Asbestos Debris Clean-up
Building 107 Crawlspace
Project Completion Documentation

Building 107
4300 Goodfellow Blvd.
St. Louis, Missouri

Contract #: GX-06P-10-GX-A-0021/GS-P-06-12-GX-5076

Terracon Project No: 15127102

Prepared for:

General Services Administration
Heartland Region
Facilities Management Division
1500 East Bannister Rd (6PME)
Room 2101
Kansas City, Missouri 64131

Prepared by:

Terracon Consultants, Inc.
Lenexa, Kansas

Date:

November 6, 2012

November 6, 2012

General Services Administration
Heartland Region
Facilities Management Division
1500 East Bannister Rd (6PME)
Room 2101
Kansas City, Missouri 64131

Attn: Mr. Dave Hartshorn
P: 816-823-1704
E: dave.hartshorn@gsa.gov

Re: Asbestos Debris Clean-up Crawlspace
Building 107
4300 Goodfellow Blvd.
St. Louis, Missouri
Terracon Project Number: 15117102

Dear Mr. Hartshorn:

Terracon Consultants, Inc. is pleased to provide project completion documentation regarding the removal of asbestos containing debris and soil performed at the above referenced site. The work was conducted in general accordance with contract GX-06P-10-GX-A-0021/GS-P-06-12-GX-5076.

We appreciate the opportunity to be of service to you on this project. If there are any questions concerning the report, or if we may be of further assistance, please contact Allen R. Bartels at 913.492.7777 or by e-mail at arbartels@terracon.com.

Sincerely,
TERRACON CONSULTANTS, INC.

[redacted]

Allen Bartels, MBA
Department Manager Asbestos Services

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SECTION 1

TERRACON PROJECT OVERSIGHT LOGS

Project: GSA-Goodfellow Building 107 - Crawlspace
Project No.: 15127102
Terracon Rep.: Kevin Arnold / Eric Schatz

Project Capsule

The project consisted of removal of asbestos containing debris and loose soil within the crawl space. Loose soil was to be removed to “hard pan” throughout the crawl space. GEI elected to use an industrial mobile vacuum system for the gross removal of debris and contaminated soil. Large pieces of concrete, dirt clods and material too big for the vaccum system were double-bagged in 6-mil asbestos disposal bags for disposal. Occu-Tec (a GSA contract vendor) performed all project air sampling and PCM analysis. Final clearance air samples were analyzed by TEM by Bureau of Veritas, a GSA contract laboratory.

The crawl space was prepped by wrapping all duct work in two layers of 6-mil polyethylene sheeting and sealing holes, pipe and conduit penetrations. Holes and pipe penetrations were sealed with duct tape, spray foam, or 6-mil polyethylene sheeting. GEI constructed a work room adjacent to the entry door. The floor, walls, and ceiling of the work room was constructed of two layers of 6-mil polyethylene sheeting. The work room also contained a three-stage decontamination unit, and two-stage waste load-out. Five negative air machines were placed inside the crawlspace. The negative air machines were exhausted to the exterior of the building. Negative pressure was continuously monitored with a RAE negative pressure recorder provided by Occu-Tec.

GEI mobilized a trailer-mounted Vac-It-All industrial vacuum unit which was equipped with HEPA filters. The vacuumed debris was collected in 20-mil reinforced “bladder” bags placed in a roll-off dumpster. Asbestos contaminated debris that was double-bagged was placed in a box dumpster that was lined with two layers of 6-mil poly sheeting.

The crawl space was divided into nine work areas, demarcated by the support pillars, (see attached drawing). Removal activities consisted of a GEI crew vacuuming the loose soil and debris from the crawlspace floor. Vacuuming ceased when the “hard pan” was encountered. During periodic visual inspections of the work area several pieces of asbestos debris was embedded in the “hard pan.” The embedded debris and adjoining soil was removed with a shovel or rake. The loosened soil was place in a 6-mil asbestos disposal bag, or the area was re-vacuumed. The asbestos waste was double-bag prior to removal from the work area and placed in a dumpster.

Several areas of a white powdery material remain throughout the soil crawl space floor. The material appears to be lime (during soil sampling the white powdery material was reported not to be asbestos containing), which is commonly added to improve the engineering properties of clay soils, including: plasticity; drying; swelling; stability; and load-bearing.

September 17, 2012

- 4:00 pm: Kevin Arnold arrives on site. An electrical sub-panel was installed earlier in the day to accommodate the additional project electrical load.
- Vicky Dunn with GEI has been on-site since approximately 4 pm. Pat Garcia with Occu-Tec starts background samples.
- 5:00 pm: Two roll-off dumpsters and one box dumpster are delivered by Allied Waste. GEI starts unloading equipment. The box dumpsters is lined with poly and affixed with warning labels.
- 6:00 pm: Prep work commences which will included: double-wall work room containment outside the crawl space access door, 3-stage decontamination chamber, 2-stage load-out chamber, critical barriers sealed-off, duct work wrapped in two layer of polyethylene sheeting, and five negative air machines.
- 11:30 pm: Negative air machines are turned on. GEI exits containment. Secured building and left site.

September 18, 2012

- 4:30 pm: Kevin Arnold and Eric Schatz arrive on site. The containment is inspected and Pat Garcia with Occu-Tec starts air samples.
- 4:45 pm: Vicky Dunn (GEI) arrives. Mr. Townsend (GSA) had contacted Vicky regarding mud/dirt on steps to basement. He expressed his concern that it was contaminated. Walked stairs with Vicky and Pat. Inside stairs were dusty; however the dust was not from this project. The inside stairs were not used by GEI the previous night. It rained Monday night and the exterior sidewalk panel was open during the work shift. Pictures were taken but no concern was identified.
- 5:00 pm: Vac-It-All delivers a vacuum unit. GEI lines the roll-off dumpster with poly and installs a 20 mil bladder bag.
- 5:30 pm: GEI dons PPE and resumes preparation work.
- 7:00 pm: Kevin Arnold and Eric Schatz enter containment to check progress. GEI continues preparation work.
- 7:30 pm: Kevin Arnold leaves the site.
- 10:30 pm: Eric Schatz enters containment to check progress. GEI estimates preparation work will be completed on September 19, 2012.
- 11:45 pm: Secured building and left site.

September 19, 2012

- 4:30 pm: Eric Schatz arrives on site. Occu-Tec has started air samples at approximately 4:00 pm.
- 4:45 pm: Vicky Dunn with GEI arrives onsite.
- 5:00 pm: Informed of another complaint regarding mud on the interior steps. Steps were HEPA vacuumed on 9/18/12. GEI will clean steps before the end of the shift. GEI dons PPE, enters containment and start removal.
- 7:00 pm: Interior steps cleaned and photographed.

- 11:30 pm: GEI exits conatinment.
- 11:45 pm: Secured building and left site.

September 20, 2012

- 4:15 pm: Eric Schatz arrives on site. Eric Shatz enters containment to inspect the work area and determines that preparation work is not complete.
- 4:30 pm: Pat Garcia of Occu-Tec and Vicky Dunn of GEI onsite. Air samples started. Discuss remaining preparation work with Vicky Dunn.
- 5:00 pm: GEI dons PPE, enters containment to complete preparation work.
- 5:35 pm: Inspected containment and deemed preparation work complete. GEI starts removal.
- 7:30 pm: Vacuum hose clogs due to wet soil.
- 9:30 pm: Vacuum continues to clog and is shut down. GEI begins raking soil to expedite drying. Outside crew works on un-clogging vacuum.
- 10:50 pm: Vicky Dunn (GEI) offsite.
- 11:45 pm: Secured building and left site.

September 21, 2012

- 4:15 pm: Eric Schatz arrives on site. Pat Garcia (Occu-Tec) on site since 4:00 pm, air samples started.
- 4:45 pm: Vicky Dunn (GEI) arriveds on site.
- 5:00 pm: GEI dons PPE and enters containment to continue work.
- 6:15 pm: Eric Schatz and Vicky Dunn enter containment. Progress is checked in right corner of Area 1. Area 1 has been raked to hardpan but has not been vacuumed yet.
- 7:00 pm: GEI connects water lines at two points in vacuum hose. The addition of water helps alleviate clogging of the vacuum hose.
- 12:15 am: Secured building and left site.

September 24, 2012

- 4:30 pm: Kevin Arnold and Eric Shatz arrive on site. Vicky Dunn with GEI and Pat Garcia with Occu-Tec are also on site. Vicky Dunn reports that the first dumpster was picked up on Saturday, September 22, 2012.
- 5:00 pm: GEI lines second dumpster with poly and a bladder bag. Occu-Tec starts air samples.
- 6:00 pm: GEI dons PPE and enters containment to continue removal.
- 11:00 pm: Conduct inspection of Area 1 with Vicky Dunn of GEI. Identified several areas with debris embedded in the “hard pan.” GEI will remove debris and adjoining soil with rake or shovel, and re-vacuum as needed.
- 11:30 pm: GEI exits work area.
- 12:00 am: Secured building and left site.

September 25, 2012

- 4:30 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, and enters containment to start removal.
- 8:00 pm: Conduct visual inspection of Areas 1 & 2 with Vicky Dunn. Area 1 passed. Identified areas in Area 2 with debris embedded in the “hard pan”. GEI will remove debris and adjoining soil with rake or shovel, and re-vacuum as needed.
- 11:30 pm: GEI exits work area.
- 12:00 am: Secured building and left site.

September 26, 2012

- 4:45 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, and enters containment starts removal.
- 11:15 pm: GEI exits work area. Dumpster is full and sealed up. Dumpster is scheduled to be picked up on September 27, 2012.
- 11:45 pm: Secured building and left site.

September 27, 2012

- 4:45 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, and enters containment and starts removal. Allied Waste drops-off an empty dumpster and collects the full dumpster. GEI lines the empty dumpster with poly and installs a bladder bag.
- 9:00 pm: Vacuum has broken down. Vac-It-All will send a technician tomorrow during the day to repair or replace the vacuum unit. Secure building and left the site. Since Pat Garcia of Occu-Tec has necessary credentials, she remains at the site to read PCM cassettes from September 26, 2012.

September 28, 2012

- 4:45 pm: Kevin Arnold arrives on site with Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: Vicky Dunn with GEI and crew arrive. GEI reports that Vac-It-All repaired the vacuum unit and it should work properly. GEI dons PPE, enters containment and starts removal.
- 11:00 pm: Conducted visual inspection of Areas 3 and 4. Identified areas with debris embedded in in the “hard pan.” GEI will remove debris and adjoining soil with rake or shovel, and re-vacuum as needed.
- 11:30 pm: GEI exits containment. Building is secured and left site.

October 1, 2012

- 4:30 pm: Kevin Arnold on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.

- 5:00 pm: GEI dons PPE, enters containment and starts removal.
- 11:00 pm: Entered work area to check on progress. Areas 5 and 6 are almost complete.
- 11:30 pm: GEI exits work area. Building is secured and left site.

October 2, 2012

- 4:30 pm: Kevin Arnold on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, enters containment and starts removal.
- 11:00 pm: Vacuum clogs several times during the shift hindering progress. GEI exits work area.
- 11:30 pm: Secured building and left site.

October 3, 2012

- 4:30 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples. GEI was on site around 4:00 pm to accept delivery of a second vacuum unit.
- 5:00 pm: GEI dons PPE, enters containment and starts removal. GEI begins removal of the large pieces of concrete, dirt clods and rubble along the west wall. GEI seals up full dumpster.
- 5:30: Allied Waste arrives with third dumpster and removes the full dumpster. GEI lines the empty dumpster with poly and installs a bladder bag. Both vacuum units are connected to the bladder bag. GEI commences vacuuming around 6:30.
- 10:00: Conducted visual inspection of Areas 5, 6, and 7. Identified areas with debris embedded in in the “hard pan.” GEI will remove debris and adjoining soil with rake or shovel, and re-vacuum as needed. Vacuuming in Area 7 has not been completed.
- 11:30 pm: GEI exits work area. Building is secured and left site

October 4, 2012

- 4:30 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, enters containment and starts removal.
- 11:30 pm: GEI exits work area. Secured building and left site.

October 5, 2012

- 4:30 pm: Kevin Arnold on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, enters containment and starts removal.
- 9: 30 pm: Conducted visual inspection of Areas 7, 8 and 9. Identified areas with debris embedded in in the “hard pan.” GEI will remove debris and adjoining soil with rake or shovel, and re-vacuum as needed. Additional loose dirt will be removed under the duct work and along the west wall in Area 9.
- 11:30 pm: GEI exits work area. Secured building and left site.

October 8, 2012

- 4:30 pm: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 5:00 pm: GEI dons PPE, enters containment and starts final cleaning. Final cleaning will consists of wet wiping of piping, conduit and light fixtures, and HEPA vacuuming all beams, lattice floor joists, and concrete foundation ledges.
- 11:30 pm: Tomorrow is Columbus Day, a Federal Holiday, and the facility will be vacant. It was decided that we would work the day shift. GEI exits work area. Secured building and left site.

October 9, 2012

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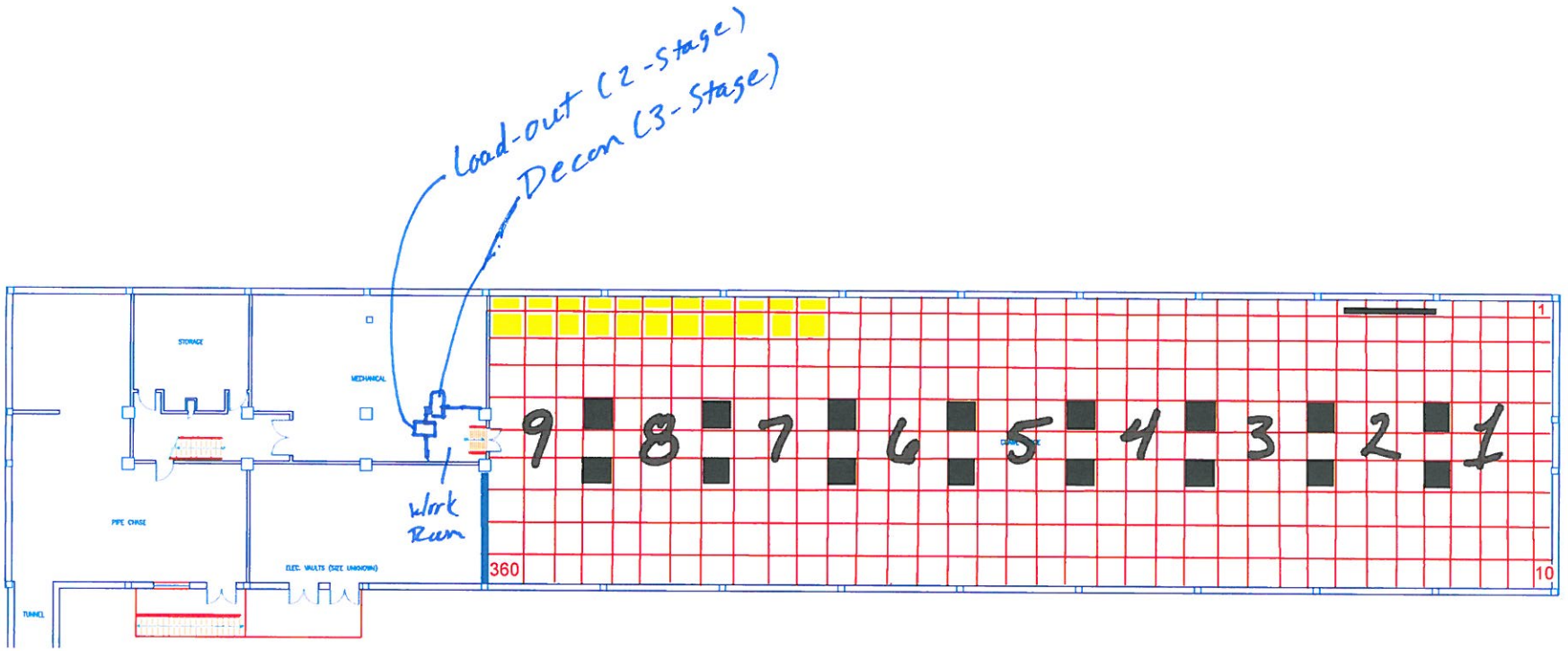
- 7:00 am: Kevin Arnold arrives on site with Vicky Dunn of GEI and Pat Garcia of Occu-Tec. Occu-Tec starts air samples.
- 7:00 am: GEI dons PPE, enters containment and continues final cleaning. The vacuum units are disconnected and the bladder bags are sealed.
- 10:45 am: Vac-It-All collects both vacuum units.
- 1:30 pm: Final cleaning is complete and GEI commences spraying encapsulant. GEI starts loading all non-essential equipment and supplies, basement area outside of the containment is cleaned and floor is HEPA vacuumed.
- 4:30 pm: Encapsulation is complete. GEI exits work area. Building is secured and left site.
- Pat Garcia of Occu-Tec holds the necessary security credentials to be on site without Terracon. Occu-Tec will return on October 10, 2012 around 10 am to conduct final air clearance samples.



