of Tulsa Oklahoma PHONE NUMBER: (918) 596-7559

STREET ADDRESS: 175 E 2nd St CITY: Tulsa STATE: OK ZIP : 74103

FACILITY REPRESENTATIVE: Terry Thomas PHONE: (918) 596-7559

ASBESTOS ABATEMENT CONTRACTOR: Asbestos Handlers, Inc.

STREET ADDRESS: 6920 E. Reading Place CITY: Tulsa STATE: OK ZIP: 74115-4637

REPRESENTATIVE: John Malloy PHONE: (918) 836-5585

PAGER: (___) N/A MOBILE PHONE: (918) 671-3227 (JM)

AIR MONITORING FIRM OR OTHER OPERATOR: A&M

STREET ADDRESS: 10010 E 16th St CITY: Tulsa STATE: OK ZIP: 74128

REPRESENTATIVE: Jeff Jenkins PHONE: (918) 665-6575

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

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: Air Force Plant #3 Bldg 6 ADDRESS: 3300 N Mingo Rd

CITY: Tulsa STATE: OK ZIP CODE: 74116 COUNTY: Tulsa

WHERE IS ACM LOCATED ? Pipe/ Duct insulation

BUILDING SIZE: SQ. FT.: 150000 AGE: 60+ YRS. # FLOORS: 2

PRESENT USE: Vacant PREVIOUS USE: Manufacturing

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

PLM

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

A&M

EPA NOTIFICATION OF DEMOLITION OR RENOVATION CONTINUED

VII. 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:** 2800 ; SURFACING AREA - **SQUARE FEET:** 11000 ; OFF FACILITY COMPONENT -

CUBIC FEET: _____ ; **CATEGORY** I - SQ. FT. _____ ; **CATEGORY II** - SQ. / LIN. FT. _____ ;

VIII. SCHEDULED DATES OF ASBESTOS REMOVAL: START: 6/22/20 FINISH: 8/21/20

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.)

Gross/Glovebag

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):

HEPA Filtration, DBL Bagging, Decon, Criticals or Drop Cloth, Enclosure

XII. LICENSED ASBESTOS WASTE TRANSPORTER: Asbestos Handlers, Inc.

ADDRESS: 6920 E. Reading Place CITY; Tulsa STATE: OK ZIP: 74115-4637

REPRESENTATIVE: John Malloy PHONE: (918) 836-5585

XIII. STATE PERMITTED ASBESTOS WASTE DISPOSAL SITE: American Environmental Landfill

ADDRESS: 212 N 177th W Ave CITY: Sand Springs STATE: OK ZIP: 74063

REPRESENTATIVE: Raven Blunt PHONE: (918) 245-7786

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

NAME OF AGENCY: _____ 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: _____

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

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.):

Isolate area, wet material, notify DEQ.

****

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR , 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:** 6/4/20

PRINTED NAME: John Malloy

****

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

SIGNATURE OF OWNER / OPERATOR: _____ **DATE:** 6/4/20

PRINTED NAME: John Malloy

****

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:

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

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

Appendix B

Project Design

A & M Engineering and
Environmental Services, Inc.
Consulting - Design - Construction - Remediation

Asbestos Abatement Project Design
Former Air Force Plant 3, Building 6

Tulsa International Airport
City of Tulsa, Tulsa County, Oklahoma

A & M Project Number 2320-001-008

Version 1 / Revision Date – N/A

August 6, 2019

Prepared For:

CITY OF Tulsa
A New Kind of Energy

City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103
Michelle Barnett, P.E. (Deputy Chief of Economic Development)
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A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

August 6, 2019

Ms. Michelle Barnett, P.E.
Deputy Chief of Economic Development
City of Tulsa
Office of the Mayor
175 East 2nd Street, Suite 15-041
Tulsa, Oklahoma 74103

A & M Project Number 2320-001-008

Email: mbarnett@cityoftulsa.org
Phone: (918) 596-7457

REF: Asbestos Abatement Project Design (PD) for Asbestos Abatement at the Former Air Force Plant 3, Building 6 located at the Tulsa International Airport, City of Tulsa, Tulsa County, Oklahoma.

Dear Ms. Barnett:

A & M Engineering and Environmental Services, Inc. (A & M) has prepared the enclosed Asbestos Abatement Project Design (PD) for **Asbestos Abatement** to be performed at the above referenced site.

Thank you for choosing A & M. If you have any questions, feel free to contact us at (918) 665-6575 or via email.

Respectfully,
A & M Engineering and Environmental Services, Inc.

Jeff Jenkins, CIH, CSP
Senior Industrial Hygienist
ODOL Project Designer
jjenkins@aandmengineering.com
Enclosure (1)

Jeff Elbert
Director of Compliance
jelbert@aandmengineering.com

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1.0 INTRODUCTION

This Asbestos Project Design was prepared by A & M Engineering and Environmental Services Inc. (A & M), to provide a prudent course of action for abating Asbestos-Containing Materials (ACM) associated with the Building 6 at the former Air Force Plant 3 (AFP3). Protocols to be used for compliance with governing regulations to protect workers and the environment from incidental exposure to airborne asbestos fibers during the work being performed are included or referenced.

PROJECT INFORMATION:

Project Name:	**Air Force Plant 3, Building 6**
Description of Work/Occupancy:	Removal of friable ACM (thermal insulation)
Project Type:	Pre-renovation
Contractor:	To be determined
Owner's Environmental Representative:	A & M Engineering and Environmental Services, Inc. (A & M)
IH/Air Monitoring Firm:	A&M: All air samples will be collected by an experienced Industrial Hygiene Technician and holds a current asbestos license in Oklahoma.
Laboratory:	A & M: A & M is a new participant in the American Industrial Hygiene Association (AIHA) Proficiency Analytical (AIHA) proficiency Analytical testing (PAT) program. All air monitoring techs performing analysis using NIOSH method 7400 A will have completed a NIOSH 582e course and shown to be proficient. The laboratory to be used for quality assurance testing and back-up analysis will be Quantem Laboratories, AIHA PAT Laboratory 101352. The Contractor is responsible for their personnel samples.

2.0 REGULATORY COMPLIANCE

The specific governing regulations affecting this work include but are not limited to: 29 Code of Federal Regulations (CFR) 1926.1101 (OSHA Construction Industry Asbestos Standard), 29 CFR 1910.134 (OSHA Respiratory Protection), 40 CFR 61, Subpart M (Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP), and Oklahoma Asbestos Control Act (OAC) 380:50 with approved variances. Waste transport and disposal is to be performed by an Oklahoma-licensed asbestos waste transporter with a waste disposal manifest/chain of custody signed by the receiving landfill. DOT Class 9 placards are to be displayed during transportation of asbestos waste.

The contractor shall maintain a daily log showing the number and names of workmen and supervisory personnel by craft physically on the job site each working day and a report of daily progress. The daily entries shall include a brief statement of the work in progress and a record of any accidents, injuries and/or safety meetings held on that day. All workmen must sign in and out during abatement operations and provide a brief description of

operations performed. These logs shall always be available for inspection at the job site while work is in progress. A reproducible copy of these logs shall be provided to the Owner's Representative at the weekly progress meeting. All personnel entering containment must have their current asbestos licenses onsite with them.

The technicians performing on-site air monitoring must maintain an onsite daily activity log. The log shall include, but not be limited to:

- Time of on-site arrival and departure.
- Times of entrance into the regulated area to ensure sample integrity.
- Signature of on-site asbestos supervisor.
- All cassettes must be properly labeled as they are placed for sample collection.
- At least one (1) technician performing on-site air monitoring will be present at the job site while asbestos abatement work is being performed.

3.0 WORK SEQUENCING/SCHEDULING

The asbestos abatement of the AFP3, Building 6 is being conducted in a single Phase, but may involve subsections or multiple areas. The tentative start date is estimated to be shortly after October 1, 2019. The work is to be scheduled by the Abatement Contractor in coordination with City of Tulsa and A & M. Work is expected to be conducted during normal work hours, Monday through Friday and hours of 7:00 AM to 5:00 PM.

4.0 EGRESS AND FIRE PROTECTION

Workers must be briefed on emergency exit procedures and the assembly point at the beginning of the work shift. In the event emergency evacuation is necessary, workers will exit immediately through the decon and to the nearest exit.

Emergency illumination shall be provided for not less than 1-1/2 hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of one (1) foot-candle (ft.-candle) and, at any point, not less than 0.1 ft.-candle, measured along the path of egress at walk surface. The emergency lighting system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting. Where maintenance of illumination depends on changing from one (1) energy source to another, a delay of not more than ten (10) seconds shall be permitted. The Abatement Contractor will provide a minimum of one (1) ABC dry-charged fire extinguisher ten (10) pound (lb.) for every three thousand (3,000) square feet (SF) of work area and outside the decon during abatement. The fire extinguishers must have a valid inspection tag and be decontaminated upon removal from the work area.

All poly used must be rated Fire Retardant Polyethylene and meet National Fire protection Association (NFPA) 701-04, American Standards for Testing and Materials (ASTM) E84, and Canvas Products Association International (CPAI) 84 or equivalent.

The Abatement Contractor must provide appropriate and sufficient signs at the abatement-controlled access entrances to direct pedestrian traffic away from blocked entrances. Signs shall be clearly visible and readable at fifty (50) feet from the abatement work area. The contractor shall install signs at the onset of work.

5.0 MATERIALS TO BE ABATED

Table 1 lists the identified ACM that is included as part of this Asbestos Project Design

Table 1
ACM to be Abated

Materials	Friable	Location(s) of the Homogeneous Material	% Asbestos Content	Estimated Quantity	Condition
Pipe Insulation	Friable	Throughout the Building	Chrysotile	2,800 LF	Intact
Pipe Fittings	Friable		Chrysotile	550 fittings	
Fan and HVAC Insulation	Friable		Chrysotile	11,000	
Fire Door	Non-friable	HVAC room – southeast corner	Unknown	2 doors	intact

ND = None Detected; NQ = Not Quantified; SF Square Foot; LF Linear Feet

A copy of the laboratory analyses (A&M March 1999 report) is provided in Appendix A. A site drawing of abatement is provided in Appendix B.

6.0 METHOD OF ABATEMENT

Building #6 will be cleared of any movable materials prior to any preparation work being conducted. The contractor must follow OAC 380:50-17 for abatement procedures.

Pipe insulation and fittings on piping that is not domestic water or sprinkler system pipes will be removed by using wrap and cut techniques. The pipes will be abated at manageable lengths using glove bag procedures allowing them to be cut. Most of the pipes are overhead and will be accessed by mechanical man-lifts or stepladders (in some situations). Piping exists on both first and second floors.

Domestic, sprinkler piping, pipe fittings will be abated using glove bag procedures with the pipes remaining in place. Domestic and sprinkler system piping may be overhead or in pipe chases feeding the four (4) restrooms. The restroom pipe chases may require selective demolition to provide access. Many of the pipes are overhead and will be accessed by mechanical man-lifts or stepladders (in some situations). Piping exists on both first and second floors.

The Heating, Ventilation, and Air conditioning (HVAC) rooms will be abated under full containment with a three (3) chamber decontamination room. All HVAC equipment in the HVAC rooms are to be demolished and removed in its entirety following the abatement by the contractor. The southeast HVAC room will be retrofitted into a compressor room; thus, the removal of the fire doors will be included in the abatement.

Removed material will be promptly bagged in accordance with OAC 380:50-17-6.

7.0 AIR MONITORING and RESPIRATORY PROTECTION

Daily air monitoring will be conducted in accordance with OAC 380:50-11-1 through 380:50-11-7. A minimum of one (1) area air monitor will be located:

- In each active abatement work area;
- Along the load-out path during loadout;
- Each independent exit area directly outside and adjacent to the work area;
- Immediately outside the clean room;
- At the exhaust point of each Air Filtration Device (AFD) or from a bank of AFD's (may not exceed 0.01 fibers/cubic centimeter (f/cc));
- Outside of a critical barrier adjacent to the work area;

The Contractor is responsible for (may arrange with A&M to provide):

- Personal air monitor samples will be collected on one (1) out of every four (4) workers (25%); or a minimum of two (2) personal air samples per abatement crew.

All non-primary calibration devices must be calibrated to a primary calibrator within one month of use and will not include any adjustable flow restricting devices as part of its construction. Calibration records or chart must be maintained onsite.

Removal of ACM materials must be conducted in full-face APR respirators fitted with High Efficiency Particulate Air (HEPA) cartridges.

8.0 CLEARANCE SAMPLING

The work area in the building is scheduled for re-occupancy; therefore, clearance by AHERA Phase Contrast Microscopy (PCM) protocol must be conducted. A minimum of five (5) samples per /work area shall be collected. Clearance samples shall be collected following the post-abatement ODOL inspection. Clearance samples inside of full containment areas will be conducted using aggressive sampling techniques.

9.0 AIR FILTRATION

Negative Air Machines (NAM) will be utilized to provide a negative air pressure of 0.02" negative pressure (water pressure drop) through the Decon of full containments. The NAMs must be fitted with HEPA filters. Ventilation must be adequate to provide four (4) Air Changes per Hour (ACH).

Each HVAC room will have approximately seven hundred (700) SF will be inside of containment and an estimated twenty (20) feet ceiling height. A minimum of one (1) two thousand (2,000) Cubic Feet per Minute (CFM) NAMs must be used inside of containment. One (1) NAM must be available for an operational back-up, if needed.

10.0 CONTAINMENT METHODS

Preparation of asbestos abatement work area will be per OAC 380:50-17-4. Critical barriers shall be utilized over openings (e.g. windows, doors, exhaust vents) where feasible and where construction of the critical barrier would not be of significant hazard. Non-moveable fixtures and equipment will be covered with a minimum single layer of 4 mil poly following pre-cleaning of surface debris prior to asbestos removal. All surfaces and equipment are to be thoroughly sprayed with a lock-down encapsulant after abatement.

11.0 DECONTAMINATION SYSTEM

A remote decontamination facility (decon) under negative pressure is planned for the abatement. The Remote Decon is to be used with the Glove-bag operations. The decon unit will be established per OAC 380:50-15-7 (Clean room requirements) and OAC 380:50-15-12 (decontamination facility preparation) consisting of three (3) chambers: a clean room, a shower and a dirty room. The airlocks for the decon unit shall consist of triple six (6) mil polyethylene overlapping flaps. The decon shower shall be equipped with a five (5) micron wastewater filter, liquid cleaning agent, non-porous shower grates and a functioning in-line water heater with capacity for five (5) gallons per worker. Disposal of wastewater will be into the sanitary sewer. The temperature of the clean room and decon must be maintained above fifty (50) degrees °F during abatement activities. Decon procedures will be per OAC 380:50-15-8 (Decontamination procedures).

Full containments (HVAC rooms) will have an attached decontamination facility (decon) with the "dirty room" opening to the work area. The containment will be under negative pressure with make-up air flowing through the three (3) chamber decon facility. The decon unit will be established per OAC 380:50-15-7 (Clean room requirements) and OAC 380:50-15-12 (decontamination facility preparation) consisting of three (3) chambers: a clean room, a shower and a dirty room. The airlocks for the decon unit shall consist of triple six (6) mil polyethylene overlapping flaps. The decon shower shall be equipped with a five (5) micron wastewater filter, liquid cleaning agent, non-porous shower grates and a functioning in-line water heater with capacity for five (5) gallons per worker. Disposal of wastewater will be into the sanitary sewer. The temperature of the clean room and decon must be maintained above fifty (50) degrees °F during abatement activities. Decon procedures will be per OAC 380:50-15-8 (Decontamination procedures).

12.0 SOIL CONTAMINATION CLEANUP

Not Applicable.

13.0 SPECIAL MATERIALS or METHODS

Scaffolding and Fall Protection

Work during this abatement may be conducted using ladders, man-lifts, or baker scaffolding. Fall protection must be used where appropriate. The asbestos abatement contractor will comply with 29 CFR 1926 Subpart L-Scaffolds and Subpart M-Fall Protection.

