

**FINAL**

**LAKE LINDEN  
CALUMET STAMP MILL SITE**

**POST-CONSTRUCTION REPORT  
ASBESTOS DEBRIS PICKUP, SOIL REMOVAL, AND RESTORATION**

*Prepared for:*  
**Honeywell Specialty Materials, LLC**

*Prepared by:*  
**Amec Foster Wheeler Environment & Infrastructure, Inc.  
Novi, Michigan**

August 2017

Project 3293161707



August 9, 2017

Mr. Brian Kelly  
On-scene Coordinator  
Region V Emergency Response Branch  
United States Environmental Protection Agency  
9311 Groh Road  
Grosse Ile, Michigan 48138

**Subject:** Administrative Settlement Agreement and Order on Consent – V-W-17-C-001  
Final Post-Construction Report  
Calumet Stamp Mill Site

Dear Mr. Kelly:

On behalf of Honeywell International Inc., Amec Foster Wheeler Environment and Infrastructure, Inc., is pleased to submit three electronic copies of the final Post-Construction Report for the Calumet Stamp Mill Site for your records. The work was completed under the Administration Settlement and Order on Consent signed October 18, 2016 docket No. V-W-17-C-001.

If you have any questions please do not hesitate to call Michael McGowan at 248-313-3665.

Sincerely,

Amec Foster Wheeler Environment and Infrastructure, Inc.

A handwritten signature in blue ink, appearing to read "Michael J. McGowan".

Michael J. McGowan  
Project Manager

A handwritten signature in blue ink, appearing to read "Garret E. Bondy".

Garret E. Bondy  
Quality Assurance Officer

MJM/sko

Enclosures: Final Post-Construction Report

cc: Chuck Gadelmann (Honeywell)

**FINAL**  
**POST-CONSTRUCTION REPORT**  
**ASBESTOS DEBRIS PICKUP, SOIL REMOVAL, AND RESTORATION**

**LAKE LINDEN – CALUMET STAMP MILL SITE**  
**TORCH LAKE TOWNSHIP, HOUGHTON COUNTY MICHIGAN**  
**HONEYWELL SITE ID 37156**

*Prepared for:*  
**HONEYWELL SPECIALTY MATERIALS, LLC**

*Prepared by:*  
**AMEC FOSTER WHEELER ENVIRONMENT & INFRASTRUCTURE, INC.**  
**46850 Magellan Drive, Suite 190**  
**Novi, Michigan 48377**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.



Signature



Title



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## LIST OF ACRONYMS

ACM:	Asbestos Containing Material
ACWM:	Asbestos Containing Waste Material
Amec Foster Wheeler:	Amec Foster Wheeler Environment & Infrastructure, Inc.
ASAO:	Administrative Settlement and Order on Consent
bgs:	Below Ground Surface
C&H:	Calumet and Hecla
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cyd:	Cubic Yard
f/cc:	Fibers per Cubic Centimeter
HASP:	Health and Safety Plan
HCHMS:	Houghton County Historical Museum Society
Honeywell:	Honeywell Specialty Materials, LLC.
MDEQ:	Michigan Department of Environmental Quality
NESHAP:	National Emission Standards for Hazardous Air Pollutants
NRDCC:	Non-Residential Direct Contact Criteria
PEL:	Permissible Exposure Limit
PCB:	Polychlorinated Biphenyl
PCM:	Phase Contrast Microscopy
Poly:	6-mil polyethylene sheeting
PPE:	Personal Protective Equipment
ppm:	Parts per Million
%	Percent
Site:	Former Calumet Stamp Mill Site
START:	Superfund Technical Assessment and Response Team
SVOC:	Semi-Volatile Organic Compound
QuanTEM:	QuanTEM Laboratories, Inc.
Tetra Tech:	Tetra Tech, Inc.
USEPA:	United States Environmental Protection Agency
VOC:	Volatile Organic Compound

## **1.0 INTRODUCTION**

This Post-Construction Report was prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) on behalf of Honeywell Specialty Materials, LLC (Honeywell) to document construction activities associated with the asbestos remedial action completed at the historic Calumet Stamp Mill Site (Site) located at 53102 Highway M-26 in Torch Lake Township, Houghton County, Michigan (Figure 1.1). The work was completed under an Administrative Settlement Agreement and Order on Consent (ASAOC) between Honeywell, the Houghton County Historical Museum Society (HCHMS) and the United States Environmental Protection Agency (USEPA).

The Site occupies approximately 11.5 acres and is bounded to the north by the Village of Lake Linden public park, to the east by the Village of Lake Linden public marina on Torch Lake, to the south by the former Hecla Stamp Mill and C&H Power Plant Site, and to the west by Highway M-26 with a grocery store and residential homes beyond. While the majority of the former buildings at the Site have been demolished, several buildings and foundations remain and are maintained for historical purposes by the HCHMS. Structures currently at the Site include the former Calumet Stamp Mill foundation, a portion of the former Hecla Stamp Mill foundation, an office building, as well various other buildings and a railroad track constructed and operated by the HCHMS.

USEPA concluded that the Site met the criteria for a time-critical removal action, as presented in the October 2016 Enforcement Action Memorandum prepared by the USEPA.

The tasks completed address the activities required in Section VIII “Work to Be Performed” of the ASAOC between Honeywell, the HCHMS and the USEPA, effective October 18, 2016.

## **2.0 SITE CONDITIONS AND BACKGROUND**

The Site is the location of a former industrial complex that crushed or “stamped” and processed ore rock from nearby copper mines. Stamping operations began in the early 1800’s and continued until an employee strike terminated plant operations in 1968. The Site is currently owned by HCHMS.

### **2.1 INITIAL SITE CONDITIONS**

Historically, the Site was part of a large industrial complex that operated as a stamping mill for the former Calumet & Hecla Mining Company (later Calumet & Hecla, Inc., or C&H) from the late 1800s until 1968. HCHMS acquired the Site in 1975 from Universal Oil Products. HCHMS has owned and operated the Site since that time. Based on historical Sanborn maps and aerial photographs, the majority of the former structures at the Site were demolished between 1935 and 1983. Former structures included the Calumet Stamp Mill (demolished between 1954 and 1963), a portion of the Hecla Stamp Mill (demolished between 1935 and 1954), the Calumet Wheel House (demolished between 1935 and 1951), Regrinding Plant Number 1 (demolished between 1935 and 1951), a Pump House (demolished between 1954 and 1963), a Machine Shop (demolished between 1963 and 1983), and a portion of the Leaching Plant (demolished between 1963 and 1983). The locations of these structures in relations to the Site are depicted on Figure 2.1

### **2.2 LOCATIONS OF HAZARDOUS SUBSTANCES**

Previous investigations completed by the USEPA and the Michigan Department of Environmental Quality (MDEQ) identified elevated concentrations of asbestos containing materials (ACMs) in Site surface soils, as well as miscellaneous presumed ACM debris scattered across the Site. Areas of ACMs are depicted on Figure 2.2. Response actions and locations were based upon the MDEQ and USEPA sampling and analyses and conclusions.

### **2.3 CAUSE OF CONTAMINATION**

ACMs found on the Site and in Site soils were the result of the presence of ACMs in onsite buildings. These ACMs were left on-Site at the time of demolition of the Stamp Mills.

### **2.4 RESPONSE ACTIVITIES**

Remediation was accomplished by the following actions:

- Securing the Site by installing fencing and warning signs,
- Removal and disposal of visible presumed ACM debris,
- Removal and disposal of Site soils suspected of containing ACM from trenches in the former Hecla Stamp Mill foundation, the former Calumet Stamp Mill foundation and from an area east and adjacent to the former Calumet Stamp Mill foundation,
- Covering with clean soil, remaining soil in the excavated foundation trenches and in the area east of the former Calumet Stamp Mill,
- Removal and disposal of pitch mastic from the rims of the circular stamp mill bases on the former Calumet Stamp Mill foundations,

- Covering the openings in the circular stamp mill bases with metal plates, and
- Cleaning of concrete foundation surfaces.

The project team, including roles, consisted of the organizations listed in Table 2.1.

### **3.0 NARRATIVE OF RESPONSE ACTIONS**

This response was conducted under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Sections 104, 106(a), 107 and 122. Remedial activities began on October 25, 2016, after the ASAOC was signed. The Site-specific Health and Safety Plan (HASP) and Work Plan were completed and sent to the USEPA for comment prior to the signing of the ASAOC so that work could commence as soon as practicable once the ASAOC was finalized. Removal activities are described in detail in Section 3.1. A chronological summary of major events related to the ACM debris pickup, soil remediation, foundation cleaning and site restoration is presented on Table 3.1.

### **3.1 THREAT ABATEMENT ACTIONS TAKEN**

This section presents a summary of the ACM removal activities and methodologies used to address the Site hazards. Figure 2.2 shows areas where Site remediation was accomplished. A photographic log of the activities described in this section is included as Appendix A. During remediation activities, Amec Foster Wheeler provided weekly progress reports to the USEPA. Copies of these reports are included in Appendix B.

#### **3.1.1 Preliminary Activities**

Under approval from the USEPA, Honeywell completed several preliminary activities prior to signing the ASAOC. Preliminary activities began in September 2016 and included;

- Completing the Site Specific HASP and having it reviewed by the USEPA.
- Completing the Work Plan and having it reviewed by the USEPA.
- Completing the Quality Assurance Project Plan and having it reviewed by the USEPA

#### **3.1.2 Exclusion and Contaminant Reduction Zone Construction**

Beginning October 26, 2016, an area of the Site was fenced using high visibility construction fencing and signed with “Danger Asbestos Hazard” signs to establish an exclusion zone. The area enclosed the entire Calumet Stamp Mill foundation as well as an area approximately 50 feet east, 30-feet north, and 75-feet west of the foundation to allow access for workers and to keep onlookers at a distance. The southern edge of the Calumet Stamp Mill foundation abutted up to the railroad ballast placed by the HCHMS and the rails were approximately 8 feet above the foundation floor.

A decontamination trailer equipped with dirty area, showers, and clean area was placed at the western edge of the exclusion zone on October 26, 2016. The trailer was connected via hoses to a water source and the filtered gray water side was connected to the sanitary sewer.

#### **3.1.3 Support Zone**

The support zone did not require construction. The HCHMS office and parking lot was used as the support zone. The former gift shop, in the same building as the HCHMS office was used as the rallying point and office/break space for the workers and administrative duties.

### **3.1.4 Assumed ACM Debris Pickup**

Assumed ACM debris was picked up from the Site on October 28 and November 1, 2016. The Site was walked by two groups of two persons and any suspect ACM was picked up and placed in 6-mil poly bags. Once a bag was filled to approximately ¼ full it was sealed and placed in a second bag and sealed again. These bags were placed into a roll-off box, awaiting disposal.

The area was observed by Amec Foster Wheeler with the USEPA START contractor to verify the completion of pickup of suspect ACM on November 1, 2016. On November 4, 2016, the USEPA OSC concurred that the Phase I pick up was complete. The roll off was transported to K&W Landfill for disposal on December 9, 2016.

### **3.1.5 Stamp Mill Foundation Trench Excavation**

Beginning November 2, 2016, the soil was removed from the foundation trenches and openings within the Calumet Stamp Mill and northern portion of the Hecla Stamp Mill foundations. Soil removal from the trenches was completed on November 30, 2016.

Initially, wood covering portions of the trenches was to be left in place and soil removal from the trenches was to work around the wood, leaving soil beneath the wood. After conferring with a representative of the HCHMS, a request was made by the HCHMS to remove the wood partially covering the trenches since it did not have any historical significance so that soil beneath the wood could be removed. Permission was granted by USEPA in consultation with the Keweenaw Historic Park and HCHMS.

Per the approved Work Plan, a maximum of two feet of soil was to be removed from the trenches. A larger trench near the middle of the Calumet Stamp Mill foundation was considerably deeper than 2 feet. Therefore, this trench was excavated to a minimum of 2 feet below the foundation floor and a demarcation layer was placed along the trench on top of the remaining soil. The demarcation layer consisted of high visibility plastic construction fence and was placed the full length and width of the trench. Some of the openings in the foundations were also excavated to 2 feet below floor level and a demarcation layer was placed on top of the soil the full width and length of the opening prior to backfill.

All soil removed from the Calumet and Hecla Stamp Mill foundation trenches were assumed to be asbestos containing waste material (ACWM). The soil was staged on plastic sheeting near the southwestern corner of the Calumet Stamp Mill foundation within the exclusion zone and covered with plastic sheeting each evening and wetted during the day.

### **3.1.6 Soil Excavation**

The soil excavation activities occurred from November 17 to November 22, 2016. In accordance with the approved Work Plan, an area east adjacent to the Calumet Stamp Mill foundation was excavated to a depth of 6-inches below ground surface (bgs). The area was approximately 20 feet wide by 300 feet long. Wood structures from a former railroad trestle were staged against the east side and near the center of the foundation. These structures were worked around, and the soil beneath them was not excavated. Excavation was completed using a loader with a 10 foot wide loader bucket. Soil was excavated two buckets wide the length of the foundation with



the exception of the wooden structures and the soil ramp located at the southeastern corner of the foundation.

All soil excavated from east adjacent to the Calumet Stamp Mill foundation were assumed to be ACWM. The excavated soil was placed on the soil stockpile also used when excavating trenches in the foundation, pending disposal.

### **3.1.7 Pitch Mastic Removal**

Pitch mastic removal from the rims of the circular stamp mill bases began on December 2, 2016. The removal was halted on December 9, 2016 due to excessive snow fall making removal difficult. The USEPA START contractor had observed four of the five rims of the circular stamp mill bases completed by December 9, 2016, and concurred that they were sufficiently abated as per the ASAOC. The fifth foundation rim was covered with snow and not visible for inspection. Pitch mastic removal was resumed on April 24, 2017 and was completed on April 28, 2017. The USEPA START contractor concurred that the pitch mastic removal was complete as per the ASAOC. Throughout this work the removed mastic was placed in 6-mil poly bags. Once a bag was filled to approximately ¼ full it was sealed and placed in a second bag and sealed again. These bags were placed into a roll-off box, and transported to K&W Landfill for disposal on May 1, 2017.

### **3.1.8 Foundation Cleaning**

Foundation cleaning commenced on November 15, 2016 and continued as the last soil was excavated and removed from the trenches. Foundation cleaning was completed on December 1, 2016. Onsite foundations were cleaned using low pressure followed by high pressure water. Dirt, sediment, and rinse water were directed toward contaminated soil in the trenches or along the eastern edge of the foundation for excavation and disposal during work in these areas.

Workers donned Level C PPE during foundation cleaning activities. Dust suppression methods and personal and perimeter air monitoring were conducted during these activities as described in Section 3.1.11.

Equipment used for foundation cleaning was decontaminated using a pressure washer. Rinse water was collected and transferred to the ACWM stockpile. Spent PPE was disposed with the ACWM at K&W Landfill.

Additionally, the circular stamp mill bases have openings at their bases. Recessed steel plates were attached to the concrete to prevent access into these bases.

### **3.1.9 Backfill**

A local source of material was used to backfill the trenches in the Calumet and Hecla Stamp Mill foundations, the excavated area east adjacent to the Calumet Stamp Mill foundation. The soil was sampled and analyzed prior to being brought onto the Site. The sample was analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, herbicides, and the 10 Michigan metals. The soil was accepted as usable for the project.

The trenches at the north end of the former Hecla Stamp Mill foundation were backfilled on November 28, 2016. Backfill of the trenches on the former Calumet Stamp Mill foundation began on November 29, 2016 and halted on December 1, 2016 due to wet weather and wet soil. Backfilling activities, including the foundation trenches and the east adjoining excavation were resumed and completed on May 15, 2017. A total of 875 cubic yards or 1,575 tons of soil were imported and placed.

### **3.1.10 Transportation and Disposal**

Loading, transport and disposal began on November 15, 2016 and the final truck load left the Site and was disposed on December 1, 2016. Prior to loading, trucks entered the Support Zone and were lined with 6 mil polyethylene sheeting (poly). To prevent airborne emissions during transit, the poly was buttoned up by folding over the loaded material and secured with adhesive tape and wire. The tops of the trucks were then tarped and secured. Each truck load was properly labeled and manifested.

Table 3.3 summarizes the quantities disposed. The disposal facility was approved to receive waste regulated by the CERCLA Off-Site Rule. Copies of waste profiles and manifests with associated weigh tickets are included in Appendices C, and D, respectively. A total of 739.85 tons of friable ACWM and 3.65 tons of non-friable ACM were disposed at K&W Landfill.

### **3.1.11 Air Monitoring**

Air monitoring, including personal, perimeter and total dust monitoring, was performed during any activities that had the potential to disturb contaminated soil or friable ACM. Total dust monitoring was performed to ensure nuisance dust was not generated. Personal asbestos air monitoring was performed during these activities to document and mitigate asbestos exposure possibilities for the workers. Perimeter asbestos air monitoring was performed during these activities to document and mitigate potential off-site migration of asbestos fibers.

Personal and perimeter air samples were collected and analyzed by phase contrast microscopy (PCM) to detect structures (fibers) collected on the sampling filters. Results were compared to the Site action level of 0.05 f/cc; one half the Permissible Exposure Limit (PEL) of 0.1 f/cc. All perimeter air samples were below the Site action level. Perimeter air monitoring results are presented on Table 3.2.

Personal air monitoring was conducted daily. Personal samples were submitted at the end of each day to an onsite technician from Analytical Testing & Consulting Services, Inc. Samples read on-site and results were generally available the next morning. During non-friable pitch mastic removal Terra Contracting personnel supplied themselves with sampling equipment and sent the samples to Analytical Testing & Consulting Services, Inc. for analysis. The final week of pitch mastic removal Terra Contracting did not complete personal air monitoring due to previous values being consistently below the action limit. Personal air monitoring results are presented on Appendix F.

Water hoses and pressure washers were used to keep materials wetted to minimize/prevent dust. In the event that dust readings began to increase, or if visible dust was observed, work was

stopped until water was applied to the material and or travel routes. Dust monitoring records are included in Appendix G.

### **3.1.12 Public Information and Community Relations Activities**

Air monitoring results were posted on-site in a conspicuous location in the HCHMS office entry way such that interested persons could view them.

## **3.2 COST INCURRED**

The total cost incurred in complying with the ASAO was approximately \$564,222. Copies of contracts and invoices related to the removal action are included in Appendix H and Appendix I, respectively. The final invoice for the project has not been generated at the time this report was submitted and is not included in Appendix I.

#### **4.0 DIFFICULTIES ENCOUNTERED**

This section describes items the affected response actions.

##### Weather Delay

Removal activities began in late October 2016 and were postponed on December 9, 2016 due to snow and cold weather. A crew was mobilized in April 2017 to finish the mastic removal, and mobilized again in May 2017 to finish trench and excavated area backfilling, and site restoration.

##### Change in Scope of Work

Initially, wood covering portions of the trenches was to be left in place and soil beneath the wood left in place. After conferring with a representative of the HCHMS, a request was made and permission given to remove the wood over the trenches since it did not have any historical significance and additional soil was removed. Permission was granted by USEPA in consultation with the Keweenaw Historic Park and HCHMS.

## **5.0 REFERENCES**

*Administrative Settlement Agreement and Order on Consent for Removal Action*, United States Environmental Protection Agency, October 18, 2016

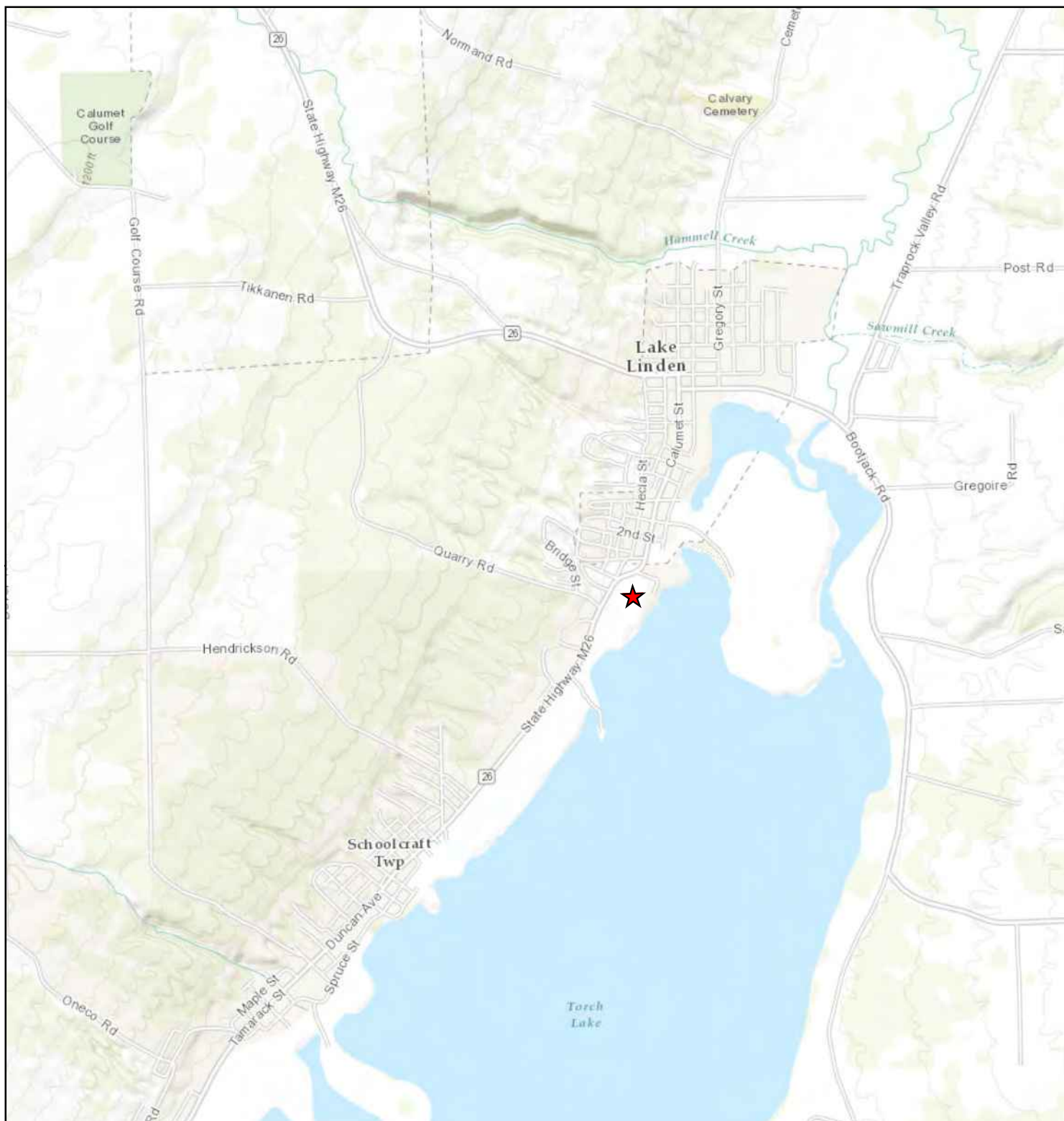
*Enforcement Action Memo*, United States Environmental Protection Agency, October 18, 2016



*USEPA Superfund Record of Decision: Torch Lake, OUs 1&3, Houghton County, MI*, United States Environmental Protection Agency, September 30, 1992

*Final Calumet Stamp Mill Site Work Plan*, Amec Foster Wheeler Environment and Infrastructure, Inc., October 2016

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**FIGURES**



Title:		<div>Site Location</div> <div>Calumet Stamp Mill Site</div> <div>53102 Hwy M-26, Torch Lake Township, MI</div>	
Client:		<div>Honeywell</div>	
Imagery courtesy of ESRI (USDA FSA NAIP 2013)		<div></div>	
<div></div>	Date: September 2016	Project No. 3293161676	
	Drawn: KPH	Figure: 1-1	
	Checked: BMG		


## Legend

 Site Location




1 Inch = 2,500 Feet

0 1,250 2,500  
Feet

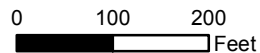


<b>Title:</b> <h2 style="text-align: center;">Site Features</h2> <p style="text-align: center;">Calumet Stamp Mill Site 53102 Hwy M-26, Torch Lake Township, MI</p>		
<b>Client:</b> <h2 style="text-align: center;">Honeywell</h2>		
Imagery courtesy of ESRI (USDA FSA NAIP 2013)		
<b>Date:</b> September 2016 <b>Drawn:</b> KPH <b>Checked:</b> BMG	<b>Project No.:</b> 3293161676 <b>Figure:</b> <span style="font-size: 2em; font-weight: bold;">2-1</span>	

### Legend

-  Railroad Track
-  Former Building Location
-  Approximate Site Boundary

1 Inch = 200 Feet





Title:

**Response Action Locations**

Calumet Stamp Mill Site  
53102 Hwy M-26, Torch Lake Township, MI

Client:

**Honeywell**

Imagery courtesy of ESRI (USDA FSA NAIP 2013)



Date: September 2016

Project No. 3293161676

Drawn: KH

Figure:

**2-2**

Checked: KC

**Legend**

Soil Removal Area



Soil Removed by Cleaning

Presumed Abbestos-Containing  
Material Removal Area

Soil Removed by Excavation



Approximate Site Boundary

1 Inch = 140 Feet

0 70 140  
Feet

---

**TABLES**

**TABLE 2.1 PROJECT TEAM**  
**Former Calumet Stamp Mill Site**  
**Lake Linden, Michigan**

<i>Company</i>	<i>Role</i>
Brian Kelly USEPA -Region V Emergency Response Branch 9311 Groh Road Grosse Ile, MI 48138 (734) 692-7684	Regulatory Agency
Amy Kerenan MDEQ -Upper Peninsula District Office 1504 West Washington Street Marquette, MI 49855 (906) 228-4853	Regulatory Agency
Chris Burns Tetra Tech, Inc. 1 S. Wacker Drive, Suite 3700 Chicago, IL 60606 (312) 201-7700	USEPA START Contractor
Jeff Binkley Mannik & Smith Group, Inc. 200 Michigan Street, Suite 705 Hancock MI, 49930 (906) 281-3404	USEPA START Contractor
Chuck Geadelmann Honeywell Specialty Materials, LLC 1985 Douglas Drive N Golden Valley, MN 49945 (763) 954-5418	Respondent
John Berry Houghton County Historical Museum and Society 53102 Highway M-26 Lake Linden, MI 49945 (906) 296-4121	Respondent
Michael McGowan AMEC Foster Wheeler Environment and Infrastructure, Inc. 46850 Magellan Drive, Suite 190 Novi, MI 48377-2448 (248) 926-4008	Prime Contractor
Richard Walsh Terra Contracting Services, LLC: 5100 West Michigan Avenue Kalamazoo, Michigan 49006 (269) 375-9595	Abatement and General Subcontractor
Brian Bonen B&B Contracting Calumet, Inc. 55670 Highway M26 Calumet, MI 49913 (906) 337-0017	Transportation Services, Excavation, Backfill Contractor
Patrick Finn Analytical Testing & Consulting Services, Inc. 14625 Doster Road Plainwell MI 49080 (269) 664-6474	Asbestos Air Sampling Onsite Analytical Laboratory

**TABLE 2.1 PROJECT TEAM**  
**Former Calumet Stamp Mill Site**  
**Lake Linden, Michigan**

<i>Company</i>	<i>Role</i>
QuanTEM Laboratories 2033 Heritage Park Drive Oklahoma City, OK 73120 (405) 755-7272	Asbestos Air Sampling Analytical Laboratory
K&W Landfill, Inc. 1187 State Highway M38 Ontonagon, MI 49953 (906) 883-3504	Disposal Facility

TABLE 3.1 PROJECT CHRONOLOGY  
Former Calumet Stamp Mill Site  
Torch Lake Township, Michigan  
3293161707

Date	Summary of Activities
October 2016	<ul style="list-style-type: none"> <li>• Fence and sign the area to become the exclusion zone.</li> <li>• Setup the decontamination trailer and delineate the contaminant reduction zone.</li> <li>• Setup the support zone and designate rallying points.</li> <li>• Complete pickup of suspect surficial asbestos containing debris.</li> </ul>
November 2016	<ul style="list-style-type: none"> <li>• Completed trench excavation and backfill on the Hecla Stamp Mill.</li> <li>• Completed foundation cleaning on the Hecla Stamp Mill.</li> <li>• Waste profile completed for the asbestos containing material (ACM) waste stream</li> <li>• Landfill approval to accept the ACM waste stream.</li> <li>• Excavated trenches in the Calumet Stamp Mill foundation.</li> <li>• Washed the trenches and foundation of the Calumet Stamp Mill.</li> <li>• Secured the site for the Holiday weekend.</li> <li>• Loaded Transported and disposed 741.20 tons of ACM in lined trucks/dumpster.</li> <li>• Remove Danger Asbestos signage.</li> <li>• Received analytical results for the backfill material: Acceptable for use.</li> <li>• Imported approximately 435 cubic yards of backfill material.</li> <li>• Backfill approximately 40% of the trenches on the Calumet Stamp Mill foundation.</li> <li>• Begin removing pitch mastic from the floatation tank foundation rims.</li> <li>• Affix steel plates into the 20 openings in the floatation tank foundations.</li> <li>• Complete personal and perimeter air monitoring during work activities.</li> </ul>
December 2016	<ul style="list-style-type: none"> <li>• Completed approximately 50% of the pitch mastic removal from the floatation tank foundation rims.</li> <li>• Secured the site for the winter.</li> <li>• Demobilize equipment and supplies for the winter.</li> </ul>
April 2017	<ul style="list-style-type: none"> <li>• Complete the asbestos containing pitch mastic removal and disposal</li> </ul>
May 2017	<ul style="list-style-type: none"> <li>• Complete site restoration: Trench backfill, excavation backfill, seeding and mulching.</li> <li>• Remove construction fence.</li> <li>• Demobilize.</li> </ul>

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 10/30/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/2/2016	CSMS-R01-AB01-161102	Sta. 01	<0.00423			0.05	
11/2/2016	CSMS-R01-AB02-161102	Sta. 02	<0.00786			0.05	
11/2/2016	CSMS-R01-AB03-161102	Sta. 03	<0.00415			0.05	
11/2/2016	CSMS-R01-AB04-161102	Sta. 04	<0.00228			0.05	
11/2/2016	CSMS-R01-ABMU-161102	Sta. Museum	<0.00548			0.05	
11/2/2016	CSMS-R01-ABNP-161102	Sta. North Park	<0.00323			0.05	
11/2/2016	CSMS-R01-FB01-161102	Field Blank (open)	NA			NA	
11/2/2016	CSMS-R01-FB02-161102	Field Blank (closed)	NA			NA	
11/3/2016	CSMS-R01-AB01-161103	Sta. 01	<0.0035			0.05	
11/3/2016	CSMS-R01-AB02-161103	Sta. 02	<0.00341			0.05	
11/3/2016	CSMS-R01-AB03-161103	Sta. 03	<0.00256			0.05	
11/3/2016	CSMS-R01-AB04-161103	Sta. 04	<0.00692			0.05	
11/3/2016	CSMS-R01-ABMU-161103	Sta. Museum	<0.00262			0.05	
11/3/2016	CSMS-R01-ABNP-161103	Sta. North Park	<0.00191			0.05	
11/3/2016	CSMS-R01-FB01-161103	Field Blank (open)	NA			NA	
11/3/2016	CSMS-R01-FB02-161103	Field Blank (closed)	NA			NA	
11/4/2016	CSMS-R01-AB01-161104	Sta. 01	<0.00181			0.05	
11/4/2016	CSMS-R01-AB02-161104	Sta. 02	<0.00615			0.05	
11/4/2016	CSMS-R01-AB03-161104	Sta. 03	<0.00260			0.05	
11/4/2016	CSMS-R01-AB04-161104	Sta. 04	<0.00744			0.05	
11/4/2016	CSMS-R01-ABMU-161104	Sta. Museum	<0.00229			0.05	
11/4/2016	CSMS-R01-ABNP-161104	Sta. North Park	<0.003289			0.05	
11/4/2016	CSMS-R01-FB01-161104	Field Blank (open)	NA			NA	
11/4/2016	CSMS-R01-FB02-161104	Field Blank (closed)	NA			NA	
11/5/2016	CSMS-R01-AB01-161105	Sta. 01	<0.00565			0.05	
11/5/2016	CSMS-R01-AB02-161105	Sta. 02	<0.00333			0.05	
11/5/2016	CSMS-R01-AB03-161105	Sta. 03	<0.00309			0.05	
11/5/2016	CSMS-R01-AB04-161105	Sta. 04	<0.00238			0.05	
11/5/2016	CSMS-R01-ABMU-161105	Sta. Museum	<0.00165			0.05	
11/5/2016	CSMS-R01-ABNP-161105	Sta. North Park	<0.00210			0.05	
11/5/2016	CSMS-R01-FB01-161105	Field Blank (open)	NA			NA	
11/5/2016	CSMS-R01-FB02-161105	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 11/6/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/7/2016	CSMS-R01-AB01-161107	Sta. 01	<0.00316			0.05	
11/7/2016	CSMS-R01-AB02-161107	Sta. 02	<0.00292			0.05	
11/7/2016	CSMS-R01-AB03-161107	Sta. 03	<0.00525			0.05	
11/7/2016	CSMS-R01-AB04-161107	Sta. 04	<0.00232			0.05	
11/7/2016	CSMS-R01-ABMU-161107	Sta. Museum	<0.00153			0.05	
11/7/2016	CSMS-R01-ABNP-161107	Sta. North Park	<0.00193			0.05	
11/7/2016	CSMS-R01-FB01-161107	Field Blank (open)	NA			NA	
11/7/2016	CSMS-R01-FB02-161107	Field Blank (closed)	NA			NA	
11/8/2016	CSMS-R01-AB01-161108	Sta. 01	<0.00535			0.05	
11/8/2016	CSMS-R01-AB02-161108	Sta. 02	<0.00192			0.05	
11/8/2016	CSMS-R01-AB03-161108	Sta. 03	<0.00153			0.05	
11/8/2016	CSMS-R01-AB04-161108	Sta. 04	<0.00300			0.05	
11/8/2016	CSMS-R01-ABMU-161108	Sta. Museum	<0.00298			0.05	
11/8/2016	CSMS-R01-ABNP-161108	Sta. North Park	<0.00239			0.05	
11/8/2016	CSMS-R01-FB01-161108	Field Blank (open)	NA			NA	
11/8/2016	CSMS-R01-FB02-161108	Field Blank (closed)	NA			NA	
11/9/2016	CSMS-R01-AB01-161109	Sta. 01	<0.00773			0.05	
11/9/2016	CSMS-R01-AB02-161109	Sta. 02	<0.00196			0.05	
11/9/2016	CSMS-R01-AB03-161109	Sta. 03	<0.00310			0.05	
11/9/2016	CSMS-R01-AB04-161109	Sta. 04	<0.00256			0.05	
11/9/2016	CSMS-R01-ABMU-161109	Sta. Museum	<0.00262			0.05	
11/9/2016	CSMS-R01-ABNP-161109	Sta. North Park	<0.00156			0.05	
11/9/2016	CSMS-R01-FB01-161109	Field Blank (open)	NA			NA	
11/9/2016	CSMS-R01-FB02-161109	Field Blank (closed)	NA			NA	
11/10/2016	CSMS-R01-AB01-161110	Sta. 01	<b>0.00305</b>			0.05	
11/10/2016	CSMS-R01-AB02-161110	Sta. 02	<b>0.00227</b>			0.05	
11/10/2016	CSMS-R01-AB03-161110	Sta. 03	<b>0.00192</b>			0.05	
11/10/2016	CSMS-R01-AB04-161110	Sta. 04	<b>0.00177</b>			0.05	
11/10/2016	CSMS-R01-ABMU-161110	Sta. Museum	<b>0.00269</b>			0.05	
11/10/2016	CSMS-R01-ABNP-161110	Sta. North Park	<b>0.0294</b>			0.05	
11/10/2016	CSMS-R01-FB01-161110	Field Blank (open)	NA			NA	
11/10/2016	CSMS-R01-FB02-161110	Field Blank (closed)	NA			NA	
11/11/2016	CSMS-R01-AB01-161111	Sta. 01	<0.00355			0.05	
11/11/2016	CSMS-R01-AB02-161111	Sta. 02	<0.00288			0.05	
11/11/2016	CSMS-R01-AB03-161111	Sta. 03	<0.00313			0.05	
11/11/2016	CSMS-R01-AB04-161111	Sta. 04	<0.00552			0.05	
11/11/2016	CSMS-R01-ABMU-161111	Sta. Museum	<0.00158			0.05	
11/11/2016	CSMS-R01-ABNP-161111	Sta. North Park	<0.00195			0.05	
11/11/2016	CSMS-R01-FB01-161111	Field Blank (open)	NA			NA	
11/11/2016	CSMS-R01-FB02-161111	Field Blank (closed)	NA			NA	
11/12/2016	CSMS-R01-AB01-161112	Sta. 01	<0.00270			0.05	
11/12/2016	CSMS-R01-AB02-161112	Sta. 02	<0.00250			0.05	
11/12/2016	CSMS-R01-AB03-161112	Sta. 03	<0.00233			0.05	
11/12/2016	CSMS-R01-AB04-161112	Sta. 04	<0.00183			0.05	
11/12/2016	CSMS-R01-ABMU-161112	Sta. Museum	<0.00154			0.05	
11/12/2016	CSMS-R01-ABNP-161112	Sta. North Park	<0.00229			0.05	
11/12/2016	CSMS-R01-FB01-161112	Field Blank (open)	NA			NA	
11/12/2016	CSMS-R01-FB02-161112	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 11/13/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/14/2016	CSMS-R01-AB01-161114	Sta. 01	<0.00187			0.05	
11/14/2016	CSMS-R01-AB02-161114	Sta. 02	<0.00285			0.05	
11/14/2016	CSMS-R01-AB03-161114	Sta. 03	<0.00244			0.05	
11/14/2016	CSMS-R01-AB04-161114	Sta. 04	<0.00241			0.05	
11/14/2016	CSMS-R01-ABMU-161114	Sta. Museum	<0.00158			0.05	
11/14/2016	CSMS-R01-ABNP-161114	Sta. North Park	<0.00260			0.05	
11/14/2016	CSMS-R01-FB01-161114	Field Blank (open)	NA			NA	
11/14/2016	CSMS-R01-FB02-161114	Field Blank (closed)	NA			NA	
11/15/2016	CSMS-R01-AB01-161115	Sta. 01	<0.00130			0.05	
11/15/2016	CSMS-R01-AB02-161115	Sta. 02	<0.00222			0.05	
11/15/2016	CSMS-R01-AB03-161115	Sta. 03	<0.00209			0.05	
11/15/2016	CSMS-R01-AB04-161115	Sta. 04	<0.00199			0.05	
11/15/2016	CSMS-R01-ABMU-161115	Sta. Museum	<0.00223			0.05	
11/15/2016	CSMS-R01-ABNP-161115	Sta. North Park	<0.00155			0.05	
11/15/2016	CSMS-R01-FB01-161115	Field Blank (open)	NA			NA	
11/15/2016	CSMS-R01-FB02-161115	Field Blank (closed)	NA			NA	
11/16/2016	CSMS-R01-AB01-161116	Sta. 01	<0.00185			0.05	
11/16/2016	CSMS-R01-AB02-161116	Sta. 02	<0.00158			0.05	
11/16/2016	CSMS-R01-AB03-161116	Sta. 03	<0.00238			0.05	
11/16/2016	CSMS-R01-AB04-161116	Sta. 04	<0.00238			0.05	
11/16/2016	CSMS-R01-ABMU-161116	Sta. Museum	<0.00285			0.05	
11/16/2016	CSMS-R01-ABNP-161116	Sta. North Park	<0.00291			0.05	
11/16/2016	CSMS-R01-FB01-161116	Field Blank (open)	NA			NA	
11/16/2016	CSMS-R01-FB02-161116	Field Blank (closed)	NA			NA	
11/17/2016	CSMS-R01-AB01-161117	Sta. 01	<0.00280			0.05	
11/17/2016	CSMS-R01-AB02-161117	Sta. 02	<0.00283			0.05	
11/17/2016	CSMS-R01-AB03-161117	Sta. 03	<0.00240			0.05	
11/17/2016	CSMS-R01-AB04-161117	Sta. 04	<0.00258			0.05	
11/17/2016	CSMS-R01-ABMU-161117	Sta. Museum	<0.00164			0.05	
11/17/2016	CSMS-R01-ABNP-161117	Sta. North Park	0.00217			0.05	
11/17/2016	CSMS-R01-FB01-161117	Field Blank (open)	NA			NA	
11/17/2016	CSMS-R01-FB02-161117	Field Blank (closed)	NA			NA	
11/18/2016	CSMS-R01-AB01-161118	Sta. 01	<0.00620			0.05	
11/18/2016	CSMS-R01-AB02-161118	Sta. 02	<0.00623			0.05	
11/18/2016	CSMS-R01-AB03-161118	Sta. 03	<0.00626			0.05	
11/18/2016	CSMS-R01-AB04-161118	Sta. 04	<0.00630			0.05	
11/18/2016	CSMS-R01-ABMU-161118	Sta. Museum	<0.00630			0.05	
11/18/2016	CSMS-R01-ABNP-161118	Sta. North Park	<0.00626			0.05	
11/18/2016	CSMS-R01-FB01-161118	Field Blank (open)	NA			NA	
11/18/2016	CSMS-R01-FB02-161118	Field Blank (closed)	NA			NA	
11/19/2016	CSMS-R01-AB01-161119	Sta. 01	No Samples				
11/19/2016	CSMS-R01-AB02-161119	Sta. 02	Did not Work				
11/19/2016	CSMS-R01-AB03-161119	Sta. 03					
11/19/2016	CSMS-R01-AB04-161119	Sta. 04					
11/19/2016	CSMS-R01-ABMU-161119	Sta. Museum					
11/19/2016	CSMS-R01-ABNP-161119	Sta. North Park					
11/19/2016	CSMS-R01-FB01-161119	Field Blank (open)					
11/19/2016	CSMS-R01-FB02-161119	Field Blank (closed)					

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)



TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 11/20/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/21/2016	CSMS-R01-AB01-161121	Sta. 01	<0.00254			0.05	
11/21/2016	CSMS-R01-AB02-161121	Sta. 02	<0.00281			0.05	
11/21/2016	CSMS-R01-AB03-161121	Sta. 03	<0.00216			0.05	
11/21/2016	CSMS-R01-AB04-161121	Sta. 04	<0.00217			0.05	
11/21/2016	CSMS-R01-ABMU-161121	Sta. Museum	<0.00183			0.05	
11/21/2016	CSMS-R01-ABNP-161121	Sta. North Park	0.00150			0.05	
11/21/2016	CSMS-R01-FB01-161121	Field Blank (open)	NA			NA	
11/21/2016	CSMS-R01-FB02-161121	Field Blank (closed)	NA			NA	
11/22/2016	CSMS-R01-AB01-161122	Sta. 01	<0.00301			0.05	
11/22/2016	CSMS-R01-AB02-161122	Sta. 02	<0.00279			0.05	
11/22/2016	CSMS-R01-AB03-161122	Sta. 03	<0.00230			0.05	
11/22/2016	CSMS-R01-AB04-161122	Sta. 04	<0.00182			0.05	
11/22/2016	CSMS-R01-ABMU-161122	Sta. Museum	<0.00163			0.05	
11/22/2016	CSMS-R01-ABNP-161122	Sta. North Park	<0.00235			0.05	
11/22/2016	CSMS-R01-FB01-161122	Field Blank (open)	NA			NA	
11/22/2016	CSMS-R01-FB02-161122	Field Blank (closed)	NA			NA	
11/23/2016	CSMS-R01-AB01-161123	Sta. 01	No Samples			0.05	
11/23/2016	CSMS-R01-AB02-161123	Sta. 02	Did not Work			0.05	
11/23/2016	CSMS-R01-AB03-161123	Sta. 03	Thanksgiving			0.05	
11/23/2016	CSMS-R01-AB04-161123	Sta. 04	Holiday			0.05	
11/23/2016	CSMS-R01-ABMU-161123	Sta. Museum				0.05	
11/23/2016	CSMS-R01-ABNP-161123	Sta. North Park				0.05	
11/23/2016	CSMS-R01-FB01-161123	Field Blank (open)				NA	
11/23/2016	CSMS-R01-FB02-161123	Field Blank (closed)				NA	
11/24/2016	CSMS-R01-AB01-161124	Sta. 01	No Samples			0.05	
11/24/2016	CSMS-R01-AB02-161124	Sta. 02	Did not Work			0.05	
11/24/2016	CSMS-R01-AB03-161124	Sta. 03	Thanksgiving			0.05	
11/24/2016	CSMS-R01-AB04-161124	Sta. 04	Holiday			0.05	
11/24/2016	CSMS-R01-ABMU-161124	Sta. Museum				0.05	
11/24/2016	CSMS-R01-ABNP-161124	Sta. North Park				0.05	
11/24/2016	CSMS-R01-FB01-161124	Field Blank (open)				NA	
11/24/2016	CSMS-R01-FB02-161124	Field Blank (closed)				NA	
11/25/2016	CSMS-R01-AB01-161125	Sta. 01	No Samples			0.05	
11/25/2016	CSMS-R01-AB02-161125	Sta. 02	Did not Work			0.05	
11/25/2016	CSMS-R01-AB03-161125	Sta. 03	Thanksgiving			0.05	
11/25/2016	CSMS-R01-AB04-161125	Sta. 04	Holiday			0.05	
11/25/2016	CSMS-R01-ABMU-161125	Sta. Museum				0.05	
11/25/2016	CSMS-R01-ABNP-161125	Sta. North Park				0.05	
11/25/2016	CSMS-R01-FB01-161125	Field Blank (open)				NA	
11/25/2016	CSMS-R01-FB02-161125	Field Blank (closed)				NA	
11/26/2016	CSMS-R01-AB01-161126	Sta. 01	No Samples			0.05	
11/26/2016	CSMS-R01-AB02-161126	Sta. 02	Did not Work			0.05	
11/26/2016	CSMS-R01-AB03-161126	Sta. 03	Thanksgiving			0.05	
11/26/2016	CSMS-R01-AB04-161126	Sta. 04	Holiday			0.05	
11/26/2016	CSMS-R01-ABMU-161126	Sta. Museum				0.05	
11/26/2016	CSMS-R01-ABNP-161126	Sta. North Park				0.05	
11/26/2016	CSMS-R01-FB01-161126	Field Blank (open)				NA	
11/26/2016	CSMS-R01-FB02-161126	Field Blank (closed)				NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 11/27/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/28/2016	CSMS-R01-AB01-161128	Sta. 01	<0.00290			0.05	
11/28/2016	CSMS-R01-AB02-161128	Sta. 02	<0.00296			0.05	
11/28/2016	CSMS-R01-AB03-161128	Sta. 03	<0.00165			0.05	
11/28/2016	CSMS-R01-AB04-161128	Sta. 04	<0.00254			0.05	
11/28/2016	CSMS-R01-ABMU-161128	Sta. Museum	<0.00245			0.05	
11/28/2016	CSMS-R01-ABNP-161128	Sta. North Park	<0.00202			0.05	
11/28/2016	CSMS-R01-FB01-161128	Field Blank (open)	NA			NA	
11/28/2016	CSMS-R01-FB02-161128	Field Blank (closed)	NA			NA	
11/29/2016	CSMS-R01-AB01-161129	Sta. 01	<0.00274			0.05	
11/29/2016	CSMS-R01-AB02-161129	Sta. 02	<0.00288			0.05	
11/29/2016	CSMS-R01-AB03-161129	Sta. 03	<0.00163			0.05	
11/29/2016	CSMS-R01-AB04-161129	Sta. 04	<0.00195			0.05	
11/29/2016	CSMS-R01-ABMU-161129	Sta. Museum	<0.00238			0.05	
11/29/2016	CSMS-R01-ABNP-161129	Sta. North Park	<0.00239			0.05	
11/29/2016	CSMS-R01-FB01-161129	Field Blank (open)	NA			NA	
11/29/2016	CSMS-R01-FB02-161129	Field Blank (closed)	NA			NA	
11/30/2016	CSMS-R01-AB01-161130	Sta. 01	<0.00249			0.05	
11/30/2016	CSMS-R01-AB02-161130	Sta. 02	<0.00248			0.05	
11/30/2016	CSMS-R01-AB03-161130	Sta. 03	<0.00211			0.05	
11/30/2016	CSMS-R01-AB04-161130	Sta. 04	<0.00207			0.05	
11/30/2016	CSMS-R01-ABMU-161130	Sta. Museum	<0.00145			0.05	
11/30/2016	CSMS-R01-ABNP-161130	Sta. North Park	<0.00170			0.05	
11/30/2016	CSMS-R01-FB01-161130	Field Blank (open)	NA			NA	
11/30/2016	CSMS-R01-FB02-161130	Field Blank (closed)	NA			NA	
12/1/2016	CSMS-R01-AB01-161201	Sta. 01	<0.00272			0.05	
12/1/2016	CSMS-R01-AB02-161201	Sta. 02	<0.00149			0.05	
12/1/2016	CSMS-R01-AB03-161201	Sta. 03	<0.00212			0.05	
12/1/2016	CSMS-R01-AB04-161201	Sta. 04	<0.00212			0.05	
12/1/2016	CSMS-R01-ABMU-161201	Sta. Museum	<0.00273			0.05	
12/1/2016	CSMS-R01-ABNP-161201	Sta. North Park	<0.00177			0.05	
12/1/2016	CSMS-R01-FB01-161201	Field Blank (open)	NA			NA	
12/1/2016	CSMS-R01-FB02-161201	Field Blank (closed)	NA			NA	
12/2/2016	CSMS-R01-AB01-161202	Sta. 01	<0.00150			0.05	
12/2/2016	CSMS-R01-AB02-161202	Sta. 02	<0.00280			0.05	
12/2/2016	CSMS-R01-AB03-161202	Sta. 03	<0.00225			0.05	
12/2/2016	CSMS-R01-AB04-161202	Sta. 04	<0.00215			0.05	
12/2/2016	CSMS-R01-ABMU-161202	Sta. Museum	<0.00183			0.05	
12/2/2016	CSMS-R01-ABNP-161202	Sta. North Park	<0.00272			0.05	
12/2/2016	CSMS-R01-FB01-161202	Field Blank (open)	NA			NA	
12/2/2016	CSMS-R01-FB02-161202	Field Blank (closed)	NA			NA	
12/3/2016	CSMS-R01-AB01-161203	Sta. 01	<0.00181			0.05	
12/3/2016	CSMS-R01-AB02-161203	Sta. 02	<0.00151			0.05	
12/3/2016	CSMS-R01-AB03-161203	Sta. 03	<0.00261			0.05	
12/3/2016	CSMS-R01-AB04-161203	Sta. 04	<0.00255			0.05	
12/3/2016	CSMS-R01-ABMU-161203	Sta. Museum	<0.00213			0.05	
12/3/2016	CSMS-R01-ABNP-161203	Sta. North Park	<0.00216			0.05	
12/3/2016	CSMS-R01-FB01-161203	Field Blank (open)	NA			NA	
12/3/2016	CSMS-R01-FB02-161203	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 12/4/2016  
Calumet Stamp Mill  
Lake Linden, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
12/5/2016	CSMS-R01-AB01-161205	Sta. 01	<0.00192			0.05	
12/5/2016	CSMS-R01-AB02-161205	Sta. 02	<0.00159			0.05	
12/5/2016	CSMS-R01-AB03-161205	Sta. 03	<0.00275			0.05	
12/5/2016	CSMS-R01-AB04-161205	Sta. 04	<0.00258			0.05	
12/5/2016	CSMS-R01-ABMU-161205	Sta. Museum	<0.00225			0.05	
12/5/2016	CSMS-R01-ABNP-161205	Sta. North Park	<0.00220			0.05	
12/5/2016	CSMS-R01-FB01-161205	Field Blank (open)	NA			NA	
12/5/2016	CSMS-R01-FB02-161205	Field Blank (closed)	NA			NA	

12/6/2016	CSMS-R01-AB01-161206	Sta. 01	<0.00217			0.05	
12/6/2016	CSMS-R01-AB02-161206	Sta. 02	<0.00209			0.05	
12/6/2016	CSMS-R01-AB03-161206	Sta. 03	<0.00170			0.05	
12/6/2016	CSMS-R01-AB04-161206	Sta. 04	<0.00145			0.05	
12/6/2016	CSMS-R01-ABMU-161206	Sta. Museum	<0.00203			0.05	
12/6/2016	CSMS-R01-ABNP-161206	Sta. North Park	<0.00204			0.05	
12/6/2016	CSMS-R01-FB01-161206	Field Blank (open)	NA			NA	
12/6/2016	CSMS-R01-FB02-161206	Field Blank (closed)	NA			NA	

[illegible][illegible][illegible][illegible]

Notes:  
f/cc = fibers per cubic centimeter  
NA = Not analyzed  
TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.2  
Perimeter Ambient Air Sampling Results  
Week of 4/22/2016  
Calumet Stamp Mill  
Lake Linden, MI

[illegible]

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)

TABLE 3.3  
Disposal Tracking for Soil Containing Asbestos  
and Double Bagged ACMs  
Calumet Stamp Mill Site  
Lake Linden, Michigan

Date	Truck Number	Manifest Number	Weigh Ticket Number	Original Weigh Ticket Number	Transporter	Weight (Tons)
11/15/2016	109	1001	11261045	278294	B&B CONTRACTING	48.86
11/15/2016	750	1002	11261061	278312	WENDER & SONS	54.26
11/15/2016	751	1003	11261050	278297	WENDER & SONS	53.60
11/15/2016	109	107922	11261063	278307	B&B CONTRACTING	51.12
11/15/2016	750	107923	11261059	278308	WENDER & SONS	53.92
11/15/2016	751	107924	11261066	278309	WENDER & SONS	53.57
11/16/2016	750	107925	11261073	278318	WENDER & SONS	52.31
11/16/2016	751	107926	11261074	278320	WENDER & SONS	52.18
11/16/2016	109	107927	11261077	278322	B&B CONTRACTING	51.12
11/16/2016	751	107928	11261085	278331	WENDER & SONS	52.27
11/16/2016	750	107929	11261082	278330	WENDER & SONS	51.25
11/17/2016	109	107930	11261101	278345	B&B CONTRACTING	46.61
11/18/2016	109	107931	11261122	278367	B&B CONTRACTING	48.70
11/29/2016	136	107932	11261239	278487	B&B CONTRACTING	49.46
12/1/2016	109	107933	11261279	278527	B&B CONTRACTING	20.62
12/9/2016	Roll Off	107934	NA	NA	Waste Management Roll Off	1.35
5/1/2017	Roll Off	88181	NA	NA	Waste Management Roll Off	2.30

Total Excavation Tons:      739.85

Total Tons Disposed:      743.50

Notes: The roll offs were not included in the excavation calculation because they were filled with Non-friable asbestos and plastic sheeting, not soil.

Materials were disposed at K&W Landfill, Ontonagon Michigan

Original weigh ticket is computer generated at the landfill

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**APPENDIX A**

Photographic Log

**Photo 1: Historical Museum Train Depot – Fence in Background**



**Photo 2: Fence along the east side of the Site**





**Photo 3: East side of Calumet Stamp Mill foundation facing south.**



**Photo 4: Surficial Asbestos Removal**





**Photo 5: Roofing Material Removed from behind the Historical Museum Train Depot**



**Photo 6: Removing trees from trenches in the Hecla Stamp Mill foundation**





**Photo 7: Removing trees from the east edge of Hecla Mill foundation.**



**Photo 8: Soil staging area within the exclusion zone**





**Photo 9: Excavating trenches on the Calumet Stamp Mill foundation**



**Photo 10: Cleaning the North end of the Hecla Stamp Mill Foundation**





**Photo 11: South end of Calumet Stamp Mill Cleaned to stockpile backfill**



**Photo 12: Place clean topsoil backfill on the southeastern corner of the Calumet Stamp Mill.**





**Photo 13: Dust control during Calumet Stamp Mill cleaning**



**Photo 14: North end of the Hecla Stamp Mill foundation after cleaning prior to backfill.**



**Photo 15: Loading plastic sheeting lined trucks with assumed asbestos containing material**



**Photo 16: Sealing the material within truck beds after filling**





**Photo 17: Excavating 6-inches of soil from the eastern edge of the Calumet Stamp Mill.**



**Photo 18: Excavation of the eastern edge of the Calumet Stamp Mill nearly complete**





**Photo 19: Washing the Calumet Stamp Mill foundation prior to backfill.**



**Photo 20: Inspecting the Calumet Stamp Mill foundation with the START Contractor.**





**Photo 21: Decontaminating skid steer prior to removal from the Exclusion zone.**



**Photo 22: Decontaminated equipment awaiting pickup.**





**Photo 23: Apparent mixing balls removed from a trench; washed and saved.**



**Photo 24: Cleaning the Calumet Stamp Mill trenches and foundation**





**Photo 25: Decontamination of the mini excavator prior to leaving the Exclusion zone**



**Photo 26: Calumet Stamp Mill foundation prior to the Holiday week end.**





**Photo 27: The Asbestos containing soil pile secured for the Holiday week end.**



**Photo 28: Backfilling holes and trenches on the Hecla Stamp Mill foundation.**





**Photo 29: Hecla Stamp Mill foundation completed**



**Photo 30: Trenches and surface clean on the Calumet Stamp Mill foundation: Backfilling.**





**Photo 31: Demarcation layer in the deep trench.**



**Photo 32: Stopped backfilling due to wet site conditions.**





**Photo 33: Excavation of eastern edge of Calumet Stamp Mill foundation complete**



**Photo 34: Loading the final truck for landfill disposal of asbestos impacted soil.**





**Photo 35: Asbestos containing soil stockpile removed and area scraped.**



**Photo 36: Begin removing pitch mastic from flotation tank foundations.**





**Photo 37: Pneumatic micro-chisel (needle) gun used to remove pitch mastic.**



**Photo 38: Preparing to remove pitch mastic from floatation tank foundation after snow**





**Photo 39: Pitch mastic removal in the snow**



**Photo 40: Equipment setup for pitch mastic removal.**





**Photo 41: Dumpster for pitch mastic, debris, and plastic sheeting disposal.**



**Photo 42: Steel plate installation in floatation tank foundation openings.**





**Photo 43: Typical steel plate installation in the floatation tank foundation openings**



**Photo 44: Last day of mastic removal December 9, 2016: Weather causing significant delays.**





**Photo 45: 8x20' Steel plates placed over tunnel area for HCHMS.**



**Photo 46: Site secure for the winter 2016 with metal signage: facing south.**



**Photo 47: Site secure for the winter December 9, 2016: Facing north.**





**Photo 48: Site secure for the winter December 9, 2016: Facing east.**



**Photo 49: Site secure for the winter December 9, 2016: Facing west**



Photo 50: Setting up for Final week of pitch mastic removal April 24, 2017



Photo 51: Equipment setup for final pitch mastic removal April 24, 2017





Photo 52: Final stages of pitch mastic removal and cleanup



Photo 53: Final inspection of floatation tank foundation pitch mastic removal





Photo 54: Final inspection of floatation tank foundation pitch mastic removal



Photo 55: Pitch mastic removal complete per START contractor





Photo 56: Facing south, final backfill in progress May 15, 2017



Photo 57: Final Cleanup of foundation after fill placement





Photo 58: East adjoining excavated area backfilled with 6-inches of “top soil”



Photo: 59: Backfill complete





Photo 60: Typical steel plate in floatation tank foundation



Photo 61: Seeding the east adjacent excavated area



Photo 62: Mulching the east adjacent excavated area



Photo 63: Applying tackifier to east adjacent excavated area





Photo 64: Final fence removal as part of site restoration



Photo 65: Site restoration, repairing ruts at the north end of the foundation





Photo 66: Former ACWM stockpile area restored



Photo 67: Top soil stockpile area restored





Photo 68: East adjacent excavated area restored



Photo 69: Facing west The Calumet Stamp Mill foundation restoration complete



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**APPENDIX B**

Weekly Progress Reports





HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Foster Wheeler Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning October 23, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC Foster Wheeler	0	0	0	11	16.75	13.5	0
Terra	0	0	0	52	52.5	51	0
WORKDAY MANHOURS	0	0	0	63	69.25	64.5	0
TOTAL MANHOURS							196.75

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
None			

Team	Location	Total Weekly Tonnage	Total Project Tonnage
None			

### III. HEALTH & SAFETY

- **Highlights**
  - Completed Daily Safety Tailgates
  - Completed weekly checklist – no issues noted

- **Inspections and Audits**

- N/A

- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 10/24/16.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 10/24/16.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list** – All tasks to be completed.
- **Submittals** – Personnel health and safety records, Activity Hazard Analysis forms for activities to be completed, Safety Data Sheets for possible chemicals brought onto the site.
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Not applicable.

### VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**
  - Setup exclusion zone fence and place signage.
  - Pick up suspect asbestos containing debris.
  - Excavate trenches and clean foundations.

- **Work Accomplished**

- Constructed exclusion zone fence and placed signage.
- Setup work zones; contaminant reduction zone and support zone.
- Begin suspect asbestos debris pickup.
- Reviewed workers training records.
- Conducted weekly Health and Safety checklist.
- Observed fence placement location and construction.

- **Laboratory Results**

- Not applicable

- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
None							

## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions

Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None



## IX. EQUIPMENT & MATERIALS

Equipment Delivered	Equipment Removed
<ul style="list-style-type: none"><li>• Mini Excavator</li><li>• Skid Steer</li><li>• Decontamination Trailer</li><li>• scaffolding</li></ul>	<ul style="list-style-type: none"><li>• </li></ul>
Materials Delivered	Materials Removed
<ul style="list-style-type: none"><li>• Fence posts and orange contactor fence.</li></ul>	<ul style="list-style-type: none"><li>• None</li></ul>

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**

Submitted By: Joe Caryl  
Amec Foster Wheeler  
Principal Construction Manager

And

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO

**Photo 1: Historical Museum Train Depot – Fence in Background**



**Photo 2: Fence along the east side of the Site**



**Photo 3: Constructing fence around the exclusion zone.**



**Photo 4: Surficial Asbestos Removal**







HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

Amec Foster Wheeler Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning October 30, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Amec Foster Wheeler	0	19	20	19.75	19.5	17.75	18.50
Terra	0	61.25	60.25	60	60	60	58.250
WORKDAY MANHOURS	0	80.25	80.25	79.75	79.50	77.75	76.75
TOTAL MANHOURS							474.25

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay	4	4

Team	Location	Total Weekly Tonnage	Total Project Tonnage
None			

### III. HEALTH & SAFETY

- **Highlights**
  - Completed Daily Safety Tailgates
  - Completed weekly checklist – no issues noted
- **Inspections and Audits**
  - N/A
- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 10/30/16.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 10/30/16.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list** – All tasks to be completed.
- **Submittals** – None
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Not applicable.

### VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**
  - Pick up suspect asbestos containing debris.
  - Excavate trenches and clean foundations.

- **Work Accomplished**

- Suspect asbestos debris pickup complete.
- Begin trench excavation using equipment and hand tools on both the Hecla Mill and Calumet Mill.
- Walk the Site with the START contractor to complete the suspect asbestos pickup.
- Conducted weekly Health and Safety checklist.
- Observed trench excavation and foundation cleaning.

- **Laboratory Results**

- Not applicable

- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
None							

## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Submitted

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions

Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None

## IX. EQUIPMENT & MATERIALS

<b>Equipment Delivered</b>	<b>Equipment Removed</b>
•	•
<b>Materials Delivered</b>	<b>Materials Removed</b>
•	• None



## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO

**Photo 1: Roofing Material Removed from behind the Historical Museum Train Depot**



**Photo 2: Removing trees from the Hecla Mill foundation**





**Photo 3: Removing trees from the east edge of Hecla Mill foundation.**



**Photo 4: Soil staging area within the exclusion zone**





**Photo 5: Excavating trenches on the Calumet Mill foundation**



Perimeter Ambient Air Sampling Results  
 Week of 10/30/2016  
 Calumet Stamp Mill  
 Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/2/2016	CSMS-R01-AB01-161102	Sta. 01	<0.00423			0.05	
11/2/2016	CSMS-R01-AB02-161102	Sta. 02	<0.00786			0.05	
11/2/2016	CSMS-R01-AB03-161102	Sta. 03	<0.00415			0.05	
11/2/2016	CSMS-R01-AB04-161102	Sta. 04	<0.00228			0.05	
11/2/2016	CSMS-R01-ABMU-161102	Sta. Museum	<0.00548			0.05	
11/2/2016	CSMS-R01-ABNP-161102	Sta. North Park	<0.00323			0.05	
11/2/2016	CSMS-R01-FB01-161102	Field Blank (open)	NA			NA	
11/2/2016	CSMS-R01-FB02-161102	Field Blank (closed)	NA			NA	
11/3/2016	CSMS-R01-AB01-161103	Sta. 01	<0.0035			0.05	
11/3/2016	CSMS-R01-AB02-161103	Sta. 02	<0.00341			0.05	
11/3/2016	CSMS-R01-AB03-161103	Sta. 03	<0.00256			0.05	
11/3/2016	CSMS-R01-AB04-161103	Sta. 04	<0.00692			0.05	
11/3/2016	CSMS-R01-ABMU-161103	Sta. Museum	<0.00262			0.05	
11/3/2016	CSMS-R01-ABNP-161103	Sta. North Park	<0.00191			0.05	
11/3/2016	CSMS-R01-FB01-161103	Field Blank (open)	NA			NA	
11/3/2016	CSMS-R01-FB02-161103	Field Blank (closed)	NA			NA	
11/4/2016	CSMS-R01-AB01-161104	Sta. 01	<0.00181			0.05	
11/4/2016	CSMS-R01-AB02-161104	Sta. 02	<0.00615			0.05	
11/4/2016	CSMS-R01-AB03-161104	Sta. 03	<0.00260			0.05	
11/4/2016	CSMS-R01-AB04-161104	Sta. 04	<0.00744			0.05	
11/4/2016	CSMS-R01-ABMU-161104	Sta. Museum	<0.00229			0.05	
11/4/2016	CSMS-R01-ABNP-161104	Sta. North Park	<0.003289			0.05	
11/4/2016	CSMS-R01-FB01-161104	Field Blank (open)	NA			NA	
11/4/2016	CSMS-R01-FB02-161104	Field Blank (closed)	NA			NA	
11/5/2016	CSMS-R01-AB01-161105	Sta. 01	<0.00565			0.05	
11/5/2016	CSMS-R01-AB02-161105	Sta. 02	<0.00333			0.05	
11/5/2016	CSMS-R01-AB03-161105	Sta. 03	<0.00309			0.05	
11/5/2016	CSMS-R01-AB04-161105	Sta. 04	<0.00238			0.05	
11/5/2016	CSMS-R01-ABMU-161105	Sta. Museum	<0.00165			0.05	
11/5/2016	CSMS-R01-ABNP-161105	Sta. North Park	<0.00210			0.05	
11/5/2016	CSMS-R01-FB01-161105	Field Blank (open)	NA			NA	
11/5/2016	CSMS-R01-FB02-161105	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)



HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning November 6, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC	0	18	20.5	19.5	20	20	20
Terra	0	42.5	51.25	51.75	67.75	66	68.25
WORKDAY MANHOURS	0	60.50	71.75	71.25	87.75	86.00	88.25
TOTAL MANHOURS							465.5

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay		4
B&B Contracting	Laurium	53.5	53.5

Backfill soil:

Team	Location	Total Weekly Cubic Yards	Total Project Cubic Yards
B&B Contracting	Lake Linden	420	420



### III. HEALTH & SAFETY

- **Highlights**

- Completed Daily Safety Tailgates
- Completed weekly checklist – no issues noted
- Completed site orientation for new workers.

- **Inspections and Audits**

- N/A

- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 9/21/14.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 9/21/14.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list –**

- Backfill the trenches on the Hecla Stamp Mill foundation.
- Finish excavating the trenches on the Calumet Stamp Mill foundation.
- Wash the Calumet Stamp Mill foundation.
- Excavate soil along the eastern edge of the Calumet Stamp Mill foundation out 20 feet and down to 6-inches deep.
- Backfill the trenches on the Calumet Stamp Mill foundation.
- Backfill the excavated area along the Calumet Stamp Mill foundation.
- Seed the backfilled area along the Calumet Stamp Mill foundation.
- Haul asbestos impacted debris and soil off-site to K&W Landfill in Ontonagon, Michigan.

- **Submittals –**

- **Contract Items** – No issues this period

- **Revised Baseline Schedule** – Not applicable.

## VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**

- Excavate trenches and clean foundations.
- Excavate soil from edge of Calumet Stamp Mill foundation.
- Transport and dispose asbestos containing debris and soil.
- Backfill trenches and area along the Calumet Stamp Mill foundation.
- Seed the backfill soil along the eastern edge of the Calumet Stamp Mill foundation.

- **Work Accomplished**

- Hecla Stamp Mill foundation trench excavation and cleaning.
- Waste profile provided to Waste Management for approval.
- Excavating trench on the Calumet Stamp Mill foundation.
- Completed personal air monitoring: all samples below detection limit (posted on-site).
- Completed perimeter air monitoring: all samples analyzed are below detection limits (posted on-site)
- Walk the Site with the START contractor to complete the Hecla Stamp Mill foundation cleaning.
- Conducted weekly Health and Safety checklist.
- Observed trench excavation, foundation cleaning, and soil stockpiling.

- **Laboratory Results**

- Perimeter air sample analysis provided as below detection limit (posted on-site).

- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
None							

## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions

Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

## New Business

- None

## IX. EQUIPMENT & MATERIALS

<b>Equipment Delivered</b>	<b>Equipment Removed</b>
<ul style="list-style-type: none"> <li>• Mini excavator</li> <li>• Skid Steer</li> <li>• Front end loader</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>Materials Delivered</b>	<b>Materials Removed</b>
<ul style="list-style-type: none"> <li>• "Top soil" backfill soil</li> </ul>	<ul style="list-style-type: none"> <li>• 420 cubic yards</li> </ul>

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO



**Photo 1: Cleaning the North end of the Hecla Stamp Mill Foundation**



**Photo 2: South end of Calumet Stamp Mill Cleaned to stockpile backfill**





**Photo 3: Place clean backfill on the southeastern corner of the Calumet Stamp Mill.**



**Photo 4: Dust control during Calumet Stamp Mill cleaning**



**Photo 5: North end of the Hecla Stamp Mill foundation after cleaning prior to backfill.**





Perimeter Ambient Air Sampling Results  
Week of 11/6/16  
Calumet Stamp Mill  
Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/7/2016	CSMS-R01-AB01-161107	Sta. 01	<0.00316			0.05	
11/7/2016	CSMS-R01-AB02-161107	Sta. 02	<0.00292			0.05	
11/7/2016	CSMS-R01-AB03-161107	Sta. 03	<0.00525			0.05	
11/7/2016	CSMS-R01-AB04-161107	Sta. 04	<0.00232			0.05	
11/7/2016	CSMS-R01-ABMU-161107	Sta. Museum	<0.00153			0.05	
11/7/2016	CSMS-R01-ABNP-161107	Sta. North Park	<0.00193			0.05	
11/7/2016	CSMS-R01-FB01-161107	Field Blank (open)	NA			NA	
11/7/2016	CSMS-R01-FB02-161107	Field Blank (closed)	NA			NA	
11/8/2016	CSMS-R01-AB01-161108	Sta. 01	<0.00535			0.05	
11/8/2016	CSMS-R01-AB02-161108	Sta. 02	<0.00192			0.05	
11/8/2016	CSMS-R01-AB03-161108	Sta. 03	<0.00153			0.05	
11/8/2016	CSMS-R01-AB04-161108	Sta. 04	<0.00300			0.05	
11/8/2016	CSMS-R01-ABMU-161108	Sta. Museum	<0.00298			0.05	
11/8/2016	CSMS-R01-ABNP-161108	Sta. North Park	<0.00239			0.05	
11/8/2016	CSMS-R01-FB01-161108	Field Blank (open)	NA			NA	
11/8/2016	CSMS-R01-FB02-161108	Field Blank (closed)	NA			NA	
11/9/2016	CSMS-R01-AB01-161109	Sta. 01	<0.00773			0.05	
11/9/2016	CSMS-R01-AB02-161109	Sta. 02	<0.00196			0.05	
11/9/2016	CSMS-R01-AB03-161109	Sta. 03	<0.00310			0.05	
11/9/2016	CSMS-R01-AB04-161109	Sta. 04	<0.00256			0.05	
11/9/2016	CSMS-R01-ABMU-161109	Sta. Museum	<0.00262			0.05	
11/9/2016	CSMS-R01-ABNP-161109	Sta. North Park	<0.00156			0.05	
11/9/2016	CSMS-R01-FB01-161109	Field Blank (open)	NA			NA	
11/9/2016	CSMS-R01-FB02-161109	Field Blank (closed)	NA			NA	
11/10/2016	CSMS-R01-AB01-161110	Sta. 01	<b>0.00305</b>			0.05	
11/10/2016	CSMS-R01-AB02-161110	Sta. 02	<b>0.00227</b>			0.05	
11/10/2016	CSMS-R01-AB03-161110	Sta. 03	<b>0.00192</b>			0.05	
11/10/2016	CSMS-R01-AB04-161110	Sta. 04	<b>0.00177</b>			0.05	
11/10/2016	CSMS-R01-ABMU-161110	Sta. Museum	<b>0.00269</b>			0.05	
11/10/2016	CSMS-R01-ABNP-161110	Sta. North Park	<b>0.0294</b>			0.05	
11/10/2016	CSMS-R01-FB01-161110	Field Blank (open)	NA			NA	
11/10/2016	CSMS-R01-FB02-161110	Field Blank (closed)	NA			NA	
11/11/2016	CSMS-R01-AB01-161111	Sta. 01	<0.00355			0.05	
11/11/2016	CSMS-R01-AB02-161111	Sta. 02	<0.00288			0.05	
11/11/2016	CSMS-R01-AB03-161111	Sta. 03	<0.00313			0.05	
11/11/2016	CSMS-R01-AB04-161111	Sta. 04	<0.00552			0.05	
11/11/2016	CSMS-R01-ABMU-161111	Sta. Museum	<0.00158			0.05	
11/11/2016	CSMS-R01-ABNP-161111	Sta. North Park	<0.00195			0.05	
11/11/2016	CSMS-R01-FB01-161111	Field Blank (open)	NA			NA	
11/11/2016	CSMS-R01-FB02-161111	Field Blank (closed)	NA			NA	
11/12/2016	CSMS-R01-AB01-161112	Sta. 01	<0.00270			0.05	
11/12/2016	CSMS-R01-AB02-161112	Sta. 02	<0.00250			0.05	
11/12/2016	CSMS-R01-AB03-161112	Sta. 03	<0.00233			0.05	
11/12/2016	CSMS-R01-AB04-161112	Sta. 04	<0.00183			0.05	
11/12/2016	CSMS-R01-ABMU-161112	Sta. Museum	<0.00154			0.05	
11/12/2016	CSMS-R01-ABNP-161112	Sta. North Park	<0.00229			0.05	
11/12/2016	CSMS-R01-FB01-161112	Field Blank (open)	NA			NA	
11/12/2016	CSMS-R01-FB02-161112	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)



HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning November 13, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC	0	21	32.75	19	20	17.5	0
Terra	0	68.25	79.25	68.25	59.75	45.75	0
WORKDAY MANHOURS	0	89.25	112.00	87.25	79.75	63.25	0.00
TOTAL MANHOURS							431.5

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay		4
B&B Contracting	Laurium	72.0	125.5

Backfill soil:

Team	Location	Total Weekly Cubic Yards	Total Project Cubic Yards
B&B Contracting	Lake Linden	0	420

### III. HEALTH & SAFETY

- **Highlights**

- Completed Daily Safety Tailgates
- Completed weekly checklist – no issues noted
- Completed site orientation for new workers.

- **Inspections and Audits**

- N/A

- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 9/21/14.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 9/21/14.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list –**

- Backfill the trenches on the Hecla Stamp Mill foundation.
- Finish excavating the trenches on the Calumet Stamp Mill foundation.
- Finish Washin the Calumet Stamp Mill foundation.
- Excavate soil along the eastern edge of the Calumet Stamp Mill foundation out 20 feet and down to 6-inches deep.
- Backfill the trenches on the Calumet Stamp Mill foundation.
- Backfill the excavated area along the Calumet Stamp Mill foundation.
- Seed the backfilled area along the Calumet Stamp Mill foundation.
- Remove pitch mastic from the edges of tank foundations on the Calumet Stamp Mill foundation.
- Haul asbestos impacted debris and soil off-site to K&W Landfill in Ontonagon, Michigan.



- **Submittals –**
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Not applicable.

## VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**
  - Backfill trenches on the northern end of the Hecla Stamp Mill foundation.
  - Finalize excavation of trenches and clean foundations.
  - Excavate Last bit of soil from edge of Calumet Stamp Mill foundation.
  - Transport and dispose last load of asbestos containing debris and soil.
  - Backfill trenches and area along the Calumet Stamp Mill foundation.
  - Seed the backfill soil along the eastern edge of the Calumet Stamp Mill foundation.
- **Work Accomplished**
  - Hecla Stamp Mill foundation trench excavation and cleaning complete per EPA.
  - Excavating trenches on the Calumet Stamp Mill foundation.
  - Began cleaning the Calumet Stamp Mill foundation.
  - Loaded, transported and disposed 669.77 tons of presumed asbestos impacted soil and presumed asbestos containing material picked up in Phase I.
  - Lined truck beds with plastic sheeting prior to filling with material and sealed the plastic sheeting after filling the beds for transportation.
  - Completed personal air monitoring: all samples below detection limit (posted on-site).
  - Completed perimeter air monitoring: all samples analyzed are below detection limits (posted on-site).
  - Received analytical results from samples of the backfill soil: no problems O.K. to use.
  - Decontaminate out B&B Contracting's skid steer, mini excavator, and front end loader.
  - Decontaminate out the rental pneumatic tire skid steer.
  - Walk the Site with the EPA and Honeywell representatives to determine remaining work on and around the Calumet Stamp Mill foundation.
  - Conducted weekly Health and Safety checklist.
  - Observed trench excavation, foundation cleaning, soil stockpiling and loadout and transportation of material to the landfill.
  - Tracked loads of material from the site to K&W Landfill: Manifests and load tickets returned.
- **Laboratory Results**
  - Perimeter air sample analysis provided as below detection limit (posted on-site).
- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
B&B Contracting	Train	Ontonagon, MI	K&W Landfill	Soil with asbestos	13	51.52 tons	669.77 tons

## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions

Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None

## IX. EQUIPMENT & MATERIALS

Equipment Delivered	Equipment Removed
• Front end loader	•
Materials Delivered	Materials Removed
•	•

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO



**Photo 1: Loading plastic sheeting lined trucks with possible asbestos containing material**



**Photo 2: Sealing the material within truck beds after filling**



**Photo 3: Excavating 6-inches of soil from the eastern edge of the Calumet Stamp Mill.**



**Photo 4: Excavation of the eastern edge of the Calumet Stamp Mill nearly complete**





**Photo 5: Washing the northern portion of the Calumet Stamp Mill foundation.**



**Photo 6: Inspecting the northern portion of the Calumet Stamp Mill foundation with START**





**Photo 7: Decontaminating B&B Contracting's skid steer**



**Photo 8: Decontaminated equipment awaiting pickup.**



**Photo 9: Apparent Ball Crusher balls removed from a trench; washed and saved**



Perimeter Ambient Air Sampling Results  
Week of 11/13/16  
Calumet Stamp Mill  
Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/14/2016	CSMS-R01-AB01-161114	Sta. 01	<0.00187			0.05	
11/14/2016	CSMS-R01-AB02-161114	Sta. 02	<0.00285			0.05	
11/14/2016	CSMS-R01-AB03-161114	Sta. 03	<0.00244			0.05	
11/14/2016	CSMS-R01-AB04-161114	Sta. 04	<0.00241			0.05	
11/14/2016	CSMS-R01-ABMU-161114	Sta. Museum	<0.00158			0.05	
11/14/2016	CSMS-R01-ABNP-161114	Sta. North Park	<0.00260			0.05	
11/14/2016	CSMS-R01-FB01-161114	Field Blank (open)	NA			NA	
11/14/2016	CSMS-R01-FB02-161114	Field Blank (closed)	NA			NA	
11/15/2016	CSMS-R01-AB01-161115	Sta. 01	<0.00130			0.05	
11/15/2016	CSMS-R01-AB02-161115	Sta. 02	<0.00222			0.05	
11/15/2016	CSMS-R01-AB03-161115	Sta. 03	<0.00209			0.05	
11/15/2016	CSMS-R01-AB04-161115	Sta. 04	<0.00199			0.05	
11/15/2016	CSMS-R01-ABMU-161115	Sta. Museum	<0.00223			0.05	
11/15/2016	CSMS-R01-ABNP-161115	Sta. North Park	<0.00155			0.05	
11/15/2016	CSMS-R01-FB01-161115	Field Blank (open)	NA			NA	
11/15/2016	CSMS-R01-FB02-161115	Field Blank (closed)	NA			NA	
11/16/2016	CSMS-R01-AB01-161116	Sta. 01	<0.00185			0.05	
11/16/2016	CSMS-R01-AB02-161116	Sta. 02	<0.00158			0.05	
11/16/2016	CSMS-R01-AB03-161116	Sta. 03	<0.00238			0.05	
11/16/2016	CSMS-R01-AB04-161116	Sta. 04	<0.00238			0.05	
11/16/2016	CSMS-R01-ABMU-161116	Sta. Museum	<0.00285			0.05	
11/16/2016	CSMS-R01-ABNP-161116	Sta. North Park	<0.00291			0.05	
11/16/2016	CSMS-R01-FB01-161116	Field Blank (open)	NA			NA	
11/16/2016	CSMS-R01-FB02-161116	Field Blank (closed)	NA			NA	
11/17/2016	CSMS-R01-AB01-161117	Sta. 01	<0.00280			0.05	
11/17/2016	CSMS-R01-AB02-161117	Sta. 02	<0.00283			0.05	
11/17/2016	CSMS-R01-AB03-161117	Sta. 03	<0.00240			0.05	
11/17/2016	CSMS-R01-AB04-161117	Sta. 04	<0.00258			0.05	
11/17/2016	CSMS-R01-ABMU-161117	Sta. Museum	<0.00164			0.05	
11/17/2016	CSMS-R01-ABNP-161117	Sta. North Park	0.00217			0.05	
11/17/2016	CSMS-R01-FB01-161117	Field Blank (open)	NA			NA	
11/17/2016	CSMS-R01-FB02-161117	Field Blank (closed)	NA			NA	
11/18/2016	CSMS-R01-AB01-161118	Sta. 01	<0.00620			0.05	
11/18/2016	CSMS-R01-AB02-161118	Sta. 02	<0.00623			0.05	
11/18/2016	CSMS-R01-AB03-161118	Sta. 03	<0.00626			0.05	
11/18/2016	CSMS-R01-AB04-161118	Sta. 04	<0.00630			0.05	
11/18/2016	CSMS-R01-ABMU-161118	Sta. Museum	<0.00630			0.05	
11/18/2016	CSMS-R01-ABNP-161118	Sta. North Park	<0.00626			0.05	
11/18/2016	CSMS-R01-FB01-161118	Field Blank (open)	NA			NA	
11/18/2016	CSMS-R01-FB02-161118	Field Blank (closed)	NA			NA	
11/19/2016	CSMS-R01-AB01-161119	Sta. 01	No Samples				
11/19/2016	CSMS-R01-AB02-161119	Sta. 02	Did not Work				
11/19/2016	CSMS-R01-AB03-161119	Sta. 03					
11/19/2016	CSMS-R01-AB04-161119	Sta. 04					
11/19/2016	CSMS-R01-ABMU-161119	Sta. Museum					
11/19/2016	CSMS-R01-ABNP-161119	Sta. North Park					
11/19/2016	CSMS-R01-FB01-161119	Field Blank (open)					
11/19/2016	CSMS-R01-FB02-161119	Field Blank (closed)					

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)





HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning November 20, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC	0	20	19.5	0	0	0	0
Terra	0	51.25	51.25	0	0	0	0
WORKDAY MANHOURS	0	71.25	70.75	0.00	0.00	0.00	0.00
TOTAL MANHOURS							431.5

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay		4
B&B Contracting	Laurium		125.5

Backfill soil:

Team	Location	Total Weekly Cubic Yards	Total Project Cubic Yards
B&B Contracting	Lake Linden	0	420

### III. HEALTH & SAFETY

- **Highlights**
  - Completed Daily Safety Tailgates
  - Completed weekly checklist – no issues observed
- **Inspections and Audits**
  - N/A
- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 11/20/16.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 11/20/16.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list –**
  - Backfill the trenches on the Hecla Stamp Mill foundation.
  - Finish excavating the trenches on the Calumet Stamp Mill foundation.
  - Finish Washing the Calumet Stamp Mill foundation.
  - Finish the excavation of soil along the eastern edge of the Calumet Stamp Mill foundation.
  - Backfill the trenches on the Calumet Stamp Mill foundation.
  - Backfill the excavated area along the Calumet Stamp Mill foundation.
  - Seed the backfilled area along the Calumet Stamp Mill foundation.
  - Remove pitch mastic from the edges of tank foundations on the Calumet Stamp Mill foundation.
  - Haul asbestos impacted debris and soil off-site to K&W Landfill in Ontonagon, Michigan.

- **Submittals** – None this period
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Not applicable.

## VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**
  - Backfill trenches on the northern end of the Hecla Stamp Mill foundation.
  - Finalize excavation of trenches and clean foundations.
  - Excavate Last bit of soil from edge of Calumet Stamp Mill foundation.
  - Transport and dispose last load of asbestos containing debris and soil.
  - Backfill trenches and area along the Calumet Stamp Mill foundation.
  - Seed the backfill soil along the eastern edge of the Calumet Stamp Mill foundation.
- **Work Accomplished**
  - Excavated trenches on the Calumet Stamp Mill foundation.
  - Continue cleaning the Calumet Stamp Mill foundation.
  - Completed personal air monitoring: all samples below detection limit (posted on-site).
  - Completed perimeter air monitoring: all samples analyzed are below detection limits (posted on-site).
  - B&B Contracting's skid steer and mini excavator removed from the site.
  - Terra rented mini excavator removed from the site.
  - Conducted weekly Health and Safety checklist.
  - Observed trench excavation and foundation cleaning.
- **Laboratory Results**
  - Perimeter air sample analysis provided as below detection limit (posted on-site).
- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED



## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions  
 Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None

## IX. EQUIPMENT & MATERIALS

Equipment Delivered	Equipment Removed
•	<ul style="list-style-type: none"> <li>• Mini excavator, B&amp;B Contracting</li> <li>• Skid steer, B&amp;B Contracting</li> <li>• Mini excavator, Terra Contracting</li> </ul>
Materials Delivered	Materials Removed
•	•

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO

**Photo 1: Cleaning the Calumet Stamp Mill trenches and foundation**



**Photo 2: Decontamination of the rental mini excavator to be taken off-site**





**Photo 3: Calumet Stamp Mill foundation prior to the Holiday week end.**



**Photo 4: Protect the impacted soil pile for the Holiday week end**



Perimeter Ambient Air Sampling Results  
 Week of 11/20/16  
 Calumet Stamp Mill  
 Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/21/2016	CSMS-R01-AB01-161121	Sta. 01	<0.00254			0.05	
11/21/2016	CSMS-R01-AB02-161121	Sta. 02	<0.00281			0.05	
11/21/2016	CSMS-R01-AB03-161121	Sta. 03	<0.00216			0.05	
11/21/2016	CSMS-R01-AB04-161121	Sta. 04	<0.00217			0.05	
11/21/2016	CSMS-R01-ABMU-161121	Sta. Museum	<0.00183			0.05	
11/21/2016	CSMS-R01-ABNP-161121	Sta. North Park	0.00150			0.05	
11/21/2016	CSMS-R01-FB01-161121	Field Blank (open)	NA			NA	
11/21/2016	CSMS-R01-FB02-161121	Field Blank (closed)	NA			NA	
11/22/2016	CSMS-R01-AB01-161122	Sta. 01	<0.00301			0.05	
11/22/2016	CSMS-R01-AB02-161122	Sta. 02	<0.00279			0.05	
11/22/2016	CSMS-R01-AB03-161122	Sta. 03	<0.00230			0.05	
11/22/2016	CSMS-R01-AB04-161122	Sta. 04	<0.00182			0.05	
11/22/2016	CSMS-R01-ABMU-161122	Sta. Museum	<0.00163			0.05	
11/22/2016	CSMS-R01-ABNP-161122	Sta. North Park	<0.00235			0.05	
11/22/2016	CSMS-R01-FB01-161122	Field Blank (open)	NA			NA	
11/22/2016	CSMS-R01-FB02-161122	Field Blank (closed)	NA			NA	
11/23/2016	CSMS-R01-AB01-161123	Sta. 01	No Samples			0.05	
11/23/2016	CSMS-R01-AB02-161123	Sta. 02	Did not Work			0.05	
11/23/2016	CSMS-R01-AB03-161123	Sta. 03	Thanksgiving			0.05	
11/23/2016	CSMS-R01-AB04-161123	Sta. 04	Holiday			0.05	
11/23/2016	CSMS-R01-ABMU-161123	Sta. Museum				0.05	
11/23/2016	CSMS-R01-ABNP-161123	Sta. North Park				0.05	
11/23/2016	CSMS-R01-FB01-161116	Field Blank (open)				NA	
11/23/2016	CSMS-R01-FB02-161123	Field Blank (closed)				NA	
11/24/2016	CSMS-R01-AB01-161124	Sta. 01	No Samples			0.05	
11/24/2016	CSMS-R01-AB02-161124	Sta. 02	Did not Work			0.05	
11/24/2016	CSMS-R01-AB03-161124	Sta. 03	Thanksgiving			0.05	
11/24/2016	CSMS-R01-AB04-161124	Sta. 04	Holiday			0.05	
11/24/2016	CSMS-R01-ABMU-161124	Sta. Museum				0.05	
11/24/2016	CSMS-R01-ABNP-161124	Sta. North Park				0.05	
11/24/2016	CSMS-R01-FB01-161124	Field Blank (open)				NA	
11/24/2016	CSMS-R01-FB02-161124	Field Blank (closed)				NA	
11/25/2016	CSMS-R01-AB01-161125	Sta. 01	No Samples			0.05	
11/25/2016	CSMS-R01-AB02-161125	Sta. 02	Did not Work			0.05	
11/25/2016	CSMS-R01-AB03-161125	Sta. 03	Thanksgiving			0.05	
11/25/2016	CSMS-R01-AB04-161125	Sta. 04	Holiday			0.05	
11/25/2016	CSMS-R01-ABMU-161125	Sta. Museum				0.05	
11/25/2016	CSMS-R01-ABNP-161125	Sta. North Park				0.05	
11/25/2016	CSMS-R01-FB01-161125	Field Blank (open)				NA	
11/25/2016	CSMS-R01-FB02-161125	Field Blank (closed)				NA	
11/26/2016	CSMS-R01-AB01-161126	Sta. 01	No Samples			0.05	
11/26/2016	CSMS-R01-AB02-161126	Sta. 02	Did not Work			0.05	
11/26/2016	CSMS-R01-AB03-161126	Sta. 03	Thanksgiving			0.05	
11/26/2016	CSMS-R01-AB04-161126	Sta. 04	Holiday			0.05	
11/26/2016	CSMS-R01-ABMU-161126	Sta. Museum				0.05	
11/26/2016	CSMS-R01-ABNP-161126	Sta. North Park				0.05	
11/26/2016	CSMS-R01-FB01-161126	Field Blank (open)				NA	
11/26/2016	CSMS-R01-FB02-161126	Field Blank (closed)				NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)



HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning November 27, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC	0	10	10	21	20	20	10
Terra	0	43.75	53	58.25	49	42.5	34
WORKDAY MANHOURS	0	53.75	63.00	79.25	69.00	62.50	44.00
TOTAL MANHOURS							371.5

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay		4
B&B Contracting	Laurium	26.5	152.0

Backfill soil:

Team	Location	Total Weekly Cubic Yards	Total Project Cubic Yards
B&B Contracting	Lake Linden	0	420



### III. HEALTH & SAFETY

- **Highlights**
  - Completed Daily Safety Tailgates
  - Completed weekly checklist – no issues noted
- **Inspections and Audits**
  - N/A
- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 11/27/16.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 11/27/16.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list –**
  - Finish backfilling the trenches on the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Backfill the excavated area along the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Seed the backfilled area along the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Remove pitch mastic from the edges of tank foundations on the Calumet Stamp Mill foundation.
  - Put up steel plates in openings of the flotation tank foundations.

- **Submittals** – None this period.
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Backfilling and seeding has been postponed till spring when the site and backfill material dry out.

## VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule**
  - Complete pitch mastic removal from the flotation tank foundations.
  - Backfill trenches on the Calumet Stamp Mill foundation; Postponed till spring.
  - Seed the backfill soil along the eastern edge of the Calumet Stamp Mill foundation.
  - Remove and dispose the last load of impacted material from the site.
- **Work Accomplished**
  - Backfilled the trenches on the Hecla Stamp Mill foundation.
  - Finished excavating the trenches on the Calumet Stamp Mill foundation.
  - Finished Washing the Calumet Stamp Mill foundation.
  - Excavated soil along the eastern edge of the Calumet Stamp Mill foundation.
  - Began backfilling the Calumet Stamp Mill foundation trenches.
  - Walked the Calumet Stamp Mill foundation with the START contractor representative and observed the foundation, trenches and eastern excavation for washing/cleaning completeness; concurred that excavation and washing/cleaning have been completed.
  - Loaded, transported, and disposed the last loads of asbestos impacted soil: 70.08 tons.
  - Began removal of mastic from the flotation tank foundations.
  - Completed personal air monitoring during pitch mastic removal.
  - Removed "Asbestos" signage from the perimeter fence.
  - Moved the exclusion zone to area immediately around the flotation tank foundations.
  - Completed perimeter air monitoring: all samples analyzed are below detection limits (posted on-site).
  - Conducted weekly Health and Safety checklist.
  - Observed trench excavation, foundation cleaning, soil stockpiling and loadout and transportation of last bit of asbestos impacted soil to the landfill.
  - Tracked loads of material from the site and manifests returned.
  - Completed loading and transporting impacted soil to the landfill.
- **Laboratory Results**
  - Perimeter air sample analysis provided as below detection limit (posted on-site).
- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
B&B Contracting	Train	Ontonagon, MI	K&W Landfill	Soil with asbestos	2	35.04 tons	70.08 tons

## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions  
 Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None

## IX. EQUIPMENT & MATERIALS

<b>Equipment Delivered</b>	<b>Equipment Removed</b>
•	• Bulldozer, B&B Contracting
<b>Materials Delivered</b>	<b>Materials Removed</b>
•	• 70.08 tons of asbestos impacted soil.

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable



## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO

**Photo 1: Backfilling holes and trenches on the Hecla Stamp Mill foundation**



**Photo 2: Hecla Stamp Mill foundation completed**





**Photo 3: Trenches and surface clean on the Calumet Stamp Mill foundation: Backfilling.**



**Photo 4: Demarcation layer in the deep trench**





**Photo 5: Stopped backfilling due to wet site conditions.**



**Photo 6: Excavation of eastern edge of Calumet Stamp Mill foundation complete**





**Photo 7: Loading the final truck for landfill disposal of asbestos impacted soil.**



**Photo 8: Area where asbestos impacted soil had been stockpiled.**





**Photo 9: Begin removing pitch mastic from flotation tank foundations.**



**Photo 10: Pneumatic micro-chisel gun used to remove pitch mastic.**



Perimeter Ambient Air Sampling Results  
Week of 11/27/16  
Calumet Stamp Mill  
Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
11/28/2016	CSMS-R01-AB01-161128	Sta. 01	<0.00290			0.05	
11/28/2016	CSMS-R01-AB02-161128	Sta. 02	<0.00296			0.05	
11/28/2016	CSMS-R01-AB03-161128	Sta. 03	<0.00165			0.05	
11/28/2016	CSMS-R01-AB04-161128	Sta. 04	<0.00254			0.05	
11/28/2016	CSMS-R01-ABMU-161128	Sta. Museum	<0.00245			0.05	
11/28/2016	CSMS-R01-ABNP-161128	Sta. North Park	<0.00202			0.05	
11/28/2016	CSMS-R01-FB01-161128	Field Blank (open)	NA			NA	
11/28/2016	CSMS-R01-FB02-161128	Field Blank (closed)	NA			NA	
11/29/2016	CSMS-R01-AB01-161129	Sta. 01	<0.00274			0.05	
11/29/2016	CSMS-R01-AB02-161129	Sta. 02	<0.00288			0.05	
11/29/2016	CSMS-R01-AB03-161129	Sta. 03	<0.00163			0.05	
11/29/2016	CSMS-R01-AB04-161129	Sta. 04	<0.00195			0.05	
11/29/2016	CSMS-R01-ABMU-161129	Sta. Museum	<0.00238			0.05	
11/29/2016	CSMS-R01-ABNP-161129	Sta. North Park	<0.00239			0.05	
11/29/2016	CSMS-R01-FB01-161129	Field Blank (open)	NA			NA	
11/29/2016	CSMS-R01-FB02-161129	Field Blank (closed)	NA			NA	
11/30/2016	CSMS-R01-AB01-161130	Sta. 01	<0.00249			0.05	
11/30/2016	CSMS-R01-AB02-161130	Sta. 02	<0.00248			0.05	
11/30/2016	CSMS-R01-AB03-161130	Sta. 03	<0.00211			0.05	
11/30/2016	CSMS-R01-AB04-161130	Sta. 04	<0.00207			0.05	
11/30/2016	CSMS-R01-ABMU-161130	Sta. Museum	<0.00145			0.05	
11/30/2016	CSMS-R01-ABNP-161130	Sta. North Park	<0.00170			0.05	
11/30/2016	CSMS-R01-FB01-161130	Field Blank (open)	NA			NA	
11/30/2016	CSMS-R01-FB02-161130	Field Blank (closed)	NA			NA	
12/1/2016	CSMS-R01-AB01-161201	Sta. 01	<0.00272			0.05	
12/1/2016	CSMS-R01-AB02-161201	Sta. 02	<0.00149			0.05	
12/1/2016	CSMS-R01-AB03-161201	Sta. 03	<0.00212			0.05	
12/1/2016	CSMS-R01-AB04-161201	Sta. 04	<0.00212			0.05	
12/1/2016	CSMS-R01-ABMU-161201	Sta. Museum	<0.00273			0.05	
12/1/2016	CSMS-R01-ABNP-161201	Sta. North Park	<0.00177			0.05	
12/1/2016	CSMS-R01-FB01-161201	Field Blank (open)	NA			NA	
12/1/2016	CSMS-R01-FB02-161201	Field Blank (closed)	NA			NA	
12/2/2016	CSMS-R01-AB01-161202	Sta. 01	<0.00150			0.05	
12/2/2016	CSMS-R01-AB02-161202	Sta. 02	<0.00280			0.05	
12/2/2016	CSMS-R01-AB03-161202	Sta. 03	<0.00225			0.05	
12/2/2016	CSMS-R01-AB04-161202	Sta. 04	<0.00215			0.05	
12/2/2016	CSMS-R01-ABMU-161202	Sta. Museum	<0.00183			0.05	
12/2/2016	CSMS-R01-ABNP-161202	Sta. North Park	<0.00272			0.05	
12/2/2016	CSMS-R01-FB01-161202	Field Blank (open)	NA			NA	
12/2/2016	CSMS-R01-FB02-161202	Field Blank (closed)	NA			NA	
12/3/2016	CSMS-R01-AB01-161203	Sta. 01	<0.00181			0.05	
12/3/2016	CSMS-R01-AB02-161203	Sta. 02	<0.00151			0.05	
12/3/2016	CSMS-R01-AB03-161203	Sta. 03	<0.00261			0.05	
12/3/2016	CSMS-R01-AB04-161203	Sta. 04	<0.00255			0.05	
12/3/2016	CSMS-R01-ABMU-161203	Sta. Museum	<0.00213			0.05	
12/3/2016	CSMS-R01-ABNP-161203	Sta. North Park	<0.00216			0.05	
12/3/2016	CSMS-R01-FB01-161203	Field Blank (open)	NA			NA	
12/3/2016	CSMS-R01-FB02-161203	Field Blank (closed)	NA			NA	

Notes:

f/cc = fibers per cubic centimeter

NA = Not analyzed

TDL = Target Detection Limit (10% of permissible exposure limit)





HEALTH, SAFETY, ENVIRONMENTAL AND REMEDIATION  
WEEKLY PROGRESS/HIGHLIGHTS REPORT

Honeywell RES Project: Calumet Stamp Mill Site

Site No.:

AMEC Project Number: 3293161707

Honeywell PO#: 4500195490

**Week Beginning December 4, 2016**

Calumet Stamp Mill Remediation  
Lake Linden, Michigan

**I. SITE RESOURCES SUMMARY**

Team	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AMEC	0	10	10.5	9.5	10	4.25	0
Terra	0	34.75	47	35	32	12	0
WORKDAY MANHOURS	0	44.75	57.50	44.50	42.00	16.25	0.00
TOTAL MANHOURS							205

**II. LOCAL RESOURCES**

Team	Location	Total Weekly Manhours	Total Project Manhours
Bay Electric	Dollar Bay		4
B&B Contracting	Laurium	13	165.0

Backfill soil:

Team	Location	Total Weekly Cubic Yards	Total Project Cubic Yards
B&B Contracting	Lake Linden	0	420

### III. HEALTH & SAFETY

- **Highlights**
  - Completed Daily Safety Tailgates
  - Completed weekly checklist – no issues noted
- **Inspections and Audits**
  - N/A
- **Incident / Near Miss**

Contractor	Date of Incident	Incident / Near Miss
		No incidents during week beginning 11/27/16.

- **Infraction Notices**

Contractor	Date of Incident	Incident / Near Miss
		No infraction notices during week beginning 11/27/16.

### IV. Pending Actions

- Continue to provide site orientation for new workers

### V. ADMINISTRATIVE ITEMS

- **Updated action task list –**
  - Finish backfilling the trenches on the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Backfill the excavated area along the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Seed the backfilled area along the Calumet Stamp Mill foundation. This will occur in the spring when the backfill soil and site dry out.
  - Remove pitch mastic from the edges of tank foundations on the Calumet Stamp Mill foundation.

- **Submittals** – None this period.
- **Contract Items** – No issues this period
- **Revised Baseline Schedule** – Backfilling, seeding, and pitch mastic removal has been postponed till spring when the site and backfill material dry out.

## VI. SCHEDULE / SITE ACTIVITY REVIEW

- **Three-Week Schedule (Spring of 2017)**
  - Complete pitch mastic removal from the flotation tank foundations.
  - Backfill trenches on the Calumet Stamp Mill foundation; Postponed till spring.
  - Seed the backfill soil along the eastern edge of the Calumet Stamp Mill foundation.
  - Remove and dispose the last load of impacted material from the site.
- **Work Accomplished**
  - Continued removal of mastic from the flotation tank foundations.
  - Completed personal air monitoring during pitch mastic removal.
  - Completed perimeter air monitoring: all samples analyzed are below detection limits (posted on-site).
  - Conducted weekly Health and Safety checklist.
  - Observed mastic removal and loadout and transportation of last bit of asbestos impacted mastic to the landfill.
  - Tracked load of material from the site.
  - Completed loading and transporting pitch mastic debris to the landfill; 1.35 tons disposed.
  - Completed securing the site for the winter; metal No Trespassing signs placed, fence checked and all gates wired closed.
  - Demobilized from the site: All supplies and equipment removed.
- **Laboratory Results**
  - Perimeter air sample analysis provided as below detection limit (posted on-site).
- **Weekly Waste Materials:**

TRANSPORTER	TRUCK TYPE	DESTINATION	TSDF	MATERIAL	TRUCK LOADS	AVG / TRUCK	AMOUNT SHIPPED
Waste Management	Rolloff	Ontonagon, MI	K&W Landfill	Pitch mastic and plastic	1	1.35 Tons	1.35 Tons



## VII. CONSTRUCTION CHANGE ORDERS

CCO No.	JUSTIFICATION	SCHEDULE IMPACT	COST IMPACT	CHANGE CODE	VALUE	STATUS
01	Working 5 Saturdays	Compress Schedule	\$2,700	1	\$2,700	Pending

Change Code: (1) Scope Change, (2) Design Error/Omission, (3) Vendor Defect, (4) Vendor Deliveries, (5) Overtime, (6) Weather, (7) Site Conditions  
 Status: Pending, Submitted, Approved, Rejected

## VIII. DISCUSSION ITEMS

### Old Business

- none

### New Business

- None

## IX. EQUIPMENT & MATERIALS

<b>Equipment Delivered</b>	<b>Equipment Removed</b>
•	• Decontamination trailer (Terra)
<b>Materials Delivered</b>	<b>Materials Removed</b>
•	• 1.35 tons of asbestos impacted media.

## X. COMMUNICATIONS / COMMUNITY RELATIONS

- None

## XI. ADDENDUM(S) TO PREVIOUS MEETING MINUTES

- Not applicable

## ATTACHMENTS

- **Photo Log**
- **Perimeter Air Sampling Results Table**

Submitted By: Joe Caryl And  
Amec Foster Wheeler  
Principal Construction Manager

Kurt L. Cunningham, CPG  
Amec Foster Wheeler  
Site Lead and SHSO

**Photo 1: Preparing to remove pitch mastic from floatation tank foundation**



**Photo 2: Pitch mastic removal in the snow**





**Photo 3: Equipment setup for pitch mastic removal.**



**Photo 4: Dumpster for pitch mastic, debris, and plastic disposal**



**Photo 5: Steel plate installation in floatation tank foundation openings.**



**Photo 6: Typical steel plate installation in the floatation tank foundation openings**





**Photo 7: Last day of mastic removal: Weather causing significant delays.**



**Photo 8: 8x20' Steel plates placed over tunnel area for HCHMS.**





**Photo 9: Site secure for the winter with metal signage: facing south.**



**Photo 10: Site secure for the winter: Facing north.**





**Photo 11: Site secure for the winter: Facing east.**



**Photo 12: Site secure for the winter: Facing west**



Perimeter Ambient Air Sampling Results  
 Week of 12/4/16  
 Calumet Stamp Mill  
 Torch Lake Township, MI

Date	Sample ID	Sample Location	Fiber Concentration (f/cc) (PCM Analysis)	Fraction Asbestos (%)	Asbestos Concentration (f/cc) (TEM analysis)	Action Limit (f/cc)	Notes
12/5/2016	CSMS-R01-AB01-161205	Sta. 01	<0.00192			0.05	
12/5/2016	CSMS-R01-AB02-161205	Sta. 02	<0.00159			0.05	
12/5/2016	CSMS-R01-AB03-161205	Sta. 03	<0.00275			0.05	
12/5/2016	CSMS-R01-AB04-161205	Sta. 04	<0.00258			0.05	
12/5/2016	CSMS-R01-ABMU-161205	Sta. Museum	<0.00225			0.05	
12/5/2016	CSMS-R01-ABNP-161205	Sta. North Park	<0.00220			0.05	
12/5/2016	CSMS-R01-FB01-161205	Field Blank (open)	NA			NA	
12/5/2016	CSMS-R01-FB02-161205	Field Blank (closed)	NA			NA	

12/6/2016	CSMS-R01-AB01-161206	Sta. 01	<0.00217			0.05	
12/6/2016	CSMS-R01-AB02-161206	Sta. 02	<0.00209			0.05	
12/6/2016	CSMS-R01-AB03-161206	Sta. 03	<0.00170			0.05	
12/6/2016	CSMS-R01-AB04-161206	Sta. 04	<0.00145			0.05	
12/6/2016	CSMS-R01-ABMU-161206	Sta. Museum	<0.00203			0.05	
12/6/2016	CSMS-R01-ABNP-161206	Sta. North Park	<0.00204			0.05	
12/6/2016	CSMS-R01-FB01-161206	Field Blank (open)	NA			NA	
12/6/2016	CSMS-R01-FB02-161206	Field Blank (closed)	NA			NA	

	Perimeter air monitoring ceased						




Notes:  
 f/cc = fibers per cubic centimeter  
 NA = Not analyzed  
 TDL = Target Detection Limit (10% of permissible exposure limit)

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**APPENDIX C**

Waste Profiles



Requested Facility: K&W Landfill ☐ Unsure Profile Number: 119468MI☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: \_\_\_\_\_**A. GENERATOR INFORMATION (MATERIAL ORIGIN)**

1. Generator Name: Honeywell Specialty Materials, LLC  
2. Site Address: 53102 M-26  
(City, State, ZIP) Torch Lake Twp. MI 49945  
3. County: Houghton  
4. Contact Name: Chuck Geadelmann  
5. Email: chuck.geadelmann@honeywell.com  
6. Phone: (763) 954-5418 7. Fax: \_\_\_\_\_  
8. Generator EPA ID: \_\_\_\_\_ ☒ N/A  
9. State ID: \_\_\_\_\_ ☒ N/A

**C. MATERIAL INFORMATION**

1. Common Name: Friable Asbestos Contaminated Soil  
Describe Process Generating Material: ☐ See Attached

Soils contaminated with friable and non-friable asbestos containing materials from demolition/dismantling or remediation activities. Does include clean-up wastes, such as soils contaminated with asbestos.

2. Material Composition and Contaminants: ☐ See Attached

1. Soil	90 - 100 %
2. Friable Asbestos	0 - 10 %
3.	
4.	
Total comp. must be equal to or greater than 100%	≥100%

3. State Waste Codes: \_\_\_\_\_ ☒ N/A  
4. Color: Various  
5. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Other: \_\_\_\_\_  
6. Free Liquid Range Percentage: \_\_\_\_\_ to \_\_\_\_\_ ☒ N/A  
7. pH: \_\_\_\_\_ to \_\_\_\_\_ ☒ N/A  
8. Strong Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_  
9. Flash Point: ☐ <140°F ☐ 140°-199°F ☐ ≥200° ☒ N/A

**E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION**

1. Analytical attached ☐ Yes  
Please identify applicable samples and/or lab reports:

2. Other information attached (such as MSDS)? ☐ Yes

**G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)**

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Chuck Geadelmann Date: 11/10/2016  
Title: Corporate Remediation Manager  
Company: Honeywell International Inc.

**B. BILLING INFORMATION**☐ SAME AS GENERATOR

1. Billing Name: Terra Contracting Services, LLC  
2. Billing Address: 5140 West Michigan Ave.  
(City, State, ZIP) Kalamazoo MI 49006  
3. Contact Name: Kerry Puzio  
4. Email: kerry.puzio@gleis.com  
5. Phone: (269) 375-9595 6. Fax: (269) 375-9595  
7. WM Hauled? ☐ Yes ☒ No  
8. P.O. Number: \_\_\_\_\_  
9. Payment Method: ☒ Credit Account ☐ Cash ☐ Credit Card

**D. REGULATORY INFORMATION**

1. EPA Hazardous Waste? ☐ Yes\* ☒ No  
Code: \_\_\_\_\_  
2. State Hazardous Waste? ☐ Yes ☒ No  
Code: \_\_\_\_\_  
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes\* ☒ No  
4. Contains Underlying Hazardous Constituents? ☐ Yes\* ☒ No  
5. From an industry regulated under Benzene NESHAP? ☐ Yes\* ☒ No  
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes\* ☒ No  
7. CERCLA or State-mandated clean-up? ☐ Yes\* ☒ No  
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes\* ☒ No

\*If Yes, see Addendum (page 2) for additional questions and space.

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No  
a. Regulated by 40 CFR 761? ☐ Yes ☐ No  
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No  
c. Were PCB imported into the US? ☐ Yes ☐ No  
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No  
11. Contains Asbestos? ☒ Yes ☐ No  
→ If Yes: ☐ Non-Friable ☐ Non-Friable - Regulated ☒ Friable

**F. SHIPPING AND DOT INFORMATION**

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business  
2. Estimated Quantity/Unit of Measure: 1000  
☒ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other: \_\_\_\_\_  
3. Container Type and Size: Lined Dump Truck  
4. USDOT Proper Shipping Name: \_\_\_\_\_ ☐ N/A

RQ Asbestos, Class 9, NA2212, PG III

Certification Signature

*Chuck Geadelmann*



Requested Facility: \_\_\_\_\_ ☐ Unsure Profile Number: **119547MI**  
☐ Multiple Generator Locations (Attach Locations) ☐ Request Certificate of Disposal ☐ Renewal? Original Profile Number: \_\_\_\_\_

**A. GENERATOR INFORMATION (MATERIAL ORIGIN)**

1. Generator Name: Taplin Group, LLC  
2. Site Address: Various  
(City, State, ZIP) Various MI 00000  
3. County: \_\_\_\_\_  
4. Contact Name: Kerry Puzio  
5. Email: kerrypuzio@taplinholdings.com  
6. Phone: (269) 375-9595 7. Fax: \_\_\_\_\_  
8. Generator EPA ID: MIK 768 689 127 ☐ N/A  
9. State ID: \_\_\_\_\_ ☒ N/A

**C. MATERIAL INFORMATION**

1. Common Name: Non-Friable Asbestos  
Describe Process Generating Material: ☐ See Attached  

Demolition/renovation - when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Including gaskets, resilient floor coverings and asphalt roofing products (specify in C.2.) Does not include clean-up wastes, such as

  
2. Material Composition and Contaminants: ☐ See Attached  

1. Non-Friable Asbestos (Uncontaminated)	0-100 %
2.	
3.	
4.	
Total comp. must be equal to or greater than 100% <span style="float: right;">≥100%</span>	

  
3. State Waste Codes: \_\_\_\_\_ ☒ N/A  
4. Color: Various  
5. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Other: \_\_\_\_\_  
6. Free Liquid Range Percentage: \_\_\_\_\_ to \_\_\_\_\_ ☒ N/A  
7. pH: \_\_\_\_\_ to \_\_\_\_\_ ☒ N/A  
8. Strong Odor: ☐ Yes ☒ No Describe: \_\_\_\_\_  
9. Flash Point: ☐ <140°F ☐ 140°–199°F ☒ ≥200° ☒ N/A

**E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION**

1. Analytical attached ☐ Yes  
Please identify applicable samples and/or lab reports:  
  
2. Other information attached (such as MSDS)? ☒ Yes

**G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)**

By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 – Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Kerry Puzio Date: 11/15/2016  
Title: Director of Regulatory Services  
Company: Taplin Group, LLC

**B. BILLING INFORMATION**☐ SAME AS GENERATOR

1. Billing Name: Taplin Group, LLC  
2. Billing Address: 5140 West Michigan Ave.  
(City, State, ZIP) Kalamazoo MI 49006  
3. Contact Name: Kerry Puzio  
4. Email: kerrypuzio@taplinholdings.com  
5. Phone: (269) 375-9595 6. Fax: \_\_\_\_\_  
7. WM Hauled? ☐ Yes ☒ No  
8. P.O. Number: \_\_\_\_\_  
9. Payment Method: ☒ Credit Account ☐ Cash ☐ Credit Card

**D. REGULATORY INFORMATION**

1. EPA Hazardous Waste? ☐ Yes\* ☒ No  
Code: \_\_\_\_\_  
2. State Hazardous Waste? ☐ Yes ☒ No  
Code: \_\_\_\_\_  
3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion? ☐ Yes\* ☒ No  
4. Contains Underlying Hazardous Constituents? ☐ Yes\* ☒ No  
5. From an industry regulated under Benzene NESHAP? ☐ Yes\* ☒ No  
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes\* ☒ No  
7. CERCLA or State-mandated clean-up? ☐ Yes\* ☒ No  
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes\* ☒ No  
**\*If Yes, see Addendum (page 2) for additional questions and space.**  
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No  
a. Regulated by 40 CFR 761? ☐ Yes ☐ No  
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No  
c. Were PCB imported into the US? ☐ Yes ☐ No  
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No  
11. Contains Asbestos? ☒ Yes ☐ No  
→ If Yes: ☒ Non-Friable ☐ Non-Friable – Regulated ☐ Friable

**F. SHIPPING AND DOT INFORMATION**

1. ☐ One-Time Event ☒ Repeat Event/Ongoing Business  
2. Estimated Quantity/Unit of Measure: 2000  
☒ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other: \_\_\_\_\_  
3. Container Type and Size: Roll-off Truck  
4. USDOT Proper Shipping Name: \_\_\_\_\_ ☒ N/A

Certification Signature

*Kerry Puzio*



**Only complete this Addendum if prompted by responses on EZ Profile™ (page 1) or to provide additional information. Sections and question numbers correspond to EZ Profile™.**

Profile Number: 119547MI

## C. MATERIAL INFORMATION

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

soils, that are contaminated with nonfriable asbestos. (Reference 104842MI) Please approve at all applicable WM Michigan Landfills

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
Total composition must be equal to or greater than 100%	
	≥100%

## D. REGULATORY INFORMATION

**Only questions with a "Yes" response in Section D on the EZ Profile™ form (page 1) need to be answered here.**

### 1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☐ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☐ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083)?

☐ Yes ☐ No

→ If Yes, please check **one** of the following:

☐ Waste meets LDR or treatment exemptions for organics (40 CFR 264.1082(c)(2) or (c)(4))

☐ Waste contains VOCs that average <500 ppmw (CFR 264.1082(c)(1)) – will require annual update.

2. State Hazardous Waste → Please list all state waste codes: \_\_\_\_\_

3. For material that is Treated, Delisted, or Excluded → Please indicate the category, below:

☐ Delisted Hazardous Waste

☐ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: \_\_\_\_\_

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

5. Industries regulated under Benzene NESHAP include petroleum refineries, chemical manufacturing plants, coke by-product recovery plants, and TSDFs.

a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.

☐ Yes ☐ No

b. Does this material contain benzene?

☐ Yes ☐ No

1. If yes, what is the flow weighted average concentration?

\_\_\_\_\_ ppmw

c. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1–9.99 Mg ☐ ≥10 Mg

d. Is this waste soil from a remediation?

☐ Yes ☐ No

1. If yes, what is the benzene concentration in remediation waste?

\_\_\_\_\_ ppmw

e. Does the waste contain >10% water/moisture?

☐ Yes ☐ No

f. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

g. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption: \_\_\_\_\_

h. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation with process information to assist others in the evaluation for proper disposal. A "Determination of Acceptability" may be needed for CERCLA wastes not going to a CERCLA approved facility.

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: \_\_\_\_\_



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**APPENDIX D**

Manifests and Associated Weigh Tickets

# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

1-A. Special Waste Profile Number ASB119468MI		NESHAAP Noted <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number 100		Elevation North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) HONEYWELL SPECIALTY MATERIALS, LLC 1985 Douglas Dr North MN10-138B 63102 M-26, TORCH LAKE TWP, MI 49945 Golden Valley, MN 55422						1-C. Generator's Phone Number 763-954-5418	
1-D. Work Site Address HONEYWELL SPECIALTY MATERIALS, LLC 63102 M-26, TORCH LAKE TWP, MI 49945						1-E. 24 Hour Emergency Response Telephone Number 763-954-5418	
2. Operator's Name and Complete Mailing Address TERRA CONTRACTING SERVICES, LLC 5140 WEST MICHIGAN AVE, KALAMAZOO, MI 49006						Operator's Phone Number 269-375-9595	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address K&W LANDFILL 11877 M38, ONTONAGON, MI 49953						WDS Phone Number <del>906-887-0882</del> 906-883-3504	
4. Name and Address of Responsible Agency State of Michigan, REGION 1 HEADQUARTERS 1990 US HIGHWAY 41 SOUTH, SOUTH MARQUETTE, MI 49855							
5. Description of Materials							
friable asbestos				FC, NA2212, Asbestos, 9, PGIII		6. Containers No. Type	
non-friable asbestos				Cat I _____ Cat II _____		7. Total Quantity yds	
						48.86 Tons	
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 wastes.							
Printed/Typed Name and Title DANIELA B. SAIGH				Signature <i>[Signature]</i> (as an agent for Honeywell)		Date 11/15/16	
10. Transporter 1 Company Name B&B Corp. Complete Mailing Address 55670 M-26 Calumet, MI Telephone Number (including area code) 906-337-0017				Driver Signature <i>[Signature]</i> Printed Name and Title Greg Tshida Driver Date 11-15-16			
11. Transporter 2 Company Name DOT # 81668136 Complete Mailing Address Telephone Number (including area code)				Driver Signature  Printed Name and Title  Date			
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 Linda Thoreson operations specialist				Signature <i>[Signature]</i>		Date 11-15-16	



K&W Landfill  
K&W Landfill  
11877 HWY 30  
Ontonagon, MI, 49953  
Ph: 906-883-3504

Original 11261045  
Ticket# 278294  
Ticket# 278294

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier ABCONTRACTING B&B CONTRACTING  
Ticket Date 11/15/2016 Vehicle# 109 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 1001  
Destination Grid  
Profile ASB119460MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross		
In	11/15/2016 10:52:07	Scale	L.Thoreson		Tare	152500 lb	
Out	11/15/2016 11:29:46	Scale	L.Thoreson		Net	54860 lb	
					Tons	97720 lb	
Comments							48.86
HONEYWELL SPECIALTY MATERIALS INC							
63102 M26							
TORCH LAKE TWP							

Product	LD%	Dty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		48.86	Tons				HOUSMI
2 EVF-L-Standard Env 100		1	Load				HOUSMI

*SS Talcida*

Total Tax  
Total Ticket





**WASTE SHIPMENT RECORD/ASBESTOS MANIFEST**  
 (See Reverse for Instructions)

**#750**

1-A. Special Waste Profile Number <b>ASB119468MI</b>		1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC 1985 Douglas Dr. North MN 10-132B Golden Valley, MN 55422</b>		1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC 63102 M-25, TORCH LAKE TWP, MI 49945</b>		1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>		1-F. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC 5140 WEST MICHIGAN AVE, KALAMAZOO, MI 49006</b>		Operator's Phone Number <b>269-375-9595</b>			
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL 11877 M38, ONTONAGON, MI 49953</b>		WDS Phone Number <b>906-883-3504</b>			
4. Name and Address of Responsible Agency <b>State of Michigan, REGION 1 HEADQUARTERS 1990 US HIGHWAY 41 SOUTH, SOUTH MARQUETTE, MI 49855</b>					
5. Description of Materials		6. Containers No. Type		7. Total Quantity yds	
inable asbestos		RD, NA2212, Asbestos, 9, PGIII		2 TR 40	
non-inable 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 labeling 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 <b>DOUGLAS SAIGH</b>		Signature <i>[Signature]</i>		Date <b>11/15/16</b>	
10. Transporter's Company Name <b>SIM WENDERT AND SONS</b>		Driver Signature <i>[Signature]</i>		Date <b>11-15-16</b>	
Complete Mailing Address <b>W7159 UPPER MICHIGAN RD Iron MT MI 49940</b>		Printed Name and Title <b>Jim Wendert</b>			
Telephone Number (including area code) <b>906 374-2164</b>		Date <b>11-15-16</b>			
11. Transporter's Company Name <b>DOH 444 678</b>		Driver Signature			
Complete Mailing Address		Printed Name and Title			
Telephone Number (including area code)		Date			
12. Discrepancy Indication Space					
13. Waste Disposal Site Owner or Operator Special Waste Approval is issued by signature in the case of a General Asbestos Approval. Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12.					
Printed/Typed Name and Title <b>Linda Thoreson Specialise</b>		Signature <i>[Signature]</i>		Date <b>11-15-16</b>	

 incorrect  
tare  
wt.



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261061

Original  
Ticket# 270312

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/15/2016 Vehicle# 750 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 1002  
Destination Grid  
PG  
Profile ASB119460NI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

Time	Scale	Operator	Inbound	Gross	
In 11/15/2016 16:07:48	Scale	LThoreson		Tare	160360 lb*
Out 11/15/2016 16:08:47	Scale	LThoreson		Net	51840 lb
		* Manual Weight		Tons	108520 lb
Comments:					54.26

HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP  
REPLACES TICKET # 278311

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		54.26	Tons				HOUGHT
2 EVF-L-Standard Env 100		1	Load				HOUGHT

Total Tax  
Total Ticket

403WM-N  
Driver's Signature



# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

#751

1-A. Special Waste Profile Number ASB119468MI		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number 1003		For Disposal Site Use Only Elevation _____ North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) HONEYWELL SPECIALTY MATERIALS, LLC 63102 M-26, TORCH LAKE TWP, MI 49945 1985 Douglas Dr. North MN10-132B Golden Valley, MN 55422				1-G. Generator's Phone Number 763-954-5418			
1-D. Work Site Address HONEYWELL SPECIALTY MATERIALS, LLC 63102 M-26, TORCH LAKE TWP, MI 49945				1-E. 24 Hour Emergency Response Telephone Number 763-954-5418			
2. Operator's Name and Complete Mailing Address TERRA CONTRACTING SERVICES, LLC 5140 WEST MICHIGAN AVE, KALAMAZOO, MI 49006				Operator's Phone Number 269-375-9595			
3. Waste Disposal Site (WDS) Name and Complete Mailing Address K&W LANDFILL 11877 M38, ONTONAGON, MI 49953				WDS Phone Number -906-667-0802 906-883-3504			
4. Name and Address of Responsible Agency State of Michigan, REGION 1 HEADQUARTERS 1990 US HIGHWAY 41 SOUTH, SOUTH MARQUETTE, MI 49855							
5. Description of Materials							
friable asbestos		RQ, NA2212, Asbestos, 9, F011		6. Containers No. Type		7. Total Quantity yds	
non-friable asbestos		Cat I _____ Cat II _____		2 TR		40	
8. Special Handling Instructions and Additional Information 24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED 153.60 Tons							
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 DOUGLAS SAUGH				Signature <i>[Signature]</i>		Date 11/15/16	
10. Transporter 1 Company Name Joe Wender & Sons				Driver Signature <i>[Signature]</i>			
Complete Mailing Address W7158 UPPER PINE CREEK MICHIGAN Telephone Number (including area code) 906 7742164				Printed Name and Title JOE WENDER Date 11/15/16			
11. Transporter 2 Company Name 906 444613				Driver Signature			
Complete Mailing Address				Printed Name and Title			
Telephone Number (including area code)				Date			
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 Linda Thoreson Specialist				Signature <i>[Signature]</i>		Date 11-15-16	

DCE-230-87

WHITE - Disposal Site

GRAY - Generator  
(To be mailed by Disposal Site)

PINK - Transporter

GOLD - Generator  
(To be taken prior to disposal)



11261050

E&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-893-3504

Original  
Ticket# 278297

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/15/2016 Vehicle# 751 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 1003  
Destination Grid  
PO  
Profile ASB119460MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/15/2016 11:55:00	Scale	LThoreson		Tare	159100 lb
Out	11/15/2016 12:22:52	Scale	LThoreson		Net	51900 lb
					Tons	107200 lb
						53.60

Comments HONEYWELL SPECIALTY MATERIALS LLC  
63102 M26  
TORCH LAKE TWP

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Ash Friable-Tons-A 100		53.60	Tons				HOUGHMI
2 EVF-L-Standard Env 100		1	Load				HOUGHMI

Total Tax  
Total Ticket

409WM-N  
Driver's Signature





# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

#109

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07922</b>		Elevation _____ North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <del>53102 M-26, TORCH LAKE TWP, MI 49045</del> <b>1985 Douglas Dr. North, MN10-132B, Golden Valley, MN 55423</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-26, TORCH LAKE TWP, MI 49045</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-0595</b>	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b> <del>906-883-4770</del>	
4. Name and Address of Responsible Agency <del>Industrial Division Asbestos Program</del> <b>State of Michigan Region 1 Headquarters</b> <del>520 Lafayette Rd N, St. Paul, MN 55105-1404</del> <b>1990 US Highway 41 South, South Marquette, MI</b>							
5. Description of Materials <b>Friable Asb</b>						6. Containers No. Type <b>2 TR</b>	
friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		7. Total Quantity yd3 <b>40</b>	
non-friable asbestos				Cat I _____ Cat II _____		<b>(51.12 Ton)</b>	
8. Special Handling Instructions and Additional Information <b>24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL. MUST BE BURIED</b>							
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 <b>DOUGLAS SAUGH</b>				Signature <i>[Signature]</i> <b>(as an agent for Honeywell)</b>		Date <b>11/15/16</b>	
10. Transporter 1 Company Name <b>BEP CO. INC.</b> Complete Mailing Address <b>55670 M-26</b> <b>CALUMET, MI 49913</b> Telephone Number (including area code) <b>926-337-2217</b>				Driver Signature <i>[Signature]</i> Printed Name and Title <b>Breg Tchida Driver</b> Date <b>11-15-16</b>			
11. Transporter 2 Company Name <b>DOT 766806</b> Complete Mailing Address _____ Telephone Number (including area code) _____				Driver Signature _____ Printed Name and Title _____ Date _____			
12. Discrepancy 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.							
Printed/Typed Name and Title <b>Kinda Hursin Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-15-16</b>	



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261063

Original  
Ticket# 278307

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier EBCONTRACTING B&B CONTRACTING  
Ticket Date 11/15/2016 Vehicle# 109 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107922  
Destination Grid  
Profile ASB11946AMI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/15/2016 15:09:10	Scale	LThoreson		Tare	157020 lb
Out	11/15/2016 16:10:54	Scale	LThoreson		Net	54780 lb
					Tons	102240 lb
						51.12

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LDX	Qty	UDM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		51.12	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

Total Tax  
Total Ticket

403WM-N  
Driver's Signature



# WASTE SHIPMENT RECORD / ASBESTOS MANIFEST

(See Reverse for Instructions)