N

Area covered in concrete rubble and not sampled

Project Mngr: ARB	Project No: 15119080	Terracon Consulting Engineers and Scientists	SAMPLING DIAGRAM
Approved By: ARB	Scale: NTS	13310 W. 96TH TERRACE LENEXA, KS 66215	GSA HEARTLAND
Checked By: ARB	Date: 1/6/12	PH. (913) 492-7777 FAX. (913) 492-7443	4300 GOOD FELLOW
Drawn By: DBM	File No:		ST. LOUIS, MISSOURI
			BUILDING 107 (CRAWLSPACE)

EXHIBIT 3

SECTION 2

GEI CONTRACTOR CLOSEOUT PACKAGE

SBA 8(a) CERTIFIED
W/DBE & S/DBE

TERRACON (OWNER'S REPRESENTATIVE)

CLOSEOUT PACKAGE

PROJECT:

FEDERAL CENTER – CRAWLSPACE (BUILDING 107)
4300 GOODFELLOW
ST. LOUIS, MO

TERRACON PROJECT NO. 15119080

ASB2122063

7225 St. Charles Rock Road
Pagedale, MO 63133

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM

ASBESTOS POST- NOTIFICATION

GENERAL INSTRUCTIONS

Persons who perform asbestos abatement projects are required to submit post-notification to the department within sixty (60) days of the completion date indicated on the initial notification. This post-notification shall include signed and dated receipt(s) of asbestos disposal as well as final air clearance results (if applicable). These documents, along with the completed post-notification form shall be mailed to the following address*:

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM (ASBESTOS)
P.O. BOX 176
JEFFERSON CITY, MISSOURI 65102

*For projects under the jurisdiction of a local agency, send post notification to the appropriate office.

PART A. ASBESTOS PROJECT INFORMATION

PROJECT NAME	PROJECT ID ASSIGNED BY MDNR
Federal Center - Building 107 Crawlspace	A5880-2012

ADDRESS		
4300 Goodfellow		
CITY	STATE	ZIP CODE
St. Louis	MO	63120

START DATE	COMPLETION DATE
9/17/2012	10/12/2012

PART B. CONTRACTOR INFORMATION

NAME OF CONTRACTOR	CONTRACTOR REGISTRATION NUMBER
GEI	13-06-0350
CONTRACTOR CONTACT PERSON	TELEPHONE NUMBER
Vicki Dunn-Wolfe	636-928-2500

PART C. WASTE DISPOSAL INFORMATION

NAME OF LANDFILL		
Roxana Landfill Authority		
ADDRESS		
4600 Cahokia Creek		
CITY	STATE	ZIP CODE
Roxana	IL	62048

NOTE: INCLUDE COPIES OF ALL WASTE SHIPMENT RECORDS AND DISPOSAL RECEIPTS

PART D. AIR SAMPLING INFORMATION

NAME OF AIR SAMPLING PROFESSIONAL	CERTIFICATION NUMBER
Patricia Garcia	7031008MOAS11347
COMPANY NAME	TELEPHONE NUMBER
OCCU-TEC	816-719-6149

NOTE: INCLUDE COPIES OF FINAL AIR CLEARANCE RESULTS (IF APPLICABLE)

PART E. AUTHENTICATION

I CERTIFY THAT THE INFORMATION LISTED ABOVE AND ENCLOSED IS TRUE AND ACCURATE.

SIGNATURE OF ASBESTOS ABATEMENT CONTRACTOR	DATE
[redacted]	10/25/12

MO 780-1229 (6-04)

ASB2122Dk3

OCCU-TEC

ENERGY, ENVIRONMENTAL AND SAFETY SOLUTIONS

ASBESTOS ABATEMENT CLOSE-OUT REPORT – Goodfellow - Building 107 St. Louis MO (MO0602AF)

Prepared for:

GSA U.S. General Services Administration

Mr. David Hartshorn, Certified Industrial Hygienist

GSA Heartland Region Safety & Environmental Management Office
1500 East Bannister Road, Room 2101

Kansas City, Missouri 64131-3088

Project Number: 92114

October 23, 2012

GSA Advantage!

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Appendices:

1. INTRODUCTION

As authorized by GSA-Heartland, OCCU-TEC provided air monitoring and project oversight services for an asbestos abatement project in Goodfellow - Building 107 located at 4300 Goodfellow, in St. Louis, Missouri. This final report contains the OCCU-TEC representatives' air sampling data, laboratory results, and accreditation documentation. This report has been prepared to document completion of the project in accordance with the Task Order prepared for the project.

2. PROJECT DESCRIPTION

The abatement project at Goodfellow - Building 107 took place to prevent possible asbestos exposure to employees that work in and near the Basement Crawl Space. Global Environmental Inc. (GEI), of St. Louis, Missouri, a sub-contractor for Terracon of Lenexa, Kansas, performed the asbestos abatement activities in the building from September 17, 2012 through October 09, 2012. GEI abated the following asbestos-containing materials while OCCU-TEC was on-site:

Description	Location	Quantity Removed
Thermal Pipe Insulation Debris	Basement - Crawl Space	700 Cubic Yards (Compacted)

OCCU-TEC was on-site during the entire abatement process. Appendix A contains accreditation documentation for OCCU-TEC staff on-site during asbestos abatement activities.

3. OBSERVATIONS

Airborne fiber concentrations measured outside the work area by OCCU-TEC ranged from between < 0.002 fibers per cubic centimeter (f/cc) to 0.005 f/cc. All results were below the EPA-AHERA clearance level of 0.01 f/cc.

Following completion of abatement, OCCU-TEC conducted clearance air monitoring using aggressive sampling techniques and transmission electron microscopy (TEM). These procedures were performed to indicate successful completion of the abatement activities. Airborne fiber concentrations in the clearance samples were less than 70.0 asbestos structures/mm^2 by TEM. This indicated that the area were ready for re-occupancy. Visual inspections and clearance air monitoring indicated successful completion of the asbestos abatement actions. OCCU-TEC authorized the abatement contractor to remove the containment enclosures following analysis of clearance samples.

4. AIR MONITORING

ASBESTOS PCM AREA SAMPLING

PCM air samples were collected on 25 millimeter, 0.8-micron pore size mixed cellulose ester membrane filters. The filters were contained in three piece cassettes equipped with electrically conductive 50-mm cowls. Sample flow rates ranged from 1.25 to 4.39 liters per minute. This flow rate was selected to provide a low detection limit with minimal likelihood of overloading the filter.

PCM analyses were performed according to the analysis procedures specified in the National Institute of Occupational Safety and Health, Protocol 7400, Asbestos Fibers, using the "A" counting rules. This method does not permit discrimination between asbestos fibers and non-asbestos fibers. Asbestos air monitoring PCM reports are provided in Appendix C.

ASBESTOS TEM CLEARANCE SAMPLING

TEM clearance sampling took place following completion of the visual inspections and encapsulation of the work areas. All asbestos clearances were collected on 25 millimeter; 0.45-micron pore size mixed cellulose ester membrane filters. The filters were contained in three-piece cassettes equipped with electrically conductive 50-mm cowls. TEM analyses were performed by Bureau Veritas – North America (BV) in Kennesaw, Georgia for independent analysis according to the TEM counting procedures described under AHERA. BV analyzed the samples under the EPA NVLAP program and has a laboratory ID number of 101125-0. Clearance results were all below 70.0 asbestos structures/mm^2 detected, indicating successful completion of the asbestos abatement activity.

5. RECOMMENDATIONS

OCCU-TEC recommends that the building management undertake the following:

1. Update the building asbestos management program to include the completed abatement action.

2. Continued implementation of the building's asbestos management program.

Appendix A

Accreditation Documentation

Expiration Date: **N/A** Certificate Number: 7031008MOAS11347

Training Date: **3/10/2008**

Missouri State Certificate for Asbestos Related Occupations

issued by Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone (573) 751-4817

Patricia J. Garcia

has successfully completed the requirements for certification as a AIR SAMPLING PROFESSIONAL. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

3/11/2008
Date

[redacted]
Director of Air Pollution Control Program

Expiration Date **10/2/2013**

Certificate Number: 7011090612MOIR11347

Training Date: **9/6/2012**

Missouri State Certificate for Asbestos Related Occupations

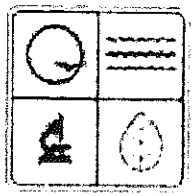
issued by Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
Phone (573) 751-4817

Patricia J. Garcia

has successfully completed the requirements for certification as a INSPECTOR. This Missouri State Certification is subject to review and the director may deny, suspend or revoke the certification per RSMo chapter 643.230.

10/3/2012
Date

[redacted]
Director of Air Pollution Control Program



THIS CERTIFIES THAT

Patricia Garcia

has successfully completed a NIOSH 582 Equivalency Course in

SAMPLING & EVALUATING AIRBORNE ASBESTOS DUST

Presented by:

OCCU-TEC, Inc.

6501 E. Commerce, Suite 230
Kansas City, Missouri 64120
(816) 231-5580

[redacted]

May 3 – May 7, 2004

Course Date

Training Coordinator

Appendix B

Daily Field Reports

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**

PROJECT NUMBER.: 92114 — **DATE: 09-17-12**

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 15:00 — **OUT: 23:45**

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 5

IN: 16:00 — **OUT: 23:45**

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature: 68 Degrees** **Conditions: Clear _____, Cloudy ___X___, Rain**

TODAY'S ACTIVITIES: **Prep. _X____, Removal ____, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob._____**

Area of Activity: **Basement GSA 107 Crawl Space** Quantity Removed: 0

Material Description: Off-Loading Equipment and Setting Up Decon, Shower, Neg Air Machines Quantity Remaining:

Area of Activity: Quantity Removed:

Material Description: Quantity Remaining:

Area of Activity: Quantity Removed:

Material Description: Quantity Remaining:

WORK PROCEDURES: Gross Removal ___, Glovebag ___, Friable ___, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment _____, Critical Barriers _____,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- ____ Emergency Info. Posted
- ____ Fire Extinguishers On-Site
- ____ GFCI's Used
- ____ OSHA Info.Posted
- ____ Personal Sampling Conducted
- ____ Entrance Warning Signs Posted
- ____ Entry/Exit Logs Posted
- ____ Storage Bins Labeled
- ____ Bags Labeled
- ____ Floor and Walls Covered
- ____ Area Ventilation Off
- ____ All Edges Sealed
- ____ Penetrations Sealed
- ____ Entry Curtains
- ____ Critical Barriers
- ____ Containment Smoke Tested
- Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- ____ Disposable Suits
- ____ Boots
- ____ Gloves
- ____ Safety Glasses/ Goggles
- ____ Hard Hat
- ____ Safety Vest
- ____ Hearing Protection
- ____ Other: _____

WORK PRACTICES

- ____ Wet Methods Used
- ____ HEPA Vacuums Used
- ____ Waste Double-Bagged or Barreled
- ____ Wastewater Filtered or Barreled
- ____ Negative Air Pressure Achieved
- ____ Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- ____ Half-Face Air Purifying Respirator
- ____ Full-Face Air Purifying Respirator
- ____ Powered Air Purifying Respirator
- ____ Other:_____

SIGNIFICANT EVENTS

No Removal; Off-loading equipment; Setting-Up equipment in Basement of BLDG 107. Building shower and decon.

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM _____, TEM ___X___

Type			
No. of Background Samples	10	No. of Personal Samples	0
No. of Area Samples	0	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME:** Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — **DATE:** 09-18-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT:** 23:45

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT:** 23:45

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: **Temperature:** __70 Degrees **Conditions:** Clear __X__, Cloudy _____,

TODAY'S ACTIVITIES: **Prep.** _X____, **Removal** __X__, **Cleanup** __X__, **Encap.** ____, **Enclosure** _____, **Demo.** _____, **Teardown/Demob. Wrapping Ducts**

Area of Activity: _____**Basement GSA 107 Crawl Space**_____ Quantity Removed:_____5 30gal bags_____

Material Description: _____Bags of Debris_____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

Area of Activity:_____ Quantity Removed:_____

Material Description: _____ Quantity Remaining:_____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) __Wrapping Duct Work_____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages__3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:_____
X Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	19:31 - -0.026 negative air pressure
X Storage Bins Labeled	___ Other: _____	20:00 - -0.027 negative air pressure
X Bags Labeled		20:40 - -0.027 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	21:00 - -0.028 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	22:00 - -0.028 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	23:00 - -0.032 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	_____
X Entry Curtains	___ Wastewater Filtered or Barreled	_____
X Critical Barriers	X Negative Air Pressure Achieved	_____
___ Containment Smoke Tested	X Equipment Decontaminated	_____
X Work Area Secured	Other: _____	_____

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: _____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 | DATE: 09-19-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | OUT: 23:45

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn | NUMBER OF WORKERS: 5

IN: 17:00 | OUT: 23:45

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 70 Degrees Conditions: Clear X, Cloudy _____,

TODAY'S ACTIVITIES: Prep. X, Removal X, Cleanup X, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob. Wrapping Ducts

Area of Activity: Basement GSA 107 Crawl Space | Quantity Removed: 10 30gal bags

Material Description: Bags of Debris | Quantity Remaining: _____

Area of Activity: _____ | Quantity Removed: _____

Material Description: _____ | Quantity Remaining: _____

Area of Activity: _____ | Quantity Removed: _____

Material Description: _____ | Quantity Remaining: _____

WORK PROCEDURES: Gross Removal X, Glovebag ___, Friable X, Non-Friable ___, Exterior ___, Other (Explain) Wrapping Duct Work

ENGINEERING CONTROLS: Full Containment X, Critical Barriers X, Splash Guards _____, Drop Cloth _____, Barrier Tape X

NEGATIVE AIR SYSTEM: Yes X, No _____, # of Units 5, Manometer on site Yes, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes X, No _____, # of Stages 3 Shower: Yes X, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- ___ Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:00 - -0.027 negative air pressure

17:51 - -0.027 negative air pressure

18:40 - -0.034 negative air pressure

19:11 - -0.037 negative air pressure

20:01 - -0.037 negative air pressure

21:30 - -0.040 negative air pressure

22:30 - -0.040 negative air pressure

_____

_____

_____

_____

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM X, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

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KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	**PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**
PROJECT NUMBER.: 92114	**DATE: 09-20-12**
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:00	**OUT: 23:45**
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	**NUMBER OF WORKERS:** 6
IN: 17:00	**OUT: 23:45**
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: **Temperature: 70 Degrees**	**Conditions: Clear X, Cloudy _____,**
TODAY'S ACTIVITIES: **Prep. X, Removal X, Cleanup X, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**	
Area of Activity: Basement GSA 107 Crawl Space	Quantity Removed: 45 cubic yards
Material Description: Debris	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
WORK PROCEDURES: Gross Removal X, Glovebag ___, Friable X, Non-Friable ___, Exterior ___, Other (Explain) _____	
ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___	
NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____	
DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____	Shower: Yes __X___, No____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:
X Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	16:00 - -0.037 negative air pressure
X Storage Bins Labeled	___ Other:	18:03 - -0.038 negative air pressure
X Bags Labeled		19:03 - -0.050 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	20:13 - -0.034 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	21:52 - -0.037 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	23:13 - -0.038 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	
X Entry Curtains	X Wastewater Filtered or Barreled	
X Critical Barriers	X Negative Air Pressure Achieved	
___ Containment Smoke Tested	X Equipment Decontaminated	
X Work Area Secured	Other:	