Electrical

Electric service is anticipated to be provided; however, tie-ins to the electrical service by a licensed electrician is the responsibility of the contractor. Lockout/tagout procedures must be used on all electrical circuits which penetrate the work area.

Water

Water service is anticipated to be provided; however, tie-ins may be in occupied buildings adjacent to Building #6.

Heat Stress

The contractor shall monitor heat stress in general accordance with OSHA Technical Manual Section III, Chapter 4.

Sanitation Facilities

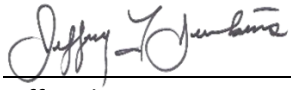
Currently the building is vacant, with electric operating. Sanitation facilities in the building is not available for use. The asbestos contractor will be responsible for arranging for sanitation facilities.

14.0 VARIANCES REQUESTED

No Variances are being requested.

15.0 CERTIFICATION

This project design was prepared by the undersigned for compliance with applicable federal and State regulations.



Jeff Jenkins, CIH, CSP
Asbestos Project Designer, OKPD 143988

August 6, 2019
Date

BUILDING NO. 006:

Date of Construction: 1942

Original Use: Maintenance Building

Floor Area: 56,266 square feet

Figure 006

Asbestos Containing Materials (ACM:

Homogeneous Areas:

HA-2: 9" x 9" floor tile – black with white streaks (+)

Consists of 700 square feet of 9" x 9" floor tile described as black with white streaks. The floor tile was installed in a checkered pattern with HA-3 (orange tan) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-3: 9" x 9" floor tile – orange tan (+)

Consists of 700 square feet of 9" x 9" floor tile described as orange tan in color. The floor tile was installed in a checkered pattern with HA-2 (black) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-6: 9" x 9" floor tile – red with white streaks (+)

Consists of 22,500 square feet of 9" x 9" floor tile described as red with white streaks. The floor tile is found in checkered patterns with various other tiles in both the first and second floor entries and the office areas (FS-1). This tile is in overall fair condition with some minor physical damage.

HA-8: White cementitious joints (+)

Consists of 250 joints described as white cementitious found in entries and office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4). The majority of joints are in good condition. However, some of the joints have been damaged from impacts and general deterioration and are in need of repair.

HA-9: White fibrous pipe and joint insulation (+)

Consists of 1,700 linear feet of pipe insulation and 300 joints described as white fibrous. The majority of pipe insulation and joints are in good condition. However, a few joints appear to be damaged and are in need of repair. This type of insulation is found throughout the first and second floor entry/office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4).

HA-10: Air handler insulation jacket – brown wool like under white fibrous (+)

Consists of 11,000 square feet of air handler insulation jacket, described as brown wool like under white fibrous. The insulation material is found in the mechanical rooms (FS-4) and is in good condition.

HA-11: 9" x 9" floor tile – aqua blue with white streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as aqua blue with white streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-12 (gray) and is in overall good condition.

HA-12: 9" x 9" floor tile – gray with white and black streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as gray with white and black streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-11 (aqua blue) and is in overall good condition.

HA-13: Gray fibrous pipe insulation (+)

Consists of 700 linear feet of pipe insulation described as gray fibrous. This insulation material found within the first floor office space (FS-1) and pipe chases (FS-3) is in overall good condition.

HA-14: Roof felt/tar/gravel (Assume +)

Consists of 30,000 square feet of roofing materials (felt/tar/gravel) located on the roof top (FS-5). This material is in a good non-friable condition.

Non-Asbestos Containing Materials Which Were Suspect:

Homogeneous Areas:

HA-1: 12" x 12" floor tile – white with gray specks found on first floor (south end of building (-)

HA-4: 9" x 9" floor tile – dark orange with white specks found on first floor (south/central end of building) (-). Checkered pattern with HA-5 (pink).

HA-5: 9" x 9" floor tile – pink with white specks found on first floor (south/central end of building) (-). Checkered pattern with HA-4 (dark orange).

HA-7: Brown fibrous (cardboard like) pipe insulation (-)

TABLE 6-1 (Continued)
Air Force Plant No. 3
Asbestos Survey Building Summary (Regulated & Non-Regulated)

Building Number	Description
	2) Approximately 400 visible insulated joints. Unknown quantities of joints also exist above the ceilings and inside pipe chases. Probably figure total of ~1,500 joints. 3) Approximately 27,000 square feet of air handler jacket insulation. 4) An unknown quantity of duct insulation exists above the drop ceilings. Probably figure total of ~15,000 linear feet of 2' x 3' duct insulation. 5) Approximately 84,000 square feet of floor tile and associated mastic. 6) Approximately 100 square feet of transite board. 7) Approximately 84,500 square feet of roof materials.
Building #006	The maintenance building contains the following ACM: 1) Approximately 2,400 linear feet of pipe insulation. 2) Approximately 550 insulated joints. 3) Approximately 11,000 square feet of air handler insulation jacket. 4) Approximately 43,900 square feet of floor tile and associated mastic. 5) Approximately 57,000 square feet of roof materials.
Building #007	The boiler house contains the following ACM: 1) Approximately 20,300 linear feet of pipe insulation. 2) Approximately 3,500 insulated joints. 3) Approximately 66,350 square feet of boiler & tank jacket insulation. 4) Approximately 33,000 square feet of roof materials.
Building #008	The police building contains the following ACM: 1) Approximately 130 linear feet of pipe insulation. 2) Approximately 25 insulated joints. 3) Approximately 50 linear feet of duct insulation (2' x 3' size) 4) Approximately 100 square feet of furnace insulation. 5) Approximately 1,400 square feet of transite wall board. 6) Approximately 3,300 square feet of floor tile & mastic. 7) Approximately 84,500 square feet of roof materials.

QUANTEM® LABORATORIES

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Set ID: 9902P501001
Date Received: February 1, 1999

Client: A&M Engineering & Environmental Serv.
Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton
Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas
Project Location: Tulsa, OK
Project No.: 1640-001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	57-FS1-HA1-001	homogeneous	gray bulk material	NAD	cellulose < 1%	
2	57-FS1-HA5-001	homogeneous	tan bulk material	NAD	cellulose 30% mineral wool 30%	perlite 30%
3	57-FS2-HA3-003	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
4	57-FS2-HA3-002	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
5	57-FS2-HA3-001	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
6	57-FS2-HA2-001	homogeneous	yellow bulk material	NAD	glass fiber 99%	
7	57-FS1-HA4-001	homogeneous	light gray bulk material	NAD	n/a	
8	57-FS3-HA6-001	homogeneous	yellow / gray bulk material	NAD	n/a	
9	7-FS1-HA2-001	homogeneous	white bulk material	chrysotile 45%	n/a	
10	7-FS1-HA2-002	homogeneous	white bulk material	chrysotile 20% amosite 10%	n/a	
11	7-FS1-HA5-003	homogeneous	gray bulk material	NAD	cellulose 70% synthetic 20%	
12	7-FS1-HA3-001	homogeneous	tan bulk material	NAD	cellulose 95%	
13	7-FS1-HA4-001	homogeneous	white bulk material	NAD	mineral wool 99%	

Ellen McKittrick
Reviewed and Approved

February 2, 1999
Date

Note: Structures denoted as being "<5μ" refer to the structures whose length is from 0.5μm to 4.9μm.
QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested.
NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F].
This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

QUANTEM® LABORATORIES
2033 Heritage Park Drive
Oklahoma City, OK 73120
Ph. (405) 755-7272
Fax (405) 755-2058

Polarized Light Microscopy
Asbestos Analysis Report

QuanTEM Set ID: 9902P501001
Date Received: February 1, 1999

Client: A&M Engineering & Environmental Serv.
Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton
Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas
Project Location: Tulsa, OK
Project No.: 1640-001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
14	7-FS1-HA5-002	homogeneous	tan bulk material	chrysotile 3%	cellulose 92%	
15	6-FS1-HA4-001	homogeneous	tan bulk material	NAD	n/a	
16	6-FS1-HA8-001	homogeneous	white bulk material	chrysotile 20%	mineral wool 30%	
17	6-FS1-HA2-001	homogeneous	black bulk material	chrysotile 3%	n/a	
18	6-FS1-HA11-001	homogeneous	blue bulk material	chrysotile 10%	n/a	
19	6-FS1-HA3-001	homogeneous	tan bulk material	chrysotile 3%	n/a	
20	6-FS1-HA6-001	homogeneous	red bulk material	chrysotile 3%	n/a	
21	6-FS1-HA1-001	homogeneous	gray bulk material	NAD	cellulose 5%	
22	6-FS1-HA5-001	homogeneous	tan bulk material	NAD	n/a	
23	6-FS1-HA9-001	homogeneous	white bulk material	chrysotile 15%	cellulose 15% glass fiber 20%	
24	6-FS1-HA7-001	homogeneous	tan / black bulk material	NAD	cellulose 80% synthetic 5% animal hair 3%	
25	6-FS1-HA12-001	homogeneous	gray bulk material	chrysotile 10%	cellulose <1%	

Ellen McKittrick
Reviewed and Approved

February 2, 1999
Date

Note: Structures denoted as being "<5μ" refer to the structures whose length is from 0.5μm to 4.9μm.
QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested.
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This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

TULSA, OKLAHOMA

ENGINEERING - ENVIRONMENTAL - CONSTRUCTION

10010 E. 16th Street - TULSA, OKLAHOMA 74128-4813
TEL: (918)665-6575 FAX: (918)665-6576 E-Mail: aandm@galstar.com

SAMPLING FIRM	CLIENT CONTACT	PHONE NUMBER
A&M	JEFF ELBERT	918-665-6575

PROJECT NUMBER	PROJECT NAME
#1640-001	McDONNELL DOUGLAS - TULSA, OK

SAMPLERS: *(Signature)* Jeff Elbert

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	MATRIX	NO. OF CONTAINERS	RUSH ? YES	RUSH ? NO	ANALYTICAL TESTS REQUIRED: ASBESTOS - PLM	REMARKS
1	1-28-99			X	57-FS1-HA1-001	SOLID	1			✓	
2				X	57-FS1-HA5-001					✓	
3				X	57-FS2-HA3-003					✓	
4				X	57-FS2-HA3-002					✓	
5				X	57-FS2-HA3-001					✓	
6				X	57-FS2-HA2-001					✓	
7				X	57-FS1-HA4-001					✓	
8				X	57-FS3-HA6-001					✓	
9				X	7-FS1-HA2-001					✓	
10				X	7-FS1-HA2-002					✓	
11				X	7-FS1-HA5-001					✓	
12				X	7-FS1-HA3-001					✓	
13				X	7-FS1-HA4-001					✓	

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Jeff Elbert	1-28-99	1630	Phillip Hyo 2-1-99 12:30

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

REMARKS:

CHAIN

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

TULSA, OKLAHOMA

ENGINEERING - ENVIRONMENTAL - CONSTRUCTION

10010 E. 16th Street - TULSA, OKLAHOMA 74128-4813
TEL: (918)665-6575 FAX: (918)665-6576 E-Mail: aandm@galstar.com

SAMPLING FIRM	CLIENT CONTACT	PHONE NUMBER
A&M	JEFF ELBERT	918-665-6575

PROJECT NUMBER	PROJECT NAME
1640-001	MCDONNELL DOUGLAS - TULSA, OK

SAMPLERS: *(Signature)* Jeff Elbert

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	MATRIX	NO. OF CONTAINERS	RUSH ? YES	RUSH ? NO	ANALYTICAL TESTS REQUIRED: ASBESTOS - PLM	REMARKS
14	1-28-99			X	7-FSI-HA5-002	SOLID	1			✓	
15	1-27-99			X	6-FSI-HA4-001	"	"			✓	
16	1-27-99			X	6-FSI-HA8-001	"	"			✓	
17	1-27-99			X	6-FSI-HA2-001	"	"			✓	
18	1-27-99			X	6-FSI-HA11-001	"	"			✓	
19	1-27-99			X	6-FSI-HA3-001	"	"			✓	
20	1-27-99			X	6-FSI-HA6-001	"	"			✓	
21	1-27-99			X	6-FSI-HA1-001	"	"			✓	
22	1-27-99			X	6-FSI-HA5-001	"	"			✓	
23	1-27-99			X	6-FSI-HA9-001	"	"			✓	
24	1-27-99			X	6-FSI-HA7-001	"	"			✓	
25	1-27-99			X	6-FSI-HA12-001	"	"			✓	

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Jeff Elbert			
RELINQUISHED BY: *(Signature)*			
RELINQUISHED BY: *(Signature)*			

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Phillip Hyde	2-1-99	12:30	
RELINQUISHED BY: *(Signature)*			
REMARKS:			

CHAIN.D

Project Design Review Form

Oklahoma Department of Labor
Asbestos Division
3017 N. Stiles, Oklahoma City, OK 73105
Phone – (405)521-6464
Fax – (405)521-6025

Project Name: Former Air Force Plant 3
Project No: 19-9426 Date:9/03/19
Project Designer: Jeff Jenkins

Approved: __X____

Disapproved: _____

	ITEM	ACCEPTED	REJECTED	COMMENTS
1.	**A statement that DOL Abatement of Friable Materials Rules apply.**	X		The Oklahoma Department of Labor, Asbestoso Division, Asbestos Control Act Title 40 450-456 and Abatement of Friable Asbestos Material Rules will apply to this project.
2.	**Sequencing and phasing of work.**	X		Work will be completed in 1 phases.
3.	**Identification of means of egress and a fire protection plan and a diagram for emergency escape routes, and fire extinguisher placements.**	X		Exits will be clearly marked and illuminated, at least two 10 lb ABC fire extinguishers will be on site, one inside the work area and one outside the work area.
4.	**The quantity, type, percentage with bulk analysis unless presumed and a diagramed location of asbestos materials to be abated.**	X		2800 linear feet of TSI material. 550 fittings and 11,000 fan and HVAC insulation. TSI is chrysotile.
5.	**Abatement methods, and techniques, and numbers of containments, glove bags or mini-containments.**	X		Full containment 380:50-17
6.	**Details of personal and area air monitoring samples.**	X		Personal Samples will be two workers associated with the glovebag removal and any workers associated with removing/bagging asbestos containing material. Area samples at the following locations: outside the decon, during load out activities, one inside containment and one at an area not associated witht the abatement zones.
7.	**Numbers and locations of Clean Test samples and type of analysis to be employed.**	X		5 clearances per area of abatement.
8.	**Numbers, capacities, a diagram to identify locations, and discharge points, if any, of negative air machines.**	X		One negative air machine will be utilized for the decon.and 7 negative air machine for the abatement area.
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		Drawings attached to project design
10.	**Details of decontamination system(s).**	X		Remote decon.
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.**	N/A		

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

REVIEWED BY: Keith H. Hunt DATE: 09/03/19 REVIEWED BY: Bernie Hart DATE: 9.4.19

Appendix A

Asbestos Sample Results

Appendix B

Proposed Abatement Layout

BUILDING 006

- SAME ORANGE FIBROUS WALL & CEILING INSULATION WITH STEEL GRATE AS SAMPLED IN OTHER BUILDINGS (ASSUME –)