#750

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107923</b>		Elevation North _____ East _____	
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <del>53102 M-28, TORCH LAKE TWP, MI 49045</del> <b>1985 Douglas Dr. North, MN 10-132B, Golden Valley, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49045</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-8585</b>	
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b> <del>800-883-4778</del>	
Transporter	4. Name and Address of Responsible Agency <b>STATE OF Michigan Region 1 Headquarters</b> <b>Industrial Division Asbestos Program</b> <b>520 Lafayette Rd N, St. Paul, MN 55105-4124</b> <b>1990 US Highway 41 South, South Marquette, MI 49885</b>							
	5. Description of Materials <b>Friable Asb</b>				6. Containers No. Type		7. Total Quantity yd3	
	friable asbestos		RQ, NA2212, Asbestos, 9, PGIII		2 TR		40	
	non-friable asbestos		Cat I _____ Cat II _____				(53.92 Tons)	
	8. Special Handling Instructions and Additional Information 24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED							
Disposal Site	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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11/15/16</b>	
	10. Transporter 1 Company Name <b>JIM WENDEN - MI SOUTH</b>				Driver Signature <i>[Signature]</i>			
	Complete Mailing Address <b>W 7158 UPPER PINE CREEK RD</b> <b>IDAOW MI MI 49801</b>				Printed Name and Title <b>Owner</b>			
	Telephone Number (including area code) <b>906 774 2164</b>				Date <b>11-15-16</b>			
Disposal Site	11. Transporter 2 Company Name				Driver Signature			
	Complete Mailing Address				Printed Name and Title			
	Telephone Number (including area code)				Date			
12. Discrepancy 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.								
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-15-10</b>		



11261059

K3W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3304

Original  
Ticket# 278308

Customer Naam TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/15/2016 Vehicle# 750 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107923 Grid  
Destination  
PO  
Profile ASB119469MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/15/2016 15:26:11	Scale	LThoreson		Tare	159680 lb
Out	11/15/2016 16:04:25	Scale	LThoreson		Net	51840 lb
					Tons	107840 lb
Comments						53.92
HONEYWELL SPECIALTY MATERIALS LLC						
53102 M26						
TORCH LAKE TWP						

Product	LDZ	Qty	UDM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		53.92	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

Total Tax  
Total Ticket

Driver's Signature





# WASTE SHIPMENT RECORD / ASBESTOS MANIFEST

(See Reverse for Instructions)

#751

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07924</b>		Elevation North _____ East _____	
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <del>53102 M-28, TORCH LAKE TWP, MI 49945</del> <b>1985 Douglas Dr. North MN10-132B Golden Valley, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49945</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-8585</b>	
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49953</b>						WDS Phone Number <b>906-783-3504</b> <del>800-869-4778</del>	
Transporter	4. Name and Address of Responsible Agency <del>Industrial Division Asbestos Program</del> <b>STATE OF Michigan Region 1 Headquarters</b> <del>525 Lafayette Rm N, St. Paul, MN 55455-1184</del> <b>1990 US Highway 41 South South Marquette, MI 49855</b>							
	5. Description of Materials <b>Friable Asb</b>				6. Containers No. Type		7. Total Quantity yd3	
	friable asbestos		RQ, NA2212, Asbestos, 9, PGIII		2 TR		40	
	non-friable asbestos		Cat I _____ Cat II _____				(53.57 tons)	
	8. Special Handling Instructions and Additional Information 24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED							
Disposal Site	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 <b>Douglas Smith</b>				Signature <i>[Signature]</i>		Date <b>11/15/16</b>	
	10. Transporter 1 Company Name <b>Oh Wender &amp; Sons</b>				Driver Signature <i>[Signature]</i>			
	Complete Mailing Address <b>W7158 UPPER PINE CREEK MICHIGAN</b>				Printed Name and Title <b>JOE WENDER</b>			
	Telephone Number (including area code) <b>906-774-2164</b>				Date <b>11/15/16</b>			
Disposal Site	11. Transporter 2 Company Name				Driver Signature			
	Complete Mailing Address				Printed Name and Title			
	Telephone Number (including area code)				Date			
12. Discrepancy 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.								
Printed/Typed Name and Title <b>Linda Thoresen Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-15-16</b>		



11261066

K&W Landfill  
11877 HWY 30  
Ontonagon, MI, 49953  
Ph: 906-883-3504

Original  
Ticket# 278309

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JINWENDERSONS Jim Wender & Sons  
Ticket Date 11/15/2016 Vehicle# 751 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route# Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107924 Grid  
PG  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELL SPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/15/2016 15:47:38	Scale	LThoreson		Tare	158980 lb
Out	11/15/2016 16:24:05	Scale	LThoreson		Net	51840 lb
					Tons	107140 lb
Comments:						53.57
HONEYWELL SPECIALTY MATERIALS LLC						
53102 M26						
TORCH LAKE TWP						

Product	LOX	Qty	UOM	Rate	Tax	Amount	Origin
1	Asb Friable-Tons-A	100	53.57	Tons			HOU6MI
2	EVF-L-Standard Env	100	1	Load			HOU6MI

Total Tax  
Total Ticket

Driver's Signature



# WASTE SHIPMENT RECORD / ASBESTOS MANIFEST

(See Reverse for Instructions)

# 750

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>	NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	WSR Number <b>107925</b>	Elevation _____ North _____ East _____							
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49945</b> <b>1785 Douglas Drive North</b> <b>MN10-1328</b> <b>GOLDEN VALLEY, MN 55122</b>			1-C. Generator's Phone Number <b>763-954-5418</b>							
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49945</b>			1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>							
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>			Operator's Phone Number <b>269-375-9505</b>							
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>			WDS Phone Number <b>906-883-3504</b>							
Transporter	4. Name and Address of Responsible Agency <b>STATE of Michigan Region 1 Headquarters</b> <b>Industrial Division Asbestos Program</b> <b>1990 US Highway 41 South</b> <b>South Marquette, MI 49855</b>										
	5. Description of Materials <b>Friable Asb</b>										
	6. Containers No. Type		7. Total Quantity yd3								
	<table border="1"> <tr> <td>friable asbestos</td> <td>RQ, NA2212, Asbestos, 9, PGIII</td> <td>2 TR</td> <td>40</td> </tr> <tr> <td>non-friable asbestos</td> <td>Cat I _____ Cat II _____</td> <td></td> <td></td> </tr> </table>		friable asbestos	RQ, NA2212, Asbestos, 9, PGIII	2 TR	40	non-friable asbestos	Cat I _____ Cat II _____			(52.31 Tons)
	friable asbestos	RQ, NA2212, Asbestos, 9, PGIII	2 TR	40							
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 <b>DOUGLAS SAIGH</b>		Signature <i>[Signature]</i> Date <b>11-16-16</b>									
Disposal Site	10. Transporter 1 Company Name <b>JIM WENDER - OWNER</b>		Driver Signature <i>[Signature]</i>								
	Complete Mailing Address <b>W7158 UPPER Pine Creek Rd</b> <b>IRON MT MICH 49801</b>		Printed Name and Title <b>JIM WENDER OWNER</b>								
	Telephone Number (including area code) <b>906 774 2164</b>		Date <b>11-16-16</b>								
	11. Transporter 2 Company Name		Driver Signature								
	Complete Mailing Address		Printed Name and Title								
Telephone Number (including area code)		Date									
12. Discrepancy 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.											
Printed/Typed Name and Title <b>Linda Horeson Specialist</b>		Signature <i>[Signature]</i>		Date <b>11-16-16</b>							

WHITE - Disposal Site

CANARY - Generator  
(To be mailed by Disposal Site)

PINK - Transporter

GOLD - Generator  
(To be taken prior to disposal)



K&M Landfill  
11677 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261073

Original  
Ticket# 278318

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/16/2016 Vehicle# 750 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107925 Grid  
Destination  
PC  
Profile ASB119469MT (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELL SPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/16/2016 10:12:21	Scale	LThoreson		Tare	156800 lb
Out	11/16/2016 10:39:14	Scale	LThoreson		Net	52180 lb
					Tons	104620 lb
						52.31

Comments: HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		52.31	Tons				HOUGMT
2 EVF-L-Standard Env 100		1	Load				HOUGMT

Total Tax  
Total Ticket

Dr-403WM-N: Signature





# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07926</b>		Elevation _____ North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <del>53102 M-20, TORCH LAKE TWP, MI 49845</del> <b>1785 Douglas Dr. North MN10-132B GOLDEN VALLEY, MN 55122</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-20, TORCH LAKE TWP, MI 49845</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-9595</b>	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b> <del>888-883-3504</del>	
4. Name and Address of Responsible Agency <del>Industrial Division Asbestos Program</del> <del>520 Lafayette Rd N, St. Paul, MN 55155-4104</del> <b>STATE of Michigan Region 1 Headquarters</b> <b>1990 US Highway 41 South</b> <b>South Marquette, MI 49855</b>							
5. Description of Materials <b>Friable Asb</b>						6. Containers	
						No.	Type
friable asbestos						RQ, NA2212, Asbestos, 9, PGIII	
non-friable asbestos						Cat I _____ Cat II _____	
						<b>2 TR</b>	
						<b>40</b>	
						<b>(52.18 Tons)</b>	
8. Special Handling Instructions and Additional Information <b>24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED</b>							
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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	
10. Transporter 1 Company Name <b>Joe Wender</b>				Driver Signature <i>[Signature]</i>			
Complete Mailing Address <b>W7158 UPPER PINE CREEK</b> <b>MICHIGAN</b>				Printed Name and Title <b>JOE WENDER</b>			
Telephone Number (including area code) <b>906 774 2164</b>				Date <b>11/16/16</b>			
11. Transporter 2 Company Name				Driver Signature			
Complete Mailing Address				Printed Name and Title			
Telephone Number (including area code)				Date			
12. Discrepancy 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.							
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	

WHITE - Disposal Site

CANARY - Generator  
(To be mailed by Disposal Site)

PINK - Transporter

GOLD - Generator  
(To be taken prior to disposal)



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261074

Original  
Ticket# 270320

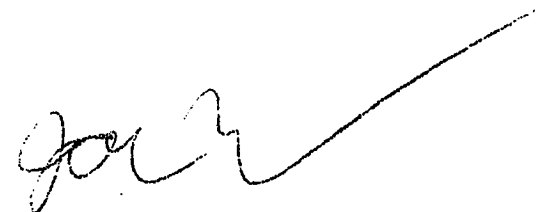
Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/16/2016 Vehicle# 751 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107926  
Destination Grid  
PO  
Profile ASB119460MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 13C-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/16/2016 10:34:39	Scale	LThoresen		Tare	156320 lb
Out	11/16/2016 10:59:14	Scale	LThoresen		Net	51960 lb
					Tons	104360 lb
						52.18

Comments: HONEYWELL SPECIALTY MATERIALS LLC  
53102 MEG  
TORCH LAKE TWP

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		52.18	Tons				HOUGMI
2 EVF-I-Standard Env 100		1	Load				HOUGMI

Total Tax  
Total Ticket

  
Dr. J. J. Wender Signature



# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

#109

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107927</b>		Elevation North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49845</b> <b>1985 Douglas Dr. North</b> <b>MN10-132B</b> <b>GOLDEN VALLEY, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-28, TORCH LAKE TWP, MI 49845</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>268-375-0595</b>	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b>	
4. Name and Address of Responsible Agency <b>STATE OF Michigan Region I Headquarters</b> <b>Industrial Division Asbestos Program</b> <b>1990 US Highway 41 South</b> <b>South Marquette, MI 49855</b>							
5. Description of Materials <b>Friable Asb</b>						6. Containers	
						No. Type	
friable asbestos						2 TR	
non-friable asbestos						40	
						51.2 Tons	
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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	
10. Transporter 1 Company Name <b>B7B CONT.</b> Complete Mailing Address <b>55670 M-26</b> <b>CALUMET, MI 49913</b> Telephone Number (including area code) <b>906-337-0417</b>				Driver Signature <i>[Signature]</i>			
				Printed Name and Title <b>Greg Tchida Driver</b>			
				Date <b>11-16-16</b>			
				Driver Signature			
11. Transporter 2 Company Name <b>D2T 1668136</b> Complete Mailing Address  Telephone Number (including area code)  				Printed Name and Title			
				Date			
				Driver Signature			
				Printed Name and Title			
12. Discrepancy 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.							
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261077

Original  
Ticket# 278322

Customer Name TERRA CONTRACT TERRA CONTRACTI Carrier B&B CONTRACTING B&B CONTRACTING  
Ticket Date 11/16/2016 Vehicle# 103 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000440  
State Waste Code Gen EPA ID  
Manifest 107927  
Destination Grid  
PO  
Profile ASD119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

Time	Scale	Operator	Inbound	Gross	
In 11/16/2016 11:25:07	Scale	LThoreson		Tare	157400 lb
Out 11/16/2016 12:01:05	Scale	LThoreson		Net	55160 lb
				Tons	102240 lb
					51.12

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 HPS  
TORCH LAKE TWP

Product	LDX	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		51.12	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

25 Tickets

Total Tax  
Total Ticket

Dr403WM-Ns Signature





# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

#750

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07928</b>		Elevation North _____ East _____	
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <del>53102 M-26, TORCH LAKE TWP, MI 49845</del> <b>183 Douglas Drive North MN10-132B GOLDEN VALLEY, MN 55422</b>						Generator's Phone Number <b>763-954-5418</b>	
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-26, TORCH LAKE TWP, MI 49845</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>268-375-9595</b>	
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b> <del>888-883-4778</del>	
	4. Name and Address of Responsible Agency <del>Industrial Division Asbestos Program</del> <del>520 Lafayette Rd N, St. Paul, MN 55155-4180</del> <b>State of Michigan, Region 1 Headquarters</b> <b>1990 US Highway 41 South</b> <b>South Marquette, MI 49855</b>							
	5. Description of Materials <b>Friable Asb</b>						6. Containers No. Type	
	friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		2 TR	
	non-friable asbestos				Cat I _____ Cat II _____		40	
	7. Total Quantity yd3 <b>51.25 Tons</b>							
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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>		
Transporter	10. Transporter 1 Company Name <b>JIM WENDLER - W-5009</b>				Driver Signature <i>[Signature]</i>			
	Complete Mailing Address <b>W7156 UPPER PINE CREEK RD</b> <b>Iron MT MIC 4 49801</b>				Printed Name and Title <b>Jim Wendler</b>			
	Telephone Number (including area code) <b>906 774 2160</b>				Date <b>11-16-16</b>			
	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							
	13. Waste Disposal Site Owner or Operator Certification of receipt of asbestos materials covered by this manifest except as noted in Item 12.							
	Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	

WHITE - Disposal Site

CANARY - Generator  
(To be mailed by Disposal Site)

PINK - Transporter

GOLD - Generator  
(To be taken prior to disposal)



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-863-3504

11261082

Original  
Ticket# 270330

Customer Name TERRACONTRACT TERRA CONTRACT Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/16/2016 Vehicle# 750 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107928  
Destination Grid  
PO  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/16/2016 14:03:11	Scale	L Thoreson		Tare	153920 lb
Out	11/16/2016 14:21:50	Scale	L Thoreson		Net	51420 lb
					Tons	102300 lb
						51.23

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Ash Friable-Tons-A 100		51.25	Tons				HOUSMI
2 EVF-L-Standard Env 100		1	Load				HOUSMI

Total Tax  
Total Ticket

Dr402WMN Signature



# WASTE SHIPMENT RECORD / ASBESTOS MANIFEST

(See Reverse for Instructions)

#751

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107929</b>		Elevation _____ North _____ East _____	
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>183 Douglas Dr. North HONEYWELL SPECIALTY MATERIALS, LLC MN10-132B 55102 M-26, TORCH LAKE TWP, MI 49945 GOLDEN VALLEY, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC 53102 M-26, TORCH LAKE TWP, MI 49945</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-9595</b>	
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL 11877 M 38, ONTONAGON, MI 49953</b>						WDS Phone Number <b>906-883-3504</b> <del>906-883-4778</del>	
Transporter	4. Name and Address of Responsible Agency <b>STATE OF Michigan Region 1 Headquarters Industrial Division Asbestos Program 1990 US Highway 41 South 520 Lafayette Rd N, St Paul, MN 55155-4194 South Marquette, MI 49855</b>							
	5. Description of Materials <b>Friable Asb</b>				6. Containers No. Type		7. Total Quantity yd3	
	friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		2 TR 40	
	non-friable asbestos				Cat I _____ Cat II _____		52.27 Tons	
	8. Special Handling Instructions and Additional Information 24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED							
Disposal Site	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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>	
	10. Transporter 1 Company Name <b>Jim Wender &amp; SONS</b>				Driver Signature <i>[Signature]</i>			
	Complete Mailing Address <b>W7158 UPPER PINE CREEK</b>				Printed Name and Title <b>JOE WENDER</b>			
	Telephone Number (including area code) <b>906 774 2164</b>				Date <b>11/16/16</b>			
Disposal Site	11. Transporter 2 Company Name				Driver Signature			
	Complete Mailing Address				Printed Name and Title			
	Telephone Number (including area code)				Date			
12. Discrepancy 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								
Printed/Typed Name and Title <b>Operations Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-16-16</b>		



K&W Landfill  
11077 HWY 30  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261085

Original  
Ticket# 278331

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier JIMWENDERSONS Jim Wender & Sons  
Ticket Date 11/16/2016 Vehicle# 751 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107929  
Destination Grid  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELL SPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/16/2016 14:23:51	Scale	LThoreson		Tare	156420 lb
Out	11/16/2016 14:44:46	Scale	LThoreson		Net	51880 lb
					Tons	104540 lb
						52.27

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LDZ	Qty	UOM	Rate	Tax	Amount	Origin
1 Ash Friable-Tons-A 100		52.27	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

Total Tax  
Total Ticket

Dr403WM-NS Signature





# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07930</b>		Elevation North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>1725 Douglas Dr. North, HONEYWELL SPECIALTY MATERIALS, LLC MN10-132B 55422 GOLDEN VALLEY, MN</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC 53102 M-26, TORCH LAKE TWP, MI 48945</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC PO BOX 127, BARK RIVER, MI 48807</b>						Operator's Phone Number <b>269-375-9595</b>	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL 11877 M 38, ONTONAGON, MI 49853</b>						WDS Phone Number <b>906-883-3504</b> <del>888-883-4778</del>	
4. Name and Address of Responsible Agency <b>STATE OF Michigan Region 1 Headquarters Industrial Division Asbestos Program 1990 US Highway 41 South 520 Lafayette Rd N, St. Paul, MN 55155-4184 South Marquette, MI 49855</b>							
5. Description of Materials <b>Friable Asb</b>						6. Containers No. Type	
friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		7. Total Quantity yd3	
non-friable asbestos				Cat I _____ Cat II _____		2 TR 40	
8. Special Handling Instructions and Additional Information 24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL. MUST BE BURIED						(46.61 Tons)	
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 <b>DOUGLAS SAIKH</b>				Signature <i>[Signature]</i>		Date <b>11-17-16</b>	
10. Transporter 1 Company Name <b>BFB COWI.</b>				Driver Signature <i>[Signature]</i>			
Complete Mailing Address <b>55670 M-26 CALUMET, MI</b>				Printed Name and Title <b>GREG TCHIDA Driver</b>			
Telephone Number (including area code) <b>906-337-0817</b>				Date <b>11-17-16</b>			
11. Transporter 2 Company Name <b>DVT 1668136</b>				Driver Signature			
Complete Mailing Address				Printed Name and Title			
Telephone Number (including area code)				Date			
12. Discrepancy 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.							
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-17-16</b>	



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-883-3504

11261101  
Original  
Ticket# 278345

Customer Name TERRACONTRACT TERRA CONTRACTI  
Ticket Date 11/17/2016  
Payment Type Credit Account  
Manual Ticket#  
Hauling Ticket#  
Route  
State Waste Code  
Manifest 107930  
Destination  
PU  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/17/2016 10:47:02	Scale	L.Thoreson		Tare	147860 lb
Out	11/17/2016 11:18:02	Scale	L.Thoreson		Net	54640 lb
					Tons	93220 lb
Comments						46.61
HONEYWELL SPECIALTY MATERIALS LLC						
53102 M26						
TORCH LAKE TWP						

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		46.61	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

*[Handwritten Signature]*

Total Tax  
Total Ticket

Driver's Signature  
403WM-N



# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

#109

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107931</b>		Elevation _____ North _____ East _____										
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>1705 Douglas Dr. North HONEYWELL SPECIALTY MATERIALS, LLC MN10-132B 53102 M-28, TORCH LAKE TWP, MI 49945 Golden Valley, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>										
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC 53102 M-28, TORCH LAKE TWP, MI 49945</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>										
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-9595</b>										
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL 11877 M 38, ONTONAGON, MI 49953</b>						WDS Phone Number <b>906-883-3504</b> <del>800-983-1726</del>										
	4. Name and Address of Responsible Agency <b>Industrial Division Asbestos Program 520 Lafayette Rd N, St. Paul, MN 55155-4194</b>																
	5. Description of Materials <b>Friable Asb</b>																
	6. Containers				7. Total Quantity												
	<table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>yd3</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>TR</td> <td>40</td> </tr> <tr> <td colspan="2"></td> <td>(48.70 tons)</td> </tr> </tbody> </table>				No.	Type	yd3	2	TR	40			(48.70 tons)				
	No.	Type	yd3														
2	TR	40															
		(48.70 tons)															
8. Special Handling Instructions and Additional Information <b>24 HOUR NOTICE GIVEN PRIOR TO DISPOSAL, MUST BE BURIED</b>																	
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 <b>DOUGLAS SAIGH</b>				Signature <i>[Signature]</i>		Date <b>11-18-16</b>											
Transporter	10. Transporter 1 Company Name <b>B&amp;B CART.</b>				Driver Signature <i>[Signature]</i>												
	Complete Mailing Address <b>55670 M-26 Calomet, MI 49913</b>				Printed Name and Title <b>Brian Tchida Driver</b>												
	Telephone Number (including area code) <b>906-337-0017</b>				Date <b>11-17-18</b>												
	11. Transporter 2 Company Name <b>DOT 1668136</b>				Driver Signature												
Disposal Site	Complete Mailing Address				Printed Name and Title												
	Telephone Number (including area code)				Date												
	12. Discrepancy 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.																	
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-18-16</b>											



K&W Landfill  
11877 HWY 38  
Ontonagon, MI, 49953  
Ph: 906-083-3504

11261122

Original  
Ticket# 270367

Customer Name TERRACONTRACT TERRA CONTRACT Carrier BBCONTRACTING B&B CONTRACTING  
Ticket Date 11/18/2016 Vehicle# 109 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107931  
Destination Grid  
PO  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	11/18/2016 11:02:33	Scale	LThoreson		Tare	152880 lb
Out	11/18/2016 11:38:28	Scale	LThoreson		Net	55480 lb
					Tons	97400 lb

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LD%	Qty	UCM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		48.70	Tons				HOU6MI
2 EVF-L-Standard Env 100		1	Load				HOU6MI

*Handwritten signature: J. J. Chade*

Total Tax  
Total Ticket

Dr. J. J. Chade Signature



# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>07932</b>		Elevation _____ North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC 1985 Douglas Dr N 53102 M-26, TORCH LAKE TWP, MI 49845 MN 10-1328 Golden Valley, MN 55422</b>						1-C. Generator's Phone Number <b>763-954-5418</b>	
1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC 53102 M-26, TORCH LAKE TWP, MI 49845</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC PO BOX 127, BARK RIVER, MI 49807</b>						Operator's Phone Number <b>269-375-9595</b>	
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL 11877 M 38, ONTONAGON, MI 49953</b>						WDS Phone Number <b>906-883-3504</b> <del>800-883-4770</del>	
4. Name and Address of Responsible Agency <b>State of Michigan Regional Headquarters Industrial Division Asbestos Program 1990 US Highway 41 South 520 Lafayette Rd N, St. Paul, MN 55155-4104 South Marquette, MI 49855</b>							
5. Description of Materials <b>Friable Asb</b>						6. Containers No. Type	
friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		40 yd <sup>3</sup>	
non-friable asbestos				Cat I _____ Cat II _____		<b>49.46 Tons</b>	
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 <b>Krist L. Cunningham, Site Lead</b>				Signature <i>[Signature]</i>		Date <b>11/29/16</b>	
10. Transporter 1 Company Name <b>BEB CONT.</b>				Driver Signature <i>[Signature]</i>			
Complete Mailing Address <b>55670 M-26 CANMET, MI 49913</b>				Printed Name and Title <b>Greg Tchida</b>			
Telephone Number (including area code) <b>906-337-0017</b>				Date <b>11-29-16</b>			
11. Transporter 2 Company Name <b>DOT: 1668136</b>				Driver Signature			
Complete Mailing Address				Printed Name and Title			
Telephone Number (including area code)				Date			
12. Discrepancy 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.							
Printed/Typed Name and Title <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>11-29-16</b>	

WHITE - Disposal Site

CANARY - Generator  
(To be mailed by Disposal Site)

PINK - Transporter

GOLD - Generator  
(To be taken prior to disposal)



K&W Landfill  
11077 HWY 30  
Duttonagon, MI, 49953  
Ph: 906-883-3504

Original 11261239  
Ticket# 878487

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier BDCONTRACTING B&B CONTRACTING  
Ticket Date 11/29/2016 Vehicle# 109 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000449  
State Waste Code Gen EPA ID  
Manifest 107932 Grid  
PO  
Profile ASB119464MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELL SPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	154500 lb
In	11/29/2016 12:12:21	Scale	LThoreson		Tare	55660 lb
Out	11/29/2016 12:53:46	Scale	LThoreson		Net	98920 lb
					Tons	49.46

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Ash Friable-Tons-A 100		49.46	Tons				HOUGMI
2 EVF-L-Standard Env 100		1	Load				HOUGMI

*BT Chida*

Total Tax  
Total Ticket

Driver's Signature  
403WM-N



# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

Generator	1-A. Special Waste Profile Number <b>ASB119468MI</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107933</b>		Elevation _____ North _____ East _____	
	1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-26, TORCH LAKE TWP, MI 49945</b> <i>1985 Douglas Dr North MN 10-130 B Golden Valley, MN 55422</i>						1-C. Generator's Phone Number <b>763-954-5418</b>	
	1-D. Work Site Address <b>HONEYWELL SPECIALTY MATERIALS, LLC</b> <b>53102 M-26, TORCH LAKE TWP, MI 49945</b>						1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>	
	2. Operator's Name and Complete Mailing Address <b>TERRA CONTRACTING SERVICES, LLC</b> <b>PO BOX 127, BARK RIVER, MI 49907</b>						Operator's Phone Number <b>289-375-9595</b>	
	3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W LANDFILL</b> <b>11877 M 38, ONTONAGON, MI 49953</b>						WDS Phone Number <b>906-883-3504</b> <del>800-883-1778</del>	
	4. Name and Address of Responsible Agency <b>State of MI Regional Headquarters</b> <b>Industrial Division Asbestos Program</b> <b>520 Lafayette Rd N, St. Paul, MN 55155-4184</b> <i>1990 US Highway 41 South South Marguette, MI 49855</i>							
	5. Description of Materials <b>Friable Asb</b>				6. Containers No. Type		7. Total Quantity yd3	
	friable asbestos				RQ, NA2212, Asbestos, 9, PGIII		1 T 15	
	non-friable asbestos				Cat I _____ Cat II _____		(20.62 tons)	
	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 <i>Asbestos</i> <b>Kurt L. Cunningham, CIB</b>				Signature <i>[Signature]</i>		Date <b>12/1/16</b>		
Transporter	10. Transporter 1 Company Name <b>B&amp;C CONTRACTING</b>				Driver Signature <i>[Signature]</i>			
	Complete Mailing Address <b>55670 M-26</b> <b>CALUMET, MI 49913</b>				Printed Name and Title <b>Brian Matron</b>			
	Telephone Number (including area code) <b>(906) 337-0017</b>				Date <b>12/1/16</b>			
	11. Transporter 2 Company Name				Driver Signature			
Disposal Site	Complete Mailing Address				Printed Name and Title			
	Telephone Number (including area code)				Date			
	12. Discrepancy 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.							
Printed/Typed Name and Title <b>Linda Thoresen Specialist</b>				Signature <i>[Signature]</i>		Date <b>12-1-16</b>		



K&W Landfill  
11877 HWY 30  
Ontonagon, MI, 49953  
Ph: 906-883-3504

Original **11261279**  
Ticket# 275527

Customer Name TERRACONTRACT TERRA CONTRACTI Carrier BBContracting B&B CONTRACTING  
Ticket Date 12/01/2016 Vehicle# 109 Volume  
Payment Type Credit Account Container  
Manual Ticket# Driver  
Hauling Ticket# Check#  
Route Billing # 0000447  
State Waste Code Gen EPA ID  
Manifest 107933  
Destination Grid  
PO  
Profile ASB119468MI (FRIABLE ASBESTOS CONTAMINATED SOIL)  
Generator 136-HONEYWELLSPEC HONEYWELL SPECIALTY MATERIALS LLC

	Time	Scale	Operator	Inbound	Gross	
In	12/01/2016 12:02:37	Scale	L.Thoreson		Tare	71620 lb
Out	12/01/2016 12:13:05	Scale	L.Thoreson		Net	30380 lb
					Tons	41240 lb
						20.62

Comments HONEYWELL SPECIALTY MATERIALS LLC  
53102 M26  
TORCH LAKE TWP

Product	LIX	Qty	UOM	Rate	Tax	Amount	Origin
1 Asb Friable-Tons-A 100		20.62	Tons				HOUHMI
2 EVF-L-Standard Env 100		1	Load				HOUHMI

Total Tax  
Total Ticker

Driver's Signature  
403WM-N





# WASTE SHIPMENT RECORD/ASBESTOS MANIFEST

(See Reverse for Instructions)

For Disposal Site Use Only

1-A. Special Waste Profile Number <b>120107MI</b> <b>ASB119468MI</b> <b>see Box 12</b>		NESHAP Notified <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		WSR Number <b>107934</b>		Elevation _____ North _____ East _____	
1-B. Generator Name, Contact Name, and Complete Mailing Address (including Zip Code) <b>Honeywell Specialty Materials, LLC</b> <b>1985 Douglas Dr. North MN10-132B</b> <b>Golden Valley, MN 55422</b>					1-C. Generator's Phone Number <b>763-954-5418</b>		
1-D. Work Site Address <b>Honeywell Specialty Materials, LLC</b> <b>63102 M-26</b> <b>Torch Lake TWP, MI 49945</b>					1-E. 24 Hour Emergency Response Telephone Number <b>763-954-5418</b>		
2. Operator's Name and Complete Mailing Address <b>Terra Contracting Services, LLC</b> <b>5100 West Michigan Avenue</b> <b>Kalamazoo, MI 49006</b>					Operator's Phone Number <b>269-375-9595</b>		
3. Waste Disposal Site (WDS) Name and Complete Mailing Address <b>K&amp;W Landfill</b> <b>11877 State Highway M38, Ontonagon, MI 49953</b>					WDS Phone Number <b>906-883-3504</b>		
4. Name and Address of Responsible Agency <b>State of Michigan, Region 1 Headquarters</b> <b>1990 US Highway 41 South</b> <b>South Marquette, MI 49855</b>							
5. Description of Materials <b>Non-Friable Asbestos</b>						6. Containers No. Type	
friable asbestos				RD, NA2212, Asbestos, 9, PDI		1 TR 10 (1.35 Tons)	
non-friable asbestos				Cat I _____ Cat II <b>X</b>		1 TR 10 (1.35 tons)	
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 <b>Kurt L. Cunningham, as agent</b>				Signature (as an agent for Honeywell) <i>[Signature]</i>		Date <b>12/09/2016</b>	
10. Transporter 1 Company Name <b>WM Houghton 406721</b>  Complete Mailing Address <b>1108 Enterprise Drive</b> <b>Houghton, MI 49931</b>  Telephone Number (including area code) <b>906-482-4575</b>					Driver Signature <i>[Signature]</i>  Printed Name and Title <b>Jim Phippen DRIVER</b>  Date <b>12/09/2016</b>		
11. Transporter 2 Company Name  Complete Mailing Address   Telephone Number (including area code)					Driver Signature   Printed Name and Title  Date		
12. Discrepancy Indication Space <b>Corrected Profile #120107MI</b> <b>Incorrect Profile Used - Material Managed as Non-Friable</b>							
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 <b>Linda Thoreson Specialist</b>				Signature <i>[Signature]</i>		Date <b>12-9-16</b>	

Douglas

# WASTE RECORD / ASBESTOS MANIFEST

Number <b>07ME</b>		NESHAP ified YES <input type="checkbox"/> NO <input type="checkbox"/>	WSR Number <b>88181</b>	For Disposal Site Use Only Elevation _____ North _____ East _____	
Contact Name, and Complete Mailing Address (including Zip Code) <b>Asbestos Materials, LLC P.O. Box 1010 Golden Valley, MN 55422</b>				1-C Generator's Phone Number <b>(763) 954-5418</b>	
Complete Mailing Address <b>PO Box 1010 Kalamazoo, MI 49006</b>				1-E 24 Hour Emergency Response Telephone Number <b>(763) 954-5418</b>	
Complete Mailing Address <b>Highway M38, Ontonagon, MI 49953</b>				Operator's Phone Number <b>(269) 375-9595</b>	
Responsible Agency <b>Region 1 Headquarters South, South Marquette, MI 49855</b>				WDS Phone Number <b>(906) 883-3504</b>	
Non-Fr ble Asbestos		6. Containers No. Type		7. Total Quantity yd3 <b>2.30 Tons 20 yds</b>	
RO, NA2212, Asbestos, 9, PGIII		Cat I Cat II			
OR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipper, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international regulations. I hereby certify that the asbestos is not contaminated with hazardous, PCB, and/or any special waste.					
Signature <b>William C. P...</b>		Signature <b>Charles Im Ouel</b>		Date <b>4/28/17</b>	
Name <b>William C. P...</b>		Or <b>Charles Im Ouel</b>			
Area code <b>90</b>		Printed Name and Title <b>Charles Im Ouel</b>			
Phone <b>883-3504</b>		Date <b>5-1-2017</b>			
Name		Driver Signature			
Area code		Printed Name and Title			
Space		Date			
Owner or Operator		Signature <b>Janet K...</b>		Date <b>5-1-17</b>	
Receipt of asbestos materials covered by this manifest		Signature		Date	
Disposal Site <b>CANARY - General (To be mailed by Disposal Site)</b>		PINK Transport		GOLD - Generator (To be taken prior to disposal)	

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**APPENDIX E**

Laboratory Analytical Results



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272166

**Date Received:** 11/04/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/9/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161102	635.7	0	100	<7.00	<0.00423	0.00423	N/A	N/A
002	AB02-161102	342.3	0	100	<7.00	<0.00786	0.00786	N/A	N/A
003	AB03-161102	647.57	0	100	<7.00	<0.00415	0.00415	N/A	N/A
004	AB04-161102	1179.75	1	100	<7.00	<0.00228	0.00228	N/A	N/A
005	ABMU-161102	491.31	1	100	<7.00	<0.00548	0.00548	N/A	N/A
006	ABNP-161102	833.04	0	100	<7.00	<0.00323	0.00323	N/A	N/A
007	FB01-161102	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161102	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

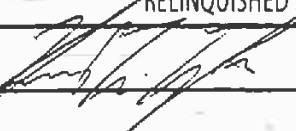
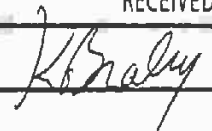
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Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email: kurt.cunningham@amechfw.com
Account #:	E-mail: kurt.cunningham@amechfw.com	Project ID: 3293161676	<input type="checkbox"/> Other: _____
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 11/2/16	P.O. Number: C012904340	

RELINQUISHED BY: 	DATE & TIME: 11/3/16 1200	VIA: Fed Ex	RECEIVED BY: 	DATE & TIME: 11/4/16 10:30
---	---------------------------	-------------	---	----------------------------

Lab No. 272164  
☒ Accept ☐ Reject

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
	AB01-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	635.7	<i>Only analyze with TEM if fibers identified on PCM.</i>
	AB02-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	342.3	
	AB03-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	647.57	
	AB04-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	1179.75	
	ABMU-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	491.31	
	ABNP-161102	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	833.04	
	FB01-161102	<input checked="" type="checkbox"/>	CSMS-R01	Field Blank open		
	FB02-161102	<input checked="" type="checkbox"/>	CSMS-R01	Field Blank closed		
		<input type="checkbox"/>	<input type="checkbox"/>			

FEDEX



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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272394

**Date Received:** 11/08/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/11/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161103	768.92	1	100	<7.00	<0.00350	0.00350	N/A	N/A
002	AB02-161103	790	1	100	<7.00	<0.00341	0.00341	N/A	N/A
003	AB03-161103	1051.28	1	100	<7.00	<0.00256	0.00256	N/A	N/A
004	AB04-161103	388.62	0	100	<7.00	<0.00692	0.00692	N/A	N/A
005	ABMU-161103	1024.89	1	100	<7.00	<0.00262	0.00262	N/A	N/A
006	ABNP-161103	1410.38	1.5	100	<7.00	<0.00191	0.00191	N/A	N/A
007	FB01-161103	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161103	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 484-5502	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email: _____
Account #:		E-mail: kurt.cunningham@amectw.com	Project ID: 3293161676	<input type="checkbox"/> Other: _____
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/3/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>[Signature]</i>	11/4/16 1700	Fed Ex	<i>K. Braley</i>	11/8/16 9:30

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
	AB01-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	768.92	Only analyze with TEM if fibers identified on PCM.
2	AB02-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	790.00	Volumes are in liters
3	AB03-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	1051.28	
4	AB04-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	388.62	
5	ABMU-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	1024.89	
6	ABNP-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Perimeter Air Sample	1410.38	
7	FB01-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161103	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9						
10						

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package 'Hold for Saturday Pickup'

Please Note - UPS and USPS are **NOT** available for Saturday Delivery



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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272392

**Date Received:** 11/08/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/11/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161104	1487.32	2	100	<7.00	<0.00181	0.00181	N/A	N/A
002	AB02-161104	437.72	0	100	<7.00	<0.00615	0.00615	N/A	N/A
003	AB03-161104	1035.25	4	100	<7.00	<0.00260	0.00260	N/A	N/A
004	AB04-161104	361.68	1	100	<7.00	<0.00744	0.00744	N/A	N/A
005	ABMU-161104	1173.41	1.5	100	<7.00	<0.00229	0.00229	N/A	N/A
006	ABNP-161104	819.95	3	100	<7.00	<0.00328	0.00328	N/A	N/A
007	FB01-161104	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161104	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.


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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <u>kcunningham@amecflw.com</u>
Account #:		E-mail: kurt.cunningham@amecflw.com	Project ID: 3293161676	<input type="checkbox"/> Other _____
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/4/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	11/4/16 1700	Fed Ex	aley	11/8/16 9:3

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161104	<input checked="" type="checkbox"/>	CSMS-R01-	412 minutes at 3.61 lpm	1487.32	Only analyze with TEM if fibers identified on PCM.
2	AB02-161104	<input checked="" type="checkbox"/>	CSMS-R01-	411 minutes at 1.07 lpm	437.72	Volumes are in liters.
3	AB03-161104	<input checked="" type="checkbox"/>	CSMS-R01-	410 minutes at 2.53 lpm	1035.25	
4	AB04-161104	<input checked="" type="checkbox"/>	CSMS-R01-	411 minutes at 0.88 lpm	361.68	
5	ABMU-161104	<input checked="" type="checkbox"/>	CSMS-R01-	411 minutes at 2.86 lpm	1173.41	
6	ABNP-161104	<input checked="" type="checkbox"/>	CSMS-R01-	411 minutes at 2.00 lpm	819.95	
7	FB01-161104	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
3	FB02-161104	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
3		<input type="checkbox"/>				
0		<input type="checkbox"/>				

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

Please Note - UPS and USPS are **NOT** available for Saturday Delivery



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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272483

**Date Received:** 11/09/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161105	475.94	1	100	<7.00	<0.00565	0.00565	N/A	N/A
002	AB02-161105	807.29	2	100	<7.00	<0.00333	0.00333	N/A	N/A
003	AB03-161105	870.43	4	100	<7.00	<0.00309	0.00309	N/A	N/A
004	AB04-161105	1129.76	3	100	<7.00	<0.00238	0.00238	N/A	N/A
005	ABMU-161105	1634.88	3	100	<7.00	<0.00165	0.00165	N/A	N/A
006	ABNP-161105	1280.84	3	100	<7.00	<0.00210	0.00210	N/A	N/A
007	FB01-161105	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161105	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Other _____
Account #:	E-mail: kurt.cunningham@amectw.com	Project ID: 3293161707	
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 11/5/16	PO Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>[Signature]</i>	11/7/16 1700	FedEx	<i>[Signature]</i>	11/8/16 3:47

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attr Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	24- Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	3- Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5- Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
	AB01-161105	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 1.06 lpm	475.94	Only analyze with TEM if fibers identified on PCM.
2	AB02-161105	<input checked="" type="checkbox"/>	CSMS-R01-	451 minutes at 1.79 lpm	807.29	Volumes are in liters.
2	AB03-161105	<input checked="" type="checkbox"/>	CSMS-R01-	451 minutes at 1.93 lpm	870.43	
4	AB04-161105	<input checked="" type="checkbox"/>	CSMS-R01-	451 minutes at 2.51 lpm	1129.76	
5	ABMU-161105	<input checked="" type="checkbox"/>	CSMS-R01-	451 minutes at 3.63 lpm	1634.88	
5	ABNP-161105	<input checked="" type="checkbox"/>	CSMS-R01-	451 minutes at 2.84 lpm	1280.84	
7	FB01-161105	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
3	FB02-161105	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272481

**Date Received:** 11/09/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161107	852.25	1	100	<7.00	<0.00316	0.00316	N/A	N/A
002	AB02-161107	922.32	3	100	<7.00	<0.00292	0.00292	N/A	N/A
003	AB03-161107	512.4	2	100	<7.00	<0.00525	0.00525	N/A	N/A
004	AB04-161107	1159.06	2.5	100	<7.00	<0.00232	0.00232	N/A	N/A
005	ABMU-161107	1760.51	3	100	<7.00	<0.00153	0.00153	N/A	N/A
006	ABNP-161107	1395.26	4	100	<7.00	<0.00193	0.00193	N/A	N/A
007	FB01-161107	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161107	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.



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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email
Account #:		E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/7/16	PO Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	11/7/16 1700	FedEx		11/8/16 347

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
	AB01-161107	<input checked="" type="checkbox"/>	CSMS-R01-	487 minutes at 1.78 lpm	852.25	Only analyze with TEM if fibers identified on PCM.
	AB02-161107	<input checked="" type="checkbox"/>	CSMS-R01-	488 minutes at 1.89 lpm	922.32	Volumes are in liters.
	AB03-161107	<input checked="" type="checkbox"/>	CSMS-R01-	488 minutes at 1.05 lpm	512.40	
	AB04-161107	<input checked="" type="checkbox"/>	CSMS-R01-	487 minutes at 2.38 lpm	1159.06	
5	ABMU-161107		CSMS-R01-	487 minutes at 3.62 lpm	1760.51	
5	ABNP-161107	<input checked="" type="checkbox"/>	CSMS-R01-	487 minutes at 2.87 lpm	1395.26	
	FB01-161107	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
5	FB02-161107	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272589

**Date Received:** 11/10/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161108	502.44	2	100	<7.00	<0.00535	0.00535	N/A	N/A
002	AB02-161108	1404.2	1	100	<7.00	<0.00192	0.00192	N/A	N/A
003	AB03-161108	1762.52	1	100	<7.00	<0.00153	0.00153	N/A	N/A
004	AB04-161108	896.25	0	100	<7.00	<0.00300	0.00300	N/A	N/A
005	ABMU-161108	901.53	1	100	<7.00	<0.00298	0.00298	N/A	N/A
006	ABNP-161108	1125.754	1	100	<7.00	<0.00239	0.00239	N/A	N/A
007	FB01-161108	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161108	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email: <u>                    </u>
Account #:		E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other: <u>                    </u>
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/8/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>[Signature]</i>	11/9/16 1700	FedEx	<i>[Signature]</i>	11/10/16 10:10

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161108	<input checked="" type="checkbox"/>	CSMS-R01-	474 minutes at 1.06 lpm	502.44	Only analyze with TEM if fibers identified on PCM.
2	AB02-161108	<input checked="" type="checkbox"/>	CSMS-R01-	476 minutes at 2.95 lpm	1404.20	Volumes are in liters.
3	AB03-161108	<input checked="" type="checkbox"/>	CSMS-R01-	477 minutes at 3.70 lpm	1762.52	
4	AB04-161108	<input checked="" type="checkbox"/>	CSMS-R01-	478 minutes at 1.88 lpm	896.25	
5	ABMU-161108	<input checked="" type="checkbox"/>	CSMS-R01-	477 minutes at 1.89 lpm	901.53	
6	ABNP-161108		CSMS-R01-	474 minutes at 2.38 lpm	1125.754	
7	FB01-161108	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161108	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272586

**Date Received:** 11/10/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161108	347.8	1	100	<7.00	<0.00773	0.00773	N/A	N/A
002	AB02-161108	1370.05	1	100	<7.00	<0.00196	0.00196	N/A	N/A
003	AB03-161108	867.65	2	100	<7.00	<0.00310	0.00310	N/A	N/A
004	AB04-161108	1050.83	4.5	100	<7.00	<0.00256	0.00256	N/A	N/A
005	ABMU-161108	1025.33	2	100	<7.00	<0.00262	0.00262	N/A	N/A
006	ABNP-161108	1719.9	3	100	<7.00	<0.00156	0.00156	N/A	N/A
007	FB01-161108	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161108	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.