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
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KANSAS CITY, MO 64116
PH: (816) 231-5580
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FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME:** Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — **DATE:** 09-21-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — OUT: 01:00

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 4

IN: 17:00 — OUT: 01:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 70 Degrees — Conditions: Clear X, Cloudy ____

TODAY'S ACTIVITIES: Prep. X, Removal X, Cleanup X, Encap. ____, Enclosure ____, Demo. ____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 70 cubic yards

Material Description: Debris — Quantity Remaining: ____

Area of Activity: ____ — Quantity Removed: ____

Material Description: ____ — Quantity Remaining: ____

Area of Activity: ____ — Quantity Removed: ____

Material Description: ____ — Quantity Remaining: ____

WORK PROCEDURES: Gross Removal X, Glovebag ___, Friable X, Non-Friable ___, Exterior ___, Other (Explain) ____

ENGINEERING CONTROLS: Full Containment X, Critical Barriers X, Splash Guards ____, Drop Cloth ____, Barrier Tape X

NEGATIVE AIR SYSTEM: Yes X, No ____, # of Units 5, Manometer on site Yes, Manometer Reading (if < 0.02") ____

DECONTAMINATION UNIT: Yes X, No ____, # of Stages 3 — Shower: Yes X, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- X Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: ____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated

Other: ____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: ____

SIGNIFICANT EVENTS

16:00 - -0.037 negative air pressure
18:03 - -0.038 negative air pressure
19:21 - -0.038 negative air pressure
20:53 - -0.035 negative air pressure
22:00 - -0.040 negative air pressure
23:13 - -0.038 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM X, TEM ____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
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KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA | PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 | DATE: 09-24-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 | OUT: 00:00

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn | NUMBER OF WORKERS: 5

IN: 17:00 | OUT: 00:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 70 Degrees Conditions: Clear X, Cloudy _____,

TODAY'S ACTIVITIES: Prep. X, Removal X, Cleanup X, Encap. ___, Enclosure ____, Demo. ____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space | Quantity Removed: 42 cubic yards

Material Description: Debris | Quantity Remaining: _____

Area of Activity: _____ | Quantity Removed: _____

Material Description: _____ | Quantity Remaining: _____

Area of Activity: _____ | Quantity Removed: _____

Material Description: _____ | Quantity Remaining: _____

WORK PROCEDURES: Gross Removal X, Glovebag ___, Friable X, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment X, Critical Barriers X, Splash Guards ____, Drop Cloth ____, Barrier Tape X

NEGATIVE AIR SYSTEM: Yes X, No ____, # of Units 5, Manometer on site Yes, Manometer Reading (if < 0.02") ____

DECONTAMINATION UNIT: Yes X, No ____, # of Stages 3 Shower: Yes X, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:00 - -0.033 negative air pressure
18:17 - -0.032 negative air pressure
19:24 - -0.031 negative air pressure
20:04 - -0.032 negative air pressure
21:04 - -0.032 negative air pressure
22:12 - -0.031 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM X, TEM ____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
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KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite
PROJECT NUMBER.: 92114	DATE: 09-25-12
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:00	OUT: 00:00
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	NUMBER OF WORKERS: 6
IN: 17:00	OUT: 00:00
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: Temperature: 82 Degrees	Conditions: Clear _____, Cloudy _X_____, Raining

TODAY'S ACTIVITIES: Prep. _X___, Removal __X__, Cleanup __X__, Encap. ___, Enclosure ____, Demo. _____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 47 cubic yards

Material Description: Debris — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X ___ Emergency Info. Posted
- X ___ Fire Extinguishers On-Site
- X ___ GFCI's Used
- X ___ OSHA Info.Posted
- ___ Personal Sampling Conducted
- X ___ Entrance Warning Signs Posted
- X ___ Entry/Exit Logs Posted
- X ___ Storage Bins Labeled
- X ___ Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X ___ All Edges Sealed
- X ___ Penetrations Sealed
- X ___ Entry Curtains
- X ___ Critical Barriers
- ___ Containment Smoke Tested
- X ___ Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X ___ Disposable Suits
- X ___ Boots
- X ___ Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X ___ Wet Methods Used
- X ___ HEPA Vacuums Used
- X ___ Waste Double-Bagged or Barreled
- X ___ Wastewater Filtered or Barreled
- X ___ Negative Air Pressure Achieved
- X ___ Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X ___ Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:00 - -0.029 negative air pressure
18:06- -0.032 negative air pressure
19:14 - -0.031 negative air pressure
20:15 - -0.032 negative air pressure
21:00 - -0.031 negative air pressure
22:37 - -0.011 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
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DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite
PROJECT NUMBER.: 92114	DATE: 09-26-12
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:00	OUT: 00:00
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	NUMBER OF WORKERS: 6
IN: 17:00	OUT: 00:00
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: Temperature: 82 Degrees	Conditions: Clear _____, Cloudy _X_____, Raining

TODAY'S ACTIVITIES: Prep. _X___, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 47 cubic yards

Material Description: Debris — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages__3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated
- Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:00 - -0.021 negative air pressure
17:56- -0.022 negative air pressure
19:34 - -0.011 negative air pressure
20:13 - -0.022 negative air pressure
21:00 - -0.011 negative air pressure
22:40 - -0.021 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

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DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — DATE: 09-27-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — OUT: 22:45

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — NUMBER OF WORKERS: 4

IN: 17:00 — OUT: 21:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: __75 Degrees Conditions: Clear _____, Cloudy _X____,

TODAY'S ACTIVITIES: Prep. _X___, Removal __X__, Cleanup __X__, Encap. ___, Enclosure _____, Demo. _____, Teardown/Demob.

Area of Activity: ____Basement GSA 107 Crawl Space_____ Quantity Removed: ____0 cubic yards_____

Material Description: _____Debris_____ Quantity Remaining: _____

Area of Activity: _____ Quantity Removed: _____

Material Description: _____ Quantity Remaining: _____

Area of Activity: _____ Quantity Removed: _____

Material Description: _____ Quantity Remaining: _____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated

Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:50 - -0.024 negative air pressure

18:00- -0.020 negative air pressure

20:00 - -0.022 negative air pressure

20:15 - -0.020 negative air pressure

Crew works to remove clogged clay dirt from vacuum cyclone. It is binding the auger.

No removal from crawl space today.

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: ____Patricia Garcia_____

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME:** Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — **DATE:** 09-28-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — **OUT:** 00:00

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — **OUT:** 00:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 82 Degrees — Conditions: Clear _____, Cloudy _X____,

TODAY'S ACTIVITIES: Prep. _X___, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 17 cubic yards

Material Description: Debris — Quantity Remaining:

Area of Activity: — Quantity Removed:

Material Description: — Quantity Remaining:

Area of Activity: — Quantity Removed:

Material Description: — Quantity Remaining:

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ — Shower: Yes __X___, No_____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:
___ Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	16:00 - -0.024 negative air pressure
X Storage Bins Labeled	___ Other:	17:36- -0.021 negative air pressure
X Bags Labeled		19:07 - -0.021 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	20:00 - -0.022 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	21:30 - -0.011 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	22:45 - -0.021 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	
X Entry Curtains	X Wastewater Filtered or Barreled	
X Critical Barriers	X Negative Air Pressure Achieved	
___ Containment Smoke Tested	X Equipment Decontaminated	
X Work Area Secured	Other:	

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	9	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	**PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**
PROJECT NUMBER.: 92114	**DATE: 10-01-12**
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:30	**OUT: 00:00**
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	**NUMBER OF WORKERS:** 7
IN: 17:00	**OUT: 00:00**
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: **Temperature: 76 Degrees**	**Conditions: Clear _____, Cloudy _X_____,**
TODAY'S ACTIVITIES: **Prep. _X___, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**	
Area of Activity: **Basement GSA 107 Crawl Space**	Quantity Removed: 65 cubic yards
Material Description: Debris	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain)	
ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___	
NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____	
DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____	Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:
___ Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	17:00 - -0.011 negative air pressure
X Storage Bins Labeled	___ Other:	17:30- -0.036 negative air pressure
X Bags Labeled		19:27 - -0.036 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	20:42 - -0.034 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	21:48 - -0.034 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	22:45 - -0.032 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	
X Entry Curtains	X Wastewater Filtered or Barreled	
X Critical Barriers	X Negative Air Pressure Achieved	
___ Containment Smoke Tested	X Equipment Decontaminated	
X Work Area Secured	Other:	

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	9	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	**PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**
PROJECT NUMBER.: 92114	**DATE: 10-02-12**
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:30	**OUT: 00:00**
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	**NUMBER OF WORKERS:** 8
IN: 17:00	**OUT: 00:00**
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: **Temperature: 70 Degrees**	**Conditions: Clear _____, Cloudy _X_____, Raining**
TODAY'S ACTIVITIES: **Prep. _X____, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**	
Area of Activity: **Basement GSA 107 Crawl Space**	Quantity Removed: 75 cubic yards
Material Description: Debris	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain)	
ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___	
NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____	
DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____	Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated

Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

17:10 - -0.045 negative air pressure
18:13- -0.050 negative air pressure
19:00 - -0.045 negative air pressure
20:13 - -0.045 negative air pressure
21:07 - -0.037 negative air pressure
22:37 - -0.036 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	**PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite**
PROJECT NUMBER.: 92114	**DATE: 10-03-12**
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:00	**OUT: 00:00**
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	**NUMBER OF WORKERS:** 8
IN: 16:00	**OUT: 00:00**
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: **Temperature: 81 Degrees**	**Conditions: Clear _X_, Cloudy _____,**
TODAY'S ACTIVITIES: **Prep. _X_, Removal _X_, Cleanup _X_, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.**	
Area of Activity: **Basement GSA 107 Crawl Space**	Quantity Removed: 95 cubic yards
Material Description: Debris	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
WORK PROCEDURES: Gross Removal _X_, Glovebag ___, Friable _X_, Non-Friable ___, Exterior ___, Other (Explain)	
ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers _X_,Splash Guards _____, Drop Cloth _____, Barrier Tape _X_	
NEGATIVE AIR SYSTEM: Yes _X_, No _____, # of Units _5_, Manometer on site _Yes_, Manometer Reading (if < 0.02") _____	
DECONTAMINATION UNIT: Yes _X_, No _____, # of Stages 3	Shower: Yes _X_, No ____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:
___ Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	16:15- -0.037 negative air pressure
X Storage Bins Labeled	___ Other:	18:23- -0.037 negative air pressure
X Bags Labeled		19:01 - -0.035 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	20:22 - -0.034 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	21:00 - -0.041 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	22:22 - -0.026 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	
X Entry Curtains	X Wastewater Filtered or Barreled	
X Critical Barriers	X Negative Air Pressure Achieved	
___ Containment Smoke Tested	X Equipment Decontaminated	
X Work Area Secured	Other:	

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM _X_, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA	PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite
PROJECT NUMBER.: 92114	DATE: 10-04-12
CONTRACTOR: Global Environmental	
OCCU-TEC PERSONNEL: Patricia Garcia	
IN: 16:00	OUT: 00:00
CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn	NUMBER OF WORKERS: 8
IN: 17:00	OUT: 00:00
VISITORS ON SITE:	
OBSERVED WEATHER CONDITIONS: Temperature: 82 Degrees	Conditions: Clear _X_, Cloudy _____,
TODAY'S ACTIVITIES: Prep. _X_, Removal _X_, Cleanup _X_, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.	
Area of Activity: Basement GSA 107 Crawl Space	Quantity Removed: 150 cubic yards
Material Description: Debris	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
Area of Activity:	Quantity Removed:
Material Description:	Quantity Remaining:
WORK PROCEDURES: Gross Removal _X_, Glovebag ___, Friable _X_, Non-Friable ___, Exterior ___, Other (Explain) _____	
ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers _X_,Splash Guards _____, Drop Cloth _____, Barrier Tape _X_	
NEGATIVE AIR SYSTEM: Yes _X_, No _____, # of Units _5_, Manometer on site _Yes_, Manometer Reading (if < 0.02") _____	
DECONTAMINATION UNIT: Yes _X_, No _____, # of Stages _3_	Shower: Yes _X_, No ____

PROJECT SITE CHECKLIST	PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY PROTECTION
X Emergency Info. Posted	X Disposable Suits	X Half-Face Air Purifying Respirator
X Fire Extinguishers On-Site	X Boots	___ Full-Face Air Purifying Respirator
X GFCI's Used	X Gloves	___ Powered Air Purifying Respirator
X OSHA Info.Posted	___ Safety Glasses/ Goggles	___ Other:
___ Personal Sampling Conducted	___ Hard Hat	
X Entrance Warning Signs Posted	___ Safety Vest	**SIGNIFICANT EVENTS**
X Entry/Exit Logs Posted	___ Hearing Protection	16:00- -0.016 negative air pressure
X Storage Bins Labeled	___ Other:	18:00- -0.025 negative air pressure
X Bags Labeled		19:01 - -0.025 negative air pressure
___ Floor and Walls Covered	**WORK PRACTICES**	20:22 - -0.025 negative air pressure
___ Area Ventilation Off	X Wet Methods Used	21:00 - -0.025 negative air pressure
X All Edges Sealed	X HEPA Vacuums Used	22:22 - -0.025 negative air pressure
X Penetrations Sealed	X Waste Double-Bagged or Barreled	
X Entry Curtains	X Wastewater Filtered or Barreled	
X Critical Barriers	X Negative Air Pressure Achieved	
___ Containment Smoke Tested	X Equipment Decontaminated	
X Work Area Secured	Other:	

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM _X_, TEM _____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — **PROJECT NAME:** Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — **DATE:** 10-05-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 16:00 — OUT: 00:00

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — **NUMBER OF WORKERS:** 6

IN: 17:00 — OUT: 00:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 50 Degrees Conditions: Clear _____, Cloudy __X___, Raining

TODAY'S ACTIVITIES: Prep. _X___, Removal __X__, Cleanup __X__, Encap. ____, Enclosure _____, Demo. _____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 97 cubic yards

Material Description: Debris — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

Area of Activity: _____ — Quantity Removed: _____

Material Description: _____ — Quantity Remaining: _____

WORK PROCEDURES: Gross Removal _X__, Glovebag ___, Friable _X__, Non-Friable ___, Exterior ___, Other (Explain) _____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated

Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

16:00- -0.016 negative air pressure
18:00- -0.022 negative air pressure
19:29 - -0.022 negative air pressure
21:07 - -0.023 negative air pressure
21:00 - -0.025 negative air pressure
22:22 - -0.025 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM __X___, TEM _____

Type

No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	10	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

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KANSAS CITY, MO 64116
PH: (816) 231-5580
TOLL FREE: (800) 950-1953
FAX: (816) 231-5641

DAILY FIELD REPORT

(Please print information clearly)

CLIENT: GSA — PROJECT NAME: Goodfellow BLDG 107 3rd Party Air Monitoring Project Oversite

PROJECT NUMBER.: 92114 — DATE: 10-08-12

CONTRACTOR: Global Environmental

OCCU-TEC PERSONNEL: Patricia Garcia

IN: 6:30 — OUT: 15:00

CONTRACTOR SUPERVISOI Matt Lour/Vicki Dunn — NUMBER OF WORKERS: 4

IN: 7:00 — OUT: 15:00

VISITORS ON SITE:

OBSERVED WEATHER CONDITIONS: Temperature: 38 Degrees Conditions: Clear X, Cloudy ____,

TODAY'S ACTIVITIES: Prep. X, Removal X, Cleanup X, Encap. X, Enclosure ____, Demo. ____, Teardown/Demob.