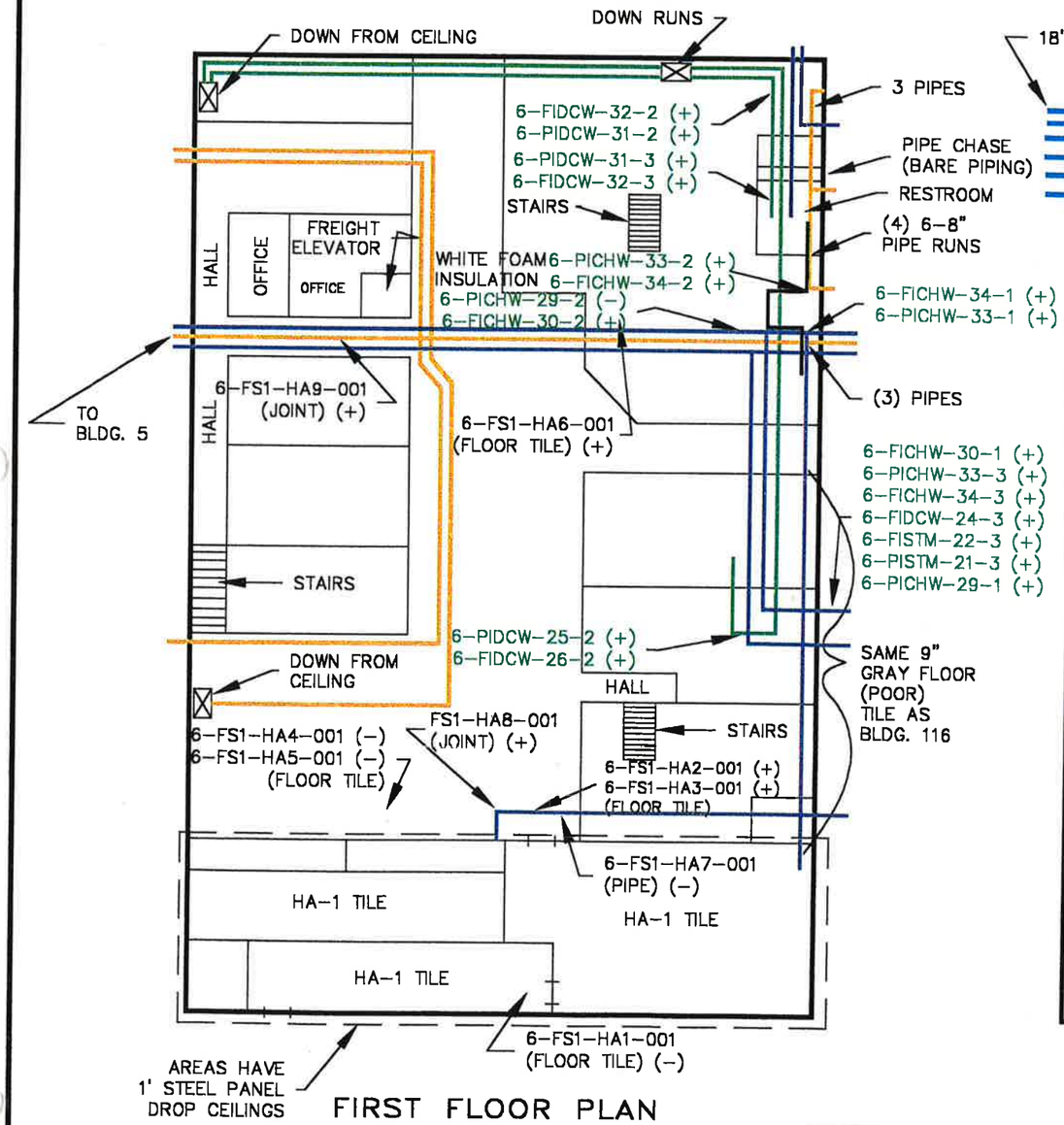
- ROOF – TAR/FELT/GRAVEL (ASSUME +)

BROWN FIBROUS (CARDBOARD LIKE) PIPE INSULATION (WHITE WRAP) (–) (WHITE CEMENTITIOUS JOINTS (+) & WHITE FIBROUS JOINTS (+))

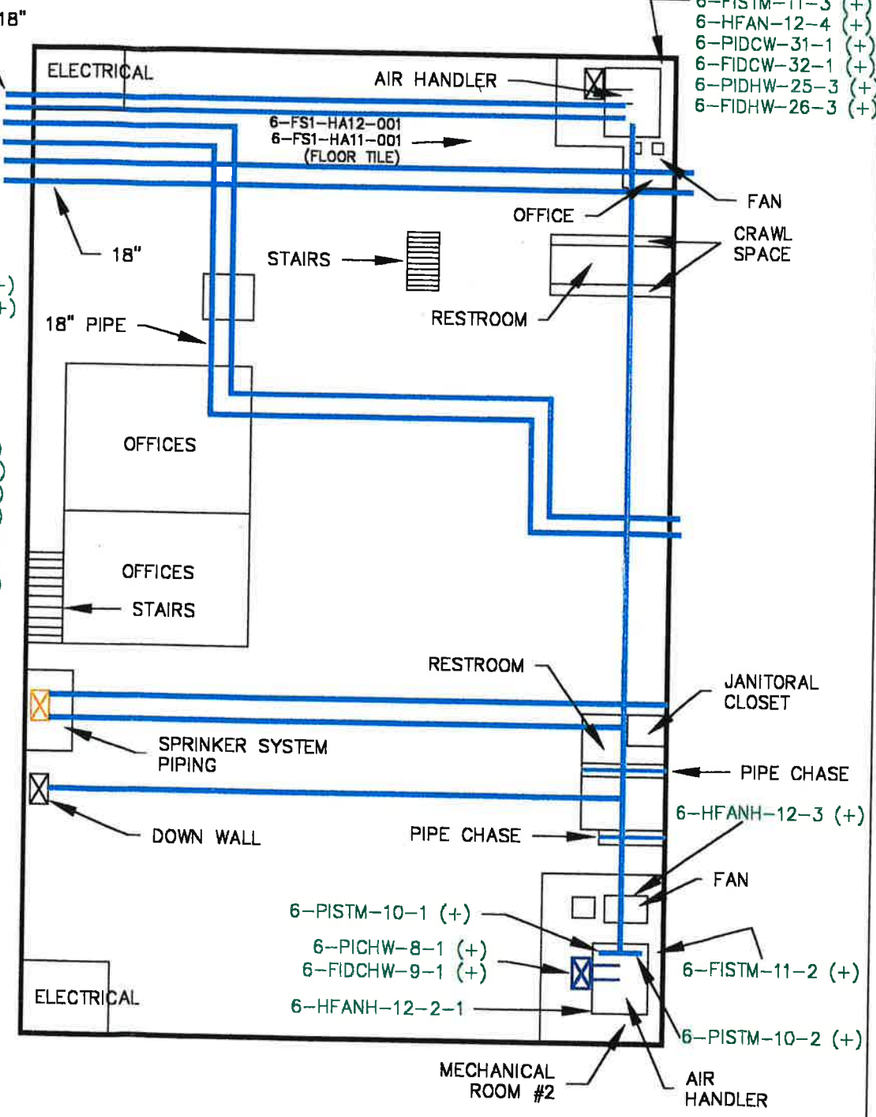
NEWER YELLOW FIBROUS (WHITE WRAP) PIPE INSULATION (ASSUME –) & JOINTS

GRAY FIBROUS PIPE & JOINTS (WHITE WRAP) (+) (WHITE FIBROUS JOINTS) (+)

WHITE FIBROUS PIPE, JOINT, HVAC INSULATION (+) (WHITE FIBROUS JOINTS (+))



FIRST FLOOR PLAN



SECOND FLOOR PLAN

SAMPLE LEGEND

FUNCTIONAL SPACES (DENOTED BY PREFIX FS)

FS–1	ENTRY AREAS & OFFICES
FS–2	RESTROOMS
FS–3	PIPE CHASES
FS–4	MECHANICAL ROOMS
FS–5	ROOF TOP

HOMOGENEOUS AREAS (DENOTED BY PREFIX HA)

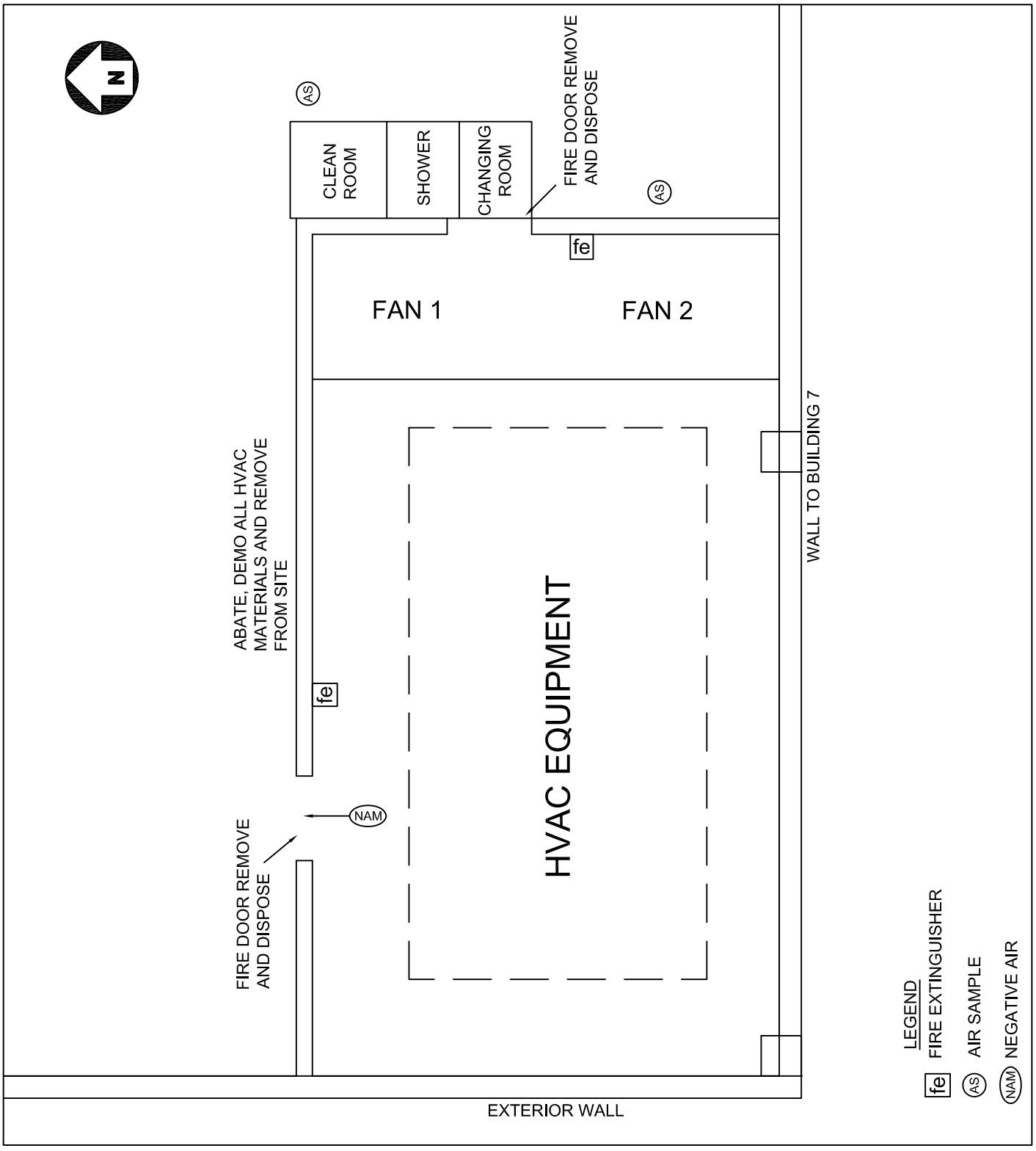
HA–1	12"X12" WHITE FLOOR TILE WITH GRAY SPECK
HA–2	9" BLACK FLOOR TILE WITH WHITE STREAKS (CHECKERED PATTERN)
HA–3	9" ORANGISH TAN TILE (CHECKERED PATTERN)
HA–4	9" DARK ORANGE FLOOR TILE WITH WHITE SPECK (CHECKERED PATTERN)
HA–5	9" PINK FLOOR TILE WITH WHITE SPECKS (CHECKERED PATTERN)
HA–6	9" RED FLOOR TILE WITH WHITE STREAKS (CHECKERED PATTERN)
HA–7	BROWN FIBROUS (CARDBOARD LIKE) PIPE INSULATION (WHITE WRAP)
HA–8	WHITE CEMENTITIOUS JOINTS
HA–9	WHITE FIBROUS JOINTS & PIPE INSULATION
HA–10	AIR HANDLER INSULATION (GRAY WRAP) BROWN WOOL LIKE UNDER WHITE FIBROUS
HA–11	9" AQUA BLUE FLOOR TILE WITH WHITE STREAKS (CHECKERED PATTERN)
HA–12	9" GRAY FLOOR TILE WITH WHITE & BLACK STREAKS (CHECKERED PATTERN)
HA–13	GRAY FIBROUS PIPE INSULATION
HA–14	ROOF FELT/TAR/GRAVEL (ASSUME +)

NOTE: GREEN TEXT DENOTES PREVIOUS SURVEY BY GALSON TECHNICAL SERVICES, INC. IN 1991.

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
ENGINEERING – ENVIRONMENTAL – CONSTRUCTION

SCALE:	DATE:	FIGURE NO.
NTS	3/1/99	006
APPROVED BY:	DRAWN BY:	PROJECT NO.
JRE	ALB	1640–001

ASBESTOS SURVEY
BUILDING 006
AIR FORCE PLANT NO. 3
TULSA, OKLAHOMA



Scale: 1"=70'

0 35 70 140

A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

XX

AIR FORCE PLANT 3
TULSA, OKLAHOMA

SCALE:	DATE:	FIGURE NO.
1" = 70'	8/2/2019	XX
APPROVED BY:	DRAWN BY:	PROJECT NO.
JJ	TF	2320-001-008

Appendix C

Regulatory Inspections

Oklahoma Department of Labor
www.ok.gov/odol/

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

Abatement Preparation Inspection Form

Abatement Project: TIA Former Air Force 3 Bldg Date: 6-26-20 Time: 9:00

Project No.: 19-9426 Phase:

Project Address/Location: City: Tulsa Zip:

Contractor: AHI Contact Person: Matt Gibson

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	N/A	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 and project design on-site	☑	☐	☐	☐
(8) Current Fit Test	☑	☐	☐	☐
(9) NIOSH approved respirators, clean, parts in working order	☑	☐	☐	☐
(10) Electrical panel outside work area	☐	☐	☑	☐
(11) Electrical system in abatement area locked out/ tagged out	☑	☐	☐	☐
(12) Temporary wiring installed by licensed electrician LIC #:	☐	☐	☑	☐
(13) Temporary panel boards properly grounded	☐	☐	☑	☐
(14) Ground fault interruption provided from outside work area	☑	☐	☐	☐
(15) Live electrical requirement met	☑	☐	☐	☐
(16) Extension cords in acceptable condition	☑	☐	☐	☐
(17) Equipment properly grounded	☑	☐	☐	☐
(18) De-con firmly constructed, opaque, with triple flaps	☑	☐	☐	☐
(19) Storage lockers for workers and ODOL inspectors' street clothes	☑	☐	☐	☐
(20) Shower with hot water supply, stable nonskid surface, lights	☑	☐	☐	☐
(21) Shower drains, filter, proper water disposal	☑	☐	☐	☐
(22) Soap from dispenser, and towels provided	☑	☐	☐	☐
(23) Hearing protection provided if required	☐	☐	☑	☐
(24) Hard hats provided, if required	☐	☐	☑	☐
(25) Appropriate footwear/safety shoes provided, if required	☑	☐	☐	☐
(26) Ventilation serving or passing through the abatement area deactivated	☑	☐	☐	☐
(27) Critical barriers in place	☑	☐	☐	☐
(28) Neg. air quantity and pressure drop, confirmed on-site with recording manometer	☑	☐	☐	☐
(29) Neg. air machine(s) have properly installed filters, clean pre-filters	☑	☐	☐	☐
(30) Prep. work secure with negative air on	☒	☐	☐	☐
(31) Make-up air sources provide adequate circulation and air cleaning	☐	☐	☑	☐
(32) Access controlled	☑	☐	☐	☐
(33) Scaffolding over 10' high has 42" side rails and 4" toe boards	☐	☐	☑	☐
(34) Scaffolding from 4' to 10' high, but less than 42" wide, has side rails	☐	☐	☑	☐
(35) Scaffolding with people working under has mesh or solid barrier on platform	☐	☐	☑	☐
(36) Scaffolding floorboards in good condition and secured	☐	☐	☑	☐
(37) Aerial lifts have full-body harness with shock lanyards	☐	☐	☑	☐
(38) Ladders are non-conducting and stable	☑	☐	☐	☐
(39) Heat stress monitors in place	☐	☐	☑	☐
(40) HEPA vacuum is clean with filters properly installed	☑	☐	☐	☐
(41) Temporary lighting is adequate and properly wired and grounded	☑	☐	☐	☐
(42) 10 # ABC fire extinguishers inspected	☑	☐	☐	☐
(43) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up.	☐	☐	☐	☐
(44) Acceptable amended water sprayers and chemicals provided	☑	☐	☐	☐
(45) Load-out sealed unless needed for make-up air	☑	☐	☐	☐
(46) Disposal bags and/or barrels provided and properly labelled	☑	☐	☐	☐
(47) Disposal vehicle properly lined	☑	☐	☐	☐
(48) Area monitoring locations identified	☑	☐	☐	☐
(49) Other	☐	☐	☐	☐