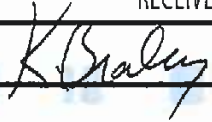
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Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 404-3562	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <u>Kurt.Cunningham@amectw.com</u>
Account #:		E-mail: kurt.cunningham@amectw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/9/16	P.O. Number: C012904340	

RELINQUISHED BY 	DATE & TIME 11/9/16 1700	VIA Fed Ex	RECEIVED BY 	DATE & TIME 11/10/16 10:00
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Lab No. 272586  
Reject

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
Particle ID	NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161108	<input checked="" type="checkbox"/>	CSMS-R01-	470 minutes at 0.74 lpm	347.8	Only analyze with TEM if fibers identified on PCM.
2	AB02-161108	<input checked="" type="checkbox"/>	CSMS-R01-	470 minutes at 2.92 lpm	1370.05	Volumes are in liters.
3	AB03-161108	<input checked="" type="checkbox"/>	CSMS-R01-	469 minutes at 1.85 lpm	867.65	
4	AB04-161108	<input checked="" type="checkbox"/>	CSMS-R01-	466 minutes at 2.26 lpm	1050.83	
5	ABMU-161108		CSMS-R01-	465 minutes at 2.21 lpm	1025.33	
6	ABNP-161108	<input checked="" type="checkbox"/>	CSMS-R01-	468 minutes at 3.68 lpm	1719.90	
7	FB01-161108	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161108	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10						

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272664

**Date Received:** 11/14/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161110	884.47	6	100	7.01	0.00305	0.00304	0.00113	0.00746
002	AB02-161110	1188.07	6	100	7.01	0.00227	0.00226	0.000840	0.00556
003	AB03-161110	1406.4	6	100	7.01	0.00192	0.00191	0.000710	0.00469
004	AB04-161110	1798.65	7	100	8.28	0.00177	0.00150	0.000710	0.00415
005	ABMU-161110	1001.413	6	100	7.01	0.00269	0.00269	0.000997	0.00659
006	ABNP-161110	108.3	7	100	8.28	0.0294	0.0248	0.0118	0.0689
007	FB01-161110	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161110	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG		Cell Phone: (511) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Other _____
Account #:		E-mail: kurt.cunningham@amectw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/10/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	11/13/16 1700	FedEx	R Bradley	11/14/16 10:30

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input checked="" type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	<input type="checkbox"/> Comments / Notes
1	AB01-161110	<input checked="" type="checkbox"/>	CSMS-R01-	482 minutes at 1.84 lpm	884.47	Only analyze with TEM if fibers identified on PCM.
2	AB02-161110	<input checked="" type="checkbox"/>	CSMS-R01-	481 minutes at 2.47 lpm	1188.07	Volumes are in liters.
3	AB03-161110	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 2.93 lpm	1406.40	
4	AB04-161110	<input checked="" type="checkbox"/>	CSMS-R01-	479 minutes at 3.76 lpm	1798.65	
5	ABMU-161110	<input checked="" type="checkbox"/>	CSMS-R01-	478 minutes at 2.10 lpm	1001.413	
6	ABNP-161110	<input checked="" type="checkbox"/>	CSMS-R01-	479 minutes at 2.11 lpm	108.30	
7	FB01-161110	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161110	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272658

**Date Received:** 11/14/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 11/14/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI.

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161111	758.78	0	100	<7.00	<0.00355	0.00355	N/A	N/A
002	AB02-161111	933.18	0	100	<7.00	<0.00288	0.00288	N/A	N/A
003	AB03-161111	858.44	3	100	<7.00	<0.00313	0.00313	N/A	N/A
004	AB04-161111	486.98	2	100	<7.00	<0.00552	0.00552	N/A	N/A
005	ABMU-161111	1701.02	1	100	<7.00	<0.00158	0.00158	N/A	N/A
006	ABNP-161111	1381.65	0	100	<7.00	<0.00195	0.00195	N/A	N/A
007	FB01-161111	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161111	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG		Cell Phone: (517) 404-5562	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Other _____
Account #:		E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date: 11/11/16	PO Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
A. McKeever	11/11/16 11:00	Fedex	K. Bralcy	11/14/16 10:30

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air-AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air-NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air-ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	- Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
<input type="checkbox"/>	AB01-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 1.68 lpm	758.78	Only analyze with TEM if fibers identified on PCM.
2	AB02-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 2.06 lpm	933.18	Volumes are in liters.
3	AB03-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 1.90 lpm	858.44	
4	AB04-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 1.08 lpm	486.98	
5	ABMU-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 3.76 lpm	1701.02	
6	ABNP-161111	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 3.13 lpm	1381.65	
7	FB01-161111	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161111	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

☐ Rush  
☐ Same Day  
☒ 24 -  
☒ 3  
☐

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272884

**Date Received:** 11/17/16

**Received By:** Peyton Awbrey

**Analyst:** Leigh Armstrong

**Date of Report:** 11/18/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161112	998.08	2	100	<7.00	<0.00270	0.00270	N/A	N/A
002	AB02-161112	1077.6	3	100	<7.00	<0.00250	0.00250	N/A	N/A
003	AB03-161112	1154.4	5	100	<7.00	<0.00233	0.00233	N/A	N/A
004	AB04-161112	1471.2	3	100	<7.00	<0.00183	0.00183	N/A	N/A
005	ABMU-161112	1747.2	2	100	<7.00	<0.00154	0.00154	N/A	N/A
006	ABNP-161112	1173.6	4	100	<7.00	<0.00229	0.00229	N/A	N/A
007	FB01-161112	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161112	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst


Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CFS		Cell Phone: (517) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Enthal
Account #:	E-mail: kurt.cunningham@amechw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____	
SAMPLED BY: Name: Ari McKeever	Date: 11/12/16	P.O. Number: C012904340		

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/14/16 12:00	FedEx		11/17/16 10:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161112	<input checked="" type="checkbox"/>	CSMS-R01-	481 minutes at 2.08 lpm	998.08	Only analyze with TEM if fibers identified on PCM.
2	AB02-161112	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 2.25 lpm	1077.60	Volumes are in liters.
3	AB03-161112	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 2.41 lpm	1154.40	
4	AB04-161112		CSMS-R01-	480 minutes at 3.07 lpm	1471.20	
5	ABMU-161112	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 3.64 lpm	1747.20	
6	ABNP-161112	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 2.45 lpm	1173.60	
7	FB01-161112	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161112	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272885

**Date Received:** 11/17/16

**Received By:** Peyton Awbrey

**Analyst:** Leigh Armstrong

**Date of Report:** 11/18/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161114	1440.21	2	100	<7.00	<0.00187	0.00187	N/A	N/A
002	AB02-161114	944.72	3	100	<7.00	<0.00285	0.00285	N/A	N/A
003	AB03-161114	1100.33	5	100	<7.00	<0.00244	0.00244	N/A	N/A
004	AB04-161114	1118.26	0.5	100	<7.00	<0.00241	0.00241	N/A	N/A
005	ABMU-161114	1705.4	0	100	<7.00	<0.00158	0.00158	N/A	N/A
006	ABNP-161114	1035.34	0	100	<7.00	<0.00260	0.00260	N/A	N/A
007	FB01-161114	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161114	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPSC		Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email
Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161676	<input type="checkbox"/> Other	
SAMPLED BY: Name: Ari McKeever	Date: 11/14/2016	P.O. Number:		

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/16/2016	Fedex	[Signature]	11/17/16 10:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM		PLM		TEM		TEM		TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush				
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day				
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour				
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day				
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day				

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161114	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 3.05 lpm	1440.21	Only analyze with TEM if fibers identified on PCM.
2	AB02-161114	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 2.11 lpm	944.72	
3	AB03-161114	<input checked="" type="checkbox"/>	CSMS-R01-	448 minutes at 2.46 lpm	1100.33	
4	AB04-161114	<input checked="" type="checkbox"/>	CSMS-R01-	448 minutes at 2.50 lpm	1118.26	
5	ABMU-161114	<input checked="" type="checkbox"/>	CSMS-R01-	448 minutes at 3.84 lpm	1705.40	
6	ABNP-161114	<input checked="" type="checkbox"/>	CSMS-R01-	448 minutes at 2.31 lpm	1035.34	
7	FB01-161114	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161114	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272881

**Date Received:** 11/17/16

**Received By:** Peyton Awbrey

**Analyst:** Leigh Armstrong

**Date of Report:** 11/18/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161115	2071.296	1	100	<7.00	<0.00130	0.00130	N/A	N/A
002	AB02-161115	1212.516	2	100	<7.00	<0.00222	0.00222	N/A	N/A
003	AB03-161115	1287.603	1	100	<7.00	<0.00209	0.00209	N/A	N/A
004	AB04-161115	1354.347	2	100	<7.00	<0.00199	0.00199	N/A	N/A
005	ABMU-161115	1207.566	3	100	<7.00	<0.00223	0.00223	N/A	N/A
006	ABNP-161115	1732.563	3	100	<7.00	<0.00155	0.00155	N/A	N/A
007	FB01-161115	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161115	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email
Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161676	<input type="checkbox"/> Other

SAMPLED BY: Name: Ari McKeever	Date: 11/15/2016	P.O. Number:
--------------------------------	------------------	--------------

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/16/2016 10:00	Fedex	<i>[Signature]</i>	11/17/16 10:00

REQUESTED SERVICES (Please <input checked="" type="checkbox"/> the Appropriate Boxes)
---

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color <input type="checkbox"/>	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161115	<input checked="" type="checkbox"/>	CSMS-R01-	557 minutes at 3.72 lpm	2071.296	Only analyze with TEM if fibers identified on PCM.
2	AB02-161115	<input checked="" type="checkbox"/>	CSMS-R01-	556 minutes at 2.18 lpm	1212.516	
3	AB03-161115	<input checked="" type="checkbox"/>	CSMS-R01-	556 minutes at 2.315 lpm	1287.603	
4	AB04-161115	<input checked="" type="checkbox"/>	CSMS-R01-	556 minutes at 2.435 lpm	1354.347	
5	ABMU-161115	<input checked="" type="checkbox"/>	CSMS-R01-	551 minutes at 2.19 lpm	1207.566	
	ABNP-161115	<input checked="" type="checkbox"/>	CSMS-R01-	556 minutes at 3.115 lpm	1732.563	
7	FB01-161115	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161115	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 272880

**Date Received:** 11/17/16

**Received By:** Peyton Awbrey

**Analyst:** Leigh Armstrong

**Date of Report:** 11/18/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161116	1450.17	2	100	<7.00	<0.00185	0.00185	N/A	N/A
002	AB02-161116	1703.11	4	100	<7.00	<0.00158	0.00158	N/A	N/A
003	AB03-161116	1129.392	4	100	<7.00	<0.00238	0.00238	N/A	N/A
004	AB04-161116	1128.582	4	100	<7.00	<0.00238	0.00238	N/A	N/A
005	ABMU-161116	943.824	4	100	<7.00	<0.00285	0.00285	N/A	N/A
006	ABNP-161116	925.035	2	100	<7.00	<0.00291	0.00291	N/A	N/A
007	FB01-161116	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161116	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.


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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Account #:	E-mail: kurt.cunningham@amectw.com	Project ID: 3293161676	<input type="checkbox"/> Other _____
SAMPLED BY: Name: Ari McKeever	Date: 11/16/2016	P.O. Number:	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/16/16 17:00	FedEx		11/16/16 10:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161116	<input checked="" type="checkbox"/>	CSMS-R01-	472 minutes at 3.07 lpm	1450.17	Only analyze with TEM if fibers identified on PCM.
2	AB02-161116	<input checked="" type="checkbox"/>	CSMS-R01-	448 minutes at 3.80 lpm	1703.11	
3	AB03-161116	<input checked="" type="checkbox"/>	CSMS-R01-	446 minutes at 2.53 lpm	1129.392	
4	AB04-161116	<input checked="" type="checkbox"/>	CSMS-R01-	445 minutes at 2.53 lpm	1128.582	
5	ABMU-161116	<input checked="" type="checkbox"/>	CSMS-R01-	445 minutes at 2.12 lpm	943.824	
6	ABNP-161116	<input checked="" type="checkbox"/>	CSMS-R01-	446 minutes at 2.075 lpm	925.035	
7	FB01-161116	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161116	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

Quantem Set ID: 272908  
Date Received: 11/18/16  
Received By: Karen Braley  
Analyst: Leigh Armstrong  
Date of Report: 11/21/2016  
Methodology: NIOSH 7400, Issue 2  
AIHA Lab Number: 101352

Client: AMEC NOVI, MI  
Kurt Cunningham  
46850 Magellan Drive Ste 190  
Novi, Michigan 48377

Acct. No.: B894

Project: Former Calumet Stamp Mill  
Location: Lake Linden, MI  
Project No.: 3293161676

Quantem Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161117	962.28	2	100	<7.00	<0.00280	0.00280	N/A	N/A
002	AB02-161117	950.04	1	100	<7.00	<0.00283	0.00283	N/A	N/A
003	AB03-161117	1121.931	3	100	<7.00	<0.00240	0.00240	N/A	N/A
004	AB04-161117	1041.768	3	100	<7.00	<0.00258	0.00258	N/A	N/A
005	ABMU-161117	1644.552	3	100	<7.00	<0.00164	0.00164	N/A	N/A
006	ABNP-161117	1355.61	6	100	7.64	0.00217	0.00198	0.000917	0.00505
007	FB01-161117	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161117	Blank	0	100	N/A	N/A	N/A	N/A	N/A

Authorized Signature: \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <a href="mailto:kurt.cunningham@amectw.com">kurt.cunningham@amectw.com</a>
Account #:	E-mail: kurt.cunningham@amectw.com	Project ID: 3293161676	<input type="checkbox"/> Other _____
SAMPLED BY: Name: Ari McKeever	Date: 11/17/2016	P.O. Number:	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/17/2016 12:00	Fedex	K. Bailey	11/18/16 10:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM		PLM		TEM		TEM		TURNAROUND TIME	
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush					
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day					
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour					
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day					
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day					

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161117	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 2.2 lpm	962.28	Only analyze with TEM if fibers identified on PCM.
2	AB02-161117	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 2.157 lpm	950.04	
3	AB03-161117	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 2.565 lpm	1121.931	
4	AB04-161117	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 2.385 lpm	1041.768	
5	ABMU-161117	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 3.765 lpm	1644.552	
6	ABNP-161117	<input checked="" type="checkbox"/>	CSMS-R01-	438 minutes at 3.095 lpm	1355.61	
7	FB01-161117	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161117	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10						

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273012

**Date Received:** 11/21/16

**Received By:** Jeff Mlekush

**Analyst:** Leigh Armstrong

**Date of Report:** 11/22/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161676

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161118	434	3	100	<7.00	<0.00620	0.00620	N/A	N/A
002	AB02-161118	432	1	100	<7.00	<0.00623	0.00623	N/A	N/A
003	AB03-161118	430	2	100	<7.00	<0.00626	0.00626	N/A	N/A
004	AB04-161118	427	2	100	<7.00	<0.00630	0.00630	N/A	N/A
005	ABMU-161118	427	0	100	<7.00	<0.00630	0.00630	N/A	N/A
006	ABNP-161118	430	2	100	<7.00	<0.00626	0.00626	N/A	N/A
007	FB01-161118	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161118	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3362	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Email <input type="checkbox"/> Other _____
Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161676	<input type="checkbox"/> Other _____

SAMPLED BY: Name: Ari McKeever	Date: 11/18/2016	P.O. Number:
--------------------------------	------------------	--------------

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	11/18/16 17:00	fedex FC	[Signature]	11/20/16 8:00

REQUESTED SERVICES (Please <input checked="" type="checkbox"/> the Appropriate Boxes)
---

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161118	<input checked="" type="checkbox"/>	CSMS-R01-	434 minutes at 3.18 lpm	434	Only analyze with TEM if fibers identified on PCM.
2	AB02-161118	<input checked="" type="checkbox"/>	CSMS-R01-	432 minutes at 2.63 lpm	432	
3	AB03-161118	<input checked="" type="checkbox"/>	CSMS-R01-	430 minutes at 2.615 lpm	430	
4	AB04-161118	<input checked="" type="checkbox"/>	CSMS-R01-	427 minutes at 2.52lpm	427	
5	ABMU-161118	<input checked="" type="checkbox"/>	CSMS-R01-	427 minutes at 3.78 lpm	427	
6	ABNP-161118	<input checked="" type="checkbox"/>	CSMS-R01-	430 minutes at 2.12 lpm	430	
7	FB01-161118	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161118	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
		<input type="checkbox"/>				
10 <sup>9</sup>		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273152

**Date Received:** 11/23/16

**Received By:** Alyssa Lewis

**Analyst:** Leigh Armstrong

**Date of Report:** 11/28/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161121	1057.5	0	100	<7.00	<0.00254	0.00254	N/A	N/A
002	AB02-161121	956.76	1	100	<7.00	<0.00281	0.00281	N/A	N/A
003	AB03-161121	1247.22	1	100	<7.00	<0.00216	0.00216	N/A	N/A
004	AB04-161121	1239.89	1	100	<7.00	<0.00217	0.00217	N/A	N/A
005	ABMU-161121	1466.38	3	100	<7.00	<0.00183	0.00183	N/A	N/A
006	ABNP-161121	1794.78	5.5	100	7.01	0.00150	0.00150	0.000617	0.00358
007	FB01-161121	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161121	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



# ASBESTOS CHAIN OF CUSTODY

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Page 1 of 1

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Lab No. <u>27352</u>	
<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Reject
Report Results ( <input checked="" type="checkbox"/> one box)	
<input type="checkbox"/> QuanTEM Website	
<input checked="" type="checkbox"/> Email <a href="mailto:kurt.cunningham@amecfw.com">kurt.cunningham@amecfw.com</a>	
<input type="checkbox"/> Other _____	

Contact Information		Project Information	
Company: Amec Foster Wheeler	Phone: (248) 313-4008	Project Name: Former Calumet Stamp Mill	
Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	
Account #:	E-mail: <a href="mailto:kurt.cunningham@amecfw.com">kurt.cunningham@amecfw.com</a>	Project ID: 3293161707	
SAMPLED BY: Name: Ari McKeever	Date: 11/21/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>Ari McKeever</i>	11/22/16 17:00	Fedex	<i>A. Jers</i>	11/23/16 12:40

REQUESTED SERVICES (Please <input checked="" type="checkbox"/> the Appropriate Boxes)				
PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation		<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> PCM	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day
	<input checked="" type="checkbox"/> NIOSH 7400			

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161121	<input checked="" type="checkbox"/>	CSMS-R01-	470 minutes at 2.25 lpm	1057.50	Only analyze with TEM if fibers identified on PCM.
2	AB02-161121	<input checked="" type="checkbox"/>	CSMS-R01-	469 minutes at 2.04 lpm	956.76	Volumes are in liters.
3	AB03-161121	<input checked="" type="checkbox"/>	CSMS-R01-	468 minutes at 2.67 lpm	1247.22	
4	AB04-161121	<input checked="" type="checkbox"/>	CSMS-R01-	467 minutes at 2.66 lpm	1239.89	
5	ABMU-161121	<input checked="" type="checkbox"/>	CSMS-R01-	467 minutes at 3.14 lpm	1466.38	
6	ABNP-161121	<input checked="" type="checkbox"/>	CSMS-R01-	468 minutes at 3.84 lpm	1794.78	
7	FB01-161121	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161121	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				



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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273145

**Date Received:** 11/23/16

**Received By:** Alyssa Lewis

**Analyst:** Leigh Armstrong

**Date of Report:** 11/28/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161122	893.37	1.5	100	<7.00	<0.00301	0.00301	N/A	N/A
002	AB02-161122	965.8	1	100	<7.00	<0.00279	0.00279	N/A	N/A
003	AB03-161122	1169.46	1	100	<7.00	<0.00230	0.00230	N/A	N/A
004	AB04-161122	1477.06	1	100	<7.00	<0.00182	0.00182	N/A	N/A
005	ABMU-161122	1654.05	1	100	<7.00	<0.00163	0.00163	N/A	N/A
006	ABNP-161122	1145.37	1	100	<7.00	<0.00235	0.00235	N/A	N/A
007	FB01-161122	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161122	Blank	0.5	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.





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Page 1 of 1

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Lab No. <u>273145</u>	
<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Reject
Report Results ( <input checked="" type="checkbox"/> one box)	
<input type="checkbox"/> QuanTEM Website	
<input checked="" type="checkbox"/> Email <u>kurt.cunningham@amecfw.com</u>	
<input type="checkbox"/> Other _____	

Contact Information		Project Information	
Company: <b>Amec Foster Wheeler</b>	Phone: <b>(248) 313-4008</b>	Project Name: <b>Former Calumet Stamp Mill</b>	
Contact: <b>Kurt L. Cunningham, CPG</b>	Cell Phone: <b>(517) 404-3582</b>	Project Location: <b>Lake Linden, MI</b>	
Account #:	E-mail: <u>kurt.cunningham@amecfw.com</u>	Project ID: <b>3293161707</b>	
SAMPLED BY: Name: <b>Ari McKeever</b>	Date: <b>11/22/16</b>	P.O. Number: <b>C012904340</b>	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<u>A. McKeever</u>	<u>11/22/16 1200</u>	<u>Fedex</u>	<u>A. Yen</u>	<u>11/23/16 1240</u>

REQUESTED SERVICES (Please <input checked="" type="checkbox"/> the Appropriate Boxes)				
PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation		<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> PCM NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161122	<input checked="" type="checkbox"/>	CSMS-R01-	439 minutes at 2.04 lpm	893.37	Only analyze with TEM if fibers identified on PCM.
2	AB02-161122	<input checked="" type="checkbox"/>	CSMS-R01-	439 minutes at 2.20 lpm	965.80	Volumes are in liters.
3	AB03-161122	<input checked="" type="checkbox"/>	CSMS-R01-	438 minutes at 2.67 lpm	1169.46	
4	AB04-161122	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 3.38 lpm	1477.06	
5	ABMU-161122	<input checked="" type="checkbox"/>	CSMS-R01-	437 minutes at 3.79 lpm	1654.05	
6	ABNP-161122	<input checked="" type="checkbox"/>	CSMS-R01-	438 minutes at 2.62 lpm	1145.37	
7	FB01-161122	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161122	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				



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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273335

**Date Received:** 11/30/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/1/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161128	928.68	1	100	<7.00	<0.00290	0.00290	N/A	N/A
002	AB02-161128	909.5	1	100	<7.00	<0.00296	0.00296	N/A	N/A
003	AB03-161128	1629.88	0	100	<7.00	<0.00165	0.00165	N/A	N/A
004	AB04-161128	1060.38	0	100	<7.00	<0.00254	0.00254	N/A	N/A
005	ABMU-161128	1096.5	1	100	<7.00	<0.00245	0.00245	N/A	N/A
006	ABNP-161128	1334.5	0	100	<7.00	<0.00202	0.00202	N/A	N/A
007	FB01-161128	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161128	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



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For Lab Use Only	
Lab No.	273335
<div>Accept</div>	Reject
Report Results (☑ one box)	
<input type="checkbox"/>	Quantem Website
<input checked="" type="checkbox"/>	Email <a href="mailto:kurt.cunningham@amecfw.com">kurt.cunningham@amecfw.com</a>
<input type="checkbox"/>	Other _____

Contact Information			Project Information	
Company: Amec Foster Wheeler	Phone: (248) 313-4008		Project Name: Former Calumet Stamp Mill	
Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3582		Project Location: Lake Linden, MI	
Account #:	E-mail: kurt.cunningham@amecfw.com		Project ID: 3293161707	
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 11/28/16		P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	11/29/16 1700	FedEx		11-30-16 10:00

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

PLM		PLM		TEM		TEM		TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush				
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day				
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour				
<input type="checkbox"/> Gravimetric Preparation	PCM		<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day			
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day				

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161128	<input checked="" type="checkbox"/>	CSMS-R01-	426 minutes at 2.18 lpm	928.68	Only analyze with TEM if fibers identified on PCM.
2	AB02-161128	<input checked="" type="checkbox"/>	CSMS-R01-	425 minutes at 2.14 lpm	909.50	Volumes are in liters.
3	AB03-161128	<input checked="" type="checkbox"/>	CSMS-R01-	425 minutes at 3.84 lpm	1629.88	
4	AB04-161128	<input checked="" type="checkbox"/>	CSMS-R01-	425 minutes at 2.50 lpm	1060.38	
5	ABMU-161128	<input checked="" type="checkbox"/>	CSMS-R01-	425 minutes at 2.58 lpm	1096.50	
6	ABNP-161128	<input checked="" type="checkbox"/>	CSMS-R01-	425 minutes at 3.14 lpm	1334.50	
7	FB01-161128	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161128	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273336

**Date Received:** 11/30/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/1/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161129	983.31	3	100	<7.00	<0.00274	0.00274	N/A	N/A
002	AB02-161129	933.92	2	100	<7.00	<0.00288	0.00288	N/A	N/A
003	AB03-161129	1650.08	1	100	<7.00	<0.00163	0.00163	N/A	N/A
004	AB04-161129	1382.92	1.5	100	<7.00	<0.00195	0.00195	N/A	N/A
005	ABMU-161129	1129.24	1	100	<7.00	<0.00238	0.00238	N/A	N/A
006	ABNP-161129	1126.99	2	100	<7.00	<0.00239	0.00239	N/A	N/A
007	FB01-161129	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161129	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.





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For Lab Use Only	
Lab No.	273336
<input checked="" type="checkbox"/> Accept	<input type="checkbox"/> Reject
Report Results ( <input checked="" type="checkbox"/> one box)	
<input type="checkbox"/> QuanTEM Website	
<input checked="" type="checkbox"/> Email	kurtcunningham@amecfw.com
<input type="checkbox"/> Other	

Contact Information			Project Information		
Company:	Amec Foster Wheeler	Phone:	(248) 313-4008	Project Name:	Former Calumet Stamp Mill
Contact:	Kurt L. Cunningham, CPG	Cell Phone:	(517) 404-3582	Project Location:	Lake Linden, MI
Account #:		E-mail:	kurt.cunningham@amecfw.com	Project ID:	3293161707
SAMPLED BY:	Name: Kurt L. Cunningham, CPG	Date:	11/29/16	P.O. Number:	C012904340

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	11/29/16 1700	Fed Ex		11-30-16 10:00

REQUESTED SERVICES (Please <input checked="" type="checkbox"/> the Appropriate Boxes)									
PLM		PLM		TEM		TEM		TURNAROUND TIME	
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)		<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)		<input type="checkbox"/> Air- AHERA		<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116		<input type="checkbox"/> Rush	
<input type="checkbox"/> 400 Point Count		<input type="checkbox"/> Other		<input checked="" type="checkbox"/> Air- NIOSH 7402		<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield		<input type="checkbox"/> Same Day	
<input type="checkbox"/> 1000 Point Count				<input type="checkbox"/> Air- ISO 10312		<input type="checkbox"/> Dust- Presence / Absence		<input checked="" type="checkbox"/> 24 - Hour	
<input type="checkbox"/> Gravimetric Preparation		PCM		<input type="checkbox"/> Drinking Water- EPA 100.2		<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755		<input type="checkbox"/> 3 - Day	
<input type="checkbox"/> Particle ID		<input checked="" type="checkbox"/> NIOSH 7400		<input type="checkbox"/> Waste Water- EPA 600/4-83-043		<input type="checkbox"/> Other		<input type="checkbox"/> 5 - Day	

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 2.19 lpm	983.31	Only analyze with TEM if fibers identified on PCM.
2	AB02-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 2.08 lpm	933.92	Volumes are in liters.
3	AB03-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 3.68 lpm	1650.08	
4	AB04-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 308 lpm	1382.92	
5	ABMU-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 2.52 lpm	1129.24	
6	ABNP-161129	<input checked="" type="checkbox"/>	CSMS-R01-	449 minutes at 2.51 lpm	1126.99	
7	FB01-161129	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161129	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273485

**Date Received:** 12/05/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/6/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161130	1081.97	2	100	<7.00	<0.00249	0.00249	N/A	N/A
002	AB02-161130	1085.88	3	100	<7.00	<0.00248	0.00248	N/A	N/A
003	AB03-161130	1277.62	4	100	<7.00	<0.00211	0.00211	N/A	N/A
004	AB04-161130	1300.32	4	100	<7.00	<0.00207	0.00207	N/A	N/A
005	ABMU-161130	1852.2	3	100	<7.00	<0.00145	0.00145	N/A	N/A
006	ABNP-161130	1584.38	2	100	<7.00	<0.00170	0.00170	N/A	N/A
007	FB01-161130	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161130	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
------------	------------------------------------	------------------------	--------------------------------------

SAMPLED BY: Name: Ari McKeever	Date: 11/30/16	P.O. Number: C012904340
--------------------------------	----------------	-------------------------

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>Ch. Myers</i>	12/01/2016 17:00	Fedex	<i>K. Bradley</i>	12/5/16 8:00 PM

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161130	<input checked="" type="checkbox"/>	CSMS-R01-	514 minutes at 2.11 lpm	1081.97	Only analyze with TEM if fibers identified on PCM.
2	AB02-161130	<input checked="" type="checkbox"/>	CSMS-R01-	511 minutes at 2.13 lpm	1085.88	Volumes are in liters.
3	AB03-161130	<input checked="" type="checkbox"/>	CSMS-R01-	508 minutes at 2.52 lpm	1277.62	
4	AB04-161130	<input checked="" type="checkbox"/>	CSMS-R01-	504 minutes at 2.58 lpm	1300.32	
5	ABMU-161130	<input checked="" type="checkbox"/>	CSMS-R01-	504 minutes at 3.68 lpm	1852.20	
6	ABNP-161130	<input checked="" type="checkbox"/>	CSMS-R01-	507 minutes at 3.24 lpm	1584.38	
7	FB01-161130	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161130	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273484

**Date Received:** 12/05/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/6/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161201	990.51	1	100	<7.00	<0.00272	0.00272	N/A	N/A
002	AB02-161201	1801.35	0	100	<7.00	<0.00149	0.00149	N/A	N/A
003	AB03-161201	1267.2	0	100	<7.00	<0.00212	0.00212	N/A	N/A
004	AB04-161201	1271.48	1	100	<7.00	<0.00212	0.00212	N/A	N/A
005	ABMU-161201	984.68	1	100	<7.00	<0.00273	0.00273	N/A	N/A
006	ABNP-161201	1516.8	0	100	<7.00	<0.00177	0.00177	N/A	N/A
007	FB01-161201	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161201	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Contact: Kurt L. Cunningham, CRG	Cell Phone: (517) 404-3582	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Enam
Account #:	E-mail: kurt.cunningham@amechw.com	Project ID: 3293161707	<input type="checkbox"/> Other
SAMPLED BY: Name: Ari McKeever	Date: 12/01/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	12/02/16 12:00	FeDEX	K. Cunningham	12/5/16 8:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24- Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3- Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5- Day

	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161201	<input checked="" type="checkbox"/>	CSMS-R01-	482 minutes at 2.06 lpm	990.51	Only analyze with TEM if fibers identified on PCM.
2	AB02-161201	<input checked="" type="checkbox"/>	CSMS-R01-	481 minutes at 3.75 lpm	1801.35	Volumes are in liters.
3	AB03-161201	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 2.72 lpm	1267.20	
4	AB04-161201	<input checked="" type="checkbox"/>	CSMS-R01-	478 minutes at 2.82 lpm	1271.48	
5	ABMU-161201	<input checked="" type="checkbox"/>	CSMS-R01-	478 minutes at 2.06 lpm	984.68	
6	ABNP-161201	<input checked="" type="checkbox"/>	CSMS-R01-	480 minutes at 3.16 lpm	1516.80	
7	FB01-161201	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161201	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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Lab No. 27 2

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273549

**Date Received:** 12/06/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/7/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161202	1789.24	4	100	<7.00	<0.00150	0.00150	N/A	N/A
002	AB02-161202	959.4	1	100	<7.00	<0.00280	0.00280	N/A	N/A
003	AB03-161202	1195.74	4	100	<7.00	<0.00225	0.00225	N/A	N/A
004	AB04-161202	1253.9	0	100	<7.00	<0.00215	0.00215	N/A	N/A
005	ABMU-161202	1473.2	3	100	<7.00	<0.00183	0.00183	N/A	N/A
006	ABNP-161202	989.35	2	100	<7.00	<0.00272	0.00272	N/A	N/A
007	FB01-161202	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161202	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Account #:	Cell Phone: (517) 404-3332	Project ID: 3293161707	<input checked="" type="checkbox"/> Enroll
SAMPLED BY: Name: Ari McKeever	E-mail: kurt.cunningham@amecfw.com	P.O. Number: C012904340	<input type="checkbox"/> Other
Date: 12/02/16			

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Ari McKeever	12/3/16 16:45	Fedex	ally	12-6-16 11:00

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%) - Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<input type="checkbox"/> PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm) - ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161202	<input checked="" type="checkbox"/>	CSMS-R01-	469 minutes at 3.82 lpm	1789.24	Only analyze with TEM if fibers identified on PCM.
2	AB02-161202	<input checked="" type="checkbox"/>	CSMS-R01-	468 minutes at 2.05 lpm	959.40	Volumes are in liters.
3	AB03-161202	<input checked="" type="checkbox"/>	CSMS-R01-	468 minutes at 2.56 lpm	1195.74	
4	AB04-161202	<input checked="" type="checkbox"/>	CSMS-R01-	467 minutes at 2.69 lpm	1253.90	
5	ABMU-161202	<input checked="" type="checkbox"/>	CSMS-R01-	464 minutes at 3.18 lpm	1473.20	
6	ABNP-161202	<input checked="" type="checkbox"/>	CSMS-R01-	470 minutes at 2.11 lpm	989.35	
7	FB01-161202		CSMS-R01-	Field Blank (opened)		
8	FB02-161202	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273552

**Date Received:** 12/06/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/7/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161203	1483.65	4	100	<7.00	<0.00181	0.00181	N/A	N/A
002	AB02-161203	1780.38	5	100	<7.00	<0.00151	0.00151	N/A	N/A
003	AB03-161203	1029.14	1	100	<7.00	<0.00261	0.00261	N/A	N/A
004	AB04-161203	1055.04	2	100	<7.00	<0.00255	0.00255	N/A	N/A
005	ABMU-161203	1262.28	2	100	<7.00	<0.00213	0.00213	N/A	N/A
006	ABNP-161203	1248.15	3	100	<7.00	<0.00216	0.00216	N/A	N/A
007	FB01-161203	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161203	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

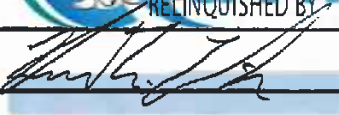
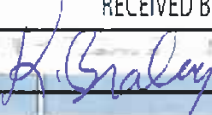
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Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input checked="" type="checkbox"/> Other
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 12/03/16	P.O. Number: C012904340	

RELINQUISHED BY: 	DATE & TIME: 12/3/16 1730	VIA: Fed Ex	RECEIVED BY: 	DATE & TIME: 12-6-16 11:00
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REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air-ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161203	<input checked="" type="checkbox"/>	CSMS-R01-	471 minutes at 3.15 lpm	1483.65	Only analyze with TEM if fibers identified on PCM.
2	AB02-161203	<input checked="" type="checkbox"/>	CSMS-R01-	471 minutes at 3.78 lpm	1780.38	Volumes are in liters.
3	AB03-161203	<input checked="" type="checkbox"/>	CSMS-R01-	471 minutes at 2.19 lpm	1029.14	
4	AB04-161203	<input checked="" type="checkbox"/>	CSMS-R01-	471 minutes at 2.24 lpm	1055.04	
5	ABMU-161203	<input checked="" type="checkbox"/>	CSMS-R01-	471 minutes at 2.68 lpm	1262.28	
6	ABNP-161203		CSMS-R01-	471 minutes at 2.65 lpm	1248.15	
7	FB01-161203	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161203	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273651

**Date Received:** 12/08/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/9/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI.

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161205	1402.04	2	100	<7.00	<0.00192	0.00192	N/A	N/A
002	AB02-161205	1689.69	2	100	<7.00	<0.00159	0.00159	N/A	N/A
003	AB03-161205	978.48	3	100	<7.00	<0.00275	0.00275	N/A	N/A
004	AB04-161205	1041.9	1	100	<7.00	<0.00258	0.00258	N/A	N/A
005	ABMU-161205	1198.19	2	100	<7.00	<0.00225	0.00225	N/A	N/A
006	ABNP-161205	1223.1	2	100	<7.00	<0.00220	0.00220	N/A	N/A
007	FB01-161205	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161205	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 12/05/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>[Signature]</i>	12/7/16 1430	FedEx	<i>K. B. Bailey</i>	12-8-16 16

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 3.08 lpm	1402.04	Only analyze with TEM if fibers identified on PCM.
2	AB02-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 3.73 lpm	1689.69	Volumes are in liters.
3	AB03-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 2.16 lpm	978.48	
4	AB04-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 2.30 lpm	1041.90	
5	ABMU-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 2.65 lpm	1198.19	
6	ABNP-161205	<input checked="" type="checkbox"/>	CSMS-R01-	453 minutes at 2.70 lpm	1223.10	
7	FB01-161205	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161205	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 273655

**Date Received:** 12/08/16

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 12/9/2016

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-161206	1239.9	2	100	<7.00	<0.00217	0.00217	N/A	N/A
002	AB02-161206	1284.27	2	100	<7.00	<0.00209	0.00209	N/A	N/A
003	AB03-161206	1580.07	2	100	<7.00	<0.00170	0.00170	N/A	N/A
004	AB04-161206	1853.68	2	100	<7.00	<0.00145	0.00145	N/A	N/A
005	ABMU-161206	1323.71	1	100	<7.00	<0.00203	0.00203	N/A	N/A
006	ABNP-161206	1318.78	1	100	<7.00	<0.00204	0.00204	N/A	N/A
007	FB01-161206	Blank	1	100	N/A	N/A	N/A	N/A	N/A
008	FB02-161206	Blank	0	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.56 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.20 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY: Name Kurt L. Cunningham, CPG	Date: 12/06/16	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>[Signature]</i>	12/7/16 1430	FedEx	<i>K. Bradley</i>	12-8-16 10.

**REQUESTED SERVICES (Please ☒ the Appropriate Boxes)**

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 2.52 lpm	1239.90	Only analyze with TEM if fibers identified on PCM.
2	AB02-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 2.61 lpm	1284.27	Volumes are in liters.
3	AB03-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 3.21 lpm	1580.07	
4	AB04-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 3.76 lpm	1853.68	
5	ABMU-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 2.69 lpm	1323.71	
6	ABNP-161206	<input checked="" type="checkbox"/>	CSMS-R01-	493 minutes at 2.68 lpm	1318.78	
7	FB01-161206	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-161206	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9						
10		<input type="checkbox"/>	<input type="checkbox"/>			

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## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 279310

**Date Received:** 04/27/17

**Received By:** Peyton Awbrey

**Analyst:** Leigh Armstrong

**Date of Report:** 4/28/2017

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-170425	705.9	1.5	100	<7.00	<0.00381	0.00381	N/A	N/A
002	AB02-170425	685.1	0	100	<7.00	<0.00393	0.00393	N/A	N/A
003	AB03-170425	868.9	2	100	<7.00	<0.00310	0.00310	N/A	N/A
004	AB04-170425	2299.5	1	100	<7.00	<0.00117	0.00117	N/A	N/A
005	ABMU-170425	1863.2	1	100	<7.00	<0.00144	0.00144	N/A	N/A
006	ABNP-170425	640.6	2	100	<7.00	<0.00420	0.00420	N/A	N/A
007	FB01-170425	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-170425	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

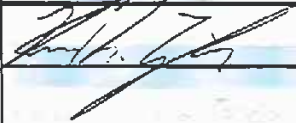

Laboratory Sr: 0.54 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.14 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG	Cell Phone: (517) 404-3382	Project Location: Lake Linden, MI	<input checked="" type="checkbox"/> Enhan _____
Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 4/25/17	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
	4/26/17 10:45	Fed Ex	Fed Ex	4/26/17 10:45
				4/27/17 8:50

Lab No. 279310  
☒ Accept ☐ Reject

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
1	AB01-170425	<input checked="" type="checkbox"/>	CSMS-R01-	558 minutes at 1.27 lpm	705.9	Only analyze with TEM if fibers identified on PCM.
2	AB02-170425	<input checked="" type="checkbox"/>	CSMS-R01-	557 minutes at 1.23 lpm	685.1	Volumes are in liters.
3	AB03-170425	<input checked="" type="checkbox"/>	CSMS-R01-	557 minutes at 1.56 lpm	868.9	
4	AB04-170425	<input checked="" type="checkbox"/>	CSMS-R01-	511 minutes at 4.50 lpm	2299.5	
5	ABMU-170425	<input checked="" type="checkbox"/>	CSMS-R01-	557 minutes at 3.35 lpm	1863.2	
5	ABNP-170425	<input checked="" type="checkbox"/>	CSMS-R01-	557 minutes at 1.15 lpm	640.6	
7	FB01-170425	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-170425	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9						
10		<input type="checkbox"/>	<input type="checkbox"/>			

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package 'Hold for Saturday Pickup'

Please Note - UPS and USPS are **NOT** available for Saturday Delivery



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 279529

**Date Received:** 05/02/17

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 5/3/2017

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-170427	815.5	1	100	<7.00	<0.00330	0.00330	N/A	N/A
002	AB02-170427	810.2	0	100	<7.00	<0.00332	0.00332	N/A	N/A
003	AB03-170427	890.1	0	100	<7.00	<0.00302	0.00302	N/A	N/A
004	AB04-170427	2086.7	0	100	<7.00	<0.00129	0.00129	N/A	N/A
005	ABMU-170427	871.5	2	100	<7.00	<0.00309	0.00309	N/A	N/A
006	ABNP-170427	1905.5	1	100	<7.00	<0.00141	0.00141	N/A	N/A
007	FB01-170427	Blank	0.5	100	N/A	N/A	N/A	N/A	N/A
008	FB02-170427	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.54 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.14 for >50 fibers.

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

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.