Area of Activity: Basement GSA 107 Crawl Space — Quantity Removed: 10 30gal bags

Material Description: Debris — Quantity Remaining: ____

Area of Activity: ____ — Quantity Removed: ____

Material Description: ____ — Quantity Remaining: ____

Area of Activity: ____ — Quantity Removed: ____

Material Description: ____ — Quantity Remaining: ____

WORK PROCEDURES: Gross Removal X, Glovebag ___, Friable X, Non-Friable ___, Exterior ___, Other (Explain) ____

ENGINEERING CONTROLS: Full Containment ___X__, Critical Barriers __X___,Splash Guards _____, Drop Cloth _____, Barrier Tape __X___

NEGATIVE AIR SYSTEM: Yes __X___, No _____, # of Units __5_, Manometer on site __Yes___, Manometer Reading (if < 0.02") _____

DECONTAMINATION UNIT: Yes __X___, No _____, # of Stages___3____ Shower: Yes __X___, No ____

PROJECT SITE CHECKLIST

- X Emergency Info. Posted
- X Fire Extinguishers On-Site
- X GFCI's Used
- X OSHA Info.Posted
- ___ Personal Sampling Conducted
- X Entrance Warning Signs Posted
- X Entry/Exit Logs Posted
- X Storage Bins Labeled
- X Bags Labeled
- ___ Floor and Walls Covered
- ___ Area Ventilation Off
- X All Edges Sealed
- X Penetrations Sealed
- X Entry Curtains
- X Critical Barriers
- ___ Containment Smoke Tested
- X Work Area Secured

PERSONAL PROTECTIVE EQUIPMENT

- X Disposable Suits
- X Boots
- X Gloves
- ___ Safety Glasses/ Goggles
- ___ Hard Hat
- ___ Safety Vest
- ___ Hearing Protection
- ___ Other: _____

WORK PRACTICES

- X Wet Methods Used
- X HEPA Vacuums Used
- X Waste Double-Bagged or Barreled
- X Wastewater Filtered or Barreled
- X Negative Air Pressure Achieved
- X Equipment Decontaminated

Other: _____

RESPIRATORY PROTECTION

- X Half-Face Air Purifying Respirator
- ___ Full-Face Air Purifying Respirator
- ___ Powered Air Purifying Respirator
- ___ Other: _____

SIGNIFICANT EVENTS

6:30- -0.016 negative air pressure

8:00- -0.022 negative air pressure

9:30 - -0.022 negative air pressure

11:07 - -0.020 negative air pressure

13:00 - -0.021 negative air pressure

14:17 - -0.020 negative air pressure

AIR MONITORING PERFORMED BY OCCU-TEC INC. : PCM X, TEM ____

Type			
No. of Background Samples	0	No. of Personal Samples	0
No. of Area Samples	8	No. of Clearance Samples	0

SIGNATURE: Patricia Garcia

Appendix C

Asbestos Air Monitoring Reports (PCM)

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/18/2012
Analysis Date: 9/19/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-001	Field Blank										0	100		
92114-PCM-002	Field Blank										0	100		
92114-PCM-003	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	15:33	11:27	1194	1492.5	9.5	100	12.10	0.003
92114-PCM-004	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	15:55	11:28	1173	1466.3	11	100	14.01	0.004
92114-PCM-005	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:09	23:17	428	1408.1	22	100	28.03	0.008
92114-PCM-006	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:11	23:17	426	1401.5	10.5	100	13.38	0.004
92114-PCM-007	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:15	23:15	420	1381.8	10.5	100	13.38	0.004
92114-PCM-008	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:18	23:16	418	1375.2	8.5	100	10.83	0.003
92114-PCM-009	Basement Outside	OWA	68	3.29	3.29	3.29	16:20	23:18	418	1375.2	2	100	2.55	< 0.002
92114-PCM-010	Basement Change Area	OWA	403	3.29	3.29	3.29	16:26	23:24	418	1375.2	9	100	11.46	0.003
92114-PCM-011	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:30	23:26	416	1368.6	7.5	100	9.55	0.003
92114-PCM-012	Basement Decon	OWA	349	3.29	3.29	3.29	16:31	23:25	414	1362.1	9	100	11.46	0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/19/2012
Analysis Date: 9/20/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-013	Field Blank										1	100		
92114-PCM-014	Field Blank										1	100		
92114-PCM-015	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:02	11:20	1158	1447.5	3	100	2.55	< 0.002
92114-PCM-016	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:03	11:21	1158	1447.5	3	100	2.55	< 0.002
92114-PCM-017	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:10	23:00	410	1348.9	7	100	7.64	< 0.003
92114-PCM-018	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:12	23:01	409	1345.6	10	100	11.46	0.003
92114-PCM-019	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:15	23:02	407	1339	2	100	1.27	< 0.003
92114-PCM-020	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:16	23:03	407	1339	4	100	3.82	< 0.003
92114-PCM-021	Basement Outside	OWA	68	3.29	3.29	3.29	16:30	23:04	394	1296.3	8.5	100	9.55	0.003
92114-PCM-022	Basement Change Area	OWA	403	3.29	3.29	3.29	16:20	23:06	406	1335.7	4	100	3.82	< 0.003
92114-PCM-023	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:21	23:05	404	1329.2	9	100	10.19	0.003
92114-PCM-024	Basement Decon	OWA	349	2.29	2.29	2.29	16:25	23:08	403	922.87	1.5	100	0.64	< 0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.
This report should not be reproduced except in full. AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/20/2012
Analysis Date: 9/21/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-025	Field Blank										1	100		
92114-PCM-026	Field Blank										0	100		
92114-PCM-027	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:33	15:54	1401	1751.3	11.5	100	14.01	0.003
92114-PCM-028	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:35	15:55	1400	1750	6.5	100	7.64	< 0.002
92114-PCM-029	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:38	23:01	383	1260.1	12.5	100	15.29	0.005
92114-PCM-030	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:40	23:02	382	1256.8	13.5	100	16.56	0.005
92114-PCM-031	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:42	23:04	382	1256.8	5	100	5.73	< 0.003
92114-PCM-032	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:45	23:04	379	1246.9	5	100	5.73	< 0.003
92114-PCM-033	Basement Change Area	OWA	403	3.29	3.29	3.29	16:49	23:06	377	1240.3	11.5	100	14.01	0.004
92114-PCM-034	Basement Decon	OWA	356	2.29	2.29	2.29	16:55	23:06	371	849.59	3	100	3.18	< 0.004
92114-PCM-035	Outside Pit Entrance	OWA	68	3.29	3.29	3.29	16:58	23:11	373	1227.2	9	100	10.83	0.003
92114-PCM-036	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:56	23:07	371	1220.6	6.5	100	7.64	< 0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained breathing apparatus.	

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/21/2012
Analysis Date: 9/24/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-037	Field Blank										1	100		
92114-PCM-038	Field Blank										1	100		
92114-PCM-039	1st Floor Admin Office	OWA	405	3.29	3.29	3.29	16:22	22:51	389	1279.8	2	100	1.27	< 0.003
92114-PCM-040	1st Floor GSA Office	OWA	385	3.29	3.29	3.29	16:24	22:52	388	1276.5	7	100	7.64	< 0.003
92114-PCM-041	1st Floor North Hallway	OWA	388	3.29	3.29	3.29	16:26	22:53	387	1273.2	1	100	0.00	< 0.003
92114-PCM-042	1st Floor South Vestibule	OWA	386	3.29	3.29	3.29	16:28	22:54	386	1269.9	2	100	1.27	< 0.003
92114-PCM-043	1st Floor Conference Room	OWA	356	2.29	2.29	2.29	16:30	22:55	385	881.65	1	100	0.00	< 0.004
92114-PCM-044	Basement Change Area	OWA	403	3.29	3.29	3.29	16:48	22:58	370	1217.3	11	100	12.74	0.004
92114-PCM-045	Basement Decon	OWA	348	2.29	2.29	2.29	16:33	22:59	386	883.94	5	100	5.10	< 0.004
92114-PCM-047	Basement by Sensors	OWA	406	3.29	3.29	3.29	16:52	23:00	368	1210.7	1	100	0.00	< 0.003
92114-PCM-046	Basement Neg Air Exhaust	OWA	349	2.29	2.29	2.29	16:52	23:00	368	842.72	7	100	7.64	< 0.004
92114-PCM-048	Outside Pit Entrance	OWA	68	3.29	3.29	3.29	16:33	22:57	384	1263.4	12.5	100	14.65	0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/24/2012
Analysis Date: 9/25/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-049	Field Blank										1	100		
92114-PCM-050	Field Blank										0	100		
92114-PCM-051	2nd Floor by Room 214	OWA	403	1.25	1.25	1.25	16:42	15:42	1380	1725	6.5	100	7.64	< 0.002
92114-PCM-052	2nd Floor by Room 224	OWA	399	1.25	1.25	1.25	16:44	15:44	1380	1725	4	100	4.46	< 0.002
92114-PCM-053	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:46	23:02	376	1650.6	8	100	9.55	0.002
92114-PCM-054	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:48	23:03	375	1646.3	3	100	3.18	< 0.002
92114-PCM-055	Outside Pit Entrance	OWA	68	4.39	4.39	4.39	16:50	23:08	378	1659.4	5.5	100	6.37	< 0.002
92114-PCM-056	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:05	23:00	355	1558.5	5.5	100	6.37	< 0.002
92114-PCM-057	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:07	23:01	354	1554.1	7.5	100	8.92	0.002
92114-PCM-058	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:09	23:06	357	1567.2	2	100	1.91	< 0.002
92114-PCM-059	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:52	23:05	373	1637.5	2.5	100	2.55	< 0.002
92114-PCM-060	Neg Air	OWA	348	2.59	2.59	2.59	16:33	23:04	391	1012.7	0	100		

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.
This report should not be reproduced except in full. AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.46.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/25/2012
Analysis Date: 9/26/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-71	Field Blank										0	100		
92114-PCM-072	Field Blank										0	100		
92114-PCM-061	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	15:42	16:08	1466	1832.5	5.5	100	7.01	< 0.002
92114-PCM-062	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	15:45	16:10	1465	1831.3	8.5	100	10.83	0.002
92114-PCM-063	1st Floor Admin	OWA	405	4.39	4.39	4.39	15:50	22:32	402	1764.8	5	100	6.37	< 0.002
92114-PCM-064	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	15:52	22:30	398	1747.2	9.5	100	12.10	0.003
92114-PCM-065	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:00	22:33	393	1725.3	1	100	1.27	< 0.002
92114-PCM-066	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:01	22:35	394	1729.7	6	100	7.64	< 0.002
92114-PCM-067	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:03	22:37	394	1729.7	5.5	100	7.01	< 0.002
92114-PCM-068	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:05	22:38	393	1725.3	3	100	3.82	< 0.002
92114-PCM-069	Neg Air	OWA	348	2.59	2.59	2.59	16:07	22:38	391	1012.7	3.5	100	4.46	< 0.003
92114-PCM-070	Outside Pit	OWA	68	4.39	4.39	4.39	16:10	20:25	255	1119.5	6	100	7.64	< 0.003

SAMPLE TYPE

PRS=personal	IWA=Inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/26/2012
Analysis Date: 9/27/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-73	Field Blank										0	100		
92114-PCM-74	Field Blank										0	100		
92114-PCM-75	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:08	16:28	1460	1825	11.5	100	14.65	0.003
92114-PCM-76	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	16:10	16:31	1461	1826.3	11.5	100	14.65	0.003
92114-PCM-77	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:14	22:35	381	1672.6	8	100	10.19	0.002
92114-PCM-78	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:15	22:38	383	1681.4	2.5	100	3.18	< 0.002
92114-PCM-79	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:18	22:39	381	1672.6	0	100		
92114-PCM-80	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:20	22:40	380	1668.2	2.5	100	3.18	< 0.002
92114-PCM-81	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:23	22:41	378	1659.4	3.5	100	4.46	< 0.002
92114-PCM-82	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:25	22:42	377	1655	5	100	6.37	< 0.002
92114-PCM-83	Neg Air	OWA	348	2.59	2.59	2.59	16:27	22:44	377	976.43	9.5	100	12.10	0.005
92114-PCM-84	Outside Pit	OWA	68	4.39	4.39	4.39	16:30	22:45	375	1646.3	4.5	100	5.73	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/27/2012
Analysis Date: 9/28/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-85	Field Blank										1	100		
92114-PCM-86	Field Blank										0	100		
92114-PCM-87	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:30	16:30	1440	1800	9.5	100	11.46	0.002
92114-PCM-88	2nd Floor by Room 224	OWA	358	1.25	1.25	1.25	16:31	16:31	1440	1800	9.5	100	11.46	0.002
92114-PCM-89	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:37	20:54	257	1128.2	8	100	9.55	0.003
92114-PCM-90	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:50	20:55	245	1075.6	3.5	100	3.82	< 0.003
92114-PCM-91	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:41	20:58	257	1128.2	2	100	1.91	< 0.003
92114-PCM-92	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:43	20:59	256	1123.8	4.5	100	5.10	< 0.003
92114-PCM-93	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:45	21:00	255	1119.5	2.5	100	2.55	< 0.003
92114-PCM-94	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:46	21:01	255	1119.5	4.5	100	5.10	< 0.003
92114-PCM-95	Neg Air	OWA	348	2.59	2.59	2.59	16:48	21:03	255	660.45	1	100	0.64	< 0.005
92114-PCM-96	Outside Pit	OWA	68	4.39	4.39	4.39	16:55	21:04	249	1093.1	5.5	100	6.37	< 0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 9/28/2012
Analysis Date: 10/1/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-97	Field Blank										0	100		
92114-PCM-98	Field Blank										0	100		
92114-PCM-99	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:30	22:45	315	1382.9	6.5	100	8.28	< 0.002
92114-PCM-100	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:32	22:46	314	1378.5	8.5	100	10.83	0.003
92114-PCM-101	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:34	22:48	314	1378.5	4.5	100	5.73	< 0.002
92114-PCM-102	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:35	22:51	316	1387.2	2.5	100	3.18	< 0.002
92114-PCM-103	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:38	22:54	316	1387.2	6.5	100	8.28	< 0.002
92114-PCM-104	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:39	22:55	316	1387.2	2	100	2.55	< 0.002
92114-PCM-105	Neg Air	OWA	348	2.59	2.59	2.59	17:40	22:56	316	818.44	8.5	100	10.83	0.005
92114-PCM-106	Outside Pit	OWA	68	4.39	4.39	4.39	17:42	22:52	310	1360.9	5.5	100	7.01	< 0.003
92114-PCM-107	1st Floor Room 110	OWA	349	2.59	2.59	2.59	17:44	22:49	305	789.95	0	100		

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained breathing apparatus.	