OF GLOVEBAGS 2 # OF FULL CONTAINMENTS # OF MINI CONTAINMENTS

Recommendations & Remarks: Ch. Stephen 15.9 - Rhonda 19

Orders: Remove ACM - call for V. Sval 6-30-20 6-26

☐ Imminent Danger

Keith A Hunt
Inspector's Signature

Contractor's or Representative's Signature

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #: 19-94126 | 07 (Month) | 21 (Day) | 2020 (Year) | ____ (Time)

Facility: TIA Former Air Force Bldg 6

Contractor #: ____ | County #: 72 | FY #: ____

Address/Location: ____ | Address City: Tulsa

Owner/Occupant: ____ | Contractor: AHI

Contact Name: ____ | Contractor's Rep.: Matt Gibson

Facility Phone #: ____ | Contractor's Phone #: ____

1. Description of Area: glove bags on 2 floors - over 500 Phase I

2. Areas requiring further cleaning: None

3. Air Counts (PCM/TEM) On-Site?: All clearances below .01 UCL

4. DOL Recommendations: —

5. Will a FINAL inspection be required?: This is the Final - Final is accepted

6. Notes:

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hunt
Inspector's Signature

Contractor's Signature

Revised 5/2016

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

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #:	19-9926	07	21	2020	
Facility:	TIA Former Air Force	Month	Day	Year	Time
Contractor #:		**County #:**	72	**FY #:**	
Address/Location:		**Address City:**	Tulsa		
Owner/Occupant:		**Contractor:**	AHI		
Contact Name:		**Contractor's Rep.:**	Matt Gibson		
Facility Phone #:		**Contractor's Phone #:**	M		

1. Description of Area: mechanical room North

2. Areas requiring further cleaning: NONE

3. Air Counts (PCM/TEM) On-Site?: All clearances below .01 UCL

4. DOL Recommendations: Tear down remaining Poly & dispose of as ACM

5. Will a FINAL inspection be required?: This is the Final - Final is accepted

6. Notes:

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hunt

Inspector's Signature

Contractor's Signature

Revised 5/2016

White Copy: DOL *Yellow Copy: Consultant* *Pink Copy: Contractor/Owner*

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #: 19-9426 — 07 (Month) — 21 (Day) — 2020 (Year) — (Time)

Facility: TIA Air Force - Jones Bldg 6

Contractor #: — **County #:** 72 — **FY #:**

Address/Location: — **Address City:** Tulsa

Owner/Occupant: — **Contractor:** AHI

Contact Name: — **Contractor's Rep.:** Matt Gibson

Facility Phone #: — **Contractor's Phone #:**

1. **Description of Area:** air Handler room South

2. **Areas requiring further cleaning:** NONE

3. **Air Counts (PCM/TEM) On-Site?:** All clearances below .01

4. **DOL Recommendations:** Tear down remaining Poly & dispose of as ACM

5. **Will a FINAL inspection be required?:** This is the Final - Final is accepted

6. **Notes:**

7. **Note any violations cited:** 380:50-

8. **Contractor's Comments:**

Keith H. Hunt
Inspector's Signature

Contractor's Signature

Revised 5/2016

White Copy: DOL *Yellow Copy: Consultant* *Pink Copy: Contractor/Owner*

Oklahoma Department of Labor
www.ok.gov/odol/

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

Abatement Preparation Inspection Form

Abatement Project: T/A Former Air Force Bldg 6 Date: 7-21-2020 Time: 9:00

Project No.: 19-92126 Phase: _____

Project Address/Location: _____ City: Tulsa Zip: _____

Contractor: AHI Contact Person: Matt Gibson

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	N/A	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 and project design on-site	☑	☐	☐	☐
(8) Current Fit Test	☑	☐	☐	☐
(9) NIOSH approved respirators, clean, parts in working order	☑	☐	☐	☐
(10) Electrical panel outside work area	☐	☐	☑	☐
(11) Electrical system in abatement area locked out/ tagged out	☐	☐	☑	☐
(12) Temporary wiring installed by licensed electrician LIC #: _____	☐	☐	☑	☐
(13) Temporary panel boards properly grounded	☐	☐	☑	☐
(14) Ground fault interruption provided from outside work area	☑	☐	☐	☐
(15) Live electrical requirement met	☑	☐	☐	☐
(16) Extension cords in acceptable condition	☑	☐	☐	☐
(17) Equipment properly grounded	☑	☐	☐	☐
(18) De-con firmly constructed, opaque, with triple flaps	☑	☐	☐	☐
(19) Storage lockers for workers and ODOL inspectors' street clothes	☑	☐	☐	☐
(20) Shower with hot water supply, stable nonskid surface, lights	☑	☐	☐	☐
(21) Shower drains, filter, proper water disposal	☑	☐	☐	☐
(22) Soap from dispenser, and towels provided	☑	☐	☐	☐
(23) Hearing protection provided if required	☐	☐	☑	☐
(24) Hard hats provided, if required	☐	☐	☑	☐
(25) Appropriate footwear/safety shoes provided, if required	☑	☐	☐	☐
(26) Ventilation serving or passing through the abatement area deactivated	☑	☐	☐	☐
(27) Critical barriers in place	☑	☐	☐	☐
(28) Neg. air quantity and pressure drop, confirmed on-site with recording manometer	☐	☐	☑	☐
(29) Neg. air machine(s) have properly installed filters, clean pre-filters	☑	☐	☐	☐
(30) Prep. work secure with negative air on	☑	☐	☐	☐
(31) Make-up air sources provide adequate circulation and air cleaning	☑	☐	☐	☐
(32) Access controlled	☑	☐	☐	☐
(33) Scaffolding over 10' high has 42" side rails and 4" toe boards	☐	☐	☑	☐
(34) Scaffolding from 4' to 10' high, but less than 42" wide, has side rails	☐	☐	☑	☐
(35) Scaffolding with people working under has mesh or solid barrier on platform	☐	☐	☑	☐
(36) Scaffolding floorboards in good condition and secured	☐	☐	☑	☐
(37) Aerial lifts have full-body harness with shock lanyards	☑	☐	☐	☐
(38) Ladders are non-conducting and stable	☑	☐	☐	☐
(39) Heat stress monitors in place	☑	☐	☐	☐
(40) HEPA vacuum is clean with filters properly installed	☑	☐	☐	☐
(41) Temporary lighting is adequate and properly wired and grounded	☑	☐	☐	☐
(42) 10 # ABC fire extinguishers inspected	☑	☐	☐	☐
(43) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up.	☑	☐	☐	☐
(44) Acceptable amended water sprayers and chemicals provided	☑	☐	☐	☐
(45) Load-out sealed unless needed for make-up air	☑	☐	☐	☐
(46) Disposal bags and/or barrels provided and properly labelled	☑	☐	☐	☐
(47) Disposal vehicle properly lined	☑	☐	☐	☐
(48) Area monitoring locations identified	☑	☐	☐	☐
(49) Other	☐	☐	☐	☐

123 # OF GLOVEBAGS | # OF FULL CONTAINMENTS | # OF MINI CONTAINMENTS

Recommendations & Remarks: Removing last glovebags at front of building

Orders: Remove ACM - V/F tomorrow

☐ Imminent Danger

Keith H. Hunt
Inspector's Signature

Contractor's or Representative's Signature

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #:	19-9426	07	22	2020	11:00
Facility:	TIA Former Air Force - Bldg 6	Month	Day	Year	Time
Contractor #:		County #:	72	FY #:	
Address/Location:		Address City:	Tulsa		
Owner/Occupant:		Contractor:	AHI		
Contact Name:		Contractor's Rep.:	Matt Gibson		
Facility Phone #:		Contractor's Phone #:			

1. Description of Area: glovebags in front of building

2. Areas requiring further cleaning: None

3. Air Counts (PCM/TEM) On-Site?: All clearances below .01 UCL

4. DOL Recommendations: Tear down remaining Poly & Tape and dispose of as ACM

5. Will a FINAL inspection be required?: this is the Final - Final is accepted

6. Notes: This completes this Project

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hensley
Inspector's Signature

Contractor's Signature

Revised 5/2016

White Copy: DOL *Yellow Copy: Consultant* *Pink Copy: Contractor/Owner*

Oklahoma Department of Labor
www.ok.gov/odol/

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Oklahoma City, OK 73105
405-521-6464 • 888-269-5353
Fax: 405-521-6025

Abatement Preparation Inspection Form

Abatement Project: TIA Former Air Force Plant 3 bldgs Date: 7-8-20 Time: 1:1/2

Project No.: 19-9426 Phase: III

Project Address/Location: 3300 N 85 E Ave City: Tulsa Zip:

Contractor: AHI Contact Person: Matt Gibson

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	N/A	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 and project design on-site	☑	☐	☐	☐
(8) Current Fit Test	☑	☐	☐	☐
(9) NIOSH approved respirators, clean, parts in working order	☑	☐	☐	☐
(10) Electrical panel outside work area	☐	☐	☑	☐
(11) Electrical system in abatement area locked out/ tagged out	☑	☐	☐	☐
(12) Temporary wiring installed by licensed electrician LIC #:	☐	☐	☑	☐
(13) Temporary panel boards properly grounded	☐	☐	☑	☐
(14) Ground fault interruption provided from outside work area	☑	☐	☐	☐
(15) Live electrical requirement met	☑	☐	☐	☐
(16) Extension cords in acceptable condition	☑	☐	☐	☐
(17) Equipment properly grounded	☑	☐	☐	☐
(18) De-con firmly constructed, opaque, with triple flaps	☑	☐	☐	☐
(19) Storage lockers for workers and ODOL inspectors' street clothes	☑	☐	☐	☐
(20) Shower with hot water supply, stable nonskid surface, lights	☑	☐	☐	☐
(21) Shower drains, filter, proper water disposal	☑	☐	☐	☐
(22) Soap from dispenser, and towels provided	☑	☐	☐	☐
(23) Hearing protection provided if required	☐	☐	☑	☐
(24) Hard hats provided, if required	☐	☐	☑	☐
(25) Appropriate footwear/safety shoes provided, if required	☑	☐	☐	☐
(26) Ventilation serving or passing through the abatement area deactivated	☑	☐	☐	☐
(27) Critical barriers in place	☑	☐	☐	☐
(28) Neg. air quantity and pressure drop, confirmed on-site with recording manometer	☐	☐	☑	☐
(29) Neg. air machine(s) have properly installed filters, clean pre-filters	☑	☐	☐	☐
(30) Prep. work secure with negative air on	☑	☐	☐	☐
(31) Make-up air sources provide adequate circulation and air cleaning	☑	☐	☐	☐
(32) Access controlled	☑	☐	☐	☐
(33) Scaffolding over 10' high has 42" side rails and 4" toe boards	☐	☐	☑	☐
(34) Scaffolding from 4' to 10' high, but less than 42" wide, has side rails	☐	☐	☑	☐
(35) Scaffolding with people working under has mesh or solid barrier on platform	☐	☐	☑	☐
(36) Scaffolding floorboards in good condition and secured	☐	☐	☑	☐
(37) Aerial lifts have full-body harness with shock lanyards	☑	☐	☐	☐
(38) Ladders are non-conducting and stable	☑	☐	☐	☐
(39) Heat stress monitors in place	☑	☐	☐	☐
(40) HEPA vacuum is clean with filters properly installed	☑	☐	☐	☐
(41) Temporary lighting is adequate and properly wired and grounded	☑	☐	☐	☐
(42) 10 # ABC fire extinguishers inspected	☑	☐	☐	☐
(43) Adequate escape routes are properly marked and illuminated with emergency lighting and battery back-up.	☑	☐	☐	☐
(44) Acceptable amended water sprayers and chemicals provided	☑	☐	☐	☐
(45) Load-out sealed unless needed for make-up air	☑	☐	☐	☐
(46) Disposal bags and/or barrels provided and properly labelled	☑	☐	☐	☐
(47) Disposal vehicle properly lined	☑	☐	☐	☐
(48) Area monitoring locations identified	☑	☐	☐	☐
(49) Other	☐	☐	☐	☐

770 # OF GLOVEBAGS | # OF FULL CONTAINMENTS | # OF MINI CONTAINMENTS

Recommendations & Remarks: glovebag removal throughout building. Only doing North Part of bldg now.

Orders: Remove glovebags call for Visual on 2 containments of glovebags in North Part of bldg

☐ Imminent Danger

Keith K. Hunt
Inspector's Signature

Contractor's or Representative's Signature

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #: 19-7426 | 07 (Month) | 08 (Day) | 2020 (Year) | ____ (Time)

Facility: TIA Former Air Force Plant 3 Bldg 6

Contractor #: ____ | County #: 72 | FY #: ____

Address/Location: 3300 N. 85 E Ave | Address City: Tulsa

Owner/Occupant: ____ | Contractor: AHI

Contact Name: ____ | Contractor's Rep.: Matt Gibson

Facility Phone #: ____ | Contractor's Phone #: ____

1. Description of Area: South Air Handler Units full neg Pressure Containment gross

2. Areas requiring further cleaning: small clips on side

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

4. DOL Recommendations: clean clips lock down mm clearances - call for Final

5. Will a FINAL inspection be required?: yes

6. Notes:

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hunt
Inspector's Signature

Contractor's Signature

Revised 5/2016

White Copy: DOL *Yellow Copy: Consultant* *Pink Copy: Contractor/Owner*

Oklahoma Department of Labor

3017 North Stiles, Suite 100
Oklahoma City, OK 73105
(405-521-6464) FAX (405-521-6025)

Asbestos Division

Visual/Final Inspection Form

DOL Project #: 19-9426 | 07 (Month) | 08 (Day) | 2025 (Year) | ____ (Time)

Facility: TIA Former Air Force Plant 3 Bldg 6

Contractor #: ____ | County #: 72 | FY #: ____

Address/Location: 3300 N 85 E Ave | Address City: Tulsa

Owner/Occupant: ____ | Contractor: AHI

Contact Name: ____ | Contractor's Rep.: Matt Gibson

Facility Phone #: ____ | Contractor's Phone #: ____

1. Description of Area: North containment - full negative Pressure

2. Areas requiring further cleaning: small clips on side of air handler unit

3. Air Counts (PCM/TEM) On-Site?: yes

4. DOL Recommendations: clean clips - lock down

5. Will a FINAL inspection be required?: yes

6. Notes:

7. Note any violations cited: 380:50-

8. Contractor's Comments:

Keith H. Hunt
Inspector's Signature

Contractor's Signature

Revised 5/2016

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

Appendix D

Air Monitoring Reports

A & M Engineering and Environmental Services
10010 East 16th Street
Tulsa, Oklahoma 74128
Phone: 918-665-6575
Fax: 918-665-6576
www.aandmengineering.com

A & M Engineering and Environmental Services, Inc.
Consulting · Design · Construction · Remediation