Account #:	E-mail: kurt.cunningham@amecfw.com	Project ID: 3293161707	<input type="checkbox"/> Other _____
SAMPLED BY: Name: Kurt L. Cunningham, CPG	Date: 4/27/17	P.O. Number: C012904340	

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>Kurt L. Cunningham</i>	5/1/17/1330	Fed Ex	Federal Express	5/1/17 1330
			<i>K. Grady</i>	5-2-17 10:35

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative [weight%]- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	<b>PCM</b>	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative [fibers/sq.cm]- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
	AB01-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 1.53 lpm	815.5	analyze with TEM if fibers identified on PCM.
2	AB02-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 1.52 lpm	810.2	Volumes are in liters.
3	AB03-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 1.67 lpm	890.1	
4	AB04-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 3.92 lpm	2086.7	Only
5	ABMU-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 1.64 lpm	871.5	
6	ABNP-170427	<input checked="" type="checkbox"/>	CSMS-R01-	533 minutes at 3.58 lpm	1905.5	
* 7	FB01-170427	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-170427	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9						
10						

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

**Please Note - UPS and USPS are NOT available for Saturday Delivery**

\* Bottom of Sample Bottle when Rec'd



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

## Phase Contrast Microscopy Analysis Report

**QuanTEM Set ID:** 279527

**Date Received:** 05/02/17

**Received By:** Karen Braley

**Analyst:** Leigh Armstrong

**Date of Report:** 5/3/2017

**Methodology:** NIOSH 7400, Issue 2

**AIHA Lab Number:** 101352

**Client:** AMEC NOVI, MI

Kurt Cunningham

46850 Magellan Drive Ste 190

Novi, Michigan 48377

**Acct. No.:** B894

**Project:** Former Calumet Stamp Mill

**Location:** Lake Linden, MI

**Project No.:** 3293161707

QuanTEM Sample ID	Client Sample ID	Air Volume (liters)	Fibers	Fields	Fiber Density (f/mm2)	Fiber Concentration (f/cc)	Detection Limits (f/cc)	95% LCL (f/cc)	95% UCL (f/cc)
001	AB01-170428	847.1	0	100	<7.00	<0.00318	0.00318	N/A	N/A
002	AB02-170428	735.8	0	100	<7.00	<0.00366	0.00366	N/A	N/A
003	AB03-170428	871.5	0	100	<7.00	<0.00309	0.00309	N/A	N/A
004	AB04-170428	874.2	1	100	<7.00	<0.00308	0.00308	N/A	N/A
005	ABMU-170428	1857.1	3	100	<7.00	<0.00145	0.00145	N/A	N/A
006	ABNP-170428	2193.7	12	100	14.6	0.00257	0.00123	0.00125	0.00532
007	FB01-170428	Blank	0	100	N/A	N/A	N/A	N/A	N/A
008	FB02-170428	Blank	1	100	N/A	N/A	N/A	N/A	N/A

**Authorized Signature:** \_\_\_\_\_

Leigh Armstrong, Analyst

Laboratory Sr: 0.54 for 5 to 20 fibers. 0.18 for 20 to 50 fibers. 0.14 for >50 fibers.

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

Results have been blank corrected per the NIOSH 7400 method, as applicable.

Contact: Kurt L. Cunningham, CPG		Cell Phone: (511) 404-0002		Project Location: Lake Umbagog, NH		<input type="checkbox"/> Other _____
Account #:		E-mail: kurt.cunningham@amechw.com		Project ID: 3293161707		
SAMPLED BY: Name: Kurt L. Cunningham, CPG		Date: 4/28/17		P.O. Number: C012904340		

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>Kurt L. Cunningham</i>	5/1/17/1330	FedEx	FedEx <i>KSS</i>	5/1/17/1330
			<i>K. Brady</i>	5-2-17 10:35

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

PLM	PLM	TEM	TEM	TURNAROUND TIME
<input type="checkbox"/> Bulk Analysis (EPA 600/R-93/116)	<input type="checkbox"/> Vermiculite Attic Insulation (EPA 600/R-04/004)	<input type="checkbox"/> Air- AHERA	<input type="checkbox"/> Bulk- Presence / Absence EPA600/R-93/116	<input type="checkbox"/> Rush
<input type="checkbox"/> 400 Point Count	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air- NIOSH 7402	<input type="checkbox"/> Bulk- Quantitative (weight%)- Chatfield	<input type="checkbox"/> Same Day
<input type="checkbox"/> 1000 Point Count		<input type="checkbox"/> Air- ISO 10312	<input type="checkbox"/> Dust- Presence / Absence	<input checked="" type="checkbox"/> 24 - Hour
<input type="checkbox"/> Gravimetric Preparation	PCM	<input type="checkbox"/> Drinking Water- EPA 100.2	<input type="checkbox"/> Dust- Quantitative (fibers/sq.cm)- ASTM D5755	<input type="checkbox"/> 3 - Day
<input type="checkbox"/> Particle ID	<input checked="" type="checkbox"/> NIOSH 7400	<input type="checkbox"/> Waste Water- EPA 600/4-83-043	<input type="checkbox"/> Other	<input type="checkbox"/> 5 - Day

No.	Sample ID (10 Characters Max)	<input checked="" type="checkbox"/> To Be Analyzed	Color	Description	Volume / Area (as applicable)	<input type="checkbox"/> Comments / Notes
1	AB01-170428	<input checked="" type="checkbox"/>	CSMS-R01-	543 minutes at 1.56 lpm	847.1	Only analyze with TEM if fibers identified on PCM.
2	AB02-170428	<input checked="" type="checkbox"/>	CSMS-R01-	543 minutes at 1.36 lpm	735.8	Volumes are in liters.
3	AB03-170428		CSMS-R01-	543 minutes at 1.61 lpm	871.5	
4	AB04-170428	<input checked="" type="checkbox"/>	CSMS-R01-	543 minutes at 1.61 lpm	874.2	
5	ABMU-170428	<input checked="" type="checkbox"/>	CSMS-R01-	543 minutes at 3.42 lpm	1857.1	
* 6	ABNP-170428	<input checked="" type="checkbox"/>	CSMS-R01-	543 minutes at 4.04 lpm	2193.7	
7	FB01-170428	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (opened)		
8	FB02-170428	<input checked="" type="checkbox"/>	CSMS-R01-	Field Blank (closed)		
9		<input type="checkbox"/>				
10		<input type="checkbox"/>				

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"

**Please Note - UPS and USPS are NOT available for Saturday Delivery** 5/2/17

5/2/17 \* Bottom OFF sample #6 Bottom when Rec'd; #6 contained water inside cassette.

---

**APPENDIX F**

Personnel Air Monitoring Results



## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
1-Nov	2628-21	Field Blank						0	<1000	
1-Nov	2628-22	Field Blank						0	<1000	
1-Nov	2628-23	PS-IWA-Milton Fields-During Mastic Removal	2.0	9:45	11:50	125	250	1	490	0.0020
1-Nov	2628-24	PS-IWA-EXC-Milton Fields- During Debris Cleanup	2.0	12:48	13:18	30	60	1	490	0.0082
1-Nov	2628-25	PS-IWA-Milton Fields-During Mastic Removal/Debris Cleanup	2.0	13:18	16:13	175	350	5	2452	0.0070

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
2-Nov	2628-26	Field Blank						0	<1000	
2-Nov	2628-27	Field Blank						0	<1000	
2-Nov	2628-28	PS-IWA-EXC-Larry Watkins- During Trench Clean out	2.0	9:31	10:01	30	60	0.5	245	0.0041
2-Nov	2628-29	PS-IWA-Larry Watkins-During Trench Clean out	2.0	10:01	11:58	117	234	4.5	2207	0.0094
2-Nov	2628-30	PS-IWA-Larry Watkins-During Trench Clean out	2.0	12:47	16:05	198	396	2	981	0.0025

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
3-Nov	2628-31	Field Blank						0	<1000	
3-Nov	2628-32	Field Blank						1	<1000	
3-Nov	2628-33	PS-IWA-Renee Crane-During Trench Clean out	2.0	10:08	11:48	100	200	ND	<1000	<0.010
3-Nov	2628-34	PS-IWA-EXC-Renee Crane- During Trench Clean out	2.0	13:01	13:31	30	60	0.5	245	0.0041
3-Nov	2628-35	PS-IWA-Renee Crane-During Trench Clean out	2.0	13:31	16:04	153	306	5	2452	0.0080

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
4-Nov	2628-36	Field Blank						0	<1000	
4-Nov	2628-37	Field Blank						1	<1000	
4-Nov	2628-38	PS-IWA-EXC-Milton Fields- During Trench Clean Out	2.0	9:05	9:35	30	60	1	490	0.0082
4-Nov	2628-39	PS-IWA-EXC-Craig Henriksen- Soil Transport-From Skid Steer	2.0	8:50	9:18	28	56	ND	<1000	<0.010
4-Nov	2628-40	PS-IWA-Craig Henriksen-Soil Transport from Skid Steer	2.0	9:18	11:56	158	316	2.5	1226	0.0039
4-Nov	2628-41	PS-IWA-Milton Fields-During Trench Clean Out	2.0	9:35	11:57	142	284	1.5	736	0.0026
4-Nov	2628-42	PS-IWA-Milton Fields-During Trench Clean Out	2.0	12:52	16:06	194	388	5	2452	0.0063
4-Nov	2628-43	PS-IWA-Craig Henriksen-Soil Transport from Skid Steer	2.0	12:46	16:11	205	410	0.5	245	0.0006

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.



## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
5-Nov	2628-44	Field Blank						0	<1000	
5-Nov	2628-45	Field Blank						0	<1000	
5-Nov	2628-46	PS-IWA-EXC-Larry Watkins- During Trench Clean Out	2.0	9:35	10:05	30	60	1	490	0.0082
5-Nov	2628-47	PS-IWA-EXC-Jason Downey- Trench Excavation from Mini Excavator	2.0	11:02	11:32	30	60	ND	<1000	<0.010
5-Nov	2628-48	PS-IWA-Larry Watkins-During Trench Clean Out	2.0	10:05	11:52	107	214	3	1471	0.0069
5-Nov	2628-49	PS-IWA-Jason Downey-Trench Excavation from Mini Excavator	2.0	12:52	16:02	190	380	ND	<1000	<0.010
5-Nov	2628-50	PS-IWA-Larry Watkins-During Trench Clean Out	2.0	12:47	15:13	146	292	2	981	0.0034

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
7-Nov	2628-51	Field Blank						2	<1000	
7-Nov	2628-52	Field Blank						0	<1000	
7-Nov	2628-53	PS-IWA-EXC-Renee Crane- During Stamp Mill Clean Out	2.0	8:13	8:43	30	60	ND	<1000	<0.010
7-Nov	2628-54	PS-IWA-Renee Crane-During Stamp Mill Clean Out	2.0	8:43	10:13	90	180	3	1471	0.0082
7-Nov	2628-55	PS-IWA-Milton Fields-During Stamp Mill Clean Out	2.0	10:20	11:50	90	180	1	490	0.0027
7-Nov	2628-56	PS-IWA-Milton Fields-During Stamp Mill Clean Out	2.0	12:55	15:43	168	336	1.5	736	0.0022

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
8-Nov	2628-57	Field Blank						0	<1000	
8-Nov	2628-58	Field Blank						0	<1000	
8-Nov	2628-59	PS-IWA-EXC-Renee Crane- During Trench Clean out	2.0	8:10	8:40	30	60	ND	<1000	<0.010
8-Nov	2628-60	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	8:40	11:46	186	372	2	981	0.0026
8-Nov	2628-61	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	12:52	15:47	175	350	1	490	0.0014

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
9-Nov	2628-62	Field Blank						1	<1000	
9-Nov	2628-63	Field Blank						0	<1000	
9-Nov	2628-64	PS-IWA-EXC-Larry Watkins- During Stamp Mill Clean out	2.0	8:38	9:08	30	60	ND	<1000	<0.010
9-Nov	2628-65	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	9:08	11:52	164	328	1	490	0.0015
9-Nov	2628-66	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	12:48	15:50	182	364	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.



## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
10-Nov	2628-67	Field Blank						0	<1000	
10-Nov	2628-68	Field Blank						0	<1000	
10-Nov	2628-69	PS-IWA-EXC-Milton Fields- During Stamp Mill Clean out	2.0	8:09	8:39	30	60	ND	<1000	<0.010
10-Nov	2628-70	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	8:39	11:30	171	342	2	981	0.0029
10-Nov	2628-71	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	12:16	15:50	214	428	2.5	1226	0.0029

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
11-Nov	2628-72	Field Blank						0	<1000	
11-Nov	2628-73	Field Blank						0	<1000	
11-Nov	2628-74	PS-IWA-EXC-Larry Watkins- During Stamp Mill Clean out	2.0	8:53	9:23	30	60	0.5	245	0.0041
11-Nov	2628-75	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	9:23	11:50	147	294	1	490	0.0017
11-Nov	2628-76	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	13:00	15:11	131	262	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
12-Nov	2628-77	Field Blank						0	<1000	
12-Nov	2628-78	Field Blank						0	<1000	
12-Nov	2628-79	PS-IWA-EXC-Renee Crane- During Stamp Mill Clean out	2.0	8:02	8:32	30	60	ND	<1000	<0.010
12-Nov	2628-80	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	8:32	11:50	198	396	1	490	0.0012
12-Nov	2628-81	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	12:45		-765	-1530		0	0.0000

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
14-Nov	2628-82	Field Blank						0	<1000	
14-Nov	2628-83	Field Blank						0	<1000	
14-Nov	2628-84	PS-IWA-EXC-Milton Fields- During Stamp Mill Clean out	2.0	8:14	8:44	30	60	2.5	1226	0.0204
14-Nov	2628-85	PS-IWA-EXC-Jonathan Narhi- From Skid Steer during Clean out	2.0	8:01	8:31	30	60	ND	<1000	<0.010
14-Nov	2628-86	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	8:44	11:50	186	372	3	1471	0.0040
14-Nov	2628-87	PS-IWA-Wayne Bourdeau-Mini Ex- During Clean out	2.0	8:31	11:51	200	400	ND	<1000	<0.010
14-Nov	2628-88	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	12:39	15:44	185	370	2	981	0.0027
14-Nov	2628-89	PS-IWA-Jonathan Narhi-Skid Steer during Clean out	2.0	12:38	15:38	180	360	2	981	0.0027

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.



## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
15-Nov	2628-90	Field Blank						0	<1000	
15-Nov	2628-91	Field Blank						0	<1000	
15-Nov	2628-92	PS-IWA-EXC-Larry Watkins- During Stamp Mill Clean out	2.0	10:52	11:21	29	58	ND	<1000	<0.010
15-Nov	2628-93	PS-IWA-Brian Bonen-From Front Loader during Soil Load out	2.0	8:19	15:53	454	908	4.5	2207	0.0024
15-Nov	2628-94	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	11:21	11:49	28	56	1	490	0.0088
15-Nov	2628-95	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	12:45	15:54	189	378	0.5	245	0.0006

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
16-Nov	2628-96	Field Blank						0	<1000	
16-Nov	2628-97	Field Blank						0	<1000	
16-Nov	2628-98	PS-IWA-EXC-Renee Crane- During Stamp Mill Clean out	2.0	8:15	8:45	30	60	0.5	245	0.0041
16-Nov	2628-99	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	8:45	11:48	183	366	1	490	0.0013
16-Nov	2628-100	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	12:38	15:52	194	388	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
17-Nov	2628-101	Field Blank						0	<1000	
17-Nov	2628-102	Field Blank						1	<1000	
17-Nov	2628-103	PS-IWA-EXC-Renee Crane- During Stanp Mill Clean out	2.0	8:47	9:17	30	60	ND	<1000	<0.010
17-Nov	2628-104	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	9:17	11:45	148	296	0.5	245	0.0008
17-Nov	2628-105	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	12:50	15:46	176	352	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
18-Nov	2628-106	Field Blank						0	<1000	
18-Nov	2628-107	Field Blank						0	<1000	
18-Nov	2628-108	PS-IWA-EXC-Renee Crane- During Stamp Mill Clean out	2.0	8:33	9:02	29	58	0.5	245	0.0042
18-Nov	2628-109	PS-IWA-Renee Crane-During Stamp Mill Clean out	2.0	9:02	11:40	158	316	ND	<1000	<0.010
18-Nov	2628-110	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	12:40	15:15	155	310	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.



## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
21-Nov	2628-111	Field Blank						0	<1000	
21-Nov	2628-112	Field Blank						0	<1000	
21-Nov	2628-113	PS-IWA-EXC-Milton Fields- During Stamp Mill Clean out	2.0	8:53	9:23	30	60	ND	<1000	<0.010
21-Nov	2628-114	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	9:23	11:47	144	288	1	490	0.0017
21-Nov	2628-115	PS-IWA-Milton Fields-During Stamp Mill Clean out	2.0	12:46	15:53	187	374	2.5	1226	0.0033

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

**Client:** Terra

**Location:** Calumet Stamp Mill

**Parameter:** Airborne fibers greater than  
five microns in length

Date 2016	ATCS Number	Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers/Fil ter	Conc F/cc
				On	Off	Total				
22-Nov	2628-116	Field Blank						0	<1000	
22-Nov	2628-117	Field Blank						0	<1000	
22-Nov	2628-118	PS-IWA-EXC-Larry Watkins- During Stamp Mill Clean out	2.0	9:04	9:34	30	60	ND	<1000	<0.010
22-Nov	2628-119	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	9:34	11:00	86	172	ND	<1000	<0.010
22-Nov	2628-120	PS-IWA-Larry Watkins-During Stamp Mill Clean out	2.0	11:45	15:05	200	400	ND	<1000	<0.010

\*-Client

PS-Personal Sample

AS-Area Sample

PA-Post Abatement

OWA-Outside Work Area

IWA- Inside Work Area

GBR- Glove Bag Removal

ND- None Detected

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.

**Patrick A Finn**

**Industrial Hygiene Technician**

**Analytical Testing & Consulting Services, Inc.**

Note: In the calculation of airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states that the statistical variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

## AIR MONITORING

Contracting

Parameter: Airborne fibers greater than  
five microns in length

Sample Description	Flow (LPM)	Sampling Times			Sample (L)	F/100 Fields	Fibers / Filter	Conc F/cc
		On	Off	Total				
Henriksen Mastic Removal	2.0	8:30	9:00	30	60	1	490	0.0082
Henriksen Mastic Removal	2.0	9:00	16:00	420	840	0	0	0.0000
Field Blank						0		
Larry Watkins Mastic	2.0	8:30	9:00	30	60	1	490	0.0082
Larry Watkins Mastic	2.0	9:00	16:00	420	840	3	1471	0.0018
Milton Fields Mastic	2.0	9:15	9:45	30	60	0	0	0.0000
Milton Fields Mastic	2.0	9:45	16:15	390	780	0.5	245	0.0003
Field Blank						0		
Field Blank						0		

I hereby certify that the above fiber counts were performed in strict confidence with applicable standards and regulations.



**Douglas A Haase**  
Analytical Testing & Consulting Services, Inc.

airborne concentrations, care should be used in the interpretation of results less than 0.010 fibers\*/cc, as NIOSH states variation of the asbestos method is greatly increased at low fiber counts. Limit of Detection: 0.010 fibers\*/cc.

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**APPENDIX G**

Dust Monitoring Results



[illegible]

$S_k$  = Station ID

[illegible]

Day was Misty all Day No visible Frost

[illegible]

Notes: Day was sunny & breezy. No visible dust till late in the day.  
Shut down dust causing process. Will water tomorrow.

[illegible]

Notes:



[illegible]

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[illegible]

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[illegible]

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[illegible]

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[illegible]

9:30 foggy, 11:00 foggy

[illegible]

98

[illegible]

Notes: Every thing is cold & frozen w/ considerable rain prior to freezing temperatures; No monitoring in the AM and PM after cold pass due to no emissions.



[illegible]

Notes: Note 8:44 not working yet (new) Note 11:00 crew not working

[illegible]

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[illegible]

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[illegible]

Notes: Note from 15:00 - End of Day Rain.



[illegible]

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[illegible]

Notes:

[illegible]

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\_\_\_\_\_

\_\_\_\_\_

TOTAL DUST FIELD SCREENING LOG									
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Project Name:	Calumet Stamp Mill Site	Project Number:	3293161707
Site Location:	Lake Linden, Michigan	Instrument ID:	
Date:	4/26/17	Time/Background:	
		Operator:	KLC
Time/Background:		Time/Background:	

[illegible]

Notes:

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**APPENDIX H**

Contracts



**Sold / Bill To:**

Honeywell International Inc.  
115 Tabor Road  
MORRIS PLAINS NJ 07950  
USA

HFM :100101

## Purchase order

Number	Version	Date
<b>4500180294</b>	<b>0</b>	<b>05-MAY-2016</b>

Honeywell's Purchase Order number and line item number must appear on all shipping documents and notices, bills of lading, and all correspondence related to this order. Unless prohibited by law or otherwise indicated on the face of this Purchase Order, all Payment terms shall commence from the date upon which both (i) a correct invoice is received at the specified "Credit to - mailing" address and in accordance with the Net terms of payment indicated below subject to Honeywell's normally scheduled twice monthly payment runs and (ii) all goods and/or services are received in conformance with the Purchase Order.

This Purchase Order is subject to and governed by the General Terms and Conditions of Purchase attached which are hereby incorporated and form part of this purchase order.

**Vendor Address:**

AMEC E AND I INC  
511 CONGRESS ST STE 200  
MACTEC ENGINEERING AND CONSULTING INC  
CUMBERLAND  
PORTLAND 04101-3428  
ME  
US

Your Vendor Number with us: 1006933

**Bill To - mailing address:**

ERS Vendor, Don't send invoice

**Ship to:**

1101 CoCode  
Honeywell International Inc.  
Chuck Geadelmann  
HIGHWAY M-26  
TORCH LAKE MI 49934  
USA

**Honeywell Contact:**

Buyer: Raj Ghaisas  
Raj.Ghaisas@Honeywell.com

Requisitioner: Harsha Utekar  
Chuck.Geadelmann@Honeywell.com  
763-954-5418

Accts Payable: Tel: 480 598 9071  
Email: AP.Corpsap@Honeywell.com

**Terms of payment :** PAY NET IN 105 DAYS  
**Currency :** USD  
**Incoterms :** FCA(Free Carrier) /FREE CARRIER  
PO Number in reference contact number :

**PO Header Text**

"The Scope and Performance of the work outlined in the attached Purchase Order shall be performed and governed by the Alliance Master Environmental Services Agreement dated 4/1/2011.".

Item	Material/Description	Quantity	UoM	Unit Price	Net Amount	TAX
10	R37156-01100 PS Identification/Site His	40,752.00	AU	1.00 / AU	40,752.00	N
	<b>Delivery Date:</b>	14-MAY-2016				
	Site: HECLA MINING (TORCH LAKE) Musuem Property- initial project set up Invoice send to Chuck Geadelmann (Honeywell- 1985 Douglas Drive North, Dock 1, Golden Valley, MN 55422)					
20	R37156-02100 REMEDIAL INVESTIGATION	88,599.00	AU	1.00 / AU	88,599.00	N
	<b>Delivery Date:</b>	14-MAY-2016				
	Site: HECLA MINING (TORCH LAKE)					

**Sold / Bill To:**

Honeywell International Inc.  
115 Tabor Road  
MORRIS PLAINS NJ 07950  
USA

**Purchase order**

Number	Version	Date
4500180294	0	05-MAY-2016
Honeywell's Purchase Order number and line item number must appear on all shipping documents and notices, bills of lading, and all correspondence related to this order. Unless prohibited by law or otherwise indicated on the face of this Purchase Order, all Payment terms shall commence from the date upon which both (i) a correct invoice is received at the specified "Credit to - mailing" address and in accordance with the Net terms of payment indicated below subject to Honeywell's normally scheduled twice monthly payment runs and (ii) all goods and/or services are received in conformance with the Purchase Order. This Purchase Order is subject to and governed by the General Terms and Conditions of Purchase attached which are hereby incorporated and form part of this purchase order.		

Museum Property- initial project set up

Invoice send to Chuck Geadelmann (Honeywell- 1985 Douglas Drive North, Dock 1, Golden Valley, MN 55422)

30		14,058.00	AU	1.00 / AU	14,058.00	N
	R37156-09400 Adm/Gen Alliance incentives					

**Delivery Date:** 14-MAY-2016

Site: HECLA MINING (TORCH LAKE)

Incentive Fees

Invoice send to Chuck Geadelmann (Honeywell- 1985 Douglas Drive North, Dock 1, Golden Valley, MN 55422)

Total net value excl. tax	USD	143,409.00
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Approved by: Raj Ghaisas

## GENERAL TERMS AND CONDITIONS OF PURCHASE (Rev. 2014-03-14)

-Corporate-

### 1. Acceptance - Order of Precedence - Modification

**1.1** This purchase order ("Purchase Order") is for the purchase of goods, services, or both as described on the face of this Purchase Order (collectively, "Goods") and is issued by the member of the Honeywell International Inc. group of companies identified on the face of this Purchase Order ("Honeywell"). This Purchase Order is deemed accepted when the supplier to which this Purchase Order is issued ("Supplier") returns the acknowledgment copy of this Purchase Order or begins performing, whichever is earlier. Honeywell rejects any additional or inconsistent terms and conditions offered by Supplier at any time. Any reference to Supplier's quotation, bid, or proposal does not imply acceptance of any term, condition, or instruction contained in that document.

**1.2** These terms and conditions together with the specifications, drawings, or other documents referred to on the face of the Purchase Order, or attached, or any documents incorporated by reference, supersede any prior or contemporaneous communications, representations, promises, or negotiations, whether oral or written, respecting the subject matter of this Purchase Order. All contract documents related to this Purchase Order are interpreted together as one agreement. But if there is an irreconcilable conflict among the provisions of those contract documents, the following order of precedence applies: a) contract documents signed by both parties; b) the face of the Purchase Order and any supplemental terms included or incorporated by reference; then c) these general Purchase Order provisions. No modification of this Purchase Order will be binding on either Party unless set forth in a writing signed by an authorized representative of both Parties specifically stating it is amending this Purchase Order. No course of dealing, prior dealings, usage of trade or course of performance will be used to modify, supplement or explain any terms used in this Purchase Order.

### 2. Delivery, Shipment and Packaging

**2.1** Supplier will deliver Goods in the quantities and on the date(s) specified on the Purchase Order or Purchase Order schedule releases. If delivery dates are not stated, Supplier will offer its best delivery date(s), which will be subject to acceptance by Honeywell. Unless otherwise directed, all Goods shipped in one day from and to a single location must be consolidated on one bill of lading or air waybill, as appropriate.

**2.2** If the delivery schedule is endangered for any reason other than Honeywell's fault, then Supplier will, at its expense, deliver Goods by the most expeditious shipping method. Honeywell reserves the right to reject, at no expense to Honeywell, all or any part of any delivery that varies from the quantity authorized by Honeywell for shipment. Supplier will not make any substitutions without Honeywell's prior written approval. All items will be packaged according to Honeywell's instructions or, if none, according to good commercial practice in a manner sufficient to ensure receipt in an undamaged condition. Honeywell will not be liable for any discharge, spill or other environmental incident (including clean-up costs) involving any Goods shipped under the Purchase Order unless caused by Honeywell and in no event until delivered to the destination designated by Honeywell. All containers will be properly marked for identification as instructed on Honeywell's Purchase Order and contain a packing slip that details, at a minimum, the Honeywell Purchase Order number(s), product part number, detailed product description, total number of boxes in shipment, quantity of product shipped, and final delivery address. Items shipped in advance of Honeywell's delivery schedule may be returned at Supplier's expense. For domestic shipments, if requested by Honeywell, and for all international shipments, Supplier will give notice of shipment to Honeywell when the Goods are delivered to a carrier for transportation. The Purchase Order number(s) must appear on all correspondence, shipping labels, and shipping documents, including all packing sheets, bills of lading and air waybills.

**2.3** All Goods, unless specifically exempted by the destination country's governing authorities, must be marked with the country of origin (manufacture) of the Goods in a conspicuous place as legibly, indelibly, and permanently as the nature of the article or container permits.

**2.4** Supplier will provide Honeywell with (a) the Harmonized Tariff Schedule number, country of origin information or certificates, manufacturer's affidavits, applicable free trade agreement ("FTA") certificates, and any other documents or information Honeywell may require to comply with international trade regulations or to lawfully minimize duties, taxes, and fees, and (b) FTA certificates for all Goods that qualify under one or more FTAs. Supplier will provide Honeywell all documents, records, and other supporting information necessary to substantiate the Goods' qualification under an FTA. Supplier will exert reasonable efforts to qualify the Goods under FTAs.

**2.5** Within one business day after Supplier delivers the Goods to the carrier, Supplier will send Honeywell a complete set of shipping documents including the commercial invoice, packing list, and air waybill, or three original parts of the combined through-bill of lading, clean without notation, necessary to release the Goods to Honeywell's custody.

### 3. Notice of Delay

Supplier must immediately notify Honeywell in writing with all information relating to any delay or threatened delay of the timely performance of this Purchase Order.

### 4. Excusable Delay (Force Majeure)

Neither party will be in default for any delay or failure to perform due to causes beyond its control and without its fault or negligence ("Force Majeure Event"), but any delay or failure to perform caused by the default of a sub tier supplier of Supplier will be excused only if (a) it is beyond the control of both Supplier and its sub-tier supplier(s) and without the fault or negligence of any of them, and (b) the Goods to be furnished cannot be obtained from other sources in sufficient time to permit Supplier to meet the delivery schedule. Supplier's ability to sell Goods at a more advantageous price or Supplier's economic hardship in buying materials or processing necessary for manufacture of the Goods, or labor disputes will not constitute an excusable delay event. The party affected by a Force Majeure Event will promptly provide written notice to the other, explaining in detail the full particulars and expected duration of the Force Majeure Event, and will use its best efforts to remedy the delay if it can be remedied. If Supplier's delivery is delayed, Honeywell may, at Honeywell's sole option, cancel deliveries scheduled during the Force Majeure Event or elect to extend the period of performance to cover the period of delay caused by the Force Majeure Event. If a Force Majeure Event occurs that affects delivery of Goods to Honeywell, Supplier will allocate its available supply of Goods in a manner that assures Honeywell of at least the same proportion of Supplier's total output of Goods as was allocated to Honeywell before the Force Majeure Event. If delivery of any Goods is delayed for more than 30 days, Honeywell may, without liability, cancel all or any part of this Purchase Order.

### 5. Performance Assurance Plan

If Honeywell, in its sole discretion, determines there is a significant risk that Supplier will fail to meet its performance or delivery requirements under this Purchase Order, Honeywell may require Supplier to perform under a Honeywell Performance Assurance Plan. The Performance Assurance Plan may include specific reporting and performance requirements reasonably tailored to ensure Supplier's adequate performance under identified provisions of this Purchase Order. Any failure by Supplier to satisfy the terms of the Performance Assurance Plan is a material breach of this Purchase Order.

### 6. Shipping Terms, Title and Risk of Loss

**6.1** If the Goods will be transported from Supplier's location in the U.S. to Honeywell's location in the U.S., unless otherwise specified on the face of the Purchase Order or in a separate agreement, the F.O.B. point is Honeywell's location. When the F.O.B. point is Supplier's location, Supplier bears all risk of loss or damage to the Goods and title passes to Honeywell upon delivery of the Goods to the carrier designated or approved by Honeywell. When the F.O.B. point is Honeywell's location, Supplier bears all risk of loss or damage to the Goods and title passes to Honeywell upon delivery of the Goods at Honeywell's location.

**6.2** In all other cases, unless otherwise specified on the face of the Purchase Order or in a separate agreement, Supplier will deliver the Goods DAP (Incoterms 2010) at Honeywell's location.

**6.3** The foregoing does not relieve Supplier of any responsibility for hidden damages discovered after acceptance of the Goods. Notwithstanding the foregoing, title and risk of loss to Goods subject to a consignment stock agreement pass upon release of the Goods from the consignment stock. Honeywell may direct Supplier to ship the Goods to Honeywell or to any third party designated by Honeywell.

### 7. Import/Customs Compliance

Supplier assumes all responsibility and liability for any shipments covered by this Purchase Order requiring any government import clearance. If government authorities declare or otherwise impose countervailing duties, antidumping duties, or retaliatory duties on the Goods imported under this Purchase Order, Honeywell reserves the right to terminate this Purchase Order in accordance with the Termination provisions of this Purchase Order. Supplier will be debited for any duties, fees, or freight incurred by Honeywell due to Supplier's failure to comply with the terms and conditions of this Purchase Order. This clause survives the termination or cancellation of this Purchase Order.

### 8. Drawback

All drawback of duties, and rights thereto, related to duties paid by Supplier or Honeywell when the Goods are imported or any materials or components used in manufacturing of the Goods will accrue to the exclusive benefit of Honeywell. Duty drawback rights include rights developed by substitution and duty drawback rights obtained from sub tier suppliers related to the Goods. Supplier will provide Honeywell with all documents, records, and other supporting information necessary to obtain any duty drawback, and will reasonably cooperate with Honeywell to obtain payment.

### 9. Offset

Supplier will assist Honeywell in obtaining credit from Supplier's government for the value of relevant Goods purchased to meet any present or future contractual offer or industrial benefit requirements imposed upon Honeywell or its subsidiaries or affiliates, if any. Assistance includes, but is not limited to, providing upon Honeywell's request evidence of the existence, value, content, and other pertinent information relating to the purchases. Honeywell reserves the right to claim these credits for itself or third parties. If Supplier awards any portion of the work in this Purchase Order to any lower tier supplier, Supplier will assign

to Honeywell any credits obtained from the sub-tier supplier's government relating to this transaction, if any, and assist Honeywell in obtaining such credits.

**10. Honeywell-Supplied Materials, Tooling, Equipment and Technical Data**

**10.1** Title to any material, tooling, equipment, or technical data that Honeywell pays for or provides to Supplier or is responsible for providing to Supplier, including replacements ("Honeywell Property") will remain or vest with Honeywell. Supplier will conspicuously label Honeywell Property as such, maintain it in good condition, keep written records of the Honeywell Property in its possession and the location of the property, not allow any liens to be placed upon it, and not change its location without prior written approval from Honeywell. Supplier is responsible for inspecting and determining that the Honeywell Property is in useable and acceptable condition.

**10.2** Supplier will use Honeywell Property exclusively to fulfill Honeywell Purchase Orders unless otherwise authorized in writing by Honeywell's procurement representative. Honeywell Property is intended for use at the Supplier's site only or as otherwise authorized in writing by Honeywell's procurement representative and, to the extent applicable, is subject to U.S. and other government export or re-export requirements. Supplier is responsible for any loss, damage, or destruction of Honeywell Property and any loss, damage or destruction of any third-party property resulting from Supplier's negligent use of Honeywell Property. Supplier will not include the cost of any insurance for Honeywell Property in the prices charged under this Purchase Order. Supplier will return Honeywell Property or dispose of it at Honeywell's sole option as it directs in writing. Honeywell makes no representations and disclaims all warranties (express or implied) with respect to Honeywell Property.

**11. Price**

Supplier will furnish the Goods at the prices stated on the face of the Purchase Order. If prices are not stated on the face of the Purchase Order, Supplier will offer its lowest prices subject to written acceptance by Honeywell. Unless otherwise provided on the face of the Purchase Order, the prices include all packaging and freight to the specified delivery point; applicable taxes and other government charges including, but not limited to, all sales, use, or excise taxes; and all customs duties, fees, or charges that must be separately itemized on all Supplier invoices. To the extent that value added tax (or any equivalent tax) is properly chargeable on the supply to Honeywell of any Goods, Honeywell will pay the tax as an addition to payments otherwise due Supplier under this Purchase Order, if Supplier provides to Honeywell a value-added tax (or equivalent tax) invoice. To the extent Honeywell has not received from Supplier all applicable forms regarding compliance with applicable tax law, Honeywell reserves the right to deduct from any payment to Supplier pursuant to this Purchase Order those amounts that Honeywell, in its sole discretion, deems to be required to be withheld in order to comply with the tax laws of any applicable jurisdiction.

**12. Price: Most Favored Customer and Meet or Release**

Supplier warrants that the prices charged for the Goods delivered under this Purchase Order are the lowest prices charged by Supplier for similar goods. If Supplier charges a lower price for similar goods, Supplier must notify Honeywell and apply that price to all Goods ordered under this Purchase Order by immediately paying Honeywell the price difference and applying the lower price to all Purchase Orders. If at any time before full performance of this Purchase Order Honeywell notifies Supplier in writing that Honeywell has received a written offer from another supplier for similar goods at a price lower than the price set forth in this Purchase Order, Supplier must immediately meet the lower price for any undelivered Goods. If Supplier fails to meet the lower price Honeywell, at its option and in addition to other rights or remedies, may immediately terminate the balance of the Purchase Order without liability.

**13. Invoicing and Payment**

After each shipment made or service provided, Supplier will submit an invoice listing a description of the Goods provided and, as applicable, part numbers, quantity, unit of measure, hours, and the unit and total prices. All applicable taxes and other government charges including, but not limited to, sales, use, or excise taxes; value added tax, customs duties, fees, and all incidental charges including but not limited to royalties, selling commissions, nonrecurring engineering, or other incidental charges must be separately itemized and identified on the invoice. The invoice must also include the following information in English, or in the destination country's official language if required: (a) name and address of Supplier and the Honeywell entity purchasing the Goods; (b) name of shipper (if different from Supplier); (c) Honeywell's Purchase Order number(s); (d) country of export; (e) detailed description of the Goods; (f) Harmonized Tariff Schedule number; (g) country of origin (manufacture) of the Goods, or if multiple countries of origin, the country of origin of each part shipped; (h) weights of the Goods shipped; (i) currency in which the sale was made; (j) payment terms; (k) shipment terms used; and (l) all rebates or discounts. The invoice will be accompanied (if applicable) by a signed bill of lading or express receipt evidencing shipment. Payment of an invoice does not constitute acceptance of the Goods and is subject to appropriate adjustment should Supplier fail to meet the requirements of the Purchase Order. Payment terms are net 120 days from receipt of invoice and conforming Goods unless otherwise stated on the face of the Purchase Order or other written agreement executed by both parties or as otherwise required by law (in the latter case the payment terms shall be the maximum permitted by law). Payment will be scheduled for the first payment cycle following the net terms for the Purchase Order.

**14. Setoff**

Honeywell may deduct any amount owing from Supplier to Honeywell as a set off against any amount owing to Supplier under this Purchase Order.

**15. Inspection**

**15.1** All Goods may be inspected and tested by Honeywell, its customers, higher-tier contractors, and end users at all reasonable times and places. If inspection or testing is made on Supplier's premises, Supplier will provide, without charge, all reasonable facilities and assistance required for the inspection and tests. Supplier's standard inspection and testing system must be approved by Honeywell in writing. All inspection and testing records, including sub-tier supplier records relating to the Goods, will be maintained by Supplier and made available to Honeywell during the performance of this Purchase Order, and for such longer periods if specified by Honeywell.

**15.2** Final inspection and acceptance by Honeywell will be at destination unless otherwise specified in this Purchase Order. Honeywell may inspect all or a sample of Goods, at its option, and may reject all or any portion of the Goods if Honeywell determines them to be defective or nonconforming within 90 days of delivery. If Honeywell performs any inspection (other than the standard inspection) after discovering defective or nonconforming Goods, any additional inspection costs will be paid by Supplier. No inspection, tests, approval, design approval, or acceptance of the Goods relieves Supplier from responsibility for warranty or any latent or patent defects, fraud, or negligence. If Goods are defective or nonconforming, Honeywell may, by written notice to Supplier rescind this Purchase Order as to the Goods; accept the Goods at an equitable reduction in price; or reject the Goods and require the delivery of replacements. Delivery of replacements will be accompanied by a written notice specifying that the Goods are replacements. If Supplier fails to deliver replacements promptly, Honeywell may correct any retained defective or nonconforming Goods at Supplier's expense; replace them with Goods from another supplier and charge the Supplier the cost thereof, including cover, and any incidental costs; or terminate this Purchase Order for cause.

**16. Warranty**

**16.1** Supplier warrants to Honeywell, its successors, assigns, customers, and end users that, during the entire Warranty Period specified below, all Goods furnished (including all replacement or corrected Goods or components): will be free from defects in material, workmanship, and design, even if the design has been approved by Honeywell; will conform to applicable drawings, designs, quality control plans, specifications and samples and other descriptions furnished or specified by Honeywell; will be merchantable; be fit for the intended purposes and operate as intended; will comply with all laws; will be free and clear of any and all liens or other encumbrances; will not infringe any patent, published patent application, or other intellectual property rights of any third party; and will not utilize misappropriated third party trade secret information. Goods that do not meet the preceding standards are collectively called "nonconforming Goods." Services will be performed in accordance with the highest standards in the industry.

**16.2** The Warranty Period is 24 months from the date of delivery to the end user or such longer period of time as may have been accepted by Honeywell from Honeywell's customer or on which any longer government requirement covering the Goods ends. These warranties survive delivery, inspection, acceptance, and payment by Honeywell. Claims for breach of warranty do not accrue until discovery of nonconforming Goods, even if the Goods were previously inspected. Any applicable statute of limitations runs from the date of discovery. Honeywell may, at its election, have the nonconforming Goods repaired, replaced, or corrected at Supplier's expense. Supplier is responsible for the costs of repairing, replacing or correcting nonconforming Goods, and for all related costs, expenses and damages including, without limitation, the costs of removal, disassembly, failure analysis, fault isolation, reinstallation, re-inspection, and retrofit of the nonconforming Goods or of Honeywell's affected end-product; all freight charges; all customer charges; and all corrective action costs. Unless set off by Honeywell, Supplier will reimburse Honeywell for all these costs upon receipt of Honeywell's invoice. The warranties and rights provided are cumulative and in addition to any warranty provided by law or equity.

**16.3** Supplier represents and warrants that there is nothing that will directly, indirectly, actually or potentially restrict or prevent Supplier in any way from fulfilling all its obligations, duties, and services under this Purchase Order, including without limitation any exclusivity or non-compete arrangement.

**17. Changes**

Honeywell may, by written or electronic notification, direct changes in the drawings, designs, specifications, method of shipment or packing, quantity, or time or place of delivery of the Goods; reschedule the services; or require additional or diminished services. Only authorized Honeywell procurement representatives may issue changes to the Purchase Order. If any change causes an increase or decrease in the cost of, or the time required for, performing this Purchase Order, an equitable adjustment will be made in the Purchase Order price, delivery dates or both, and this Purchase Order will be modified in writing or electronically accordingly. Any claim for adjustment under this provision may, at Honeywell's option, be deemed to be waived unless asserted in writing (including the amount of the claim) and delivered to Honeywell within 30 days from the date of the receipt by Supplier of the Honeywell-directed change to the Purchase Order. If the cost of property made obsolete or excess as a result of a change is paid by Honeywell, Honeywell may prescribe the manner of disposition of the property. Notwithstanding any disagreement between the parties regarding



the impact of a change, Supplier will proceed diligently with its performance under this Purchase Order pending resolution of the disagreement.

#### **18. Design and Process Changes**

Supplier will make no changes in the design, materials, manufacturing location, manufacturing equipment, production process, changes between a manual and automated process, or any other processes related to the Goods specified in the Purchase Order or documents referenced in it, or if none, those in place when the Purchase Order is issued, without the advance written approval of Honeywell's procurement representative. This requirement applies whether or not the change affects costs and regardless of the type of change, including product improvements.