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/1/2012
Analysis Date: 10/2/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-108	Field Blank										0	100		
92114-PCM-109	Field Blank										0	100		
92114-PCM-110	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:50	22:42	352	1545.3	3	100	3.82	< 0.002
92114-PCM-111	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:51	22:43	352	1545.3	5	100	6.37	< 0.002
92114-PCM-112	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:52	22:44	352	1545.3	2	100	2.55	< 0.002
92114-PCM-113	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:55	22:45	350	1536.5	3	100	3.82	< 0.002
92114-PCM-114	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:57	22:47	350	1536.5	3	100	3.82	< 0.002
92114-PCM-115	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:58	22:48	350	1536.5	5.5	100	7.01	< 0.002
92114-PCM-116	Neg Air	OWA	348	2.59	2.59	2.59	17:00	22:50	350	906.5	2	100	2.55	< 0.004
92114-PCM-117	Outside Pit	OWA	68	4.39	4.39	4.39	17:03	22:58	355	1558.5	5	100	6.37	< 0.002
92114-PCM-118	1st Floor Room 110	OWA	349	2.59	2.59	2.59	17:10	22:46	336	870.24	8	100	10.19	0.005

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.
This report should not be reproduced except in full. AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/2/2012
Analysis Date: 10/3/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-119	Field Blank										0	100		
92114-PCM-120	Field Blank										0	100		
92114-PCM-121	2nd Floor by Room 214	OWA	404	1.25	1.25	1.25	16:36	15:57	1401	1751.3	11.5	100	14.65	0.003
92114-PCM-122	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	16:37	16:00	1403	1753.8	12.5	100	15.92	0.003
92114-PCM-123	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:00	22:28	328	1439.9	3	100	3.82	< 0.002
92114-PCM-124	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:01	22:29	328	1439.9	6	100	7.64	< 0.002
92114-PCM-125	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:02	22:30	328	1439.9	6	100	7.64	< 0.002
92114-PCM-126	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:04	22:31	327	1435.5	6.5	100	8.28	< 0.002
92114-PCM-127	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:07	22:32	325	1426.8	3	100	3.82	< 0.002
92114-PCM-128	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:08	22:33	325	1426.8	4	100	5.10	< 0.002
92114-PCM-129	Neg Air	OWA	348	2.59	2.59	2.59	17:10	22:34	324	839.16	5	100	6.37	< 0.004
92114-PCM-130	Outside Pit	OWA	68	4.39	4.39	4.39	17:05	22:35	330	1448.7	7	100	8.92	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.
This report should not be reproduced except in full. AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.46.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/3/2012
Analysis Date: 10/4/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0.5

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	Flow Rate (l/min) End	Flow Rate (l/min) Avg	Running Time Start	Running Time Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-131	Field Blank										0	100		
92114-PCM-132	Field Blank										1	100		
92114-PCM-133	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	16:36	15:59	1403	1753.8	4.5	100	5.10	< 0.002
92114-PCM-134	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	16:37	16:00	1403	1753.8	9.5	100	11.46	0.003
92114-PCM-135	1st Floor Admin	OWA	405	4.39	4.39	4.39	17:00	22:49	349	1532.1	6	100	7.01	< 0.002
92114-PCM-136	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	17:01	22:51	350	1536.5	5.5	100	6.37	< 0.002
92114-PCM-137	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	17:02	22:55	353	1549.7	7.5	100	8.92	0.002
92114-PCM-138	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	17:04	22:56	352	1545.3	6	100	7.01	< 0.002
92114-PCM-139	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	17:07	22:22	315	1382.9	2	100	1.91	< 0.002
92114-PCM-140	Basement by Sensors	OWA	406	4.39	4.39	4.39	17:08	22:23	315	1382.9	5.5	100	6.37	< 0.002
92114-PCM-141	Neg Air	OWA	348	2.59	2.59	2.59	17:10	22:24	314	813.26	3.5	100	3.82	< 0.004
92114-PCM-142	Outside Pit	OWA	68	4.39	4.39	4.39	17:05	22:50	345	1514.6	8.5	100	10.19	0.003

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/4/2012
Analysis Date: 10/5/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 1

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
				Start	End	Avg	Start	Stop						
92114-PCM-143	Field Blank										1	100		
92114-PCM-144	Field Blank										1	100		
92114-PCM-145	2nd Floor by Room 214	OWA	356	1.25	1.25	1.25	14:50	*						
92114-PCM-146	2nd Floor by Room 224	OWA	350	1.25	1.25	1.25	14:51	16:16	1292	1615	5	100	5.10	< 0.002
92114-PCM-147	1st Floor Admin	OWA	405	4.39	4.39	4.39	14:54	22:55	481	2111.6	1.5	100	0.64	< 0.002
92114-PCM-148	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	14:55	22:56	481	2111.6	1.5	100	0.64	< 0.002
92114-PCM-149	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	14:57	22:57	480	2107.2	4.5	100	4.46	< 0.002
92114-PCM-150	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	14:58	22:58	480	2107.2	3	100	2.55	< 0.002
92114-PCM-151	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	15:00	22:59	479	2102.8	4.5	100	4.46	< 0.002
92114-PCM-152	Basement by Sensors	OWA	406	4.39	4.39	4.39	15:01	23:00	479	2102.8	2	100	1.27	< 0.002
92114-PCM-153	Neg Air	OWA	348	2.59	2.59	2.59	15:03	23:00	477	1235.4	7.5	100	8.28	0.003
92114-PCM-154	Outside Pit	OWA	68	4.39	4.39	4.39	15:05	23:02	477	2094	1	100	0.00	< 0.002

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266

The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

* = Pump stopped; aborted sample

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PCM ANALYSIS OF AIR SAMPLES

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/5/2012
Analysis Date: 10/8/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE

ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	Flow Rate (l/min) End	Flow Rate (l/min) Avg	Running Time Start	Running Time Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-155	Field Blank										0	100		
92114-PCM-156	Field Blank										0	100		
92114-PCM-157	1st Floor Admin	OWA	405	4.39	4.39	4.39	16:23	22:25	362	1589.2	3	100	3.82	< 0.002
92114-PCM-158	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	16:24	22:26	362	1589.2	12.5	100	15.92	0.004
92114-PCM-159	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	16:26	22:27	361	1584.8	3	100	3.82	< 0.002
92114-PCM-160	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	16:28	22:32	364	1598	11	100	14.01	0.003
92114-PCM-161	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	16:30	22:33	363	1593.6	5	100	6.37	< 0.002
92114-PCM-162	Basement by Sensors	OWA	406	4.39	4.39	4.39	16:31	22:35	364	1598	8	100	10.19	0.002
92114-PCM-163	Neg Air	OWA	348	2.59	2.59	2.59	16:32	22:34	362	937.58	6.5	100	8.28	< 0.004
92114-PCM-164	Outside Pit	OWA	68	4.39	4.39	4.39	16:39	22:45	366	1606.7	13	100	16.56	0.004
92114-PCM-165	1st Floor Room 111	OWA	350	2.59	2.59	2.59	16:44	22:29	345	893.55	8.5	100	10.83	0.005
92114-PCM-166	1st Floor Room 114	OWA	349	2.59	2.59	2.59	16:44	22:28	344	890.96	1	100	1.27	< 0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.
This report should not be reproduced except in full. AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

PCM ANALYSIS OF AIR SAMPLES

4151 N. Mulberry Drive, Suite 275
KANSAS CITY, MO 64116
PH: (816) 231-5580
FAX: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 Bannister Road
PROJECT NAME: 3rd Party Project Oversite BLDG 107 Crawl Space

OCCU-TEC Project # : 92114
Sample Date: 10/8/2012
Analysis Date: 10/9/2012
Report Date: 10/23/2012
Rotometer # 412
Blank Average = 0

FILTER TYPE: 25mm, 0.8 um MCE
ANALYTICAL METHOD: NIOSH 7400

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min) Start	End	Avg	Running Time Start	Stop	Total Minutes	Volume Liters	Fibers	Fields	Fibers/ mm2	Fibers/ cc
92114-PCM-167	Field Blank										0	100		
92114-PCM-168	Field Blank										0	100		
92114-PCM-169	1st Floor Admin	OWA	405	4.39	4.39	4.39	7:05	14:00	415	1821.9	7.5	100	9.55	0.002
92114-PCM-170	1st Floor GSA Offices	OWA	385	4.39	4.39	4.39	7:06	14:01	415	1821.9	5	100	6.37	< 0.002
92114-PCM-171	1st Floor North Hallway	OWA	388	4.39	4.39	4.39	7:08	14:02	414	1817.5	2	100	2.55	< 0.002
92114-PCM-172	1st Floor South Vestibule	OWA	386	4.39	4.39	4.39	7:09	14:05	416	1826.2	3.5	100	4.46	< 0.002
92114-PCM-173	Basement Outside Crawl Space	OWA	403	4.39	4.39	4.39	7:09	14:03	414	1817.5	3	100	3.82	< 0.002
92114-PCM-174	Basement by Sensors	OWA	406	4.39	4.39	4.39	7:12	14:06	414	1817.5	10	100	12.74	0.003
92114-PCM-175	1st Floor Room 111	OWA	350	2.59	2.59	2.59	7:15	14:09	414	1072.3	0	100		
92114-PCM-176	1st Floor Room 114	OWA	349	2.59	2.59	2.59	7:17	14:10	413	1069.7	8	100	10.19	0.004

SAMPLE TYPE

PRS=personal	IWA=inside work area	NAE=negative air exhaust
BLK= blank	OWA= outside work area	CR= clean room
CL=clearance	BGD=background	

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained	breathing apparatus.

Analyzed By: [redacted]

Checked By: [redacted]

The NIOSH 7400 counting rules A does not distinguish between asbestos and non-asbestos fibers.
The NIOSH 7400 method assumes the lowest quantitative fiber density is 7 fibers / 100 fields at 95% confidence level. OCCUTEC's limit of detection (LOD) is equal to 7 fibers/100 fields.
Samples proceeded by a < sign are calculated using a count of 7 fibers per 100 fields.

AIHA PAT Lab # : 101266
The estimated intracounter coefficient of variation (CV) for this laboratory is 0.77 (Low Range), 0.27(Medium Range, 0.17 (High Range).
Low Range = 5 to 20 Fibers; Medium Range = 20 to 50 Fibers; High Range = 50 to 100 Fibers
The estimated interlaboratory CV for the quality control program that this laboratory participates in is 0.45.

Appendix D

Asbestos Clearance Reports (TEM)

OCCU-TEC
SAFETY AND ENVIRONMENTAL SOLUTIONS

TEM ANALYSIS OF AIR SAMPLES

4151 North Mulberry Drive, Suite 275
Kansas City, Missouri 64116
(816) 231-5580
Toll Free: (800) 950-1953
Fax: (816) 231-5641

CLIENT NAME: GSA
ADDRESS: 1500 E. Bannister
PROJECT NAME: GSA 3rd Party Air Monitoring and Oversite

OCCU-TEC Project # : 92114
Sample Date: 10/9/2012
Analysis Date: 10/10/2012
Report Date: 10/23/2012
Rotometer # 412

FILTER TYPE: 25mm, 0.45 um

Client Sample ID	Activity/ Location	Sample Type	Pump ID	Flow Rate (l/min)			Running Time		Total Minutes	Volume Liters	# Asbestos Stuctures	Asbestos Structures/mm^2	Concentration Structures/cc
				Start	End	Avg	Start	Stop					
92114-014	Field Blank	BLK											
92114-015	Inside Blank	BLK											
92114-016	Outside Blank	BLK											
92114-017	Northend of Crawl Space	CL	385	6.93	6.93	6.93	10:10	14:30	270	1871.1	None Detected	<22	<0.0046
92114-018	Northend of Crawl Space	CL	404	6.93	6.93	6.93	10:11	14:42	271	1878	None Detected	<22	<0.0046
92114-019	Center of Crawl Space	CL	399	6.93	6.93	6.93	10:12	14:44	272	1885	None Detected	<22	<0.0045
92114-020	Southend of Crawl Space	CL	405	6.93	6.93	6.93	10:14	14:46	272	1885	None Detected	<22	<0.0045
92114-021	Southend of Crawl Space	CL	388	6.93	6.93	6.93	10:15	14:48	273	1891.9	None Detected	<22	<0.0045
92114-022	1st FL South Vestibule	CL	386	6.93	6.93	6.93	10:22	15:14	292	2023.6	None Detected	<22	<0.0042
92114-023	Basement OWA Crawl Space	CL	403	6.93	6.93	6.93	10:24	15:10	286	1982	None Detected	<22	<0.0043
92114-024	Basement by Sensors	CL	406	6.93	6.93	6.93	10:25	15:12	287	1988.9	None Detected	<22	<0.0043

SAMPLE TYPE

PRS=personal	IWA=inside work area
BLK= blank	OWA= outside work area
ICL=inside clearance	OCL=outside clearance
BGD=background	NAE=negative air exhaust

ACTIVITY

PREP=site prep.	BGLO=bag load out
GLBG=glovebag	CLN=clean up
GREM=gross removal	EXC=excursion

RESPIRATOR TYPE

HM=half mask	APR=air purifying resp.
FF=full face	SA=supplied air
P=powered	PD=pressure demand
SCBA=self contained breathing apparatus	

Sampled By: Pat Garcia

Appendix E

Laboratory Reports (TEM)

September 25, 2012

Jeff Smith
OCCU-TEC INC.
6501 E. Commerce
Suite 230
Kansas City, MO 64120-

Bureau Veritas Work Order No. A1209155

Reference: 92114-BLDG 107 CRAWL SPACE

Dear Jeff Smith:

Bureau Veritas North America, Inc. received 10 samples on September 19, 2012 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a sixty-day holding period, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

[redacted]

Jon Perrenoud

Senior Microscopist

Electronic signature authorized through password protection

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services

3380 Chastain Meadows Parkway, Suite 300

Kennesaw, GA 30144

Main: (770) 499-7701

Fax: (770) 499-7511

www.us.bureauveritas.com

CASE NARRATIVE

Date: *25-Sep-12*

CLIENT: OCCU-TEC INC.

Project: 92114-BLDG 107 CRAWL SPACE

Work Order No A1209155

ANALYTICAL METHOD FOR AIRBORNE ASBESTOS FIBERS USING TRANSMISSION ELECTRON MICROSCOPY (TEM) BY THE AHERA METHOD

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

Upon receipt in the laboratory, filters are transferred to a glass slide with a drop of dimethyl formamide/acetic acid clearing solution. After clearing, samples are partially ashed in a plasma asher. The filters are then carbon coated in a vacuum evaporator. Portions of the cleared/ashed/coated filters are excised and placed on 200-mesh copper TEM grids in a wick-type solutional washer containing 100% acetone.

Two grids are placed consecutively in the TEM for examination. An equal number of openings are examined on each grid at 15,000X magnification. Asbestos structures containing fibers which meet a >5:1 length:width aspect ratio and a minimum length of 0.5 micrometers are identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. Fibers are classified by structure type, are sized (length and width), and are identified as chrysotile, amphibole, ambiguous, or non-asbestos. Results are reported as total asbestos structures per square millimeter of filter and asbestos structures per cubic centimeter of air (asbestos structures/cc). The Kennesaw, Georgia laboratory is accredited by NVLAP –Lab Code 101125-0.

For clearance of a work area in schools (k-12) the requirement is that the average of the results of the five inside samples is <70 str/mm2 assuming an analytical sensitivity of <0.005 structures/cubic centimeter.

References

USEPA. 1987. Asbestos Hazard Emergency Response Act. Appendix A to 40 CFR 763, Subpart E. Washington: GPO. (AHERA protocol).

ANALYTICAL RESULTS

Client: OCCU-TEC INC.

Client Reference No.: 92114-BLDG 107 CRAWL SPACE

Work Order No.: A1209155 **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1209155-001A	004	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-002A	005	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-003A	006	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1209155-004A	007	22	< 22	0	0	0	< 0.0050	< 0.0050	< 0.0050	0.0050	0	< 0.022
A1209155-005A	008	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021
A1209155-006A	009	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

ANALYTICAL RESULTS

Client: OCCU-TEC INC.