Project:						**T**	**Cass. Dia =**		**25 mm**			**PF =**	**1000**	**Field of View =**		**0.00785**	**Pg.**	**1**	**OF**	**1**
Pump Number	**Sample Number**	**Date Sampled**	**Time 1 On-Off**	**Time 2 On-Off**	**Collection Information**	**Y P**	**Pers Exp.**	**Flow Rate (L/M) Pre**	**Post**	**Avg.**	**Calib. Factor**	**Fiber Count**	**Field Count**	**Ttl. Time (Min.)**	**Volume (Liters)**	**Fiber Density**	**Fibers Per CC**	**Det. Limit**	**LCL**	**UCL**
Hi-Vol	722-01	7/20/20	07:51:00 10:00:00		Clearance South End - Near South Entrance	C		10.00	10.00	10.00	1.00	3.0	100	129	1290.0	3.822	**BDL**	0.003	0.001	0.003
Hi-Vol	722-02	7/20/20	07:51:00 10:00:00		Clearance South End - NW corner of Area	C		10.00	10.00	10.00	1.00	5.0	100	129	1290.0	6.369	**BDL**	0.003	0.001	0.003
Hi-Vol	722-03	7/20/20	07:52:00 10:00:00		Clearance South End - NE Corner of Area	C		10.00	10.00	10.00	1.00	6.0	100	128	1280.0	7.643	**BDL**	0.003	0.001	0.003
Hi-Vol	722-04	7/20/20	07:52:00 10:00:00		Clearance South End - SE Corner of Area	C		10.00	10.00	10.00	1.00	9.0	100	128	1280.0	11.465	**0.003**	0.003	0.002	0.003
Hi-Vol	722-05	7/20/20	07:52:00 10:00:00		Clearance South End - Near Center	C		10.00	10.00	10.00	1.00	7.0	100	128	1280.0	8.917	**0.003**	0.003	0.002	0.003
		7/20/20				C				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20				C				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20				C				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20				C				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20				C				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	722-06	7/20/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA
	722-07	7/20/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jett Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

A & M Engineering and Environmental Services
10010 East 16th Street
Tulsa, Oklahoma 74128
Phone: 918-665-6575
Fax: 918-665-6576
www.aandmengineering.com

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Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
	Cass. Dia = 25 mm											PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
	721-01	7/21/20	11:10:00		Remote decon - Neg Air Exhaust	A		2.00	2.00	2.00	0.99	4.0	100	500	990.0	5.096	**BDL**	0.003	0.001	0.003
HV			19:30:00		Glove Bags - South End															
	721-02	7/21/20	11:10:00		Remote Decon - Outside clean Room	A		2.00	2.00	2.00	0.99	3.0	100	500	990.0	3.822	**BDL**	0.003	0.001	0.003
HV			19:30:00		Glove Bags - South End															
	721-03	7/21/20	11:10:00		Work Area	A		2.00	2.00	2.00	0.99	6.5	100	500	990.0	8.280	**BDL**	0.003	0.002	0.003
HV			19:30:00		Glove Bags - South End															
	721-04	7/21/20	11:11:00		Load Out Path	A		2.00	2.00	2.00	0.99	2.5	100	489	968.2	3.185	**BDL**	0.004	0.001	0.004
3075			19:20:00		Glove Bags															
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/21/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	721-05	7/21/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	721-06	7/21/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

[signature]

AM Technician: Jett Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Consulting · Design · Construction · Remediation

Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
					Cass. Dia = 25 mm							PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
	717-01	7/17/20	07:39:00 15:58:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	4.0	100	499	988.0	5.096	**BDL**	0.003	0.001	0.003
	717-02	7/17/20	07:40:00 15:59:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	2.5	100	499	988.0	3.185	**BDL**	0.003	0.001	0.003
HV	717-03	7/17/20	07:42:00 16:02:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	1.00	3.0	100	500	1000.0	3.822	**BDL**	0.003	0.001	0.003
HV	717-04	7/17/20	07:45:00 16:06:00		2nd Floor Work Area Glove Bags	A		2.00	1.90	1.95	1.00	7.5	100	501	977.0	9.554	**0.004**	0.004	0.002	0.004
HV	717-05	7/17/20	07:48:00 16:04:00		Load Out Path Glove Bags	A		5.00	5.10	5.05	1.00	6.0	100	496	2504.8	7.643	**BDL**	0.001	0.001	0.001
		7/17/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/17/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	717-06	7/17/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	717-07	7/17/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed
in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
						T	Cass. Dia = 25 mm					PF = 1000		Field of View = 0.00785			Pg. 1		OF	1
Hi-Vol	720-01	7/20/20	07:08:00 09:15:00		Clearance 2nd Floor - South End	C		10.00	10.00	10.00	1.00	6.0	100	127	1270.0	7.643	**BDL**	0.003	0.001	0.003
Hi-Vol	720-02	7/20/20	07:08:00 09:16:00		Clearance 2nd Floor	C		10.00	10.00	10.00	1.00	3.5	100	128	1280.0	4.459	**BDL**	0.003	0.001	0.003
Hi-Vol	720-03	7/20/20	07:09:00 09:17:00		Clearance 2nd Floor - center	C		10.00	10.00	10.00	1.00	2.0	100	128	1280.0	2.548	**BDL**	0.003	0.000	0.003
Hi-Vol	720-04	7/20/20	07:10:00 09:20:00		Clearance 2nd Floor	C		10.00	10.00	10.00	1.00	1.5	100	130	1300.0	1.911	**BDL**	0.003	0.000	0.003
Hi-Vol	720-05	7/20/20	07:11:00 09:19:00		Clearance 2nd Floor - North end	C		10.00	10.00	10.00	1.00	2.0	100	128	1280.0	2.548	**BDL**	0.003	0.000	0.003
Hi-Vol	720-06	7/20/20	10:08:00 12:16:00		Clearance 1st Floor - South End	C		10.00	10.00	10.00	1.00	6.5	100	128	1280.0	8.280	**BDL**	0.003	0.002	0.003
Hi-Vol	720-07	7/20/20	10:03:00 12:15:00		Clearance 1st Floor	C		10.00	10.00	10.00	1.00	6.0	100	132	1320.0	7.643	**BDL**	0.003	0.001	0.003
Hi-Vol	720-08	7/20/20	10:04:00 12:12:00		Clearance 1st Floor - Center	C		10.00	10.00	10.00	1.00	2.5	100	128	1280.0	3.185	**BDL**	0.003	0.001	0.003
Hi-Vol	720-09	7/20/20	10:05:00 12:11:00		Clearance 1st Floor	C		10.00	10.00	10.00	1.00	4.0	100	126	1260.0	5.096	**BDL**	0.003	0.001	0.003
Hi-Vol	720-10	7/20/20	10:06:00 12:10:00		Clearance 1st Floor North end	C		10.00	10.00	10.00	1.00	3.5	100	124	1240.0	4.459	**BDL**	0.003	0.001	0.003
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/20/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	720-11	7/20/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	720-12	7/20/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
	Cass. Dia = 25 mm											PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
3072	716-01	7/16/20	07:03:00 16:40:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	3.5	100	577	1142.5	4.459	**BDL**	0.003	0.001	0.003
3074	716-02	7/16/20	07:03:00 16:40:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	2.0	100	577	1142.5	2.548	**BDL**	0.003	0.001	0.003
HV	716-03	7/16/20	07:46:00 16:33:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	1.00	5.0	100	527	1054.0	6.369	**BDL**	0.003	0.001	0.003
HV	716-04	7/16/20	07:44:00 16:36:00		2nd Floor Work Area Glove Bags	A		2.00	2.00	2.00	1.00	3.5	100	532	1064.0	4.459	**BDL**	0.003	0.001	0.003
HV	716-05	7/16/20	07:47:00 16:34:00		Load Out Path Glove Bags	A		5.00	5.00	5.00	1.00	4.0	100	527	2635.0	5.096	**BDL**	0.001	0.000	0.001
		7/16/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/16/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	716-06	7/16/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	716-07	7/16/20	06:34:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	1046	0.0	0.637	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
					Cass. Dia = 25 mm							PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
3075	715-01	7/15/20	07:04:00 16:40:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	2.0	100	576	1140.5	2.548	**BDL**	0.003	0.001	0.003
3079	715-02	7/15/20	07:04:00 16:40:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	3.5	100	576	1140.5	4.459	**BDL**	0.003	0.001	0.003
HV	715-03	7/15/20	07:07:00 16:35:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	1.00	4.5	100	568	1136.0	5.732	**BDL**	0.003	0.001	0.003
HV	715-04	7/15/20	07:13:00 16:26:00		2nd Floor Work Area Glove Bags	A		2.00	2.00	2.00	1.00	8.0	100	553	1106.0	10.191	**0.004**	0.003	0.002	0.003
		7/15/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/15/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	715-06	7/15/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	715-07	7/15/20	06:35:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	1045	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Project: | **T** **Cass. Dia =** **25 mm** | **PF =** **1000** | **Field of View =** **0.00785** | **Pg.** **1** **OF** **1**

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
3072	714-01	7/14/20	06:55:00 16:37:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	4.5	100	582	1152.4	5.732	**BDL**	0.003	0.001	0.003
3071	714-02	7/14/20	06:55:00 16:37:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	4.0	100	582	1152.4	5.096	**BDL**	0.003	0.001	0.003
HV	714-03	7/14/20	07:06:00 16:33:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	3.0	100	567	1122.7	3.822	**BDL**	0.003	0.001	0.003
HV	714-04	7/14/20	07:08:00 16:35:00		2nd Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	2.0	100	567	1122.7	2.548	**BDL**	0.003	0.001	0.003
HV	714-07	7/14/20	13:03:00 16:32:00		Load Out Path Glove Bags	A		5.00	5.00	5.00	0.99	2.0	100	209	1034.6	2.548	**BDL**	0.003	0.001	0.003
		7/14/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/14/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	714-05	7/14/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	714-06	7/14/20	06:35:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	1045	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1

Rotometer Number: Low Flow and High Flow

Calibration Date: 6/25/2020

AM Technician: Jett Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Phone: 918-665-6575
Fax: 918-665-6576
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A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

Project:

						T	**Cass. Dia =**		**25 mm**			**PF =**	**1000**	**Field of View =**		**0.00785**	**Pg.**	**1**	**OF**	**1**
Pump Number	**Sample Number**	**Date Sampled**	**Time 1 On-Off**	**Time 2 On-Off**	**Collection Information**	**Y P**	**Pers Exp.**	**Flow Rate (L/M)** Pre	Post	Avg.	**Calib. Factor**	**Fiber Count**	**Field Count**	**Ttl. Time (Min.)**	**Volume (Liters)**	**Fiber Density**	**Fibers Per CC**	**Det. Limit**	**LCL**	**UCL**
3075	713-01	7/13/20	06:42:00 16:39:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	3.0	100	597	1182.1	3.822	**BDL**	0.003	0.001	0.003
3079	713-02	7/13/20	06:42:00 16:39:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	4.5	100	597	1182.1	5.732	**BDL**	0.003	0.001	0.003
HV	713-03	7/13/20	07:05:00 16:33:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	5.0	100	568	1124.6	6.369	**BDL**	0.003	0.001	0.003
HV	713-04	7/13/20	06:55:00 16:35:00		2nd Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	9.5	100	580	1148.4	12.102	**0.004**	0.003	0.003	0.003
		7/13/20												0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/13/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	713-05	7/13/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	713-06	7/13/20	06:40:00		Blank 2 (field blank)	B		0.00	0.00	0.00		1.5	100	1040	0.0	1.911	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed
in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

7/10/2020

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Consulting · Design · Construction · Remediation

Project: | **T** | **Cass. Dia = 25 mm** | **PF = 1000** | **Field of View = 0.00785** | **Pg. 1 OF 1**

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
3074	710-11	7/10/20	07:03:00 15:41:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	4.0	100	518	1025.6	5.096	**BDL**	0.003	0.001	0.003
3075	710-12	7/10/20	07:03:00 15:41:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	5.0	100	518	1025.6	6.369	**BDL**	0.003	0.001	0.003
3079	710-13	7/10/20	07:06:00 15:48:00		1st Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	6.5	100	522	1033.6	8.280	**BDL**	0.003	0.002	0.003
3072	710-14	7/10/20	07:30:00 15:55:00		2nd Floor Work Area Glove Bags	A		2.00	2.00	2.00	0.99	7.0	100	505	999.9	8.917	**0.003**	0.003	0.002	0.003
3071	710-15	7/10/20	13:06:00 15:37:00		Load Out Path Glove Bags	A		2.00	2.00	2.00	0.99	4.5	100	151	299.0	5.732	**BDL**	0.011	0.005	0.011
		7/10/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	710-16	7/10/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA
	710-17	7/10/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010

NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1

Rotometer Number: Low Flow and High Flow

Calibration Date: 6/25/2020

Microscope: Olympus CX43rf

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Project:

						T	**Cass. Dia =**		**25 mm**			**PF =**	**1000**	**Field of View =**		**0.00785**	**Pg.**	**1**	**OF**	**1**
Pump Number	**Sample Number**	**Date Sampled**	**Time 1 On-Off**	**Time 2 On-Off**	**Collection Information**	**Y P**	**Pers Exp.**	**Flow Rate (L/M) Pre**	**Post**	**Avg.**	**Calib. Factor**	**Fiber Count**	**Field Count**	**Ttl. Time (Min.)**	**Volume (Liters)**	**Fiber Density**	**Fibers Per CC**	**Det. Limit**	**LCL**	**UCL**
Hi-Vol	710-01	7/10/20	07:45:00 10:05:00		Clearance North Containment	C		10.00	10.00	10.00	1.00	8.0	100	140	1400.0	10.191	**0.003**	0.002	0.002	0.002
Hi-Vol	710-02	7/10/20	07:45:00 10:05:00		Clearance North Containment	C		10.00	10.00	10.00	1.00	5.5	100	140	1400.0	7.006	**BDL**	0.002	0.001	0.002
Hi-Vol	710-03	7/10/20	07:45:00 10:05:00		Clearance North Containment	C		10.00	10.00	10.00	1.00	3.5	100	140	1400.0	4.459	**BDL**	0.002	0.001	0.002
Hi-Vol	710-04	7/10/20	07:45:00 10:05:00		Clearance North Containment	C		10.00	10.00	10.00	1.00	4.0	100	140	1400.0	5.096	**BDL**	0.002	0.001	0.002
Hi-Vol	710-05	7/10/20	07:45:00 10:05:00		Clearance North Containment	C		10.00	10.00	10.00	1.00	4.0	100	140	1400.0	5.096	**BDL**	0.002	0.001	0.002
Hi-Vol	710-06	7/10/20	13:55:00 16:02:00		Clearance South Containment	C		10.00	10.00	10.00	1.00	4.0	100	127	1270.0	5.096	**BDL**	0.003	0.001	0.003
Hi-Vol	710-07	7/10/20	13:55:00 16:02:00		Clearance South Containment	C		10.00	10.00	10.00	1.00	2.5	100	127	1270.0	3.185	**BDL**	0.003	0.001	0.003
Hi-Vol	710-08	7/10/20	13:55:00 16:02:00		Clearance South Containment	C		10.00	10.00	10.00	1.00	4.0	100	127	1270.0	5.096	**BDL**	0.003	0.001	0.003
Hi-Vol	710-09	7/10/20	13:55:00 16:02:00		Clearance South Containment	C		10.00	10.00	10.00	1.00	3.0	100	127	1270.0	3.822	**BDL**	0.003	0.001	0.003
Hi-Vol	710-10	7/10/20	13:55:00 16:02:00		Clearance South Containment	C		10.00	10.00	10.00	1.00	3.0	100	127	1270.0	3.822	**BDL**	0.003	0.001	0.003
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/10/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	710-16	7/10/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA
	710-17	7/10/20	06:47:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	1033	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Consulting - Design - Construction - Remediation