#### **19. Stop Work**

At any time by written notice and at no cost, Honeywell may require Supplier to stop all or any part of the work under this Purchase Order for up to 120 days (Stop Work Order), and for any further period as mutually agreed. Immediately upon receipt of a Stop-Work Order, Supplier will comply with its terms. At any time Honeywell may, in whole or in part, either cancel the Stop Work Order or terminate the work under the Termination section of this Purchase Order. To the extent the Stop Work Order is canceled or expires, Supplier must immediately resume work.

#### **20. Termination**

**20.1** The nonbreaching party may terminate this Purchase Order if the other party commits a material breach and fails to remedy the breach within 30 calendar days following receipt of written notice specifying the grounds for the breach, except in the case of breach related to safety, health, or security, in which case Honeywell will have the right to immediately terminate the Order. A material breach includes, but is not limited to, late delivery or delivery of nonconforming Goods. The solvent party may terminate this Purchase Order upon written notice if the other party becomes insolvent or if any petition is filed or proceedings commenced by or against that party relating to bankruptcy, receivership, reorganization, or assignment for the benefit of creditors.

**20.2** Notwithstanding any firm time period or quantity on the face of the Purchase Order, Honeywell may terminate this Purchase Order in whole or in part at any time with or without cause for undelivered Goods or unperformed services upon 10 days' prior written notice.

**20.3** If Honeywell terminates this Purchase Order under either 20.1 or 20.2, Honeywell's sole liability to Supplier, and Supplier's sole and exclusive remedy, is payment for Goods received and accepted by Honeywell before the date of termination. The payment can be set off against any damages to Honeywell. Upon termination, Honeywell may require Supplier to transfer title and deliver to Honeywell any completed Goods and Honeywell will pay the Purchase Order price for those Goods subject to set off against any damages to Honeywell. Honeywell may also require Supplier to transfer title and deliver to Honeywell any or all property produced or procured by Supplier to perform this Purchase Order. Honeywell will credit Supplier with the reasonable value of the property, but not more than Supplier's actual cost or the Purchase Order value, whichever is less.

**20.4** To the extent that any portion of this Purchase Order is not terminated under 20.1 or 20.2 above, Supplier will continue performing that portion.

#### **21. Cessation of Production**

If production of any Good is to be discontinued or suspended within 1 year after final delivery under this Purchase Order, Supplier must give Honeywell as much prior written notice as commercially reasonable of the discontinuance or suspension. For at least 180 days from the discontinuance or suspension, Supplier must accept orders from Honeywell for the Good at the price and on the terms of this Purchase Order.

#### **22. Indemnifications**

##### **22.1 General Indemnification**

Supplier will, at its expense, defend and indemnify Honeywell and its subsidiaries, affiliates, and agents, and their respective officers, directors, shareholders, employees, and customers (collectively "Indemnitees") from and against any and all loss, cost, damage, claim, or liability, including reasonable attorney and professional fees and costs, and the cost of settlement, compromise, judgment, or verdict incurred by or demanded of an Indemnitee arising out of, resulting from or occurring in connection with Supplier's negligence, willful misconduct, or breach of the terms of this Purchase Order. Indemnitee may participate in the defense or negotiations to protect its interests. Supplier will not enter into any settlement or compromise without Honeywell's prior written consent, which will not be unreasonably withheld.

##### **22.2 Intellectual Property Indemnification**

For Goods provided under this Purchase Order, Supplier will, at its expense, defend and indemnify Honeywell and its customers (Indemnitee) from and against any and all loss, cost, damage, claim, or liability, including reasonable attorney and professional fees and costs, and the cost of settlement, compromise, judgment, or verdict incurred by or demanded from Indemnitee arising out of, or relating to any alleged or actual: (a) patent, copyright, or trademark infringement; (b) unlawful disclosure, use, or misappropriation of a trade secret; or (c) violation of any other third-party intellectual property right, and from expenses incurred by Indemnitee in defense of such suit, claim, or proceeding if Supplier does not undertake the defense thereof.

##### **22.3 Right to Defend**

Supplier will have the right to conduct the defense and settlement of any claim or action described in this Indemnification and Remedies Section if it acknowledges in writing its responsibility for such claim. In no event will Supplier enter into any

settlement without Honeywell's prior written consent, which will not be unreasonably withheld. Indemnitee may participate in a defense or negotiations to protect its interests. If any injunction or restraining order is issued, Supplier will, at its expense, obtain for Indemnitee either the right to continue using and selling the Goods or replace or modify the Goods to make them noninfringing; without any loss of functionality.

#### **23. Insurance**

Supplier will maintain and carry liability insurance which includes, but is not limited to, commercial general liability (including product liability and for services to be performed, completed operations liability) in a sum no less than \$5 million, automobile liability in a sum no less than \$5 million, worker's compensation in an amount no less than the applicable statutory minimum requirement, and employer's liability in an amount of no less than \$1 million, with insurance carriers with an AM Bests rating of no less than A- or equivalent. Before delivery of any Goods or commencement of any services under the Purchase Order, Supplier will provide to Honeywell evidence that Supplier maintains the described insurance, and that the coverage will not be changed without 30 days advance written notification to Honeywell from the carrier(s). Except where prohibited by law, Supplier will require its insurers to waive all rights of recovery or subrogation against Honeywell, its subsidiaries and affiliated companies, and its and their respective officers, directors, shareholders, employees, and agents. The amount of insurance carried in compliance with the above requirements is not to be construed as either a limitation on or satisfaction of the indemnification obligation in this Purchase Order.

#### **24. Confidentiality and Intellectual Property**

**24.1** All information, including without limitation specifications, samples, drawings, materials, know-how, designs, processes, and other technical, business, or financial information, that: (a) has been or will be supplied to Supplier by or on behalf of Honeywell; or (b) Supplier will design, develop, or create in connection with this Purchase Order; as to individual items or a combination of components or both, and whether or not completed, and all derivatives of (a) and (b) that Supplier has or will design, develop or create are deemed to be "Confidential Information" of Honeywell. All Confidential Information is work made for hire and made in the course of services rendered. All rights to it belong exclusively to Honeywell, with Honeywell having the sole right to obtain, hold, and renew, in its own name or for its own benefit, patents, copyrights, registrations, or other appropriate protection. To the extent that exclusive title or ownership rights in Confidential Information may not originally vest in Honeywell, Supplier irrevocably assigns transfers and conveys to Honeywell all right, title, and interest therein.

**24.2** Honeywell's Confidential Information will remain the property of Honeywell. It may not be used by Supplier for any purpose other than for performing this Purchase Order, may not be disclosed to any third party, and will be returned to Honeywell upon the earlier of Honeywell's written request or completion of the Purchase Order. If, with Honeywell's prior written approval, Supplier furnishes Confidential Information to a sub-tier supplier, Supplier will bind the sub-tier supplier to confidentiality requirements substantially identical to this provision and Supplier will remain responsible to Honeywell for any breach of this provision by its sub-tier suppliers. No disclosure, description or other communication of any sort will be made by Supplier to any third person of the fact of Honeywell's purchase of Goods under this Purchase Order, the terms of this Purchase Order, the substance of any discussions or negotiations concerning this Purchase Order, or either party's performance under this Purchase Order.

**24.3** "Personal Data" means any information relating to an identified or identifiable natural person; an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity. Supplier will: (a) treat Personal Data of all Honeywell personnel and prospective Honeywell personnel as Confidential Information; (b) take appropriate technical and organizational security measures as are required by Honeywell to protect Personal Data; (c) use and permit employees and third parties to use Personal Data pursuant to Honeywell's instructions only for purposes directly related to the performance of obligations under this Purchase Order; (d) refrain from transferring Personal Data out of the European Union unless Honeywell has given its prior consent to the transfer and Supplier has satisfied any further requirements reasonably imposed by Honeywell; (e) indemnify Honeywell against all losses, costs, expenses, damages, liabilities, demands, claims, actions or proceedings which Honeywell may suffer or incur arising out of any breach of this clause 24.3; and (f) promptly notify Honeywell about: any legally binding request for disclosure of Personal Data by a law enforcement agency (unless otherwise prohibited); any accidental or unauthorized processing of Personal Data; and any requests received from individuals to whom Personal Data relates, without responding to that request unless it has been otherwise authorized to do so by Honeywell. If Supplier will process Personal Data that Honeywell transfers from any of its affiliates in the European Union to any of its affiliates in the US pursuant to the U.S. - EU Safe Harbor Framework ("Safe Harbor Personal Data"), Supplier warrants that either (a) Supplier self-certifies to the U.S. - EU Safe Harbor Framework with respect to the processing of the Safe Harbor Personal Data and will notify Honeywell immediately if its self-certification terminates for any reason, or (b) Supplier must provide at least the same level of privacy protection as required by the U.S. - EU Safe harbor Framework.



## 25. Record Retention and Audit

**25.1** Records: Supplier will maintain detailed records reflecting Supplier's compliance with this Purchase Order a period of 10 years after the final delivery or termination of this Purchase Order or for the period prescribed by applicable law, whichever period is longer. Supplier will require each of its sub-tier suppliers to do likewise with respect to their records and materials.

**25.2** Audit: For a period of 10 years from the date of last delivery or for the period prescribed by applicable law, whichever period is longer, Honeywell will have the right in connection with this Purchase Order to conduct an audit. Supplier will provide, and will cause each of its sub-tier suppliers to provide, access for Honeywell's auditors to Supplier's and Supplier's sub-tier supplier's books and other pertinent records and any other information as requested by Honeywell's auditors. During the audit if any invoice submitted by Supplier is found to be in error, an appropriate adjustment including the costs of the audit will be made to the invoice or the next succeeding invoice following the discovery of the error and resulting payment/credit will be issued promptly. Supplier will, and, if applicable, will cause its sub-tier suppliers to, promptly correct any deficiencies discovered as a result of the audit.

## 26. Assignment and Subcontracting

This Purchase Order will be binding on the Supplier and their respective permitted successors and assigns. Supplier will not assign this Purchase Order or any rights or obligations under this Purchase Order or subcontract all or any aspect of the work called for without the prior written approval of Honeywell. Any transfer of this Purchase Order by Supplier by merger, consolidation, dissolution, or any change in ownership or power to vote a controlling share of the voting stock in Supplier will constitute an assignment for the purposes of this Purchase Order. Any assignment or subcontracting without Honeywell's written approval will be voidable at the option of Honeywell. Honeywell may assign this Purchase Order or any of its rights or obligations under this Purchase Order to any of its subsidiaries or affiliates, or to any purchaser or successor to all or substantially all of the assets of Honeywell without Supplier's consent and upon written notice to Supplier. Supplier will be responsible for all its subcontractors and any act or omission of the subcontractor shall be deemed and action or omission from the Supplier for the purpose of this Agreement.

## 27. Relationship of Parties/Independent Contractor

Nothing in this Purchase Order will be construed to place Supplier and Honeywell in an agency, employment, franchise, joint venture, or partnership relationship. Neither party has the authority to obligate or bind the other in any manner. Nothing contained in this Purchase Order will give rise or is intended to give rise to rights of any kind to any third parties. Neither party will make any representation to the contrary. The parties agree that Supplier will perform its obligations under this Purchase Order as an independent contractor. Supplier will be solely responsible to exercise full control of, supervision over and responsibility for Supplier's personnel, its subcontractors or its agents, and any employee of any of the foregoing as well as compliance with workers' compensation, unemployment, disability insurance, social security, withholding and all other laws, rules, codes, regulations and ordinances governing such matters.

## 28. Compliance with Laws and Integrity

**28.1** Supplier will comply with all laws, regulations and ordinances and Honeywell's Code of Business Conduct ("Code") in performing this Purchase Order. A copy of the Code may be obtained at <http://www.honeywell.com/sites/honeywell/codeofconduct.htm>. Supplier agrees to abide by and maintain an integrity and compliance program that encompasses at a minimum the standards of business conduct set forth in the Code and that effectively prevents and corrects ethical violations and maintains compliance with laws. Supplier will also comply with Honeywell's reasonable security requirements upon request by Honeywell.

**28.2** Upon request, in form and substance satisfactory to enable Honeywell to meet its compliance obligations with regard to Regulation (EC) No 1907/2006 ("REACH"), Supplier will provide Honeywell with complete information regarding the chemical composition of any Goods supplied under this Purchase Order, including all safety information required under REACH and information regarding the registration or pre-registration status of any Goods pursuant to REACH promptly but no later than 30 days of receiving such request. Supplier agrees that it will include any Honeywell "Identified Use" in its REACH registrations or applications for Authorization, unless Supplier notifies Honeywell that it rejects the Identified Use in order to protect human health or the environment and specifies the reason for the rejection. In this case Honeywell will have the right to terminate this Purchase Order without incurring any damages.

**28.3** Absent Honeywell's prior written consent, no Goods will contain any of the (i) substances identified in Article 4.1 of the European Parliament Directive 2002/95/EC (RoHS Directive) as that Directive is updated from time to time, (ii) substances of very high concern ("SVHC") defined in Article 57 of Regulation (EC) No 1907/2006 ("REACH") as updated from time to time, and/or (iii) substances listed in or similar applicable laws or regulations, restricting the use of hazardous materials in other jurisdictions as updated from time to time.

**28.4** Goods will comply with the restrictions set forth in the Montreal Protocol on ozone-depleting substances.

**28.5** Supplier will be responsible for all costs and liabilities for or relating to the recycling of Goods pursuant to the most current version of European Parliament Directive 2002/96/EC (WEEE Directive) as this Directive is implemented in each country.

## 29. Supply Chain Security

Supplier will implement the Business Partner Criteria of any Supply Chain Security Program that the country of import for the Goods may adopt such as the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT) or the Canadian Partners in Protection (PIP) Program.

## 30. Conflict Minerals

In accordance with applicable "Conflict Minerals" laws, Honeywell must determine whether its products contain tin, tantalum, tungsten, or gold ("3TG") originating in the Democratic Republic of the Congo and adjoining countries ("Conflict Minerals"). To the extent Supplier supplies direct materials containing 3TG to Honeywell under this Purchase Order, Supplier commits to have a supply chain process to ensure and document a reasonable inquiry into the country of origin of the 3TG minerals incorporated into products it supplies to Honeywell. If requested, Supplier will promptly provide information or representations that Honeywell reasonably believes are required to meet its conflict minerals compliance obligations.

## 31. US Equal Employment Opportunity Regulations

To the extent employment activities of Supplier occur in the United States and if otherwise applicable **this contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.**

## 32. Applicable Law and Forum

**32.1 United States:** If Honeywell is a legal entity formed in the United States, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of the State of New York, U.S.A. without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto), and the federal or state courts in New York, New York will have exclusive jurisdiction of any dispute.

**32.2 China:** If both parties are legal entities formed in The People's Republic of China, then the construction, interpretation, performance, and enforcement hereof all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of The People's Republic of China without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute not resolved by the parties through consultations will be subject to binding arbitration in accordance with the rules of the China International Economic Trade Arbitration Commission (CIETAC). In any arbitration there will be three arbitrators. Each Party will select and appoint one arbitrator within 30 days after the date of a request for arbitration. The third arbitrator will be jointly selected and appointed by the Parties. If the Parties fail to select and appoint the third arbitrator, the Chairman of CIETAC will select the third arbitrator. If a Party does not select and appoint an arbitrator within thirty days after the selection and appointment of the first arbitrator, the relevant selection and appointment will be made by the Chairman of CIETAC. The place of arbitration will be Shanghai.

If Honeywell is a legal entity formed in The People's Republic of China and the Supplier is not a legal entity formed in The People's Republic of China, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of England and Wales without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute not resolved by the parties will be subject to arbitration in accordance with the rules of the Singapore International Arbitration Centre.

**32.3 Korea, Hong Kong, Malaysia, Taiwan, Singapore, Indonesia, Vietnam, Australia, and New Zealand:** If Honeywell is a legal entity formed in Korea, Hong Kong, Malaysia, Singapore, Indonesia, Vietnam, Australia, and New Zealand, then the construction, interpretation, performance and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of the country under which the Honeywell entity is formed, excluding the UN Convention on Contracts for the International Sale of Goods of 1980 (and any amendments or successors thereto), and any dispute arising out of or relating to this Purchase Order, including the breach, termination or validity thereof, will be finally resolved in accordance with the rules of arbitration as noted below. Judgment upon the award rendered by the arbitrators may be entered by any court having jurisdiction thereof. The place of arbitration will be selected by Honeywell.

- Singapore, Indonesia, Vietnam, Australia, New Zealand, - in accordance with the arbitration rules of the Singapore International Arbitration Center

- Korea - in accordance with the arbitration rules of the Korean Commercial Arbitration Board

- Hong Kong - in accordance with the arbitration rules of the Hong Kong International Arbitration Center
- Malaysia - in accordance with the arbitration rules of the Kuala Lumpur Regional Arbitration Centre
- Taiwan - in accordance with the arbitration rules of the local Arbitration Act

**32.4 EMEA, India and countries not listed above:** If Honeywell is a legal entity formed in a European, Middle Eastern and African country or formed in a country not identified above, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of England and Wales without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute arising out of or relating to this Purchase Order, including the breach, termination or validity thereof, will be finally resolved by a panel of three arbitrators in accordance with the Rules for Arbitration of the International Chamber of Commerce. Judgment upon the award rendered by the arbitrators may be entered by any court having jurisdiction thereof. The place of arbitration will be London, England.

**32.5 Additional rules applicable to Arbitration:** Any award will be payable in the currency of this Purchase Order. Either party may apply to the arbitrators seeking injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either party also may, without waiving any remedy under this Purchase Order, seek from any court having jurisdiction any interim or provisional relief that is necessary to protect the rights or property of that party, pending the arbitrators' determination of the merits of the controversy. The language of the arbitration will be English.

### **33. Remedies**

All Honeywell remedies set forth in this Purchase Order are in addition to, and will in no way limit, any other rights and remedies at law or in equity.

### **34. Notices**

Notices relating to this Purchase Order must be in writing and may be delivered personally, by recognized overnight courier, or by certified first class mail, postage prepaid (each to the respective address appearing on the face of this Purchase Order). A Notice will be deemed given on the date delivered if delivered personally; 3 business days after being placed in the mail as specified above or in the custody of an overnight courier as specified above.

### **35. Publicity**

Supplier will not use Honeywell's name or marks or refer to or identify Honeywell in any advertising or publicity releases or promotional or marketing materials without Honeywell's prior written approval. Furthermore, Supplier will not claim or suggest, implicitly or explicitly, that Honeywell's use of its Goods constitutes Honeywell's endorsement of its Goods.

### **36. Non-Exclusivity / No Commitment**

Nothing in this Purchase Order will restrict Honeywell's right to contract with any third party to provide or perform, or to provide or perform on its own behalf, products or services similar or identical to the Goods provided by Supplier pursuant to this Purchase Order. Furthermore, there is no requirement that any minimum level of business or fees be provided to Supplier by Honeywell.

### **37. Headings and Captions**

Headings and captions are for convenience of reference only and do not alter the meaning or interpretation of any provision of this Purchase Order.

### **38. Waiver**

The failure or delay of either Party to enforce at any time any of the provisions of this Purchase Order will be construed to be a continuing waiver of those provisions, nor will any failure or delay prejudice the right of the Party to take any action or to exercise any right or remedy to enforce any provision.

### **39. Severability**

If any provision of this Purchase Order (or portion thereof) is held to be illegal, invalid, or unenforceable by a court of competent jurisdiction, the parties agree that the court will construe the provision in a manner that renders the provision valid and enforceable to the fullest extent possible under the law of the applicable jurisdiction and that the remaining provisions will remain in full force and effect.

### **40. Survival**

All provisions of this Purchase Order which by their nature should apply beyond its term will remain in force after any termination or expiration of this Purchase Order including, but not limited to, those addressing the following subjects: Import/Customs Compliance; Drawback; Offset; Honeywell-Supplied Materials, Tooling, Equipment and Technical Data; Price; Price: Most Favored Customer and Meet or Release; Invoicing and Payment; Set Off; Warranty; Cessation of Production; General Indemnification; Intellectual Property Indemnification; Insurance; Lien Waivers; Confidentiality/Data Privacy and Intellectual Property; Audit; Relationship Between the Parties/Independent Contractor; Applicable Law and Forum; Remedies; Publicity; Waiver; and Survival.

### **41. Translations**

Translations in various languages of this General Terms and Conditions of Purchase may be available for reference. In case of inconsistencies between translations and the original English version, the English version shall prevail.

**Sold / Bill To:**

Honeywell International Inc.  
115 Tabor Road  
MORRIS PLAINS NJ 07950  
USA

HFM :100101

## Change to Purchase order

Number	Version	Date
4500195490	2	18-MAY-2017

Honeywell's Purchase Order number and line item number must appear on all shipping documents and notices, bills of lading, and all correspondence related to this order. Unless prohibited by law or otherwise indicated on the face of this Purchase Order, all Payment terms shall commence from the date upon which both (i) a correct invoice is received at the specified "Credit to - mailing" address and in accordance with the Net terms of payment indicated below subject to Honeywell's normally scheduled twice monthly payment runs and (ii) all goods and/or services are received in conformance with the Purchase Order. This Purchase Order is subject to and governed by the General Terms and Conditions of Purchase attached which are hereby incorporated and form part of this purchase order.

**Vendor Address:**

AMEC E AND I INC  
511 CONGRESS ST STE 200  
MACTEC ENGINEERING AND CONSULTING INC  
CUMBERLAND  
PORTLAND 04101-3428  
ME  
US

Your Vendor Number with us: 1006933

**Bill To - mailing address:**

ERS Vendor, Don't send invoice

**Ship to:**

1101 CoCode  
Honeywell International Inc.  
CHUCK GEADELMANN  
QUARRY RD & M26  
LAKE LINDEN MI 49945  
USA

**Honeywell Contact:**

Buyer: Raj Ghaisas  
Raj.Ghaisas@Honeywell.com  
  
Requisitioner: Mr Merry Abbott  
CHUCK.GEADELMANN@HONEYWELL.COM  
973-455  
  
Accts Payable: Tel: 480 598 9071  
Email: AP.Corpsap@Honeywell.com

**Terms of payment :** PAY NET IN 120 DAYS  
**Currency :** USD  
**Incoterms :** FCA(Free Carrier) /FREE CARRIER  
PO Number in reference contact number :

\*\*\* Text changed \*\*\*

**PO Header Text**

"The Scope and Performance of the work outlined in the attached Purchase Order shall be performed and governed by the Master Environmental Services Agreement dated 6/1/2016."

Item	Material/Description	Quantity	UoM	Unit Price	Net Amount	TAX
10	R37156-05710 REMEDIATION	420,813.00	AU	1.00 / AU	420,813.00	N
	<b>Delivery schedule</b>	<b>Quantity</b>	<b>Unit</b>	<b>Date</b>	<b>Received Qty</b>	
	0001	338,375.00	AU	10-NOV-2016	256,177.16	
	0002	82,438.00	AU	26-MAY-2017	0.00	
	RIMS ID# 145401 SITE: HELCA MINING (TORCH LAKE) MUSEUM PROPERTY - ACM REMOVAL RM: CHUCK GEADELMAN *** PO quantity changed *** *** Schedule lines changed *** *** Item partially delivered ***					

**Sold / Bill To:**

Honeywell International Inc.  
115 Tabor Road  
MORRIS PLAINS NJ 07950  
USA

**Change to Purchase order**

Number	Version	Date
4500195490	2	18-MAY-2017
<p>Honeywell's Purchase Order number and line item number must appear on all shipping documents and notices, bills of lading, and all correspondence related to this order. Unless prohibited by law or otherwise indicated on the face of this Purchase Order, all Payment terms shall commence from the date upon which both (i) a correct invoice is received at the specified "Credit to - mailing" address and in accordance with the Net terms of payment indicated below subject to Honeywell's normally scheduled twice monthly payment runs and (ii) all goods and/or services are received in conformance with the Purchase Order.</p> <p>This Purchase Order is subject to and governed by the General Terms and Conditions of Purchase attached which are hereby incorporated and form part of this purchase order.</p>		

Total net value excl. tax

USD

420,813.00

Approved by:

Raj Ghaisas

## GENERAL TERMS AND CONDITIONS OF PURCHASE (Rev. 2014-03-14)

-Corporate-

### **1. Acceptance - Order of Precedence - Modification**

**1.1** This purchase order ("Purchase Order") is for the purchase of goods, services, or both as described on the face of this Purchase Order (collectively, "Goods") and is issued by the member of the Honeywell International Inc. group of companies identified on the face of this Purchase Order ("Honeywell"). This Purchase Order is deemed accepted when the supplier to which this Purchase Order is issued ("Supplier") returns the acknowledgment copy of this Purchase Order or begins performing, whichever is earlier. Honeywell rejects any additional or inconsistent terms and conditions offered by Supplier at any time. Any reference to Supplier's quotation, bid, or proposal does not imply acceptance of any term, condition, or instruction contained in that document.

**1.2** These terms and conditions together with the specifications, drawings, or other documents referred to on the face of the Purchase Order, or attached, or any documents incorporated by reference, supersede any prior or contemporaneous communications, representations, promises, or negotiations, whether oral or written, respecting the subject matter of this Purchase Order. All contract documents related to this Purchase Order are interpreted together as one agreement. But if there is an irreconcilable conflict among the provisions of those contract documents, the following order of precedence applies: a) contract documents signed by both parties; b) the face of the Purchase Order and any supplemental terms included or incorporated by reference; then c) these general Purchase Order provisions. No modification of this Purchase Order will be binding on either Party unless set forth in a writing signed by an authorized representative of both Parties specifically stating it is amending this Purchase Order. No course of dealing, prior dealings, usage of trade or course of performance will be used to modify, supplement or explain any terms used in this Purchase Order.

### **2. Delivery, Shipment and Packaging**

**2.1** Supplier will deliver Goods in the quantities and on the date(s) specified on the Purchase Order or Purchase Order schedule releases. If delivery dates are not stated, Supplier will offer its best delivery date(s), which will be subject to acceptance by Honeywell. Unless otherwise directed, all Goods shipped in one day from and to a single location must be consolidated on one bill of lading or air waybill, as appropriate.

**2.2** If the delivery schedule is endangered for any reason other than Honeywell's fault, then Supplier will, at its expense, deliver Goods by the most expeditious shipping method. Honeywell reserves the right to reject, at no expense to Honeywell, all or any part of any delivery that varies from the quantity authorized by Honeywell for shipment. Supplier will not make any substitutions without Honeywell's prior written approval. All items will be packaged according to Honeywell's instructions or, if none, according to good commercial practice in a manner sufficient to ensure receipt in an undamaged condition. Honeywell will not be liable for any discharge, spill or other environmental incident (including clean-up costs) involving any Goods shipped under the Purchase Order unless caused by Honeywell and in no event until delivered to the destination designated by Honeywell. All containers will be properly marked for identification as instructed on Honeywell's Purchase Order and contain a packing slip that details, at a minimum, the Honeywell Purchase Order number(s), product part number, detailed product description, total number of boxes in shipment, quantity of product shipped, and final delivery address. Items shipped in advance of Honeywell's delivery schedule may be returned at Supplier's expense. For domestic shipments, if requested by Honeywell, and for all international shipments, Supplier will give notice of shipment to Honeywell when the Goods are delivered to a carrier for transportation. The Purchase Order number(s) must appear on all correspondence, shipping labels, and shipping documents, including all packing sheets, bills of lading and air waybills.

**2.3** All Goods, unless specifically exempted by the destination country's governing authorities, must be marked with the country of origin (manufacture) of the Goods in a conspicuous place as legibly, indelibly, and permanently as the nature of the article or container permits.

**2.4** Supplier will provide Honeywell with (a) the Harmonized Tariff Schedule number, country of origin information or certificates, manufacturer's affidavits, applicable free trade agreement ("FTA") certificates, and any other documents or information Honeywell may require to comply with international trade regulations or to lawfully minimize duties, taxes, and fees, and (b) FTA certificates for all Goods that qualify under one or more FTAs. Supplier will provide Honeywell all documents, records, and other supporting information necessary to substantiate the Goods' qualification under an FTA. Supplier will exert reasonable efforts to qualify the Goods under FTAs.

**2.5** Within one business day after Supplier delivers the Goods to the carrier, Supplier will send Honeywell a complete set of shipping documents including the commercial invoice, packing list, and air waybill, or three original parts of the combined through-bill of lading, clean without notation, necessary to release the Goods to Honeywell's custody.

### **3. Notice of Delay**

Supplier must immediately notify Honeywell in writing with all information relating to any delay or threatened delay of the timely performance of this Purchase Order.

### **4. Excusable Delay (Force Majeure)**

Neither party will be in default for any delay or failure to perform due to causes beyond its control and without its fault or negligence ("Force Majeure Event"), but any delay or failure to perform caused by the default of a sub tier supplier of Supplier will be excused only if (a) it is beyond the control of both Supplier and its sub-tier supplier(s) and without the fault or negligence of any of them, and (b) the Goods to be furnished cannot be obtained from other sources in sufficient time to permit Supplier to meet the delivery schedule. Supplier's ability to sell Goods at a more advantageous price or Supplier's economic hardship in buying materials or processing necessary for manufacture of the Goods, or labor disputes will not constitute an excusable delay event. The party affected by a Force Majeure Event will promptly provide written notice to the other, explaining in detail the full particulars and expected duration of the Force Majeure Event, and will use its best efforts to remedy the delay if it can be remedied. If Supplier's delivery is delayed, Honeywell may, at Honeywell's sole option, cancel deliveries scheduled during the Force Majeure Event or elect to extend the period of performance to cover the period of delay caused by the Force Majeure Event. If a Force Majeure Event occurs that affects delivery of Goods to Honeywell, Supplier will allocate its available supply of Goods in a manner that assures Honeywell of at least the same proportion of Supplier's total output of Goods as was allocated to Honeywell before the Force Majeure Event. If delivery of any Goods is delayed for more than 30 days, Honeywell may, without liability, cancel all or any part of this Purchase Order.

### **5. Performance Assurance Plan**

If Honeywell, in its sole discretion, determines there is a significant risk that Supplier will fail to meet its performance or delivery requirements under this Purchase Order, Honeywell may require Supplier to perform under a Honeywell Performance Assurance Plan. The Performance Assurance Plan may include specific reporting and performance requirements reasonably tailored to ensure Supplier's adequate performance under identified provisions of this Purchase Order. Any failure by Supplier to satisfy the terms of the Performance Assurance Plan is a material breach of this Purchase Order.

### **6. Shipping Terms, Title and Risk of Loss**

**6.1** If the Goods will be transported from Supplier's location in the U.S. to Honeywell's location in the U.S., unless otherwise specified on the face of the Purchase Order or in a separate agreement, the F.O.B. point is Honeywell's location. When the F.O.B. point is Supplier's location, Supplier bears all risk of loss or damage to the Goods and title passes to Honeywell upon delivery of the Goods to the carrier designated or approved by Honeywell. When the F.O.B. point is Honeywell's location, Supplier bears all risk of loss or damage to the Goods and title passes to Honeywell upon delivery of the Goods at Honeywell's location.

**6.2** In all other cases, unless otherwise specified on the face of the Purchase Order or in a separate agreement, Supplier will deliver the Goods DAP (Incoterms 2010) at Honeywell's location.

**6.3** The foregoing does not relieve Supplier of any responsibility for hidden damages discovered after acceptance of the Goods. Notwithstanding the foregoing, title and risk of loss to Goods subject to a consignment stock agreement pass upon release of the Goods from the consignment stock. Honeywell may direct Supplier to ship the Goods to Honeywell or to any third party designated by Honeywell.

### **7. Import/Customs Compliance**

Supplier assumes all responsibility and liability for any shipments covered by this Purchase Order requiring any government import clearance. If government authorities declare or otherwise impose countervailing duties, antidumping duties, or retaliatory duties on the Goods imported under this Purchase Order, Honeywell reserves the right to terminate this Purchase Order in accordance with the Termination provisions of this Purchase Order. Supplier will be debited for any duties, fees, or freight incurred by Honeywell due to Supplier's failure to comply with the terms and conditions of this Purchase Order. This clause survives the termination or cancellation of this Purchase Order.

### **8. Drawback**

All drawback of duties, and rights thereto, related to duties paid by Supplier or Honeywell when the Goods are imported or any materials or components used in manufacturing of the Goods will accrue to the exclusive benefit of Honeywell. Duty drawback rights include rights developed by substitution and duty drawback rights obtained from sub tier suppliers related to the Goods. Supplier will provide Honeywell with all documents, records, and other supporting information necessary to obtain any duty drawback, and will reasonably cooperate with Honeywell to obtain payment.

### **9. Offset**

Supplier will assist Honeywell in obtaining credit from Supplier's government for the value of relevant Goods purchased to meet any present or future contractual offer or industrial benefit requirements imposed upon Honeywell or its subsidiaries or affiliates, if any. Assistance includes, but is not limited to, providing upon Honeywell's request evidence of the existence, value, content, and other pertinent information relating to the purchases. Honeywell reserves the right to claim these credits for itself or third parties. If Supplier awards any portion of the work in this Purchase Order to any lower tier supplier, Supplier will assign



to Honeywell any credits obtained from the sub-tier supplier's government relating to this transaction, if any, and assist Honeywell in obtaining such credits.

**10. Honeywell-Supplied Materials, Tooling, Equipment and Technical Data**

**10.1** Title to any material, tooling, equipment, or technical data that Honeywell pays for or provides to Supplier or is responsible for providing to Supplier, including replacements ("Honeywell Property") will remain or vest with Honeywell. Supplier will conspicuously label Honeywell Property as such, maintain it in good condition, keep written records of the Honeywell Property in its possession and the location of the property, not allow any liens to be placed upon it, and not change its location without prior written approval from Honeywell. Supplier is responsible for inspecting and determining that the Honeywell Property is in useable and acceptable condition.

**10.2** Supplier will use Honeywell Property exclusively to fulfill Honeywell Purchase Orders unless otherwise authorized in writing by Honeywell's procurement representative. Honeywell Property is intended for use at the Supplier's site only or as otherwise authorized in writing by Honeywell's procurement representative and, to the extent applicable, is subject to U.S. and other government export or re-export requirements. Supplier is responsible for any loss, damage, or destruction of Honeywell Property and any loss, damage or destruction of any third-party property resulting from Supplier's negligent use of Honeywell Property. Supplier will not include the cost of any insurance for Honeywell Property in the prices charged under this Purchase Order. Supplier will return Honeywell Property or dispose of it at Honeywell's sole option as it directs in writing. Honeywell makes no representations and disclaims all warranties (express or implied) with respect to Honeywell Property.

**11. Price**

Supplier will furnish the Goods at the prices stated on the face of the Purchase Order. If prices are not stated on the face of the Purchase Order, Supplier will offer its lowest prices subject to written acceptance by Honeywell. Unless otherwise provided on the face of the Purchase Order, the prices include all packaging and freight to the specified delivery point; applicable taxes and other government charges including, but not limited to, all sales, use, or excise taxes; and all customs duties, fees, or charges that must be separately itemized on all Supplier invoices. To the extent that value added tax (or any equivalent tax) is properly chargeable on the supply to Honeywell of any Goods, Honeywell will pay the tax as an addition to payments otherwise due Supplier under this Purchase Order, if Supplier provides to Honeywell a value-added tax (or equivalent tax) invoice. To the extent Honeywell has not received from Supplier all applicable forms regarding compliance with applicable tax law, Honeywell reserves the right to deduct from any payment to Supplier pursuant to this Purchase Order those amounts that Honeywell, in its sole discretion, deems to be required to be withheld in order to comply with the tax laws of any applicable jurisdiction.

**12. Price: Most Favored Customer and Meet or Release**

Supplier warrants that the prices charged for the Goods delivered under this Purchase Order are the lowest prices charged by Supplier for similar goods. If Supplier charges a lower price for similar goods, Supplier must notify Honeywell and apply that price to all Goods ordered under this Purchase Order by immediately paying Honeywell the price difference and applying the lower price to all Purchase Orders. If at any time before full performance of this Purchase Order Honeywell notifies Supplier in writing that Honeywell has received a written offer from another supplier for similar goods at a price lower than the price set forth in this Purchase Order, Supplier must immediately meet the lower price for any undelivered Goods. If Supplier fails to meet the lower price Honeywell, at its option and in addition to other rights or remedies, may immediately terminate the balance of the Purchase Order without liability.

**13. Invoicing and Payment**

After each shipment made or service provided, Supplier will submit an invoice listing a description of the Goods provided and, as applicable, part numbers, quantity, unit of measure, hours, and the unit and total prices. All applicable taxes and other government charges including, but not limited to, sales, use, or excise taxes; value added tax, customs duties, fees, and all incidental charges including but not limited to royalties, selling commissions, nonrecurring engineering, or other incidental charges must be separately itemized and identified on the invoice. The invoice must also include the following information in English, or in the destination country's official language if required: (a) name and address of Supplier and the Honeywell entity purchasing the Goods; (b) name of shipper (if different from Supplier); (c) Honeywell's Purchase Order number(s); (d) country of export; (e) detailed description of the Goods; (f) Harmonized Tariff Schedule number; (g) country of origin (manufacture) of the Goods, or if multiple countries of origin, the country of origin of each part shipped; (h) weights of the Goods shipped; (i) currency in which the sale was made; (j) payment terms; (k) shipment terms used; and (l) all rebates or discounts. The invoice will be accompanied (if applicable) by a signed bill of lading or express receipt evidencing shipment. Payment of an invoice does not constitute acceptance of the Goods and is subject to appropriate adjustment should Supplier fail to meet the requirements of the Purchase Order. Payment terms are net 120 days from receipt of invoice and conforming Goods unless otherwise stated on the face of the Purchase Order or other written agreement executed by both parties or as otherwise required by law (in the latter case the payment terms shall be the maximum permitted by law). Payment will be scheduled for the first payment cycle following the net terms for the Purchase Order.

**14. Setoff**

Honeywell may deduct any amount owing from Supplier to Honeywell as a set off against any amount owing to Supplier under this Purchase Order.

**15. Inspection**

**15.1** All Goods may be inspected and tested by Honeywell, its customers, higher-tier contractors, and end users at all reasonable times and places. If inspection or testing is made on Supplier's premises, Supplier will provide, without charge, all reasonable facilities and assistance required for the inspection and tests. Supplier's standard inspection and testing system must be approved by Honeywell in writing. All inspection and testing records, including sub-tier supplier records relating to the Goods, will be maintained by Supplier and made available to Honeywell during the performance of this Purchase Order, and for such longer periods if specified by Honeywell.

**15.2** Final inspection and acceptance by Honeywell will be at destination unless otherwise specified in this Purchase Order. Honeywell may inspect all or a sample of Goods, at its option, and may reject all or any portion of the Goods if Honeywell determines them to be defective or nonconforming within 90 days of delivery. If Honeywell performs any inspection (other than the standard inspection) after discovering defective or nonconforming Goods, any additional inspection costs will be paid by Supplier. No inspection, tests, approval, design approval, or acceptance of the Goods relieves Supplier from responsibility for warranty or any latent or patent defects, fraud, or negligence. If Goods are defective or nonconforming, Honeywell may, by written notice to Supplier rescind this Purchase Order as to the Goods; accept the Goods at an equitable reduction in price; or reject the Goods and require the delivery of replacements. Delivery of replacements will be accompanied by a written notice specifying that the Goods are replacements. If Supplier fails to deliver replacements promptly, Honeywell may correct any retained defective or nonconforming Goods at Supplier's expense; replace them with Goods from another supplier and charge the Supplier the cost thereof, including cover, and any incidental costs; or terminate this Purchase Order for cause.

**16. Warranty**

**16.1** Supplier warrants to Honeywell, its successors, assigns, customers, and end users that, during the entire Warranty Period specified below, all Goods furnished (including all replacement or corrected Goods or components): will be free from defects in material, workmanship, and design, even if the design has been approved by Honeywell; will conform to applicable drawings, designs, quality control plans, specifications and samples and other descriptions furnished or specified by Honeywell; will be merchantable; be fit for the intended purposes and operate as intended; will comply with all laws; will be free and clear of any and all liens or other encumbrances; will not infringe any patent, published patent application, or other intellectual property rights of any third party; and will not utilize misappropriated third party trade secret information. Goods that do not meet the preceding standards are collectively called "nonconforming Goods." Services will be performed in accordance with the highest standards in the industry.

**16.2** The Warranty Period is 24 months from the date of delivery to the end user or such longer period of time as may have been accepted by Honeywell from Honeywell's customer or on which any longer government requirement covering the Goods ends. These warranties survive delivery, inspection, acceptance, and payment by Honeywell. Claims for breach of warranty do not accrue until discovery of nonconforming Goods, even if the Goods were previously inspected. Any applicable statute of limitations runs from the date of discovery. Honeywell may, at its election, have the nonconforming Goods repaired, replaced, or corrected at Supplier's expense. Supplier is responsible for the costs of repairing, replacing or correcting nonconforming Goods, and for all related costs, expenses and damages including, without limitation, the costs of removal, disassembly, failure analysis, fault isolation, reinstallation, re-inspection, and retrofit of the nonconforming Goods or of Honeywell's affected end-product; all freight charges; all customer charges; and all corrective action costs. Unless set off by Honeywell, Supplier will reimburse Honeywell for all these costs upon receipt of Honeywell's invoice. The warranties and rights provided are cumulative and in addition to any warranty provided by law or equity.

**16.3** Supplier represents and warrants that there is nothing that will directly, indirectly, actually or potentially restrict or prevent Supplier in any way from fulfilling all its obligations, duties, and services under this Purchase Order, including without limitation any exclusivity or non-compete arrangement.

**17. Changes**

Honeywell may, by written or electronic notification, direct changes in the drawings, designs, specifications, method of shipment or packing, quantity, or time or place of delivery of the Goods; reschedule the services; or require additional or diminished services. Only authorized Honeywell procurement representatives may issue changes to the Purchase Order. If any change causes an increase or decrease in the cost of, or the time required for, performing this Purchase Order, an equitable adjustment will be made in the Purchase Order price, delivery dates or both, and this Purchase Order will be modified in writing or electronically accordingly. Any claim for adjustment under this provision may, at Honeywell's option, be deemed to be waived unless asserted in writing (including the amount of the claim) and delivered to Honeywell within 30 days from the date of the receipt by Supplier of the Honeywell-directed change to the Purchase Order. If the cost of property made obsolete or excess as a result of a change is paid by Honeywell, Honeywell may prescribe the manner of disposition of the property. Notwithstanding any disagreement between the parties regarding

the impact of a change, Supplier will proceed diligently with its performance under this Purchase Order pending resolution of the disagreement.

#### **18. Design and Process Changes**

Supplier will make no changes in the design, materials, manufacturing location, manufacturing equipment, production process, changes between a manual and automated process, or any other processes related to the Goods specified in the Purchase Order or documents referenced in it, or if none, those in place when the Purchase Order is issued, without the advance written approval of Honeywell's procurement representative. This requirement applies whether or not the change affects costs and regardless of the type of change, including product improvements.

#### **19. Stop Work**

At any time by written notice and at no cost, Honeywell may require Supplier to stop all or any part of the work under this Purchase Order for up to 120 days (Stop Work Order), and for any further period as mutually agreed. Immediately upon receipt of a Stop-Work Order, Supplier will comply with its terms. At any time Honeywell may, in whole or in part, either cancel the Stop Work Order or terminate the work under the Termination section of this Purchase Order. To the extent the Stop Work Order is canceled or expires, Supplier must immediately resume work.