Client Reference No.: 92114-BLDG 107 CRAWL SPACE

Work Order No.: A1209155 **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1209155-007A	010	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022
A1209155-008A	011	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022
A1209155-009A	012	15	< 15	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019
A1209155-010A	013	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

Analyst(s) Name/Date: [redacted] 9/25/2012

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-001A	004	09/17/12 @12:00 am	09/20/12 @9:14 am	1559	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	5	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A1	C4A	0	0.00	0.00	None Detected			0
2	A1	C4C	0	0.00	0.00	None Detected			0
3	A1	E4A	0	0.00	0.00	None Detected			0
4	A2	C4A	0	0.00	0.00	None Detected			0
5	A2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-002A	005	09/17/12 @12:00 am	09/20/12 @9:14 am	1559	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	5	18	< 18	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B1	C4A	0	0.00	0.00	None Detected			0
2	B1	C4C	0	0.00	0.00	None Detected			0
3	B1	E4A	0	0.00	0.00	None Detected			0
4	B2	C4A	0	0.00	0.00	None Detected			0
5	B2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-003A	006	09/17/12 @12:00 am	09/20/12 @9:14 am	1539	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	5	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C1	C4A	0	0.00	0.00	None Detected			0
2	C1	C4C	0	0.00	0.00	None Detected			0
3	C1	E4A	0	0.00	0.00	None Detected			0
4	C2	C4A	0	0.00	0.00	None Detected			0
5	C2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-004A	007	09/17/12 @12:00 am	09/20/12 @9:14 am	1719	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	4	22	< 22	0	0	0	< 0.0050	< 0.0050	< 0.0050	0.0050	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D1	C4A	0	0.00	0.00	None Detected			0
2	D1	C4C	0	0.00	0.00	None Detected			0
3	D2	C4A	0	0.00	0.00	None Detected			0
4	D2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-005A	008	09/17/12 @12:00 am	09/20/12 @9:14 am	1450	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E1	C4A	0	0.00	0.00	None Detected			0
2	E1	C4C	0	0.00	0.00	None Detected			0
3	E2	C4A	0	0.00	0.00	None Detected			0
4	E2	C4C	0	0.00	0.00	None Detected			0
5	E2	E4A	0	0.00	0.00	None Detected			0
		Total Fibers:	0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-006A	009	09/17/12 @12:00 am	09/20/12 @9:14 am	1450	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	5	18	< 18	0	0	0	< 0.0047	< 0.0047	< 0.0047	0.0047	0	< 0.021

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A6	C4A	0	0.00	0.00	None Detected			0
2	A6	C4C	0	0.00	0.00	None Detected			0
3	A6	E4A	0	0.00	0.00	None Detected			0
4	A7	C4A	0	0.00	0.00	None Detected			0
5	A7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um

Sample Type: Air
Effective Filter Area: 385 mm²

Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²

Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-007A	010	09/17/12 @12:00 am	09/20/12 @9:14 am	1386	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	5	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B6	C4A	0	0.00	0.00	None Detected			0
2	B6	C4C	0	0.00	0.00	None Detected			0
3	B6	E4A	0	0.00	0.00	None Detected			0
4	B7	C4A	0	0.00	0.00	None Detected			0
5	B7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-008A	011	09/17/12 @12:00 am	09/20/12 @9:14 am	1386	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0049	< 0.0049	< 0.0049	0.0049	0	< 0.022

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C6	C4A	0	0.00	0.00	None Detected			0
2	C6	C4C	0	0.00	0.00	None Detected			0
3	C6	E4A	0	0.00	0.00	None Detected			0
4	C7	C4A	0	0.00	0.00	None Detected			0
5	C7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 9/19/2012 10:49:00 AM
Report Date: 9/25/2012 4:12:51 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-009A	012	09/17/12 @12:00 am	09/20/12 @9:14 am	1300	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	6	15	< 15	0	0	0	< 0.0044	< 0.0044	< 0.0044	0.0044	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D6	C4A	0	0.00	0.00	None Detected			0
2	D6	C4C	0	0.00	0.00	None Detected			0
3	D6	E4A	0	0.00	0.00	None Detected			0
4	D7	C4A	0	0.00	0.00	None Detected			0
5	D7	C4C	0	0.00	0.00	None Detected			0
6	D7	E4A	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114-BLDG 107 CRAWL SPACE**

Work Order No.: **A1209155** **Date:** *25-Sep-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 9/19/2012 10:49:00 AM
Grid Opening Size: 0.0112 mm²
Report Date: 9/25/2012 4:12:51 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1209155-010A	013	09/17/12 @12:00 am	09/20/12 @9:14 am	1539	1	09/25/12 @1:52 pm	NG	09-20-12A-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chry-sotile	Amph-ibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
Asbestos	5	18	< 18	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E6	E4A	0	0.00	0.00	None Detected			0
2	E6	E4C	0	0.00	0.00	None Detected			0
3	E6	F4A	0	0.00	0.00	None Detected			0
4	E7	C4A	0	0.00	0.00	None Detected			0
5	E7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14992x	100 KeV	9/4/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

Analyst(s) Name/Date: [redacted] 9/25/2012

REQUEST FOR LABORATORY ANALYTICAL SERVICES

BUG 107 CRAWLSPACE

A1209155

For Bureau Veritas Use Only
Bureau Veritas Lab Project No.

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5887
(248) 344-1770
Fax (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pky, Ste 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
Fax (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
Fax (847) 726-3323

RUSH ANALYSIS
CONTACT LAB IN ADVANCE
Need Results by: STANDARD
Charges Authorized? ☒ Yes ☐ No
(if yes, initial here) _____
☒ Email Results ☒ Fax

REPORT RESULTS TO

Name	JEFF SMITH
Company	OCCUTEC
Mailing Address	4151 N. MULBERRY STE 275
City, State, Zip	KANSAS CITY, MO 64116
Telephone No.	816.231.5580
Fax No.	816.231.5641
Client Job. No.	92114
Dept.	

BILLING/INVOICE INFORMATION

☐ PO # _____ ☐ Call for Credit Card Information ☐ Direct Bill

Name	DAVID HARTSHORN
Company	GSA
Address	1500 EAST BANNISTER, ROOM 2101
City, State, Zip	KANSAS CITY, MO 64131-3088

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)
CALL PAT GARCIA W/ QUESTIONS
816.719.6149

* Explanation of Preservation
STANDARD T-A-T

Solls: Which state are these from? _____

Waters: ☐ Drinking Water ☐ Groundwater ☐ Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

	CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	AHERA ASB TEM PROTOCOL	FOR LAB USE ONLY
004	GSA ADMIN 1ST FLOOR	09/17	15:15	TEM CASSETTE	1559	1		
005	GSA OFFICES 1ST FLOOR		15:20		1559	1		
006	ROOM 110 1ST FLOOR		15:25		1539	1		
007	ROOM 112 1ST FLOOR		15:30		1719	1		
008	BY ROOM 214 2ND FLOOR		15:42		1450	1		
009	BY ROOM 224 2ND FLOOR		15:45		1450	1		
010	BASEMENT BY SENSORS		16:10		1386	1		
011	BASEMENT OUTSIDE CRAWLSPACE		16:15		1386	1		
012	BASEMENT CRAWL SPACE		16:25		1300	1		
013	OUTSIDE EAST PARKING LOT		16:35		1539	1		

CHAIN OF CUSTODY

Collected by:	PATRICIA GARCIA	11:24 (print)	Collector's Signature:
Relinquished by:	PATRICIA GARCIA	Date/Time 9/19/17	Received by: [redacted] Date/Time
Relinquished by:		Date/Time	Received by: Date/Time 9/19/2012
Method of Shipment:	FED EX		Received at Lab by: Date/Time

Authorized by: [redacted] Date 09/19/12

(Client Signature **MUST** Accompany Request)

Sample Condition Upon Receipt: ☒ Acceptable ☐ Other (explain)

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Page 1 of 1

LABORATORY COPY

October 11, 2012

Jeff Smith
OCCU-TEC INC.
4151 N. Mulberry Suite 275
Kansas City, MO 64116

Bureau Veritas Work Order No. A1210109

Reference: 92114 - BLDG 107 CRAWLSPACE

Dear Jeff Smith:

Bureau Veritas North America, Inc. received 8 samples on October 10, 2012 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a sixty-day holding period, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

[redacted]

Kuntal Parikh

Senior Microscopist

Electronic signature authorized through password protection

cc: Michael Wantland

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services

3380 Chastain Meadows Parkway, Suite 300

Kennesaw, GA 30144

Main: (770) 499-7701

Fax: (770) 499-7511

www.us.bureauveritas.com

CASE NARRATIVE

Date: *11-Oct-12*

CLIENT: OCCU-TEC INC.

Project: 92114 - BLDG 107 CRAWLSPACE

Work Order No A1210109

ANALYTICAL METHOD FOR AIRBORNE ASBESTOS FIBERS USING TRANSMISSION ELECTRON MICROSCOPY (TEM) BY THE AHERA METHOD

The results of this report relate only to the samples listed in the body of this report.

Unless otherwise noted below, the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and/or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

Upon receipt in the laboratory, filters are transferred to a glass slide with a drop of dimethyl formamide/acetic acid clearing solution. After clearing, samples are partially ashed in a plasma asher. The filters are then carbon coated in a vacuum evaporator. Portions of the cleared/ashed/coated filters are excised and placed on 200-mesh copper TEM grids in a wick-type solutional washer containing 100% acetone.

Two grids are placed consecutively in the TEM for examination. An equal number of openings are examined on each grid at 15,000X magnification. Asbestos structures containing fibers which meet a >5:1 length:width aspect ratio and a minimum length of 0.5 micrometers are identified using morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy. Fibers are classified by structure type, are sized (length and width), and are identified as chrysotile, amphibole, ambiguous, or non-asbestos. Results are reported as total asbestos structures per square millimeter of filter and asbestos structures per cubic centimeter of air (asbestos structures/cc). The Kennesaw, Georgia laboratory is accredited by NVLAP –Lab Code 101125-0.

For clearance of a work area in schools (k-12) the requirement is that the average of the results of the five inside samples is <70 str/mm2 assuming an analytical sensitivity of <0.005 structures/cubic centimeter.

References

USEPA. 1987. Asbestos Hazard Emergency Response Act. Appendix A to 40 CFR 763, Subpart E. Washington: GPO. (AHERA protocol).

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1210109-001A	017	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020
A1210109-002A	018	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020
A1210109-003A	019	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-004A	020	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-005A	021	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020
A1210109-006A	022	22	< 22	0	0	0	< 0.0042	< 0.0042	< 0.0042	0.0042	0	< 0.019

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

ANALYTICAL RESULTS

Client: OCCU-TEC INC.

Client Reference No.: 92114 - BLDG 107 CRAWLSPACE

Work Order No.: A1210109 **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air

Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample ID	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted			Total Asbestos				95 % Confidence Limit	
				Chrysotile	Amphibole	Total	Chrysotile (s/cc)	Amphibole (s/cc)	Total (s/cc)	Sensitivity (s/cc)	Low	High
A1210109-007A	023	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019
A1210109-008A	024	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

MCEF: Mixed Cellulose Ester Filter
s/mm²: Structures per square millimeter
"--" : No Results (Air Volume is 0)

s/cc: Structures per cubic centimeter of air collected.
<: Result is less than the indicated limit of detection.

Note 1: AHERA Structures counted contain fibers which met a ≥ 5:1 (length:width) aspect ratio and were ≥ 0.5um in length.
Note 2: AHERA sampling criteria requires that >1200 liters of air be collected on 0.45um filters. Deviation from thses requirements
Note 3: Yamate Level II Structures counted contain fibers which meet a ≥ 3:1 (length:width) aspect ratio.

Analyst(s) Name/Date: [redacted] 10/11/2012

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-001A	017	10/09/12 @12:00 am	10/10/12 @12:34 pm	1871	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A1	C4A	0	0.00	0.00	None Detected			0
2	A1	C4C	0	0.00	0.00	None Detected			0
3	A2	C4A	0	0.00	0.00	None Detected			0
4	A2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-002A	018	10/09/12 @12:00 am	10/10/12 @12:34 pm	1878	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0046	< 0.0046	< 0.0046	0.0046	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B1	C4A	0	0.00	0.00	None Detected			0
2	B1	C4C	0	0.00	0.00	None Detected			0
3	B2	C4A	0	0.00	0.00	None Detected			0
4	B2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-003A	019	10/09/12 @12:00 am	10/10/12 @12:34 pm	1885	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C1	C4A	0	0.00	0.00	None Detected			0
2	C1	C4C	0	0.00	0.00	None Detected			0
3	C2	C4A	0	0.00	0.00	None Detected			0
4	C2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-004A	020	10/09/12 @12:00 am	10/10/12 @12:34 pm	1885	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	D1	C4A	0	0.00	0.00	None Detected			0
2	D1	C4C	0	0.00	0.00	None Detected			0
3	D2	C4A	0	0.00	0.00	None Detected			0
4	D2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Filtration Filter: MCE Filter, .45um
Sample Type: Air
Effective Filter Area: 385 mm²
Date Received: 10/10/2012 12:23:12 PM
Grid Opening Size: 0.0112 mm²
Report Date: 10/11/2012 2:58:02 PM

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-005A	021	10/09/12 @12:00 am	10/10/12 @12:34 pm	1891	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0045	< 0.0045	< 0.0045	0.0045	0	< 0.020

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	E1	C4A	0	0.00	0.00	None Detected			0
2	E1	C4C	0	0.00	0.00	None Detected			0
3	E2	C4A	0	0.00	0.00	None Detected			0
4	E2	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-006A	022	10/09/12 @12:00 am	10/10/12 @12:34 pm	2024	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0042	< 0.0042	< 0.0042	0.0042	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	A6	G4C	0	0.00	0.00	None Detected			0
2	A6	H4A	0	0.00	0.00	None Detected			0
3	A7	C4A	0	0.00	0.00	None Detected			0
4	A7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-007A	023	10/09/12 @12:00 am	10/10/12 @12:34 pm	1982	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	B6	C4A	0	0.00	0.00	None Detected			0
2	B6	C4C	0	0.00	0.00	None Detected			0
3	B7	C4C	0	0.00	0.00	None Detected			0
4	B7	E4A	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

ANALYTICAL RESULTS

Client: **OCCU-TEC INC.**

Client Reference No.: **92114 - BLDG 107 CRAWLSPACE**

Work Order No.: **A1210109** **Date:** *11-Oct-12*

Analytical Method: TEM AHERA
Sample Type: Air
Date Received: 10/10/2012 12:23:12 PM
Report Date: 10/11/2012 2:58:02 PM

Filtration Filter: MCE Filter, .45um
Effective Filter Area: 385 mm²
Grid Opening Size: 0.0112 mm²

Lab Sample No.	Client Sample Identification	Date Sampled	Prep Date	Air Vol. (L)	Dilution Factor	Analysis Date	Analyst	Grid Box Identification
A1210109-008A	024	10/09/12 @12:00 am	10/10/12 @12:34 pm	1989	1	10/11/12 @10:14 am	NG	10-10-12E-1

Analysis	Grid Openings Counted	Reporting Limit (s/mm²)	Total Asbestos (s/mm²)	Structures Counted: Chry-sotile	Structures Counted: Amph-ibole	Structures Counted: Total	Total Asbestos: Chrysotile (s/cc)	Total Asbestos: Amphibole (s/cc)	Total Asbestos: Total (s/cc)	Total Asbestos: Sensitivity (s/cc)	95 % Confidence Limit: Low	95 % Confidence Limit: High
Asbestos	4	22	< 22	0	0	0	< 0.0043	< 0.0043	< 0.0043	0.0043	0	< 0.019

TEM Count Details

Rec	Grid	Grid Opening ID	Count	Length (um)	Width (um)	Structure ID	Structure Type	EDS	Mass (ng)
1	C6	C4A	0	0.00	0.00	None Detected			0
2	C6	C4C	0	0.00	0.00	None Detected			0
3	C7	C4A	0	0.00	0.00	None Detected			0
4	C7	C4C	0	0.00	0.00	None Detected			0
	Total Fibers:		0					**Total Mass:**	0

TEM Microscope Documentation

Instrument	*Magnification	Accelerating Voltage	Calibration Date
TEM 2/D686	14980x	100 KeV	10/1/2012

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

Analyst(s) Name/Date: [redacted] 10/11/2012

BLDG 107 CRAWLSPACE

24HR TAT

REQUEST FOR LABORATORY ANALYTICAL SERVICES

For Bureau Veritas Use Only
Bureau Veritas Lab Project No.

Bureau Veritas North America, Inc.