Project: 2320-002

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
					Cass. Dia = 25 mm							PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
Hi-Vol	709-01	7/9/20	06:52:00 13:55:00		Neg air Exhaust North Containment - Cleaning	A		5.00	5.00	5.00	1.00	6.0	100	423	2115.0	7.643	**BDL**	0.002	0.001	0.002
Hi-Vol	709-02	7/9/20	06:52:00 13:55:00		Outside Clean Room North Containment - Cleaning	A		5.00	5.00	5.00	1.00	4.5	100	423	2115.0	5.732	**BDL**	0.002	0.001	0.002
Hi-Vol	709-03	7/9/20	06:52:00 13:55:00		Outside Load Out /Critical North Containment - Cleaning	A		5.00	5.00	5.00	1.00	9.0	100	423	2115.0	11.465	**0.002**	0.002	0.001	0.002
3079	709-04	7/9/20	06:57:00 15:50:00		Neg air Exhaust South Containment - Cleaning	A		5.00	5.00	5.00	1.00	4.0	100	533	2665.0	5.096	**BDL**	0.001	0.000	0.001
3072	709-05	7/9/20	06:57:00 15:50:00		Outside Clean Room South Containment - Cleaning	A		5.00	5.00	5.00	1.00	6.5	100	533	2665.0	8.280	**BDL**	0.001	0.001	0.001
3071	709-06	7/9/20	06:57:00 15:50:00		Outside Load Out /Critical South Containment - Cleaning	A		5.00	5.00	5.00	1.00	9.0	100	533	2665.0	11.465	**0.002**	0.001	0.001	0.001
3072	709-09	7/9/20	07:15:00 16:40:00		Remote decon - Neg Air Exhaust Glove Bags	A		2.00	2.00	2.00	0.99	3.5	100	565	1118.7	4.459	**BDL**	0.003	0.001	0.003
	709-10	7/9/20	07:13:00 16:40:00		Remote Decon - Outside clean Room Glove Bags	A		2.00	2.00	2.00	0.99	4.0	100	567	1122.7	5.096	**BDL**	0.003	0.001	0.003
3079	709-11	7/9/20	07:46:00 16:35:00		1st Floor Work Area Glove Bags			2.00	2.00	2.00	0.99	7.5	100	529	1047.4	9.554	**0.004**	0.003	0.002	0.003
3075	709-12	7/9/20	07:40:00 16:15:00		2nd Floor Work Area Glove Bags			2.00	2.00	2.00	0.99	12.0	100	515	1019.7	15.287	**0.006**	0.003	0.004	0.008
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/9/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	709-07	7/9/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA
	709-08	7/9/20	06:47:00 16:00:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	553	0.0	0.637	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Project: | **Cass. Dia =** 25 mm | **PF =** 1000 | **Field of View =** 0.00785 | **Pg.** 1 **OF** 1

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
	708-01	7/8/20	14:59:00		Neg air Exhaust	A		5.00	5.00	5.00	1.00	3.5	100	109	545.0	4.459	**BDL**	0.006	0.002	0.006
Hi-Vol			16:48:00		North Containment - Cleaning															
	708-02	7/8/20	14:58:00		Outside Clean Room	A		5.00	5.00	5.00	1.00	4.0	100	110	550.0	5.096	**BDL**	0.006	0.002	0.006
Hi-Vol			16:48:00		North Containment - Cleaning															
	708-03	7/8/20	14:57:00		Outside Load Out /Critical	A		5.00	5.00	5.00	1.00	3.0	100	111	555.0	3.822	**BDL**	0.006	0.002	0.006
Hi-Vol			16:48:00		North Containment - Cleaning															
	708-04	7/8/20	14:53:00		Neg air Exhaust	A		5.00	5.00	5.00	1.00	5.5	100	109	545.0	7.006	**BDL**	0.006	0.003	0.006
3079			16:42:00		South Containment - Cleaning															
	708-05	7/8/20	14:55:00		Outside Clean Room	A		5.00	5.00	5.00	1.00	2.5	100	107	535.0	3.185	**BDL**	0.006	0.001	0.006
3072			16:42:00		South Containment - Cleaning															
	708-06	7/8/20	14:54:00		Outside Load Out /Critical	A		5.00	5.00	5.00	1.00	4.0	100	108	540.0	5.096	**BDL**	0.006	0.002	0.006
3071			16:42:00		South Containment - Cleaning															
		7/8/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/8/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	708-07	7/8/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	708-08	7/8/20	15:03:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	112	0.0	0.637	**NA**	NA	NA	NA
			16:55:00																	

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed
in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Project:

T | **Cass. Dia = 25 mm** | **PF = 1000** | **Field of View = 0.00785** | **Pg. 1 OF 1**

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Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
Hi-Vol	706-01	7/6/20	06:41:00 16:05:00		Neg air Exhaust North Containment - Cleaning	A		5.00	5.00	5.00	1.00	5.0	100	564	2820.0	6.369	**BDL**	0.001	0.001	0.001
Hi-Vol	706-02	7/6/20	06:42:00 16:06:00		Outside Clean Room North Containment - Cleaning	A		5.00	5.00	5.00	1.00	9.0	100	564	2820.0	11.465	**0.002**	0.001	0.001	0.001
Hi-Vol	706-03	7/6/20	06:43:00 16:08:00		Outside Load Out /Critical North Containment - Cleaning	A		5.00	5.00	5.00	1.00	4.0	100	565	2825.0	5.096	**BDL**	0.001	0.000	0.001
3079	706-04	7/6/20	06:46:00 16:10:00		Work area North Containment - Cleaning	A		2.00	1.90	1.95	0.99	4.5	100	564	1088.8	5.732	**BDL**	0.003	0.001	0.003
3072	706-05	7/6/20	08:18:00 16:17:00		Load Out Path	A		2.00	1.90	1.95	0.99	3.5	100	479	924.7	4.459	**BDL**	0.004	0.001	0.004
3071	706-06	7/6/20	08:16:00 16:20:00		Near Waste Dumpster	A		2.00	2.00	2.00	0.99	2.5	100	484	958.3	3.185	**BDL**	0.004	0.001	0.004
		7/6/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/6/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	706-07	7/6/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	706-08	7/6/20	06:35:00		Blank 2 (field blank)	B		0.00	0.00	0.00		1.0	100	1045	0.0	1.274	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

A & M Engineering and Environmental Services
10010 East 16th Street
Tulsa, Oklahoma 74128
Phone: 918-665-6575
Fax: 918-665-6576
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Consulting · Design · Construction · Remediation

Project:

						T	Cass. Dia =	25 mm				PF =	1000	Field of View =		0.00785	Pg.	1	OF	1
Pump Number	**Sample Number**	**Date Sampled**	**Time 1 On-Off**	**Time 2 On-Off**	**Collection Information**	**Y P**	**Pers Exp.**	**Flow Rate (L/M) Pre**	**Post**	**Avg.**	**Calib. Factor**	**Fiber Count**	**Field Count**	**Ttl. Time (Min.)**	**Volume (Liters)**	**Fiber Density**	**Fibers Per CC**	**Det. Limit**	**LCL**	**UCL**
Hi-Vol	702-01	7/2/20	06:50:00 15:20:00		Neg air Exhaust North Containment - Cleaning	A		5.00	5.00	5.00	1.00	7.0	100	510	2550.0	8.917	**0.001**	0.001	0.001	0.001
Hi-Vol	702-02	7/2/20	06:50:00 15:20:00		Outside Clean Room North Containment - Cleaning	A		5.00	5.00	5.00	1.00	3.0	100	510	2550.0	3.822	**BDL**	0.001	0.000	0.001
Hi-Vol	702-03	7/2/20	06:50:00 15:20:00		Outside Load Out /Critical North Containment - Cleaning	A		5.00	5.00	5.00	1.00	4.5	100	510	2550.0	5.732	**BDL**	0.001	0.001	0.001
3072	702-04	7/2/20	06:54:00 15:20:00		Work area North Containment - Cleaning	A		2.00	2.00	2.00	0.99	4.0	100	506	1001.9	5.096	**BDL**	0.003	0.001	0.003
SKC 389	702-07	7/2/20	09:30:00 13:00:00		Load Out Path	A		2.00	2.00	2.00	0.99	3.5	100	210	415.8	4.459	**BDL**	0.008	0.003	0.008
SKC 391	702-08	7/2/20	09:30:00 13:00:00		Near Waste Dumpster	A		2.00	2.00	2.00	0.99	6.0	100	210	415.8	7.643	**BDL**	0.008	0.004	0.008
		7/2/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20				A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/2/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	702-05	7/2/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	702-06	7/2/20	06:45:00 15:20:00		Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	515	0.0	0.637	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed
in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

A & M Engineering and Environmental Services
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Phone: 918-665-6575
Fax: 918-665-6576
www.aandmengineering.com

Project:

T | Cass. Dia = 25 mm | PF = 1000 | Field of View = 0.00785 | Pg. 1 OF 1

0

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
Hi-Vol	701-01	7/1/20	07:08:00 16:16:00		Outside Load Out /Critical South Containment - final wipe down	A		5.00	5.00	5.00	1.00	10.0	100	548	2740.0	12.739	**0.002**	0.001	0.001	0.002
Hi-Vol	701-02	7/1/20	07:09:00 16:17:00		Outside Clean Roon South Containment - final wipe down	A		5.00	5.00	5.00	1.00	5.0	100	548	2740.0	6.369	**BDL**	0.001	0.001	0.001
Hi-Vol	701-03	7/1/20	07:10:00 16:18:00		Neg Air Exhaust South Containment - final wipe down	A		5.00	5.00	5.00	1.00	9.5	100	548	2740.0	12.102	**0.002**	0.001	0.001	0.001
Hi-Vol	701-04	7/1/20	07:08:00 16:32:00		Neg air Exhaust North Containment - Cleaning	A		5.00	5.00	5.00	1.00	6.0	100	564	2820.0	7.643	**BDL**	0.001	0.001	0.001
Hi-Vol	701-05	7/1/20	07:05:00 16:32:00		Outside Clean Room North Containment - Cleaning	A		5.00	5.00	5.00	1.00	11.0	100	567	2835.0	14.013	**0.002**	0.001	0.001	0.003
Hi-VOL	701-06	7/1/20	07:05:00 16:32:00		Outside Load Out /Critical North Containment - Cleaning	A		5.00	5.00	5.00	1.00	11.0	100	567	2835.0	14.013	**0.002**	0.001	0.001	0.003
3072	701-07	7/1/20	07:14:00 16:35:00		Work Area North Containment - Cleaning	A		2.00	2.00	2.00	0.99	12.0	100	561	1110.8	15.287	**0.005**	0.003	0.003	0.007
						A				0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
										0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
										0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		7/1/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	701-09	7/1/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA
	701-10	7/1/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

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Project Number: 2320-002

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Project:

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
	Cass. Dia = 25 mm											PF = 1000		Field of View = 0.00785			Pg. 1		OF 1	
3079	630-01	6/30/20	07:41:00 16:17:00		Outside Load Out /Critical South Containment - Removal and Cleaning	A		5.00	5.00	5.00	1.00	11.5	103	516	2580.0	14.223	**0.002**	0.001	0.001	0.003
Hi-Vol	630-02	6/30/20	07:41:00 16:17:00		Outside Clean Roon South Containment - Removal and Cleaning	A		5.00	5.00	5.00	1.00	19.0	100	516	2580.0	24.204	**0.004**	0.001	0.002	0.005
Hi-Vol	630-03	6/30/20	07:41:00 16:17:00		Neg Air Exhaust South Containment - Removal and Cleaning	A		5.00	5.00	5.00	1.00	9.0	107	516	2580.0	10.715	**0.002**	0.001	0.001	0.001
Hi-Vol	630-04	6/30/20	07:55:00 16:18:00		Work area South Containment - Removal and Cleaning	A		2.00	2.00	2.00	1.00	22.5	100	503	1006.0	28.662	**0.011**	0.003	0.007	0.015
Hi-Vol	630-05	6/30/20	07:33:00 16:12:00		Outside clean Room North Containment - Removal and Cleaning	A		5.00	5.00	5.00	1.00	8.0	100	519	2595.0	10.191	**0.002**	0.001	0.001	0.001
Hi-VOL	630-06	6/30/20	07:33:00 16:12:00		Neg Air Exhaust North Containment - Removal and Cleaning	A		5.00	5.00	5.00	1.00	13.0	101	519	2595.0	16.397	**0.002**	0.001	0.002	0.003
3072	630-07	6/30/20	07:33:00 16:12:00		Outside Load Out /Critical North Containment - Removal and Cleaning	A		5.00	5.00	5.00	0.99	15.0	100	519	2569.1	19.108	**0.003**	0.001	0.002	0.004
3071	630-08	6/30/20	07:50:00 16:15:00		Work Area North Containment - Removal and Cleaning	A		2.00	2.00	2.00	0.99	16.0	100	505	999.9	20.382	**0.008**	0.003	0.005	0.011
SKC 391	630-09	6/30/20	07:25:00 10:40:00	12:55:00 16:08:00	Load Out Path	A		2.00	2.00	2.00	0.99	12.0	101	388	768.2	15.135	**0.008**	0.004	0.005	0.010
SKC	630-10	6/30/20	07:25:00 16:08:00		Near Load Out Trailer	A		2.00	2.00	2.00	0.99	11.0	100	523	1035.5	14.013	**0.005**	0.003	0.003	0.007
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/30/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	629-11	6/30/20			Blank 1 (media blank)	B		0.00	0.00	0.00		1.0	100	0	0.0	1.274	**NA**	NA	NA	NA
	629-12	6/30/20			Blank 2 (field blank)	B		0.00	0.00	0.00		2.0	100	0	0.0	2.548	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

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in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

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Project:

0 Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	T Y P	Cass. Dia = Pers Exp.	25 mm Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	PF = Fiber Count	1000 Field Count	Field of View = Ttl. Time (Min.)	Volume (Liters)	0.00785 Fiber Density	Fibers Per CC	Pg. 1 Det. Limit	OF LCL	1 UCL
3079	626-01	6/26/20	10:00:00 15:00:00		Carlos Sosa (#402652 FF - PAPR) South Containment	P	<0.01	1.90	1.90	1.90	0.99	100.0	39	300	563.2	326.637	**0.223**	0.006	0.139	0.308
3072	626-02	6/26/20	10:00:00 15:05:00		Roberto G. (#402299, FF - PAPR) South Containment	P	<0.01	1.90	1.90	1.90	0.99	100.0	55	305	572.5	231.616	**0.156**	0.006	0.097	0.215
skc 922	626-03	6/26/20	10:10:00 15:00:00		Work Area - Inside containment South Containment	A		1.90	1.90	1.90	0.99	100.0	76	290	545.5	167.616	**0.118**	0.006	0.074	0.163
Hi-Vol	626-04	6/26/20	10:05:00 15:00:00		Neg air Exhaust South Containment	A		8.00	8.00	8.00	1.00	27.0	100	295	2360.0	34.395	**0.006**	0.001	0.003	0.008
Hi-Vol	626-05	6/26/20	10:05:00 15:00:00		Outside Clean Room South Containment	A		8.00	8.00	8.00	1.00	33.0	101	295	2360.0	41.622	**0.007**	0.001	0.004	0.009
Hi-VOL	626-06	6/26/20	10:16:00 15:00:00		Outside Load Out - Critical South Containment	A		8.00	8.00	8.00	1.00	19.0	100	284	2272.0	24.204	**0.004**	0.002	0.003	0.006
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/26/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	626-07	6/26/20			Blank 1	B		0.00	0.00	0.00		1.0	100	0	0.0	1.274	**NA**	NA	NA	NA
	626-08	6/26/20			Blank 2	B		0.00	0.00	0.00		1.5	100	0	0.0	1.911	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

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Project: | **Cass. Dia =** 25 mm | **PF =** 1000 | **Field of View =** 0.00785 | **Pg.** 1 **OF** 1