Detroit Lab
22345 Roethel Drive
Novi, MI 48375
(800) 806-5687
(248) 344-1770
Fax (248) 344-2655

Atlanta Lab
3380 Chastain Meadows Pky, Ste 300
Kennesaw, GA 30144
(800) 252-9919
(770) 499-7500
Fax (770) 499-7511

Chicago Lab
95 Oakwood Road
Lake Zurich, IL 60047
(888) 576-7522
(847) 726-3320
Fax (847) 726-3323

A12/10109

RUSH ANALYSIS
CONTACT LAB IN ADVANCE
Need Results by: 10/10/12 — 10/11/12 13:00 HRS
Charges Authorized? ☒ Yes ☐ No
(if yes, Initial here) AG
☒ Email Results ☒ Fax
JSMITH@OCCUTEL.COM

REPORT RESULTS TO

Name	JEFF SMITH
Company	OCCUTEL
Mailing Address	4151 N. MULBERRY STE 275
City, State, Zip	KANSAS CITY, MO 64116
Telephone No.	816.231.5580
Client Job. No.	92114
Dept.	ENV.
Fax No.	816.231.5641

BILLING/INVOICE INFORMATION

☐ PO # _____ ☐ Call for Credit Card Information ☐ Direct Bill

Name	DAVID HARTSHORN
Company	GSA
Address	1500 EAST BANNISTER ROOM 2101
City, State, Zip	KANSAS CITY, MO 64131-3088

Special Instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)
PHONE PAT GARCIA W/ VERBAL RESULTS 816.719.6149

* Explanation of Preservation

Soils: Which state are these from? _____

Waters: ☐ Drinking Water ☐ Groundwater ☐ Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request. Enter a 'P' if Preservative added.*)

	CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/ MEDIA	AIR VOLUME (specify units)	Number of Containers	AHERA ASBESTOS TEM PROTOCOL	FOR LAB USE ONLY
017	NORTH END OF CRAWL SPACE #395	10/09/12	10:10	TEM CASSETTE	1,871	1		
018	NORTH END OF CRAWL SPACE #404		10:11		1,878	1		
019	CENTER OF CRAWLSPACE #399		10:12		1,885	1		
020	SOUTH END OF CRAWL SPACE #405		10:14		1,985	1		
021	SOUTH END OF CRAWL SPACE #398		10:15		1,991	1		
022	1ST FL S VESTIBULE #396		10:22		2,024	1		
023	BASEMENT OWA CRAWLSPACE #403		10:24		1,992	1		
024	BASEMENT BY SUNSOR #406		10:25		1,989	1		

CHAIN OF CUSTODY

Collected by:	PATRICIA GARCIA (print)	Collector's Signature:	[redacted]
Relinquished by:	PATRICIA GARCIA	Date/Time 10/09/12	Received by:
Relinquished by:		Date/Time	Received by:
Method of Shipment:	FEDEX		Received at Lab by:
Authorized by:	[redacted]	Date 10/09/12	Sample Condition Upon Receipt: ☑ Acceptable ☐ Other (explain)

Date/Time 10/10/2012 1225

(Client Signature **MUST** Accompany Request)

CLEARANCE 24 HR TURN AROUND TIME

LABORATORY COPY

Page 1 of 1

BLANKS NOT SUBMITTED

1

WASTE SHIPMENT RECORD / ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

Elevation______

North______ East______

ASBESTOS 5 (vertical handwriting in the left margin)

Generator

1-A. Special Waste Profile Number: 43381019946

NESHAP Notified: ✓ YES ____ NO

WSR Number: 007790

1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code):
Terracon (Owner's Representative)
13910 West 96th Terrace
Lenexa, KS 66215

1-C. Generator's Phone Number: 913-998-7397

1-D. Work Site Address:
Federal Center
4300 Goodfellow
St. Louis, MO

1-E. 24 Hour Emergency Response Telephone Number: 913-998-7397

2. Operator's Name and Complete Mailing Address:
GEI
7225 St. Charles Rock Road
Pagedale, MO 63133

Operator's Phone Number: 636-928-2500

3. Waste Disposal Site (WDS) Name and Complete Mailing Address:
Roxana Landfill Authority
4600 Cahokia Creek Road
Roxana, IL 62048

WDS Phone Number: 618-656-6912

4. Name and Address of Responsible Agency:
MO Dept. of Natural Resources
205 Jefferson, Room 20
Jefferson City, MO 65102

5. Description of Materials		6. Containers No.	6. Containers Type	7. Total Quantity yd3
friable asbestos: Contaminated Soil & Debris	Asbestos, 9, NA2212, III, RQ	Bladder	Bag	20 yd
non-friable asbestos	Cat I ____ Cat II ____			

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title: Vicki Dunn-Wolfe/President

Signature: [redacted]

Date: 9-21-12

Transporter

10. Transporter 1 Company Name: Allied Waste

Complete Mailing Address:
12976 St. Charles Rock Road
Bridgeton, MO 63044

Telephone Number (including area code): 636-947-5959

Driver Signature: [redacted]

Printed Name and Title: PATRICK LOCKHART

Date: 9-24-12

11. Transporter 2 Company Name

Complete Mailing Address

Telephone Number (including area code)

Driver Signature

Printed Name and Title

Date

Disposal Site

12. Discrepancy Indication Space

13. Waste Disposal Site Owner or Operator
Special Waste Approval is issued by signature in the case of a Generic Asbestos Approval.
Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.

7150

Printed/Typed Name and Title:

Signature: [redacted]

Date: 9/24/12

WHITE - Disposal Site | CANARY - Generator (To be mailed by Disposal Site) | PINK - Transporter | GOLD - Generator (To be taken prior to disposal)

DCE-230-97

2

WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only
Elevation_____
North_____ East_____

Generator

1-A.Special Waste Profile Number	NESHAP Notified	WSR Number
43381019946	____YES ____NO	007791

1-B. Generator Name, Contact Name, and Complete Mailing Address (Including Zip Code)
Terracon (Owner's Representative)
13910 West 96th Terrace
Lenexa, KS 66215

1-C. Generator's Phone Number
913-998-7397

1-D. Work Site Address
Federal Center
4300 Goodfellow
St. Louis, MO

1-E. 24 Hour Emergency Response Telephone Number
913-998-7397

2. Operator's Name and Complete Mailing Address
GEI
7225 St. Charles Rock Road
Pagedale, MO 63133

Operator's Phone Number
636-926-2500

3. Waste Disposal Site (WDS) Name and Complete Mailing Address
Roxana Landfill Authority
4600 Cahokia Creek Road
Roxana, IL 62048

WDS Phone Number
618-656-6912

4. Name and Address of Responsible Agency
MO Dept. of Natural Resources
205 Jefferson, Room 20
Jefferson City, MO 65102

5. Description of Materials		6. Containers No.	6. Containers Type	7. Total Quantity yd3
friable asbestos: Contaminated Soil & Debris	Asbestos, 9, NA2212, III, RQ	BULK	BA	204
non-friable asbestos	Cat I ____ Cat II ____			

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title	Signature	Date
Vicki Dunn-Wolfe/President	[redacted]	9-27-12

Transporter

10. Transporter 1 Company Name
Allied Waste
Complete Mailing Address
12976 St. Charles Rock Road
Bridgeton, MO 63044
Telephone Number (Including area code)
636-947-5959

Driver Signature [redacted]
Printed Name and Title: Mike T. Hinton
Date: 9-28-12

11. Transporter 2 Company Name
Complete Mailing Address
Telephone Number (Including area code)

Driver Signature
Printed Name and Title
Date

Disposal Site

12. Discrepancy Indication Space

13. Waste Disposal Site Owner or Operator
Special Waste Approval is issued by signature in the case of a Generic Asbestos Approval.
Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12.

Printed/Typed Name and Title	Signature	Date
Cyndi Hosta	[redacted]	9/28/12

WHITE - Disposal Site | CANARY - Generator (To be mailed by Disposal Site) | PINK - Transporter | GOLD - Generator (To be taken prior to disposal)

DCE-230-97

ASB2122Db3

3

WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only
Elevation_____
North_____ East_____

Generator

1-A. Special Waste Profile Number	NESHAP Notified	WSR Number
43381019946	✓ YES ____ NO	007793

1-B. Generator Name, Contact Name, and Complete Mailing Address (Including Zip Code)
Terracon (Owner's Representative)
13910 West 96th Terrace
Lenexa, KS 66215

1-C. Generator's Phone Number
913-998-7397

1-D. Work Site Address
Federal Center
4300 Goodfellow
St. Louis, MO

1-E. 24 Hour Emergency Response Telephone Number
913-998-7397

2. Operator's Name and Complete Mailing Address
GEI
7225 St. Charles Rock Road
Pagedale, MO 63133

Operator's Phone Number
636-928-2500

3. Waste Disposal Site (WDS) Name and Complete Mailing Address
Roxana Landfill Authority
4600 Cahokia Creek Road
Roxana, IL 62048

WDS Phone Number
618-656-6912

4. Name and Address of Responsible Agency
MO Dept. of Natural Resources
205 Jefferson, Room 20
Jefferson City, MO 65102

920 612 8. LIT

5. Description of Materials		6. Containers No.	6. Containers Type	7. Total Quantity yd3
friable asbestos Contaminated Soil & Debris	Asbestos, 9, NA2212, III, RQ	RM-W		200 yd
non-friable asbestos	Cat I ____ Cat II ____			

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title	Signature	Date
Vicki Dunn-Wolfe/President	[redacted]	10-2-12

ASB2122D43

Transporter

10. Transporter 1 Company Name
Allied Waste
Complete Mailing Address
12976 St. Charles Rock Road
Bridgeton, MO 63044
Telephone Number (including area code)
636-947-5959

Driver Signature [redacted]
Printed Name and Title Mike Tillman
Date 10-4-12

11. Transporter 2 Company Name
Complete Mailing Address
Telephone Number (including area code)

Driver Signature
Printed Name and Title
Date

Disposal Site

12. Discrepancy Indication Space

13. Waste Disposal Site Owner or Operator
Special Waste Approval is issued by signature in the case of a Generic Asbestos Approval.
Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12.

Printed/Typed Name and Title	Signature	Date
	[redacted]	10/4/12

OCE-230-97 WHITE - Disposal Site CANARY - Generator (To be mailed by Disposal Site) GOLD - Generator (To be taken prior to disposal)

DWITT

4

WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only
Elevation ______
North ______ East ______

ASB2122DW5

Generator

1-A. Special Waste Profile Number: 43381019946	NESHAP Notified: ✓ YES ___ NO	WSR Number: 007794
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code): Terracon (Owner's Representative), 13910 West Terrace, Lenexa, KS 66215		1-C. Generator's Phone Number: 913-998-7397
1-D. Work Site Address: Federal Center, 4300 Goodfellow, St. Louis, MO		1-E. 24 Hour Emergency Response Telephone Number: 913-998-7397
2. Operator's Name and Complete Mailing Address: GEI, 7225 St. Charles Rock Road, Pagedale, MO 63133		Operator's Phone Number: 636-928-2500
3. Waste Disposal Site (WDS) Name and Complete Mailing Address: Roxana Landfill Authority, 4600 Cahokia Creek Road, Roxana, IL 62048		WDS Phone Number: 618-656-6912
4. Name and Address of Responsible Agency: MO Dept. of Natural Resources, 205 Jefferson, Room 20, Jefferson City, MO 65102		

5. Description of Materials		6. Containers No.	Type	7. Total Quantity yd3
friable asbestos: Contaminated Soil & Debris	Asbestos, 9, NA2212, III, RQ	2	B/Addk	2yd
non-friable asbestos	Cat I ____ Cat II ____			

8. Special Handling Instructions and Additional Information
24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED

9. GENERATOR/OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.

Printed/Typed Name and Title	Signature	Date
Vicki Dunn-Wolfe/President	[redacted]	10-9-12

Transporter

10. Transporter 1 Company Name: Allied Waste	Driver Signature: [redacted]
Complete Mailing Address: 12976 St. Charles Rock Road, Bridgeton, MO 63044	Printed Name and Title: Mike Lillman
Telephone Number (including area code): 636-947-5959	Date: 10-10-12
11. Transporter 2 Company Name	Driver Signature
Complete Mailing Address	Printed Name and Title
Telephone Number (including area code)	Date

Disposal Site

12. Discrepancy Indication Space: 921775

13. Waste Disposal Site Owner or Operator
Special Waste Approval is issued by signature in the case of a Generic Asbestos Approval.
Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.

Printed/Typed Name and Title	Signature	Date
D Witt	[redacted]	10/10/12

WHITE - Disposal Site | CANARY - Generator (To be mailed by Disposal Site) | PINK - Transporter | GOLD - Generator (To be taken prior to disposal)

DCG-230-97

PLEASE TYPE OR PRINT

5

WASTE SHIPMENT RECORD
(FOR SHIPMENT OF ASBESTOS)

WMX Profile #	24 Hour Response Number	WMX-WSR Number
43291019046		121596

Generator

1. Work Site Name and Mailing Address	Owner's Name	Owner's Phone No.
Federal Center 4300 Goodfellow St. Louis, MO	Allen Bartels Owner's Rep 913-908-7307	913-908-7307

2. Operator's Name and Address	Operator's Contact	Operator's Phone No.
GEI 7225 St. Charles Rock Road Pagedale, MO 63133	Vicki Dunn-Wolfe	636-928-2500

3. Waste Disposal Site (WDS) Name, Mailing Address, and Physical Site Location	WDS Phone No.
Roxana Landfill Authority 4600 Cahokia Creek Road Roxana, IL 62048	618-656-6912

4. Name, and Address of Responsible Agency	Responsible Agency Phone Number
MO Dept. of Natural Resources 205 Jefferson, Room 20 Jefferson City, MO 65102	573-751-4817

5. Description of Materials	6. Containers No.	Type	7. Total Quantity m³	(yd³)
Contaminated Soil & Debris (Friable)	217	Rags		40 yds

8. Special Handeling Instructions and Additional Information

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

Printed/Typed Name & Title	Signature	Month Day Year
Vicki Dunn-Wolfe/President	[redacted]	10-12-12

Transporter

10. Transporter 1 (Acknowledgment of Receipt of Materials)

Printed/Typed Name & Title	Signature	Month Day Year
Allied Waste Address and Telephone Number 636-947-5959 12976 St. Charles Rock Road Bridgeton, MO 63044	[redacted]	10-16-12

11. Transporter 2 (Acknowledgment of Receipt of Materials)

Printed/Typed Name & Title	Signature	Month Day Year
Address and Telephone No.		

Disposal Site

12. Descrepancy Indication Space

13. Waste Disposal Site Owner or Operator: 923070

Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.

Printed/Typed Name & Title	Signature	Month Day Year
Mitch Hulka	[redacted]	10/16/12

ASB2127D03

PLEASE TYPE OR PRINT

WASTE SHIPMENT RECORD
(FOR SHIPMENT OF ASBESTOS)

WMX Profile #	24 Hour Response Number	WMX-WSR Number
433819979946		121597

Generator

1. Work Site Name and Mailing Address	Owner's Name	Owner's Phone No.
Federal Center 4300 Goodfellow St. Louis, MO	Allen Barbets	913-998-7397
2. Operator's Name and Address	**Operator's Contact**	**Operator's Phone No.**
GEI 7225 St. Charles Rock Road Pagedale, MO 63133	Vicki Dunn-Wolfe	636-928-2500
3. Waste Disposal Site (WDS) Name, Mailing Address, and Physical Site Location		**WDS Phone No.**
Roxana Landfill Authority 4600 Cahokia Creek Road Roxana, IL 62048		618-656-6912
4. Name, and Address of Responsible Agency		**Responsible Agency Phone Number**
MO Dept. of Natural Resources 205 Jefferson, Room 20 Jefferson City, MO 65102		573-751-4817

5. Description of Materials	6. Containers No.	Type	7. Total Quantity m^3	(yd^3)
Contaminated Soil & Debris (Friable)	1	BAG	20yd	

8. Special Handeling Instructions and Additional Information

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

Printed/Typed Name & Title	Signature	Month Day Year
Vicki Dunn-Wolfe/President	[redacted]	10-12-12

Transporter

10. Transporter 1 (Acknowledgment of Receipt of Materials)

Printed/Typed Name & Title	Signature	Month Day Year
Allied Waste 636-947-5959 Address and Telephone Number 12976 St. Charles Rock Road Bridgeton, MO 63044	[redacted]	10-12-12

11. Transporter 2 (Acknowledgment of Receipt of Materials)

Printed/Typed Name & Title	Signature	Month Day Year
Address and Telephone No.		