0

Pump Number	Sample Number	Date Sampled	Time 1 On-Off	Time 2 On-Off	Collection Information	TYP	Pers Exp.	Flow Rate (L/M) Pre	Post	Avg.	Calib. Factor	Fiber Count	Field Count	Ttl. Time (Min.)	Volume (Liters)	Fiber Density	Fibers Per CC	Det. Limit	LCL	UCL
Hi-Vol	629-01	6/29/20	07:49:00 16:40:00		Outside Load Out /Critical South Containment - Removal	A		5.00	5.00	5.00	0.99	26.5	100	531	2623.1	33.758	**0.005**	0.001	0.003	0.007
Hi-Vol	629-02	6/29/20	07:57:00 16:41:00		Outside Clean Roon South Containment - Removal	A		8.00	8.00	8.00	1.00	36.0	100	524	4192.0	45.860	**0.004**	0.001	0.003	0.006
Hi-Vol	629-03	6/29/20	08:00:00 16:42:00		Neg Air Exhaust South Containment - Removal	A		7.00	7.00	7.00	1.00	28.0	100	522	3654.0	35.669	**0.004**	0.001	0.002	0.005
3079	629-04	6/29/20	08:03:00 16:30:00		Outside clean Room North Containment - Removal	A		2.00	2.00	2.00	1.00	10.5	100	507	1014.0	13.376	**0.005**	0.003	0.003	0.007
Hi-Vol	629-05	6/29/20	08:07:00 16:28:00		Neg Air Exhaust North Containment - Removal	A		9.00	9.00	9.00	1.00	17.0	106	501	4509.0	20.430	**0.002**	0.001	0.001	0.002
Hi-VOL	629-06	6/29/20	08:11:00 16:31:00		Outside Load Out /Critical North Containment - Removal	A		4.00	4.00	4.00	1.00	12.0	100	500	2000.0	15.287	**0.003**	0.002	0.002	0.004
SKC	629-07	6/29/20	12:15:00 04:34:00		Work Area South Containment - Removal	A		2.00	2.00	2.00	0.99	65.0	100	979	1938.4	82.803	**0.016**	0.002	0.010	0.023
SKC	629-08	6/29/20	12:17:00 04:42:00		Work Area North Containment - Removal	A		2.00	2.00	2.00	0.99	47.0	100	985	1950.3	59.873	**0.012**	0.002	0.007	0.016
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
		6/29/20								0.00				0	0.0	#DIV/0!	**NA**	NA	NA	NA
	629-09	6/29/20			Blank 1 (media blank)	B		0.00	0.00	0.00		0.5	100	0	0.0	0.637	**NA**	NA	NA	NA
	629-10	6/29/20			Blank 2 (field blank)	B		0.00	0.00	0.00		0.0	100	0	0.0	0.000	**NA**	NA	NA	NA

ANALYST PARTICIPATING IN LAB AIHA-272727 NIOSH 7400 METHOD 7/1/2010
NC = Not Counted. Reasons: 1. Overload; 2. Damaged Filter; 3. Pump Failure; 4. Missing Filter REV 1
Rotometer Number: Low Flow and High Flow
Calibration Date: 6/25/2020

I hereby certify that the above samples were collected and analyzed in compliance with applicable standards and regulations.

AM Technician: Jeff Jenkins
Location: AFP#3; Building 6
Contractor: Asbestos Handlers, inc.
Project Number: 2320-002

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** June 29, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
1	6/29/2020	LUIS FIGUEROA PAGAN 402466	740 1645	545	2.41 2.308	2.359	1285.655	32 100	40.76433	0.0122	0.0027	0.0014	0.0230
2	6/29/2020	CHRISTOPHER RHOADES 402656	740 1645	545	2.308 2.204	2.256	1229.52	29 100	36.94268	0.0116	0.0028	0.0013	0.0218
3	6/29/2020	FIELD BLANK SEALED											
4	6/29/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** June 29, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
1	6/29/2020	LUIS FIGUEROA PAGAN 402466	740 1645	545	2.41 2.308	2.359	1285.655	32 100	40.76433	0.0122	0.0027	0.0014	0.0230
2	6/29/2020	CHRISTOPHER RHOADES 402656	740 1645	545	2.308 2.204	2.256	1229.52	29 100	36.94268	0.0116	0.0028	0.0013	0.0218
3	6/29/2020	FIELD BLANK SEALED											
4	6/29/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** June 30, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - NORTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
6	6/30/2020	ENRIQUE ROJAS 402066	700 1620	560	2.5 2.41	2.455	1374.8	36 100	45.85987	0.0128	0.0025	0.0015	0.0242
7	6/30/2020	JUAN CARLOS PARRA 402112	700 1620	560	2.41 2.308	2.359	1321.04	40 100	50.95541	0.0149	0.0026	0.0017	0.0280
8	6/30/2020	FIELD BLANK SEALED											
9	6/30/2020	FILED BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** June 30, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
5	6/30/2020	JUAN CHECA 402265	650 1630	580	2.41 2.308	2.359	1368.22	28 100	35.66879	0.0100	0.0025	0.0012	0.0189
6	6/30/2020	ERNESTO ALVARRON ENCISO 279599	650 1630	580	2.5 2.41	2.455	1423.9	32 100	40.76433	0.0110	0.0024	0.0013	0.0208
7	6/30/2020	FIELD BLANK SEALED											
8	6/30/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 1, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
9	07/012020	LUIS FIGUEROA PAGAN 402466	650 1630	580	2.5 2.41	2.455	1423.9	15 100	19.10828	0.0052	0.0024	0.0006	0.0097
10	07/012020	CHRISTOPHER RHOADES 402656	650 1630	580	2.41 2.308	2.359	1368.22	11 100	14.01274	0.0039	0.0025	0.0005	0.0074
11	07/012020	FIELD BLANK SEALED											
12	07/012020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 1, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - NORTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
10	7/1/2020	KARINA CHECA 402265	700 1650	590	2.41 2.308	2.359	1391.81	33 100	42.03822	0.0116	0.0025	0.0013	0.0219
11	7/1/2020	ALEXI KIMA SARDUY 402012	700 1650	590	2.308 2.204	2.256	1331.04	37 100	47.13376	0.0136	0.0026	0.0016	0.0257
12	7/1/2020	FIELD BLANK SEALED											
13	7/1/2020	FILED BLANK EXPOSED											

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

Environmental Hazard Control,inc

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** July 6, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - NORTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
18	7/6/2020	CARLOS SOSA 402652	700 1650	590	2.5 2.41	2.455	1448.45	24 100	30.57325	0.0081	0.0024	0.0009	0.0153
19	7/6/2020	STEPHANIE CHECA 402264	700 1650	590	2.41 2.308	2.359	1391.81	31 100	39.49045	0.0109	0.0025	0.0013	0.0206
20	7/6/2020	JUAN CHJECA	710 740	30	2.5 2.5	2.5	75	11 100	14.01274	0.0719	0.0458	0.0083	0.1355
21	7/6/2020	FIELD BLANK SEALED											
22	7/6/2020	FILED BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 8, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: CLEANUP OF TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
13	7/8/2020	JUAN CHECA	1500	120	2.5	2.5	300	6	7.64331		0.0114		
		402374	1700		2.5			100		BDL		0.0013	0.0216
14	7/8/2020	KARINA CHECA	1500	120	2.5	2.5	300	3	3.82166		0.0114		
		402066	1700		2.5			100		BDL		0.0013	0.0216
15	7/8/2020	FIELD BLANK SEALED											
16	7/8/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 8, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - NORTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
23	7/8/2020	CARLOS SOSA 402652	1445 1645	120	2.5 2.5	2.5	300	4 100	5.095541	 BDL	0.0114	 0.0013	 0.0216
24	7/8/2020	ENRIQUE ROJAS 402066	1445 1645	120	2.5 2.5	2.5	300	5 100	6.369427	 BDL	0.0114	 0.0013	 0.0216
25	7/8/2020	FIELD BLANK SEALED											
26	7/8/2020	FILED BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** July 9, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GROSS REMOVAL TSI ON AIR HANDLERS - NORTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
27	07/09/210	CARLOS SOSA 402652	700 1300	360	2.5 2.41	2.455	883.8	8 100	10.19108	0.0044	0.0039	0.0005	0.0084
28	07/09/210	ENRIQUE ROJAS 402066	700 1300	360	2.5 2.5	2.5	900	6 100	7.643312	BDL	0.0038	0.0004	0.0072
29	07/09/210	FIELD BLANK SEALED											
30	07/09/210	FILED BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** July 9, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: CLEANUP OF TSI ON AIR HANDLERS - SOUTH SIDE FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
17	7/9/2020	CARLOS SOSA 402652	1300 1700	240	2.41 2.308	2.359	566.16	9 100	11.46497	0.0078	0.0061	0.0009	0.0147
18	7/9/2020	ENRIQUE ROJAS 402066	1300 1700	240	2.5 2.41	2.455	589.2	6 100	7.643312	BDL	0.0058	0.0007	0.0110
19	7/9/2020	FIELD BLANK SEALED											
20	7/9/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control,inc

2301 S SHERIDAN
TULSA OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY # 101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLANT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** July 9, 2020 **LOQ** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GLOVEBAG REMOVAL UPSTAIRS AND DOWNSTAIRS FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
1	07/09/210	ALEXEI LIMA SARDUY 402012 UPSTAIRS	1300 1700	240	2.5 2.41	2.455	589.2	11 100	14.01274	0.0092	0.0058	0.0011	0.0173
2	07/09/210	LUIS FIGUEROA PAGAN 402466 UPSTAIRS	1300 1700	240	2.5 2.308	2.404	576.96	5 100	6.369427	BDL	0.0060	0.0007	0.0112
3	07/09/210	CHRISTOPHER RHOADES 402656 DOWNSTAIRS	1302 1702	240	2.5 2.41	2.455	589.2	8 100	10.19108	0.0067	0.0058	0.0000	0.0000
4	07/09/210	JUAN CARLOS PARRA 402122 DOWNSTAIRS	1302 1702	240	2.5 2.41	2.455	589.2	6 100	7.643312	BDL	0.0058	0.0000	0.0000
5	07/09/210	FIELD BLANK SEALED											
6	07/09/210	FILED BLANK EXPOSED											

Environmental Hazard Control, Inc

2301 E. Sheridan Road, Suite B
Tulsa, OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY #101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLNAT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 13, 2020 **LOD** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GLOVEBAG REMOVAL UPSTARIS AND DOWNSTAIRS FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
14	7/13/2020	CHRISTOPHER RHOADES 402656 DOWNSTAIRS	645 1645	600	2.308 2.204	2.256	1353.6	12 100	15.28662	0.0043	0.0025	0.0005	0.0082
15	7/13/2020	ENRIQUE ROJAS 402066 DOWNSTAIRS	645 1645	600	2.308 2.204	2.256	1353.6	9 100	11.46497	0.0033	0.0025	0.0004	0.0061
16	7/13/2020	LUIS FIGUEROA PAGAN 402466 UPSTAIRS	647 1647	600	2.41 2.308	2.359	1415.4	11 100	14.01274	0.0038	0.0024	0.0004	0.0072
17	7/13/2020	ALEXEI LIMA SARDUY 402012 UPSTAIRS	647 1647	600	2.5 2.41	2.455	1473	8 100	10.19108	0.0027	0.0023	0.0003	0.0050
18	7/13/2020	JUAN CARLOS PARRA 402122 UPSTAIRS	649 1649	600	2.41 2.308	2.359	1415.4	9 100	11.46497	0.0031	0.0024	0.0004	0.0059
19	7/13/2020	KARINA CHECA 402265	650 720	30	2.5 2.5	2.5	75	2 100	2.547771	BDL	0.0458	0.0053	0.0862
20	7/13/2020	FIELD BLANK SEALED											
21	7/13/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control, Inc

2301 E. Sheridan Road, Suite B
Tulsa, OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY #101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLNAT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM **DATE ANALYZED:** July 14, 2020 **LOD** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GLOVEBAG REMOVAL UPSTARIS AND DOWNSTAIRS FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
22	7/14/2020	CHRISTOPHER RHOADES 402656 DOWNSTAIRS	645 1700	615	2.5 2.41	2.455	1509.825	12 100	15.28662	0.0039	0.0023	0.0005	0.0073
23	7/14/2020	ENRIQUE ROJAS 402066 DOWNSTAIRS	645 1700	615	2.41 2.308	2.359	1450.785	6 100	7.643312	BDL	0.0024	0.0003	0.0045
24	7/14/2020	LUIS FIGUEROA PAGAN 402466 UPSTAIRS	647 1702	615	2.308 2.204	2.256	1387.44	8 100	10.19108	0.0028	0.0025	0.0003	0.0053
25	7/14/2020	ALEXEI LIMA SARDUY 402012 UPSTAIRS	647 1702	615	2.41 2.308	2.359	1450.785	10 100	12.73885	0.0034	0.0024	0.0004	0.0064
26	7/14/2020	JUAN CARLOS PARRA 402122 UPSTAIRS	649 1704	615	2.308 2.204	2.256	1387.44	8 100	10.19108	0.0028	0.0025	0.0003	0.0053
27	7/14/2020	FIELD BLANK SEALED											
28	7/14/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control, Inc

2301 E. Sheridan Road, Suite B
Tulsa, OK 74129
918-747-1330

AIHA REFRERENCE LABORATORY #101372

CLIENT: 3181 ASBESTOS HANDLERS **SAMPLED BY:** VICKI GILLAM **MICROSCOPE:** NIKON

PROJECT: TIA FORMER AIR FORCE PLNAT 3 BLD 6 **FILTER AREA:** 385 **FIELD AREA:** 0.00785

ANALYST: VICKI GILLAM Vicki Gillam **DATE ANALYZED:** July 15, 2020 **LOD** 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GLOVEBAG REMOVAL UPSTARIS AND DOWNSTAIRS FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER	DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
29	7/15/2020	CHRISTOPHER RHOADES 402656 DOWNSTAIRS	645 1700	615	 2.308	2.308	1419.42	6 100	7.643312	BDL	0.0024	0.0003	0.0046
30	7/15/2020	ENRIQUE ROJAS 402066 DOWNSTAIRS	645 1700	615	2.5 2.41	2.455	1509.825	9 100	11.46497	0.0029	0.0023	0.0003	0.0055
31	7/15/2020	LUIS FIGUEROA PAGAN 402466 UPSTAIRS	647 1702	615	2.41 2.308	2.359	1450.785	12 100	15.28662	0.0041	0.0024	0.0005	0.0076
32	7/15/2020	ALEXEI LIMA SARDUY 402012 UPSTAIRS	647 1702	615	2.5 2.41	2.455	1509.825	15 100	19.10828	0.0049	0.0023	0.0006	0.0092
33	7/15/2020	JUAN CARLOS PARRA 402122 UPSTAIRS	649 1704	615	2.41 2.308	2.359	1450.785	10 100	12.73885	0.0034	0.0024	0.0004	0.0064
34	7/15/2020	FIELD BLANK SEALED											
35	7/15/2020	FIELD BLANK EXPOSED											

Environmental Hazard Control, Inc

2328 E. 13th Sheridan Road, Suite B
Tulsa, OK 74129
918-794-4830

AIHA REFRERENCE LABORATORY #101372

CLIENT: 3181 ASBESTOS HANDLERS SAMPLED BY: VICKI GILLAM MICROSCOPE: NIKON

PROJECT: TIA FORMER AIR FORCE PLNAT 3 BLD 6 FILTER AREA: 385 FIELD AREA: 0.00785

ANALYST: VICKI GILLAM DATE ANALYZED: July 21, 2020 LOD 7 fibers/mm^2 filter area

DESCRIPTION/PPE: GLOVEBAG REMOVAL DOWNSTAIRS FIRST ROOM FF NORTH APR, DISP SUITS, BOOTS, HARNESS AND LAYNARD

SAMPLE NUMBER		DATE	NAME/LOCATION SOCIAL SECURITY NUMBER	TIME BEG / END	TOTAL TIME MINS.	FLOW RATE BEGIN END	AVG. FLOW	TOTAL VOLUME LITERS	FIBERS FIELDS	FIBERS / MM2	F / CC	DETECTION LIMIT	LCL	UCL
1	1	7/21/2020	CHRISTOPHER RHOADES 402656	1030 1930	540	2.41 2.308	2.359	1273.86	10 100	12.73885	0.0039	0.0027	0.0004	0.0073
2	2	7/21/2020	CARLOS SOSA 402652	1030 1930	540	2.5 2.41	2.455	1325.7	8 100	10.19108	0.0030	0.0026	0.0003	0.0056
3	3	7/21/2020	LUIS FIGUEROA PAGAN 402466	1032 1932	540	2.5 2.41	2.455	1325.7	8 100	10.19108	0.0030	0.0026	0.0003	0.0056
4	4	7/21/2020	ALEXEI LIMA SARDUY 402012	1032 1934	540	2.41 2.308	2.359	1273.86	12 100	15.28662	0.0046	0.0027	0.0005	0.0087
5	5	7/21/2020	KARINA CHECA 402265	1034 1934	540	2.41 2.308	2.359	1273.86	5 100	6.369427	BDL	0.0027	0.0003	0.0051
6	6	7/21/2020	FIELD BLANK SEALED											
7	7	7/21/2020	FIELD BLANK EXPOSED											

Appendix E

Waste Disposal Records

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air force plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VARO1 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,			30	cy
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name
Signature
7/1/20 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Laura Buckland

Tag No. _____ State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature — 7-1-20 Ship Date

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

Driver Signature — 7-1-20 Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt
Name of Authorized Agent
Signature
7-1-2020 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

151910 2-19

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air force plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VARO1 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,			30	cy
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name

Signature

7/14/2020 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Kevin Sutton

Tag No. _____ State: _____

USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature — 7/14/20 Ship Date

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

Driver Signature — 7/14/20 Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt
Name of Authorized Agent

Signature

7-14-2020
Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

15158 2-19

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air Force Plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VARO1 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,			30	CY
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name
Signature
7/15/2020 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Kevin Slatter

Tag No. _____ State: _____

USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature
7/15/20 — Ship Date

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

Driver Signature
7/15/20 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt
Name of Authorized Agent
Signature
7-15-2020 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

15/992 220

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air Force Plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VARO1 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,			30	y
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name

Signature

7/17/20 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Jim Alvarado

Tag No. Y26024 State: OK.

USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature — 7/17/20 Ship Date

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

Driver Signature — 7/17/2020 Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt — Name of Authorized Agent

Signature

7-17-2020 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

752384

113

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air Force Plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VAR01 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,			30	cy
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name

Signature

7/20/20 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Richard E. Willi

Tag No. _____ State: _____

USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

20 Jul 20 — Ship Date

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

Driver Signature

20 Jul 20 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt — Name of Authorized Agent

Signature

7-20-2020 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

752680 2-19

Generator

Generator's Name: City of Tulsa

Mailing Address: 175 E. 2nd St

Tulsa, OK 74103
City State Zip

Point of Generation Address: Air Force Plant #3
3300 N. 85th East Ave

Tulsa, OK 74115
City State Zip

Contact: _____
Name Phone

Manifest Job No. MN359VARO1 / 7637

Bill to Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

Tulsa, OK 74115
City State Zip

Contact: John Malloy 918 836-5585
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Friable Asbestos, Class9, NA 2212, PG. III,		Bag	30yd.	
Greater Than One (1) Pound				

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.

Asbestos Handlers Inc — Generator Authorized Agent Name

_____ — Signature

7-22-20 — Shipment Date

Transporter

Transporter Name: Asbestos Handlers Inc

Address: 6920 E. Reading Place

City, State Zip: Tulsa, OK 74115

Driver Name (Print): Kevin Sutton

Tag No. _____ State: _____

USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

K. Sutton — Driver Signature

7/22/20 — Ship Date

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

K. Sutton — Driver Signature

7/22/20 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

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

Laura King Micki King Raven Blunt — Name of Authorized Agent

_____ — Signature

7-22-2020 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

Appendix F

Asbestos Survey Report

BUILDING NO. 006:

Date of Construction: 1942

Original Use: Maintenance Building

Floor Area: 56,266 square feet

Figure 006

Asbestos Containing Materials (ACM:

Homogeneous Areas:

HA-2: 9" x 9" floor tile – black with white streaks (+)

Consists of 700 square feet of 9" x 9" floor tile described as black with white streaks. The floor tile was installed in a checkered pattern with HA-3 (orange tan) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-3: 9" x 9" floor tile – orange tan (+)

Consists of 700 square feet of 9" x 9" floor tile described as orange tan in color. The floor tile was installed in a checkered pattern with HA-2 (black) and is damaged and in overall poor condition. The floor tile, found within the first floor entry and office areas (FS-1) is loose, warped and beginning to crumble.

HA-6: 9" x 9" floor tile – red with white streaks (+)

Consists of 22,500 square feet of 9" x 9" floor tile described as red with white streaks. The floor tile is found in checkered patterns with various other tiles in both the first and second floor entries and the office areas (FS-1). This tile is in overall fair condition with some minor physical damage.

HA-8: White cementitious joints (+)

Consists of 250 joints described as white cementitious found in entries and office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4). The majority of joints are in good condition. However, some of the joints have been damaged from impacts and general deterioration and are in need of repair.

HA-9: White fibrous pipe and joint insulation (+)

Consists of 1,700 linear feet of pipe insulation and 300 joints described as white fibrous. The majority of pipe insulation and joints are in good condition. However, a few joints appear to be damaged and are in need of repair. This type of insulation is found throughout the first and second floor entry/office areas (FS-1), pipe chases (FS-3), and mechanical rooms (FS-4).

HA-10: Air handler insulation jacket – brown wool like under white fibrous (+)

Consists of 11,000 square feet of air handler insulation jacket, described as brown wool like under white fibrous. The insulation material is found in the mechanical rooms (FS-4) and is in good condition.

HA-11: 9" x 9" floor tile – aqua blue with white streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as aqua blue with white streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-12 (gray) and is in overall good condition.

HA-12: 9" x 9" floor tile – gray with white and black streaks (+)

Consists of 10,000 square feet of 9" x 9" floor tile described as gray with white and black streaks. This floor tile is found within the second floor office space (FS-1) in a checkered pattern with HA-11 (aqua blue) and is in overall good condition.

HA-13: Gray fibrous pipe insulation (+)

Consists of 700 linear feet of pipe insulation described as gray fibrous. This insulation material found within the first floor office space (FS-1) and pipe chases (FS-3) is in overall good condition.

HA-14: Roof felt/tar/gravel (Assume +)

Consists of 30,000 square feet of roofing materials (felt/tar/gravel) located on the roof top (FS-5). This material is in a good non-friable condition.

Non-Asbestos Containing Materials Which Were Suspect:

Homogeneous Areas:

HA-1: 12" x 12" floor tile – white with gray specks found on first floor (south end of building (-)

HA-4: 9" x 9" floor tile – dark orange with white specks found on first floor (south/central end of building) (-). Checkered pattern with HA-5 (pink).

HA-5: 9" x 9" floor tile – pink with white specks found on first floor (south/central end of building) (-). Checkered pattern with HA-4 (dark orange).

HA-7: Brown fibrous (cardboard like) pipe insulation (-)

TABLE 6-1 (Continued)
Air Force Plant No. 3
Asbestos Survey Building Summary (Regulated & Non-Regulated)

Building Number	Description
	2) Approximately 400 visible insulated joints. Unknown quantities of joints also exist above the ceilings and inside pipe chases. Probably figure total of ~1,500 joints. 3) Approximately 27,000 square feet of air handler jacket insulation. 4) An unknown quantity of duct insulation exists above the drop ceilings. Probably figure total of ~15,000 linear feet of 2' x 3' duct insulation. 5) Approximately 84,000 square feet of floor tile and associated mastic. 6) Approximately 100 square feet of transite board. 7) Approximately 84,500 square feet of roof materials.
Building #006	The maintenance building contains the following ACM: 1) Approximately 2,400 linear feet of pipe insulation. 2) Approximately 550 insulated joints. 3) Approximately 11,000 square feet of air handler insulation jacket. 4) Approximately 43,900 square feet of floor tile and associated mastic. 5) Approximately 57,000 square feet of roof materials.
Building #007	The boiler house contains the following ACM: 1) Approximately 20,300 linear feet of pipe insulation. 2) Approximately 3,500 insulated joints. 3) Approximately 66,350 square feet of boiler & tank jacket insulation. 4) Approximately 33,000 square feet of roof materials.
Building #008	The police building contains the following ACM: 1) Approximately 130 linear feet of pipe insulation. 2) Approximately 25 insulated joints. 3) Approximately 50 linear feet of duct insulation (2' x 3' size) 4) Approximately 100 square feet of furnace insulation. 5) Approximately 1,400 square feet of transite wall board. 6) Approximately 3,300 square feet of floor tile & mastic. 7) Approximately 84,500 square feet of roof materials.

QUANTEM® LABORATORIES

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

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Set ID: 9902P501001
Date Received: February 1, 1999

Client: A&M Engineering & Environmental Serv.
Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton
Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas
Project Location: Tulsa, OK
Project No.: 1640-001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
1	57-FS1-HA1-001	homogeneous	gray bulk material	NAD	cellulose < 1%	
2	57-FS1-HA5-001	homogeneous	tan bulk material	NAD	cellulose 30% mineral wool 30%	perlite 30%
3	57-FS2-HA3-003	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
4	57-FS2-HA3-002	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
5	57-FS2-HA3-001	homogeneous	white / yellow bulk material	NAD	cellulose 10% glass fiber 25%	
6	57-FS2-HA2-001	homogeneous	yellow bulk material	NAD	glass fiber 99%	
7	57-FS1-HA4-001	homogeneous	light gray bulk material	NAD	n/a	
8	57-FS3-HA6-001	homogeneous	yellow / gray bulk material	NAD	n/a	
9	7-FS1-HA2-001	homogeneous	white bulk material	chrysotile 45%	n/a	
10	7-FS1-HA2-002	homogeneous	white bulk material	chrysotile 20% amosite 10%	n/a	
11	7-FS1-HA5-003	homogeneous	gray bulk material	NAD	cellulose 70% synthetic 20%	
12	7-FS1-HA3-001	homogeneous	tan bulk material	NAD	cellulose 95%	
13	7-FS1-HA4-001	homogeneous	white bulk material	NAD	mineral wool 99%	

Ellen McKittrick
Reviewed and Approved

February 2, 1999
Date

Note: Structures denoted as being "<5μ" refer to the structures whose length is from 0.5μm to 4.9μm.
QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested.
NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F].
This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

QUANTEM® LABORATORIES
2033 Heritage Park Drive
Oklahoma City, OK 73120
Ph. (405) 755-7272
Fax (405) 755-2058

Polarized Light Microscopy
Asbestos Analysis Report

QuanTEM Set ID: 9902P501001
Date Received: February 1, 1999

Client: A&M Engineering & Environmental Serv.
Account Number: A501

Analyzed By: Ellen McKittrick / Joe Melton
Methodology: AHERA (40 CFR Part 763 App. A. Sub. F)

Project: McDonnell Douglas
Project Location: Tulsa, OK
Project No.: 1640-001

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos	Non-Asbestos Fiber	Other
14	7-FS1-HA5-002	homogeneous	tan bulk material	chrysotile 3%	cellulose 92%	
15	6-FS1-HA4-001	homogeneous	tan bulk material	NAD	n/a	
16	6-FS1-HA8-001	homogeneous	white bulk material	chrysotile 20%	mineral wool 30%	
17	6-FS1-HA2-001	homogeneous	black bulk material	chrysotile 3%	n/a	
18	6-FS1-HA11-001	homogeneous	blue bulk material	chrysotile 10%	n/a	
19	6-FS1-HA3-001	homogeneous	tan bulk material	chrysotile 3%	n/a	
20	6-FS1-HA6-001	homogeneous	red bulk material	chrysotile 3%	n/a	
21	6-FS1-HA1-001	homogeneous	gray bulk material	NAD	cellulose 5%	
22	6-FS1-HA5-001	homogeneous	tan bulk material	NAD	n/a	
23	6-FS1-HA9-001	homogeneous	white bulk material	chrysotile 15%	cellulose 15% glass fiber 20%	
24	6-FS1-HA7-001	homogeneous	tan / black bulk material	NAD	cellulose 80% synthetic 5% animal hair 3%	
25	6-FS1-HA12-001	homogeneous	gray bulk material	chrysotile 10%	cellulose <1%	

Ellen McKittrick
Reviewed and Approved

February 2, 1999
Date

Note: Structures denoted as being "<5μ" refer to the structures whose length is from 0.5μm to 4.9μm.
QuanTEM is a NVLAP-accredited TEM and PLM laboratory (Lab Code 101959). This report relates only to the specific items tested.
NVLAP accreditation applies only to AHERA analysis [40 CFR Ch. I (1-1-87 ed.) Part 763, Appendix A to Subparts E and F].
This report may not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government.

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

TULSA, OKLAHOMA

ENGINEERING - ENVIRONMENTAL - CONSTRUCTION

10010 E. 16th Street - TULSA, OKLAHOMA 74128-4813
TEL: (918)665-6575 FAX: (918)665-6576 E-Mail: aandm@galstar.com

SAMPLING FIRM	CLIENT CONTACT	PHONE NUMBER
A&M	JEFF ELBERT	918-665-6575

PROJECT NUMBER	PROJECT NAME
#1640-001	McDONNELL DOUGLAS - TULSA, OK

SAMPLERS: *(Signature)* Jeff Elbert

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	MATRIX	NO. OF CONTAINERS	RUSH ? YES	RUSH ? NO	ANALYTICAL TESTS REQUIRED: ASBESTOS - PLM	REMARKS
1	1-28-99			X	57-FS1-HA1-001	SOLID	1			✓	
2				X	57-FS1-HA5-001					✓	
3				X	57-FS2-HA3-003					✓	
4				X	57-FS2-HA3-002					✓	
5				X	57-FS2-HA3-001					✓	
6				X	57-FS2-HA2-001					✓	
7				X	57-FS1-HA4-001					✓	
8				X	57-FS3-HA6-001					✓	
9				X	7-FS1-HA2-001					✓	
10				X	7-FS1-HA2-002					✓	
11				X	7-FS1-HA5-001					✓	
12				X	7-FS1-HA3-001					✓	
13				X	7-FS1-HA4-001					✓	

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Jeff Elbert	1-28-99	1630	Phillip Hyo 2-1-99 12:30

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*

REMARKS:

CHAIN

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

TULSA, OKLAHOMA

ENGINEERING - ENVIRONMENTAL - CONSTRUCTION

10010 E. 16th Street - TULSA, OKLAHOMA 74128-4813
TEL: (918)665-6575 FAX: (918)665-6576 E-Mail: aandm@galstar.com

SAMPLING FIRM	CLIENT CONTACT	PHONE NUMBER
A&M	JEFF ELBERT	918-665-6575

PROJECT NUMBER	PROJECT NAME
1640-001	MCDONNELL DOUGLAS - TULSA, OK

SAMPLERS: *(Signature)* Jeff Elbert

STA. NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	MATRIX	NO. OF CONTAINERS	RUSH ? YES	RUSH ? NO	ANALYTICAL TESTS REQUIRED: ASBESTOS - PLM	REMARKS
14	1-28-99			X	7-FSI-HA5-002	SOLID	1			✓	
15	1-27-99			X	6-FSI-HA4-001	"	"			✓	
16	1-27-99			X	6-FSI-HA8-001	"	"			✓	
17	1-27-99			X	6-FSI-HA2-001	"	"			✓	
18	1-27-99			X	6-FSI-HA11-001	"	"			✓	
19	1-27-99			X	6-FSI-HA3-001	"	"			✓	
20	1-27-99			X	6-FSI-HA6-001	"	"			✓	
21	1-27-99			X	6-FSI-HA1-001	"	"			✓	
22	1-27-99			X	6-FSI-HA5-001	"	"			✓	
23	1-27-99			X	6-FSI-HA9-001	"	"			✓	
24	1-27-99			X	6-FSI-HA7-001	"	"			✓	
25	1-27-99			X	6-FSI-HA12-001	"	"			✓	

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Jeff Elbert			
RELINQUISHED BY: *(Signature)*			
RELINQUISHED BY: *(Signature)*			

RELINQUISHED BY: *(Signature)*	DATE	TIME	RECEIVED BY: *(Signature)*
Phillip Hyde	2-1-99	12:30	
RELINQUISHED BY: *(Signature)*			
REMARKS:			

CHAIN.D