Disposal Site

12. Descrepancy Indication Space

13. Waste Disposal Site Owner or Operator:
Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12. 922407

Printed/Typed Name & Title	Signature	Month Day Year
Derrick Ioar	[redacted]	10 12 12

ASB2122DL3

FOR OFFICE USE ONLY

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 63102-0176

ASBESTOS NOTIFICATION AMENDMENT #2

(Please type information)

PART A CONTRACTOR INFORMATION

1. ASBESTOS ABATEMENT CONTRACTOR NAME				
GEI				
2. CONTRACTOR STREET ADDRESS	CITY	STATE	ZIP	TELEPHONE NUMBER
7225 St. Charles Rock Road, Pagedale, MO 63133				636-928-2500
3. MISSOURI REGISTRATION NUMBER	REGISTRATION EXPIRATION DATE			CONTACT PERSON
13-06-0350	6/30/2013			Vicki Dunn-Wolfe

PART B PROJECT INFORMATION

1. PROJECT SITE NAME				
Federal Center - Building 107 Crawlspace				
2. PROJECT SITE ADDRESS	CITY	STATE	ZIP	TELEPHONE NUMBER
4300 Goodfellow, St. Louis, MO 63120				816-823-2227
3. PROJECT I.D. NUMBER ASSIGNED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES				
A5880-2012				

PART C AMENDMENT INFORMATION (ATTACH ANOTHER SHEET IF NECESSARY)

PROJECT INFORMATION AS NOTIFIED (Example: Start Time: 7:00 a.m.	AMENDED TO Start Time: 7:30 a.m.)
Work Schedule:	Work Schedule:
Offsite: 10/10/12	10/12/12
Project completed/pending air clearances	Project completed
	Air clearances received

PART D SUPPLEMENTAL INFORMATION (AS NEEDED)

PART E AUTHENTICATION

SIGNATURE OF COMPANY REPRESENTATIVE	TITLE	
[redacted]	Office Coordinator	
PRINTED OR TYPED NAME		DATE
Lindsay Dunn		10/12/12

MO 780-1556 (7-96)

FOR OFFICE USE ONLY

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 63102-0176

ASBESTOS NOTIFICATION AMENDMENT # 1

(Please type information)

PART A CONTRACTOR INFORMATION

1. ASBESTOS ABATEMENT CONTRACTOR NAME		
GEI		
2. CONTRACTOR STREET ADDRESS / CITY / STATE / ZIP		TELEPHONE NUMBER
7225 St. Charles Rock Road, Pagedale, MO 63133		636-928-2500
3. MISSOURI REGISTRATION NUMBER	REGISTRATION EXPIRATION DATE	CONTACT PERSON
13-06-0350	6/30/2013	Vicki Dunn-Wolfe

PART B PROJECT INFORMATION

1. PROJECT SITE NAME		
Federal Center - Building 107 Crawlspace		
2. PROJECT SITE ADDRESS / CITY / STATE / ZIP		TELEPHONE NUMBER
4300 Goodfellow, St. Louis, MO 63120		816-823-2227
3. PROJECT I.D. NUMBER ASSIGNED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES		
A5880-2012		

PART C AMENDMENT INFORMATION (ATTACH ANOTHER SHEET IF NECESSARY)

PROJECT INFORMATION AS NOTIFIED	AMENDED TO
(Example: Start Time: 7:00 a.m.	Start Time: 7:30 a.m.)
Work Schedule:	Work Schedule:
9/17/12 - 10/10/12	Offsite :10/10/12
Time: 5:00 pm - 12:00 am	Project completed/pending air clearances
Break: 8:30 pm	

PART D SUPPLEMENTAL INFORMATION (AS NEEDED)

PART E AUTHENTICATION

SIGNATURE OF COMPANY REPRESENTATIVE	TITLE
[redacted]	Office Coordinator
PRINTED OR TYPED NAME	DATE
Lindsay Dunn	10/10/12

MO 780-1556 (7-96)

MISSOURI DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 65102-0176

ASBESTOS PROJECT NOTIFICATION

FOR APCP USE ONLY	
DATE RECEIVED	CHECK DATE
CHECK NUMBER	CHECK AMOUNT

PART A. NOTIFICATION INFORMATION

1. TYPE OF NOTIFICATION (CHECK ONE)
☑ ORIGINAL ☐ REVISION ☐ CANCELLATION

2. TYPE OF PROJECT NOTIFICATION

☑ 160 SQUARE FEET, 260 LINEAR FEET, 35 CUBIC FEET OR MORE OF FRIABLE ASBESTOS MATERIAL INVOLVED*
☐ LESS THAN 160 SQUARE FEET, 260 LINEAR FEET, OR 35 CUBIC FEET OF FRIABLE ASBESTOS MATERIAL INVOLVED
DOES THIS PROJECT INVOLVE STRUCTURAL RENOVATION ☑ OR DEMOLITION ☐**

*NOTE: A NON-REFUNDABLE REVIEW FEE OF $100 MUST BE SUBMITTED FOR ANY ASBESTOS ABATEMENT PROJECT INVOLVING 160 SQUARE FEET, 260 LINEAR FEET, 35 CUBIC FEET, OR MORE OF FRIABLE ASBESTOS-CONTAINING MATERIAL, AND FOR PLANNED RENOVATION PROJECTS AS DEFINED IN U.S. EPA REGULATION 40 CFR PART 61 SUBPART M.

THIS NOTIFICATION DOES **NOT SATISFY THE REQUIREMENT FOR DEMOLITION NOTIFICATION. USE FORM NUMBER 780-1923 FOR DEMOLITION NOTIFICATION.

MAKE CHECKS PAYABLE TO MISSOURI AIR POLLUTION CONTROL PROGRAM OR THE APPROPRIATE LOCAL AGENCY.

3. IF AN UNSAFE STRUCTURE IS BEING DEMOLISHED UNDER THE ORDER OF A STATE OR LOCAL GOVERNMENT AGENCY, INCLUDE A COPY OF THE UNSAFE BUILDING DECLARATION AND COMPLETE THE FOLLOWING:

A. NAME OF INDIVIDUAL ORDERING DEMOLITION	B. TITLE
C. AUTHORITY OF THE INDIVIDUAL	D. TELEPHONE NUMBER

4. FOR EMERGENCY RENOVATIONS COMPLETE THE FOLLOWING:

A. DATE AND HOUR OF THE EMERGENCY

B. DESCRIPTION OF THE SUDDEN, UNEXPECTED EVENT

C. EXPLANATION OF HOW THE EVENT CAUSED UNSAFE CONDITIONS OR WOULD CAUSE EQUIPMENT DAMAGE OR AN UNREASONABLE FINANCIAL BURDEN

5. IF A WAIVER OF ANY REQUIREMENT IS REQUESTED, INDICATE THE WAIVER DESIRED AND THE JUSTIFICATION FOR SUCH A WAIVER. (USE SUPPLEMENTAL SHEET IF NECESSARY)

A. WAIVER	B. JUSTIFICATION

PART B. CONTRACTOR INFORMATION AND AUTHORIZATION

1. ASBESTOS ABATEMENT CONTRACTOR NAME
Global Environmental Inc.

2. CONTRACTOR ADDRESS
7225 St Charles Rock Rd

3. CITY	4. STATE	5. ZIP CODE
St Louis	MO	63133

6. MISSOURI REGISTRATION NUMBER	7. REGISTRATION EXPIRATION DATE
13-06-0350	06/30/2013
8. ON-SITE SUPERVISOR AND CERTIFICATION NUMBER	9. CONTRACTOR TELEPHONE NUMBER
Vicki Dunn 7112112311MOSR2221	(314) 575-5769

10a. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF FEDERAL REGULATION (40 CFR PART 61 SUBPART M) WILL BE ON-SITE DURING THE PROJECT AND PROOF THAT THIS PERSON HAS COMPLETED THE REQUIRED TRAINING WILL BE AVAILABLE FOR INSPECTION BY THE DEPARTMENT.

10b. BY MY SIGNATURE, I ATTEST THAT ALL ASBESTOS ABATEMENT PROCEDURES SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REGULATIONS.

10c. I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND UNDERSTANDING, THE INFORMATION PROVIDED IN THIS NOTIFICATION IS TRUE AND CORRECT.

11. SIGNATURE	12. DATE
[redacted]	08/30/2012

13. PRINTED NAME AND TITLE
Vicki Dunn, President

PART C. PROJECT DESCRIPTION

1. FACILITY PROJECT NAME			
2122063 GSA Heartland Bldg 107 Crawlspace			
2. ADDRESS			
4300 Goodfellow Rd, Bldg 107 Crawlspace			
3. PROJECT CITY	4. COUNTY	5. STATE	6. ZIP CODE
St Louis	St Louis	MO	63120
7. OWNER NAME			
GSA Heartland			
8. OWNER ADDRESS			
1500 E Bannister Rd			
9. OWNER CITY		10. STATE	11. ZIP CODE
Kansas City		MO	64131
12. OWNER CONTACT	13. OWNER TELEPHONE NUMBER		
Dave L. Hartshorn (6PMX)	(816) 823-2227		
14. BUILDING SIZE	15. NUMBER OF FLOORS	16. AGE IN YEARS	
90x100	2	over 30	
17. PRESENT USE	18. PRIOR USE		
Office	Office		

PART D. ASBESTOS MATERIALS TO BE DISTURBED

1. DESCRIPTION AND QUANTITY OF FRIABLE ASBESTOS MATERIALS TO BE DISTURBED

MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
Contaminated Soil	9,000		
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET

2. DESCRIPTION AND QUANTITY OF NON-FRIABLE ASBESTOS MATERIALS TO BE DISTURBED

MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET

3. DESCRIBE THE PROCEDURE FOR THE DETECTION OF ASBESTOS CONTAINING MATERIALS INCLUDING THE ANALYTICAL METHOD EMPLOYED. INCLUDE A COPY OF THE ASBESTOS INSPECTION REPORT.

PLM 7400. Copy of inspection report is attached.

PART E. PROJECT SCHEDULE

	START DATE	COMPLETION DATE	TIME
1. SITE PREPARATION PHASE	09/17/2012	09/18/2012	12:30am
2. ASBESTOS ABATEMENT PHASE	09/19/2012	10/10/2012	12:30am
3. DAILY WORK SCHEDULE	START TIME 5:00 PM	QUIT TIME 12:30 AM	LUNCH BREAK 8:30pm - 9:00pm

PART F. OTHER MISSOURI CERTIFIED PERSONNEL INVOLVED WITH PROJECT

DISCIPLINE	NAME	CERTIFICATE NUMBER	TELEPHONE
1. AIR SAMPLING PROFESSIONAL	OCCU-TEC (PAT GARCIA)	7031008 MOAS 11347	(816) 719-6149
2. INSPECTOR	OCCU-TEC (PAT GARCIA)	N/A	(816) 719-6149
3. MANAGEMENT PLANNER			
4. PROJECT DESIGNER			

PART G. PROJECT DESCRIPTION

1. DESCRIBE ABATEMENT WORK INCLUDING LOCATION IN BUILDING, PLANNED DEMOLITION/RENOVATION, AND METHODS TO BE USED

Gross removal method in accordance with NESHAPs crawlspace building 107.

2. DESCRIBE WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS

Full containment utilizing HEPA filtered negative air pressure.

3. DESCRIBE THE CONTINGENCY PLAN IF UNEXPECTED RACM IS DISCOVERED

Stop work, wet material, cover material, notify owner.

PART H. WASTE DISPOSAL

1. NAME OF WASTE TRANSPORTER: Allied Waste			
2. ADDRESS: 12976 St Charles Rock Rd			
3. CITY: Bridgeton		4. STATE: MO	5. ZIP CODE: 63044
6. CONTACT PERSON: N/A	7. TELEPHONE NUMBER: (636) 947-5959		
8. WASTE DISPOSAL SITE: ROXANA LANDFILL AUTHORITY			
9. ADDRESS: 4600 CAHOKIA CREEK RD			
10. CITY: ROXANA		11. STATE: IL	12. ZIP CODE: 62048
13. CONTACT PERSON: DARLENE WITT	14. TELEPHONE NUMBER: 618-656-6912		

PART I. SUPPLEMENTAL INFORMATION

1. PROJECT SITE	2. NOTIFICATION DATE
2122063 GSA HEARTLAND BLD6107	08-30-2012
3. PART NUMBER	4. ITEM NUMBER

Michael Blaine, MO ASB SUPERVISOR # 71180504 12 MOSR 11560
~~Chris Townsend, MO ASB SUPERVISOR # 71121006 11 MOSR 337~~
Joseph Dunn, MO ASB SUPERVISOR # 71180504 12 MOSR 12086

Job file

Olivette Branch
St Louis, Missouri
631329998
2871440220 -0096
08/30/2012 (800)275-8777 04:46:27 PM

Sales Receipt

Product Description	Sale Qty	Unit Price	Final Price
JEFFERSON CITY MO 65102			$6.05
Zone-2 Priority Mail			
2 lb. 1.70 oz.			
Expected Delivery: Sat 09/01/12			
Return Rcpt (Green Card)			$2.35
Certified			$2.95
Label #:	70121010000137926509		
Issue PVI:			$11.35
Total:			$11.35

Paid by:
Debit Card $11.35
Account #: XXXXXXXXXXXX5437
Approval #: 130068
Transaction #: 520
23 903070506
Receipt#: 003862

Order stamps at usps.com/shop or call 1-800-Stamp24. Go to usps.com/clicknship to print shipping labels with postage.
For other information call 1-800-ASK-USPS.
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Bill#: 1000403756116
Clerk: 12

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Return Receipt Fee (Endorsement Required)	$2.35
Restricted Delivery Fee (Endorsement Required)	$0.00
Total Postage & Fees	$ $11.35

0930 12 AUG 30 2012 Postmark Here
08/30/2012

Sent To
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

Notification
GSA Bldg 107
Crawlspace

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

SEP 1 3 2012

Ms. Vicki Dunn, President
Global Environmental, Incorporated
7225 St. Charles Rock Road
St. Louis, MO 63133

RE: **Notice of Receipt**

Dear Ms. Dunn:

This letter serves to acknowledge, on September 4, 2012, the Missouri Department of Natural Resources' Air Pollution Control Program (APCP) received your asbestos project notification dated August 30, 2012. This notice applies to abatement of GSA Heartland, Building 107 Crawlspace, located at 4300 Goodfellow Road in St. Louis, Missouri. The APCP assigned this notice **#A5880-2012.**

State and federal regulation require demolition and asbestos project notifications be submitted to this program. However, the APCP is not conducting a detailed review of each notice. It remains the responsibility of the facility owner and the person conducting the activity to maintain compliance with all applicable laws and regulations pertaining to the conduct of demolition, renovation and asbestos projects.

The notice start date is **September 17, 2012.**

Please note, if there are any changes to the project information, an amendment must be sent to the APCP and the St. Louis Regional Office (SLRO) which has jurisdictional responsibility for this project. Please use the enclosed APCP amendment form when submitting changes. The SLRO contact information is as follows: 7545 South Lindbergh Suite 210 in St. Louis, MO 63125. They can also be reached by phone at (314) 416-2960 or fax (314) 416-2970. The regional office staff may conduct a detailed review of this notice, as well as on-site inspections to determine compliance. Please contact the SLRO if you need to discuss your project with department staff.

Please be aware, the City of St. Louis, Department of Health may continue to regulate asbestos projects impacting asbestos containing material in amounts less than those