#### **20. Termination**

**20.1** The nonbreaching party may terminate this Purchase Order if the other party commits a material breach and fails to remedy the breach within 30 calendar days following receipt of written notice specifying the grounds for the breach, except in the case of breach related to safety, health, or security, in which case Honeywell will have the right to immediately terminate the Order. A material breach includes, but is not limited to, late delivery or delivery of nonconforming Goods. The solvent party may terminate this Purchase Order upon written notice if the other party becomes insolvent or if any petition is filed or proceedings commenced by or against that party relating to bankruptcy, receivership, reorganization, or assignment for the benefit of creditors.

**20.2** Notwithstanding any firm time period or quantity on the face of the Purchase Order, Honeywell may terminate this Purchase Order in whole or in part at any time with or without cause for undelivered Goods or unperformed services upon 10 days' prior written notice.

**20.3** If Honeywell terminates this Purchase Order under either 20.1 or 20.2, Honeywell's sole liability to Supplier, and Supplier's sole and exclusive remedy, is payment for Goods received and accepted by Honeywell before the date of termination. The payment can be set off against any damages to Honeywell. Upon termination, Honeywell may require Supplier to transfer title and deliver to Honeywell any completed Goods and Honeywell will pay the Purchase Order price for those Goods subject to set off against any damages to Honeywell. Honeywell may also require Supplier to transfer title and deliver to Honeywell any or all property produced or procured by Supplier to perform this Purchase Order. Honeywell will credit Supplier with the reasonable value of the property, but not more than Supplier's actual cost or the Purchase Order value, whichever is less.

**20.4** To the extent that any portion of this Purchase Order is not terminated under 20.1 or 20.2 above, Supplier will continue performing that portion.

#### **21. Cessation of Production**

If production of any Good is to be discontinued or suspended within 1 year after final delivery under this Purchase Order, Supplier must give Honeywell as much prior written notice as commercially reasonable of the discontinuance or suspension. For at least 180 days from the discontinuance or suspension, Supplier must accept orders from Honeywell for the Good at the price and on the terms of this Purchase Order.

#### **22. Indemnifications**

##### **22.1 General Indemnification**

Supplier will, at its expense, defend and indemnify Honeywell and its subsidiaries, affiliates, and agents, and their respective officers, directors, shareholders, employees, and customers (collectively "Indemnitees") from and against any and all loss, cost, damage, claim, or liability, including reasonable attorney and professional fees and costs, and the cost of settlement, compromise, judgment, or verdict incurred by or demanded of an Indemnitee arising out of, resulting from or occurring in connection with Supplier's negligence, willful misconduct, or breach of the terms of this Purchase Order. Indemnitee may participate in the defense or negotiations to protect its interests. Supplier will not enter into any settlement or compromise without Honeywell's prior written consent, which will not be unreasonably withheld.

##### **22.2 Intellectual Property Indemnification**

For Goods provided under this Purchase Order, Supplier will, at its expense, defend and indemnify Honeywell and its customers (Indemnitee) from and against any and all loss, cost, damage, claim, or liability, including reasonable attorney and professional fees and costs, and the cost of settlement, compromise, judgment, or verdict incurred by or demanded from Indemnitee arising out of, or relating to any alleged or actual: (a) patent, copyright, or trademark infringement; (b) unlawful disclosure, use, or misappropriation of a trade secret; or (c) violation of any other third-party intellectual property right, and from expenses incurred by Indemnitee in defense of such suit, claim, or proceeding if Supplier does not undertake the defense thereof.

##### **22.3 Right to Defend**

Supplier will have the right to conduct the defense and settlement of any claim or action described in this Indemnification and Remedies Section if it acknowledges in writing its responsibility for such claim. In no event will Supplier enter into any

settlement without Honeywell's prior written consent, which will not be unreasonably withheld. Indemnitee may participate in a defense or negotiations to protect its interests. If any injunction or restraining order is issued, Supplier will, at its expense, obtain for Indemnitee either the right to continue using and selling the Goods or replace or modify the Goods to make them noninfringing; without any loss of functionality.

#### **23. Insurance**

Supplier will maintain and carry liability insurance which includes, but is not limited to, commercial general liability (including product liability and for services to be performed, completed operations liability) in a sum no less than \$5 million, automobile liability in a sum no less than \$5 million, worker's compensation in an amount no less than the applicable statutory minimum requirement, and employer's liability in an amount of no less than \$1 million, with insurance carriers with an AM Bests rating of no less than A- or equivalent. Before delivery of any Goods or commencement of any services under the Purchase Order, Supplier will provide to Honeywell evidence that Supplier maintains the described insurance, and that the coverage will not be changed without 30 days advance written notification to Honeywell from the carrier(s). Except where prohibited by law, Supplier will require its insurers to waive all rights of recovery or subrogation against Honeywell, its subsidiaries and affiliated companies, and its and their respective officers, directors, shareholders, employees, and agents. The amount of insurance carried in compliance with the above requirements is not to be construed as either a limitation on or satisfaction of the indemnification obligation in this Purchase Order.

#### **24. Confidentiality and Intellectual Property**

**24.1** All information, including without limitation specifications, samples, drawings, materials, know-how, designs, processes, and other technical, business, or financial information, that: (a) has been or will be supplied to Supplier by or on behalf of Honeywell; or (b) Supplier will design, develop, or create in connection with this Purchase Order; as to individual items or a combination of components or both, and whether or not completed, and all derivatives of (a) and (b) that Supplier has or will design, develop or create are deemed to be "Confidential Information" of Honeywell. All Confidential Information is work made for hire and made in the course of services rendered. All rights to it belong exclusively to Honeywell, with Honeywell having the sole right to obtain, hold, and renew, in its own name or for its own benefit, patents, copyrights, registrations, or other appropriate protection. To the extent that exclusive title or ownership rights in Confidential Information may not originally vest in Honeywell, Supplier irrevocably assigns transfers and conveys to Honeywell all right, title, and interest therein.

**24.2** Honeywell's Confidential Information will remain the property of Honeywell. It may not be used by Supplier for any purpose other than for performing this Purchase Order, may not be disclosed to any third party, and will be returned to Honeywell upon the earlier of Honeywell's written request or completion of the Purchase Order. If, with Honeywell's prior written approval, Supplier furnishes Confidential Information to a sub-tier supplier, Supplier will bind the sub-tier supplier to confidentiality requirements substantially identical to this provision and Supplier will remain responsible to Honeywell for any breach of this provision by its sub-tier suppliers. No disclosure, description or other communication of any sort will be made by Supplier to any third person of the fact of Honeywell's purchase of Goods under this Purchase Order, the terms of this Purchase Order, the substance of any discussions or negotiations concerning this Purchase Order, or either party's performance under this Purchase Order.

**24.3** "Personal Data" means any information relating to an identified or identifiable natural person; an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his physical, physiological, mental, economic, cultural or social identity. Supplier will: (a) treat Personal Data of all Honeywell personnel and prospective Honeywell personnel as Confidential Information; (b) take appropriate technical and organizational security measures as are required by Honeywell to protect Personal Data; (c) use and permit employees and third parties to use Personal Data pursuant to Honeywell's instructions only for purposes directly related to the performance of obligations under this Purchase Order; (d) refrain from transferring Personal Data out of the European Union unless Honeywell has given its prior consent to the transfer and Supplier has satisfied any further requirements reasonably imposed by Honeywell; (e) indemnify Honeywell against all losses, costs, expenses, damages, liabilities, demands, claims, actions or proceedings which Honeywell may suffer or incur arising out of any breach of this clause 24.3; and (f) promptly notify Honeywell about: any legally binding request for disclosure of Personal Data by a law enforcement agency (unless otherwise prohibited); any accidental or unauthorized processing of Personal Data; and any requests received from individuals to whom Personal Data relates, without responding to that request unless it has been otherwise authorized to do so by Honeywell. If Supplier will process Personal Data that Honeywell transfers from any of its affiliates in the European Union to any of its affiliates in the US pursuant to the U.S. - EU Safe Harbor Framework ("Safe Harbor Personal Data"), Supplier warrants that either (a) Supplier self-certifies to the U.S. - EU Safe Harbor Framework with respect to the processing of the Safe Harbor Personal Data and will notify Honeywell immediately if its self-certification terminates for any reason, or (b) Supplier must provide at least the same level of privacy protection as required by the U.S. - EU Safe harbor Framework.

## 25. Record Retention and Audit

**25.1** Records: Supplier will maintain detailed records reflecting Supplier's compliance with this Purchase Order a period of 10 years after the final delivery or termination of this Purchase Order or for the period prescribed by applicable law, whichever period is longer. Supplier will require each of its sub-tier suppliers to do likewise with respect to their records and materials.

**25.2** Audit: For a period of 10 years from the date of last delivery or for the period prescribed by applicable law, whichever period is longer, Honeywell will have the right in connection with this Purchase Order to conduct an audit. Supplier will provide, and will cause each of its sub-tier suppliers to provide, access for Honeywell's auditors to Supplier's and Supplier's sub-tier supplier's books and other pertinent records and any other information as requested by Honeywell's auditors. During the audit if any invoice submitted by Supplier is found to be in error, an appropriate adjustment including the costs of the audit will be made to the invoice or the next succeeding invoice following the discovery of the error and resulting payment/credit will be issued promptly. Supplier will, and, if applicable, will cause its sub-tier suppliers to, promptly correct any deficiencies discovered as a result of the audit.

## 26. Assignment and Subcontracting

This Purchase Order will be binding on the Supplier and their respective permitted successors and assigns. Supplier will not assign this Purchase Order or any rights or obligations under this Purchase Order or subcontract all or any aspect of the work called for without the prior written approval of Honeywell. Any transfer of this Purchase Order by Supplier by merger, consolidation, dissolution, or any change in ownership or power to vote a controlling share of the voting stock in Supplier will constitute an assignment for the purposes of this Purchase Order. Any assignment or subcontracting without Honeywell's written approval will be voidable at the option of Honeywell. Honeywell may assign this Purchase Order or any of its rights or obligations under this Purchase Order to any of its subsidiaries or affiliates, or to any purchaser or successor to all or substantially all of the assets of Honeywell without Supplier's consent and upon written notice to Supplier. Supplier will be responsible for all its subcontractors and any act or omission of the subcontractor shall be deemed and action or omission from the Supplier for the purpose of this Agreement.

## 27. Relationship of Parties/Independent Contractor

Nothing in this Purchase Order will be construed to place Supplier and Honeywell in an agency, employment, franchise, joint venture, or partnership relationship. Neither party has the authority to obligate or bind the other in any manner. Nothing contained in this Purchase Order will give rise or is intended to give rise to rights of any kind to any third parties. Neither party will make any representation to the contrary. The parties agree that Supplier will perform its obligations under this Purchase Order as an independent contractor. Supplier will be solely responsible to exercise full control of, supervision over and responsibility for Supplier's personnel, its subcontractors or its agents, and any employee of any of the foregoing as well as compliance with workers' compensation, unemployment, disability insurance, social security, withholding and all other laws, rules, codes, regulations and ordinances governing such matters.

## 28. Compliance with Laws and Integrity

**28.1** Supplier will comply with all laws, regulations and ordinances and Honeywell's Code of Business Conduct ("Code") in performing this Purchase Order. A copy of the Code may be obtained at <http://www.honeywell.com/sites/honeywell/codeofconduct.htm>. Supplier agrees to abide by and maintain an integrity and compliance program that encompasses at a minimum the standards of business conduct set forth in the Code and that effectively prevents and corrects ethical violations and maintains compliance with laws. Supplier will also comply with Honeywell's reasonable security requirements upon request by Honeywell.

**28.2** Upon request, in form and substance satisfactory to enable Honeywell to meet its compliance obligations with regard to Regulation (EC) No 1907/2006 ("REACH"), Supplier will provide Honeywell with complete information regarding the chemical composition of any Goods supplied under this Purchase Order, including all safety information required under REACH and information regarding the registration or pre-registration status of any Goods pursuant to REACH promptly but no later than 30 days of receiving such request. Supplier agrees that it will include any Honeywell "Identified Use" in its REACH registrations or applications for Authorization, unless Supplier notifies Honeywell that it rejects the Identified Use in order to protect human health or the environment and specifies the reason for the rejection. In this case Honeywell will have the right to terminate this Purchase Order without incurring any damages.

**28.3** Absent Honeywell's prior written consent, no Goods will contain any of the (i) substances identified in Article 4.1 of the European Parliament Directive 2002/95/EC (RoHS Directive) as that Directive is updated from time to time, (ii) substances of very high concern ("SVHC") defined in Article 57 of Regulation (EC) No 1907/2006 ("REACH") as updated from time to time, and/or (iii) substances listed in or similar applicable laws or regulations, restricting the use of hazardous materials in other jurisdictions as updated from time to time.

**28.4** Goods will comply with the restrictions set forth in the Montreal Protocol on ozone-depleting substances.

**28.5** Supplier will be responsible for all costs and liabilities for or relating to the recycling of Goods pursuant to the most current version of European Parliament Directive 2002/96/EC (WEEE Directive) as this Directive is implemented in each country.

## 29. Supply Chain Security

Supplier will implement the Business Partner Criteria of any Supply Chain Security Program that the country of import for the Goods may adopt such as the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT) or the Canadian Partners in Protection (PIP) Program.

## 30. Conflict Minerals

In accordance with applicable "Conflict Minerals" laws, Honeywell must determine whether its products contain tin, tantalum, tungsten, or gold ("3TG") originating in the Democratic Republic of the Congo and adjoining countries ("Conflict Minerals"). To the extent Supplier supplies direct materials containing 3TG to Honeywell under this Purchase Order, Supplier commits to have a supply chain process to ensure and document a reasonable inquiry into the country of origin of the 3TG minerals incorporated into products it supplies to Honeywell. If requested, Supplier will promptly provide information or representations that Honeywell reasonably believes are required to meet its conflict minerals compliance obligations.

## 31. US Equal Employment Opportunity Regulations

To the extent employment activities of Supplier occur in the United States and if otherwise applicable **this contractor and subcontractor shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, or national origin. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.**

## 32. Applicable Law and Forum

**32.1 United States:** If Honeywell is a legal entity formed in the United States, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of the State of New York, U.S.A. without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto), and the federal or state courts in New York, New York will have exclusive jurisdiction of any dispute.

**32.2 China:** If both parties are legal entities formed in The People's Republic of China, then the construction, interpretation, performance, and enforcement hereof all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of The People's Republic of China without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute not resolved by the parties through consultations will be subject to binding arbitration in accordance with the rules of the China International Economic Trade Arbitration Commission (CIETAC). In any arbitration there will be three arbitrators. Each Party will select and appoint one arbitrator within 30 days after the date of a request for arbitration. The third arbitrator will be jointly selected and appointed by the Parties. If the Parties fail to select and appoint the third arbitrator, the Chairman of CIETAC will select the third arbitrator. If a Party does not select and appoint an arbitrator within thirty days after the selection and appointment of the first arbitrator, the relevant selection and appointment will be made by the Chairman of CIETAC. The place of arbitration will be Shanghai.

If Honeywell is a legal entity formed in The People's Republic of China and the Supplier is not a legal entity formed in The People's Republic of China, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of England and Wales without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute not resolved by the parties will be subject to arbitration in accordance with the rules of the Singapore International Arbitration Centre.

**32.3 Korea, Hong Kong, Malaysia, Taiwan, Singapore, Indonesia, Vietnam, Australia, and New Zealand:** If Honeywell is a legal entity formed in Korea, Hong Kong, Malaysia, Singapore, Indonesia, Vietnam, Australia, and New Zealand, then the construction, interpretation, performance and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of the country under which the Honeywell entity is formed, excluding the UN Convention on Contracts for the International Sale of Goods of 1980 (and any amendments or successors thereto), and any dispute arising out of or relating to this Purchase Order, including the breach, termination or validity thereof, will be finally resolved in accordance with the rules of arbitration as noted below. Judgment upon the award rendered by the arbitrators may be entered by any court having jurisdiction thereof. The place of arbitration will be selected by Honeywell.

- Singapore, Indonesia, Vietnam, Australia, New Zealand, - in accordance with the arbitration rules of the Singapore International Arbitration Center
- Korea - in accordance with the arbitration rules of the Korean Commercial Arbitration Board



- Hong Kong - in accordance with the arbitration rules of the Hong Kong International Arbitration Center
- Malaysia - in accordance with the arbitration rules of the Kuala Lumpur Regional Arbitration Centre
- Taiwan - in accordance with the arbitration rules of the local Arbitration Act

**32.4 EMEA, India and countries not listed above:** If Honeywell is a legal entity formed in a European, Middle Eastern and African country or formed in a country not identified above, then the construction, interpretation, performance, and enforcement hereof, all transactions hereunder and the parties relationship in connection therewith or any related claims whether founded in contract, tort or otherwise, will be governed by the laws of England and Wales without regard to or application of its principles or laws regarding conflicts of laws, and excluding the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto). Any dispute arising out of or relating to this Purchase Order, including the breach, termination or validity thereof, will be finally resolved by a panel of three arbitrators in accordance with the Rules for Arbitration of the International Chamber of Commerce. Judgment upon the award rendered by the arbitrators may be entered by any court having jurisdiction thereof. The place of arbitration will be London, England.

**32.5 Additional rules applicable to Arbitration:** Any award will be payable in the currency of this Purchase Order. Either party may apply to the arbitrators seeking injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either party also may, without waiving any remedy under this Purchase Order, seek from any court having jurisdiction any interim or provisional relief that is necessary to protect the rights or property of that party, pending the arbitrators' determination of the merits of the controversy. The language of the arbitration will be English.

### **33. Remedies**

All Honeywell remedies set forth in this Purchase Order are in addition to, and will in no way limit, any other rights and remedies at law or in equity.

### **34. Notices**

Notices relating to this Purchase Order must be in writing and may be delivered personally, by recognized overnight courier, or by certified first class mail, postage prepaid (each to the respective address appearing on the face of this Purchase Order). A Notice will be deemed given on the date delivered if delivered personally; 3 business days after being placed in the mail as specified above or in the custody of an overnight courier as specified above.

### **35. Publicity**

Supplier will not use Honeywell's name or marks or refer to or identify Honeywell in any advertising or publicity releases or promotional or marketing materials without Honeywell's prior written approval. Furthermore, Supplier will not claim or suggest, implicitly or explicitly, that Honeywell's use of its Goods constitutes Honeywell's endorsement of its Goods.

### **36. Non-Exclusivity / No Commitment**

Nothing in this Purchase Order will restrict Honeywell's right to contract with any third party to provide or perform, or to provide or perform on its own behalf, products or services similar or identical to the Goods provided by Supplier pursuant to this Purchase Order. Furthermore, there is no requirement that any minimum level of business or fees be provided to Supplier by Honeywell.

### **37. Headings and Captions**

Headings and captions are for convenience of reference only and do not alter the meaning or interpretation of any provision of this Purchase Order.

### **38. Waiver**

The failure or delay of either Party to enforce at any time any of the provisions of this Purchase Order will be construed to be a continuing waiver of those provisions, nor will any failure or delay prejudice the right of the Party to take any action or to exercise any right or remedy to enforce any provision.

### **39. Severability**

If any provision of this Purchase Order (or portion thereof) is held to be illegal, invalid, or unenforceable by a court of competent jurisdiction, the parties agree that the court will construe the provision in a manner that renders the provision valid and enforceable to the fullest extent possible under the law of the applicable jurisdiction and that the remaining provisions will remain in full force and effect.

### **40. Survival**

All provisions of this Purchase Order which by their nature should apply beyond its term will remain in force after any termination or expiration of this Purchase Order including, but not limited to, those addressing the following subjects: Import/Customs Compliance; Drawback; Offset; Honeywell-Supplied Materials, Tooling, Equipment and Technical Data; Price; Price: Most Favored Customer and Meet or Release; Invoicing and Payment; Set Off; Warranty; Cessation of Production; General Indemnification; Intellectual Property Indemnification; Insurance; Lien Waivers; Confidentiality/Data Privacy and Intellectual Property; Audit; Relationship Between the Parties/Independent Contractor; Applicable Law and Forum; Remedies; Publicity; Waiver; and Survival.

### **41. Translations**

Translations in various languages of this General Terms and Conditions of Purchase may be available for reference. In case of inconsistencies between translations and the original English version, the English version shall prevail.

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**APPENDIX I**

Invoices



# Invoice

**Remittance Address:**  
**Amec Foster Wheeler Environment & Infrastructure, Inc.**  
**24376 Network Place**  
**Chicago, IL 60673-1376**

Honeywell  
 1985 Douglas Drive N  
 MN10-132B  
 Golden Valley, MN 55422  
 Attention: Charles Geadelmann

**Invoice # :** J04409496  
**Invoice Date :** 01/31/2017  
**Project :** 3293161707  
**Contract Number :** PO#4500195490 #37156  
**Due Date :** 05/31/2017  
**Terms :** Net 120 Days

Re : HWCGS Museum Prop-ACM Removal

**For Professional Services Rendered: 12/10/2016 to 01/31/2017**

\*\*\*invoice via RIMS\*\*\*

## Invoice Summary Totals

Phase : 510001 -- Project Management	2,898.37
Phase : 571001 -- RA (Soil Removal)	13,749.95
<b>TOTAL PHASE SUMMARY</b>	<b>16,648.32</b>
<b>Amount Due this Invoice</b>	<b>16,648.32</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 510001 -- Project Management	8,626.00	9,248.31	-622.31
Phase: 520001 -- Final Report	13,400.00	0.00	13,400.00
Phase: 571001 -- RA (Soil Removal)	316,349.00	244,959.32	71,389.68
<b>Total : 3293161707 -- HWCGS Museum Prop-ACM Removal</b>	<b>338,375.00</b>	<b>254,207.63</b>	<b>84,167.37</b>

## Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04409058	12/01/2016	58,008.73	58,008.73
J04409118	12/13/2016	179,550.58	179,550.58
J04409496	01/31/2017	16,648.32	16,648.32

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

**Project Manager :** McGowan, Michael J

**Terms:** Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
 Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
 Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161707  
Project Number : HWCGS Museum Prop-ACM Removal

Invoice Date : 01/31/2017  
Invoice # : J04409496

Phase : 510001 -- Project Management

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior</b>			
McGowan,Michael J	24.5	110.05	2,696.16
<b>Total : Senior</b>	<b>24.5</b>		<b>2,696.16</b>
<b>Total Fees</b>	<b>24.5</b>		<b>2,696.16</b>

**Other**

<u>Activity / Employee Name</u>	<u>Amount</u>
ODC Fee	202.21
<b>Other Subtotal</b>	<b>202.21</b>

Total Phase : 510001 -- Project Management

Fees : 2,898.37  
Expenses : 0.00  
Total : 2,898.37

Phase : 571001 -- RA (Soil Removal)

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Principal</b>			
Caryl,Joseph W	0.5	146.87	73.43
<b>Total : Senior Principal</b>	<b>0.5</b>		<b>73.43</b>
<b>NA&amp;NC - Senior</b>			
McGowan,Michael J	12.0	110.05	1,320.56
<b>Total : Senior</b>	<b>12.0</b>		<b>1,320.56</b>
<b>NA&amp;NC - Project</b>			
Cunningham,Kurt L	75.5	79.66	6,014.11
Cunningham,Kurt L	2.0	79.66	159.31
<b>Total : Project</b>	<b>77.5</b>		<b>6,173.42</b>
<b>Total Fees</b>	<b>90.0</b>		<b>7,567.41</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
Cunningham,Kurt L	1,164.95	1.000	1,164.95
McKeever,Randall E	922.63	1.000	922.63
<b>Total : Transportation</b>	<b>2,087.58</b>		<b>2,087.58</b>
<b>Other Travel</b>			
Cunningham,Kurt L	235.81	1.000	235.81
<b>Total : Other Travel</b>	<b>235.81</b>		<b>235.81</b>
<b>Lodging</b>			
Cunningham,Kurt L	2,057.80	1.000	2,057.80
<b>Total : Lodging</b>	<b>2,057.80</b>		<b>2,057.80</b>
<b>Meals (Including Tips)</b>			
Cunningham,Kurt L	555.15	1.000	555.15
McKeever,Randall E	40.81	1.000	40.81

Project Name : 3293161707  
Project Number : HWCGS Museum Prop-ACM Removal

Invoice Date : 01/31/2017  
Invoice # : J04409496

Phase : 571001 -- RA (Soil Removal)

Reimbursable Expenses

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Total : Meals (Including Tips)</b>	<b>595.96</b>		<b>595.96</b>
<b>Analytical Lab</b>			
Quantem Laboratories LLC	48.00	1.050	50.40
<b>Total : Analytical Lab</b>	<b>48.00</b>		<b>50.40</b>
<b>Other Cost</b>			
Cunningham,Kurt L	32.00	1.000	32.00
FedEx - 332043838	449.59	1.000	449.59
UPS	105.84	1.000	105.84
<b>Total : Other Cost</b>	<b>587.43</b>		<b>587.43</b>

**Total Reimbursable Expenses** **5,614.98**

**Total Expenses** **5,614.98**

<u>Other</u>	<u>Amount</u>
ODC Fee	567.56
<b>Other Subtotal</b>	<b>567.56</b>

Total Phase : 571001 -- RA (Soil Removal)

**Fees :** **8,134.97**  
**Expenses :** **5,614.98**  
**Total :** **13,749.95**

**Total Project:** **3293161707 -- HWCGS Museum Prop-ACM Removal** **16,648.32**

# Invoice

## Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re : HWCGS Museum Prop-ACM Removal

Invoice # : J04409642  
Invoice Date : 02/28/2017  
Project : 3293161707  
Contract Number : PO#4500195490 #37156  
Due Date : 06/28/2017  
Terms : Net 120 Days

For Professional Services Rendered: 02/01/2017 to 02/28/2017

\*\*\*invoice via RIMS\*\*\*

## Invoice Summary Totals

Phase : 510001 -- Project Management	295.75
Phase : 571001 -- RA (Soil Removal)	1,673.78
<b>TOTAL PHASE SUMMARY</b>	<b>1,969.53</b>
<b>Amount Due this Invoice</b>	<b>1,969.53</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 510001 -- Project Management	8,626.00	9,544.06	-918.06
Phase: 520001 -- Final Report	13,400.00	0.00	13,400.00
Phase: 571001 -- RA (Soil Removal)	316,349.00	246,633.10	69,715.90
<b>Total : 3293161707 -- HWCGS Museum Prop-ACM Removal</b>	<b>338,375.00</b>	<b>256,177.16</b>	<b>82,197.84</b>

## Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04409058	12/01/2016	58,008.73	58,008.73
J04409118	12/13/2016	179,550.58	179,550.58
J04409496	01/31/2017	16,648.32	16,648.32
J04409642	02/28/2017	1,969.53	1,969.53

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager : McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161707  
Project Number : HWCGS Museum Prop-ACM Removal

Invoice Date : 02/28/2017  
Invoice # : J04409642

Phase : 510001 -- Project Management

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior</b>			
McGowan,Michael J	2.5	110.05	275.12
<b>Total : Senior</b>	<b>2.5</b>		<b>275.12</b>
<b>Total Fees</b>	<b>2.5</b>		<b>275.12</b>

**Other**

<u>Activity / Employee Name</u>	<u>Amount</u>
ODC Fee	20.63
<b>Other Subtotal</b>	<b>20.63</b>

Total Phase : 510001 -- Project Management

**Fees :** 295.75  
**Expenses :** 0.00  
**Total :** 295.75

Phase : 571001 -- RA (Soil Removal)

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Principal</b>			
Caryl,Joseph W	1.5	146.87	220.30
<b>Total : Senior Principal</b>	<b>1.5</b>		<b>220.30</b>
<b>NA&amp;NC - Senior</b>			
McGowan,Michael J	8.5	110.05	935.40
<b>Total : Senior</b>	<b>8.5</b>		<b>935.40</b>
<b>NA&amp;NC - Project</b>			
Cunningham,Kurt L	1.5	79.66	119.49
<b>Total : Project</b>	<b>1.5</b>		<b>119.49</b>
<b>Total Fees</b>	<b>11.5</b>		<b>1,275.19</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
McKeever,Randall E	4.00	1.000	4.00
<b>Total : Transportation</b>	<b>4.00</b>		<b>4.00</b>
<b>Other Travel</b>			
McKeever,Randall E	70.00	1.000	70.00
<b>Total : Other Travel</b>	<b>70.00</b>		<b>70.00</b>
<b>Meals (Including Tips)</b>			
McKeever,Randall E	40.48	1.000	40.48
<b>Total : Meals (Including Tips)</b>	<b>40.48</b>		<b>40.48</b>
<b>Supplies &amp; Equipment</b>			
McKeever,Randall E	188.47	1.000	188.47
<b>Total : Supplies &amp; Equipment</b>	<b>188.47</b>		<b>188.47</b>
<b>Total Reimbursable Expenses</b>			<b>302.95</b>



Project Name : 3293161707

Invoice Date : 02/28/2017

Project Number : HWCGS Museum Prop-ACM Removal

Invoice # : J04409642

<b>Total Expenses</b>	<b>302.95</b>
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<b>Other</b>		Amount
ODC Fee		95.64
<b>Other Subtotal</b>		<b>95.64</b>

Total Phase : 571001 -- RA (Soil Removal)	Fees :	1,370.83
	Expenses :	302.95
	Total :	1,673.78

Total Project:	3293161707 -- HWCGS Museum Prop-ACM Removal	1,969.53
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Monthly Project Financial Summary- through January 20, 2017

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	1/20/17	1100	3293161676	\$ 40,752.00	\$ -	\$ 40,703.44	\$ 48.56	99.9%	\$ 48.56	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 2,245.74	\$ 65,918.98	\$ 22,680.02	74.4%	\$ 22,680.02	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 1.68	\$ 10,598.69	\$ 3,459.31	75.4%	\$ 3,459.31	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 2,247.42	\$ 117,221.11	\$ 26,187.89	81.7%	\$ 26,187.89	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	1/20/2017		3293161676	\$ 143,409.00	\$ 2,247.42	\$ 117,221.11	\$ 26,187.89	81.7%	\$ 26,187.89	\$ 143,409.00	\$ -

Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04409449  
Invoice Date: 01/24/2017  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 05/24/2017  
Terms: Net 120 Days

For Professional Services Rendered: 11/26/2016 to 01/20/2017

Invoice Summary Totals

Phase : 2100 -- Remedial Investigation	2,246.74
Phase : 9400 -- Incentive Fee	1.68
<b>TOTAL PHASE SUMMARY</b>	<b>2,247.42</b>
<b>Amount Due this Invoice</b>	<b>2,247.42</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	40,703.44	48.56
Phase: 2100 -- Remedial Investigation	88,599.00	65,918.98	22,680.02
Phase: 9400 -- Incentive Fee	14,058.00	10,598.69	3,459.31
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>117,221.11</b>	<b>26,187.89</b>

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04408865	10/23/2016	41,078.58	41,078.58
J04409055	12/01/2016	15,513.36	15,513.36
J04409449	01/24/2017	2,247.42	2,247.42

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 01/24/2017  
Invoice # : J04409449

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
NA&NC - Admin			
Harmon,Diane	0.3	56.04	16.81
<b>Total : Admin</b>	<b>0.3</b>		<b>16.81</b>
<b>Total Fees</b>	<b>0.3</b>		<b>16.81</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
Analytical Lab			
Quantem Laboratories LLC	616.00	1.050	646.80
<b>Total : Analytical Lab</b>	<b>616.00</b>		<b>646.80</b>
Equipment Rental			
Pine Environmental Services, Inc.	1,441.23	1.000	1,441.23
<b>Total : Equipment Rental</b>	<b>1,441.23</b>		<b>1,441.23</b>
Other Cost			
FedEx - 332043838	27.56	1.000	27.56
FedEx 004100050	112.67	1.000	112.67
<b>Total : Other Cost</b>	<b>140.23</b>		<b>140.23</b>
<b>Total Reimbursable Expenses</b>			<b>2,228.26</b>
<b>Total Expenses</b>			<b>2,228.26</b>

<u>Other</u>	<u>Amount</u>
ODC Fee	0.67
<b>Other Subtotal</b>	<b>0.67</b>

<b>Total Phase : 2100 -- Remedial Investigation</b>	<b>Fees :</b>	<b>17.48</b>
	<b>Expenses :</b>	<b>2,228.26</b>
	<b>Total :</b>	<b>2,245.74</b>

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	1.68
Other Subtotal	1.68
Total Phase : 9400 -- Incentive Fee	
Fees :	1.68
Expenses :	0.00
Total :	1.68

**Total Project: 3293161676 -- HW Torch Lake/Museum Property 2,247.42**



2033 Heritage Park Drive  
Oklahoma City, OK 73120

# INVOICE

Invoice Number: 167686  
Invoice Date: Nov 9, 2016  
Page: 1

<b>Bill To:</b>
AMEC Novi-MI 46850 Magellan Dr STE 190 Novi, MI 48377

<b>Ship to:</b>

Customer ID	Customer PO	Payment Terms	
B894	C012904340	Net 30	
Sales Rep ID	Shipping Method	Ship Date	Due Date
AB			12/9/16

Quantity	Description	Unit Price	Amount
56.00	PCM	5.00	280.00
56.00	PCM Samples	6.00	336.00
Combines invoices 167686 167829 167830 167974 167975 167941 167942 167943 167973 168256 168258 168260 168261 168284 Lab No: 272166, Project: Former Calumet Stamp Mill, Project No: 3293161676, Location: Lake Linden, MI, Project Manager: Kurt Cunningham			

Subtotal	616.00
Sales Tax	
Total Invoice Amount	616.00
Payment/Credit Applied	
<b>TOTAL</b>	<b>616.00</b>

Check/Credit Memo No:

1.5% per month on past due amounts



Monthly Project Financial Summary- through February 24, 2017

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	2/24/17	1100	3293161676	\$ 40,752.00	\$ -	\$ 40,703.44	\$ 48.56	99.9%	\$ 48.56	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 1,021.67	\$ 66,940.65	\$ 21,658.35	75.6%	\$ 21,658.35	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 52.25	\$ 10,650.94	\$ 3,407.06	75.8%	\$ 3,407.06	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 1,073.92	\$ 118,295.03	\$ 25,113.97	82.5%	\$ 25,113.97	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	2/24/2017		3293161676	\$ 143,409.00	\$ 1,073.92	\$ 118,295.03	\$ 25,113.97	82.5%	\$ 25,113.97	\$ 143,409.00	\$ -

Invoice

Remittance Address:  
Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re : HW Torch Lake/Museum Property

Invoice # : J04409577  
Invoice Date : 02/24/2017  
Project : 3293161676  
Contract Number : PO#4500180294 #37156  
Due Date : 06/24/2017  
Terms : Net 120 Days

For Professional Services Rendered: 01/21/2017 to 02/24/2017

Invoice Summary Totals

Phase : 2100 -- Remedial Investigation	1,021.67
Phase : 9400 -- Incentive Fee	52.25
<b>TOTAL PHASE SUMMARY</b>	<b>1,073.92</b>
<b>Amount Due this Invoice</b>	<b>1,073.92</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	40,703.44	48.56
Phase: 2100 -- Remedial Investigation	88,599.00	66,940.65	21,658.35
Phase: 9400 -- Incentive Fee	14,058.00	10,650.94	3,407.06
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>118,295.03</b>	<b>25,113.97</b>

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04409055	12/01/2016	15,513.36	15,513.36
J04409449	01/24/2017	2,247.42	2,247.42
J04409577	02/24/2017	1,073.92	1,073.92

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager : McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com)  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 02/24/2017  
Invoice # : J04409577

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	4.5	116.10	522.47
<b>Total : Senior</b>	<b>4.5</b>		<b>522.47</b>
<b>Total Fees</b>	<b>4.5</b>		<b>522.47</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Analytical Lab</b>			
Quantem Laboratories LLC	480.00	1.040	499.20
<b>Total : Analytical Lab</b>	<b>480.00</b>		<b>499.20</b>
<b>Total Reimbursable Expenses</b>			<b>499.20</b>

**Total Expenses** **499.20**

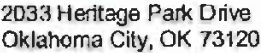
Total Phase : 2100 -- Remedial Investigation

Fees : 522.47  
Expenses : 499.20  
Total : 1,021.67

Phase : 9400 -- Incentive Fee

<u>Other</u>	<u>Amount</u>
<b>Fee</b>	<b>52.25</b>
<b>Other Subtotal</b>	<b>52.25</b>
<b>Total Phase : 9400 -- Incentive Fee</b>	<b>52.25</b>
	<b>Fees : 52.25</b>
	<b>Expenses : 0.00</b>
	<b>Total : 52.25</b>

Total Project: 3293161676 -- HW Torch Lake/Museum Property 1,073.92



Invoice Number: 1701020  
Invoice Date: Jan 26, 2017  
Page: 1

**Ship to:**  
AMEC Novi-MI  
46850 Magellan Dr STE 190  
Novi, MI 48377

Quantity	Description	Unit Price	Amount
80.00	PCM Samples	6.00	480.00

Subtotal	480.00
Sales Tax	
Total Invoice Amount	480.00
Payment/Credit Applied	
<b>TOTAL</b>	<b>480.00</b>

**1.5% per month on past due amounts**

Monthly Project Financial Summary- through May 6, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
Torch Lake/Museum															
Property	Geadelmann	37156	McGowan	4500180294	5/6/16	1100	3293161676	\$ 40,752.00	\$ 14,143.29	\$ 14,143.29	\$ 26,608.71	34.7%	\$ 26,608.71	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ -	\$ -	\$ 88,599.00	0.0%	\$ 88,599.00	\$ 88,599.00	#####
						9400		\$ 14,058.00	\$ 1,359.93	\$ 1,359.93	\$ 12,698.07	9.7%	\$ 12,698.07	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 15,503.22	\$ 15,503.22	\$ 127,905.78	10.8%	\$ 127,905.78	\$ 143,409.00	#####
Torch Lake/Museum															
Property	Geadelmann	37156	McGowan	4500180294	5/6/2016		3293161676	\$' 143,409.00	\$ 15,503.22	\$ 15,503.22	\$ 127,905.78	10.8%	\$ 127,905.78	\$ 143,409.00	#####



Invoice

Remittance Address:  
Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422  
Attention: Charles Geadelmann

Invoice # : J04407768  
Invoice Date : 05/16/2016  
Project : 3293161676  
Contract Number : PO#4500180294 #37156  
Due Date : 08/29/2016  
Terms : Net 105 Days

Re : HW Torch Lake/Museum Property

For Professional Services Rendered: 02/06/2016 to 05/06/2016

Invoice Summary Totals

Phase : 1100 -- Identification/Site History	14,143.29
Phase : 9400 -- Incentive Fee	1,359.93
<b>TOTAL PHASE SUMMARY</b>	<b>15,503.22</b>
<b>Amount Due this Invoice</b>	<b>15,503.22</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	14,143.29	26,608.71
Phase: 2100 -- Remedial Investigation	88,599.00	0.00	88,599.00
Phase: 9400 -- Incentive Fee	14,058.00	1,359.93	12,698.07
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>15,503.22</b>	<b>127,905.78</b>

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04407768	05/16/2016	15,503.22	15,503.22

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager : McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 05/16/2016  
Invoice # : J04407768

Phase : 1100 -- Identification/Site History

Fees			
Activity / Employee Name	Hours	Rate	Amount
NA&NC - Senior Principal			
Caryl, Joseph W	1.5	169.77	254.66
<b>Total : Senior Principal</b>	<b>1.5</b>		<b>254.66</b>
NA&NC - Senior Principal			
Sroonian, Sandra L	8.5	146.71	1,247.08
<b>Total : Senior Principal</b>	<b>8.5</b>		<b>1,247.08</b>
NA&NC - Senior			
McGowan, Michael J	85.0	127.21	10,812.81
<b>Total : Senior</b>	<b>85.0</b>		<b>10,812.81</b>
NA&NC - Senior			
EmeryDeVisser, Anita M	10.0	119.88	1,198.77
<b>Total : Senior</b>	<b>10.0</b>		<b>1,198.77</b>
NA&NC - Technical Professional 1			
Gibney, Bonnie M	1.0	58.87	58.87
<b>Total : Technical Professional 1</b>	<b>1.0</b>		<b>58.87</b>
NA&NC - Admin			
McLean, Deanna D	0.6	45.21	27.13
<b>Total : Admin</b>	<b>0.6</b>		<b>27.13</b>
<b>Total Fees</b>	<b>106.6</b>		<b>13,599.32</b>

Other	Amount
ODC Fee	543.97
<b>Other Subtotal</b>	<b>543.97</b>

<b>Total Phase : 1100 -- Identification/Site History</b>	<b>Fees :</b>	<b>14,143.29</b>
	<b>Expenses :</b>	<b>0.00</b>
	<b>Total :</b>	<b>14,143.29</b>

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	1,359.93
<b>Other Subtotal</b>	<b>1,359.93</b>

<b>Total Phase : 9400 -- Incentive Fee</b>	<b>Fees :</b>	<b>1,359.93</b>
	<b>Expenses :</b>	<b>0.00</b>
	<b>Total :</b>	<b>1,359.93</b>

**Total Project:** 3293161676 -- HW Torch Lake/Museum Property **15,503.22**

Monthly Project Financial Summary- through May 26, 2017

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	5/26/17	1100	3293161676	\$ 40,752.00	\$ -	\$ 40,703.44	\$ 48.56	99.9%	\$ 48.56	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 2,713.13	\$ 69,653.78	\$ 18,945.22	78.6%	\$ 18,945.22	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 271.31	\$ 10,922.25	\$ 3,135.75	77.7%	\$ 3,135.75	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 2,984.44	\$ 121,279.47	\$ 22,129.53	84.6%	\$ 22,129.53	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	5/26/17		3293161676	\$ 143,409.00	\$ 2,984.44	\$ 121,279.47	\$ 22,129.53	84.6%	\$ 22,129.53	\$ 143,409.00	\$ -

Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re : HW Torch Lake/Museum Property

Invoice # : J04410144  
Invoice Date : 05/30/2017  
Project : 3293161676  
Contract Number : PO#4500180294 #37156  
Due Date : 09/27/2017  
Terms : Net 120 Days

For Professional Services Rendered: 02/25/2017 to 05/26/2017

Invoice Summary Totals

Phase : 2100 -- Remedial Investigation	2,713.13
Phase : 9400 -- Incentive Fee	271.31
<b>TOTAL PHASE SUMMARY</b>	<b>2,984.44</b>
Amount Due this Invoice	2,984.44

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	40,703.44	48.56
Phase: 2100 -- Remedial Investigation	88,599.00	69,653.78	18,945.22
Phase: 9400 -- Incentive Fee	14,058.00	10,922.25	3,135.75
Total : 3293161676 -- HW Torch Lake/Museum Property	143,409.00	121,279.47	22,129.53

Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04409449	01/24/2017	2,247.42	2,247.42
J04409577	02/24/2017	1,073.92	1,073.92
J04410144	05/30/2017	2,984.44	2,984.44

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager : McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 05/30/2017  
Invoice # : J04410144

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	3.0	190.58	571.74
<b>Total : Senior</b>	<b>3.0</b>		<b>571.74</b>
<b>NA&amp;NC - Project Manager</b>			
McGowan, Michael J	15.5	119.58	1,853.45
<b>Total : Project Manager</b>	<b>15.5</b>		<b>1,853.45</b>
<b>NA&amp;NC - Admin</b>			
Osenroth, Sarah K	4.5	63.99	287.94
<b>Total : Admin</b>	<b>4.5</b>		<b>287.94</b>
<b>Total Fees</b>	<b>23.0</b>		<b>2,713.13</b>

Total Phase : 2100 -- Remedial Investigation

Fees : 2,713.13  
Expenses : 0.00  
Total : 2,713.13

Phase : 9400 -- Incentive Fee

<u>Other</u>	<u>Amount</u>
Fee	271.31
<b>Other Subtotal</b>	<b>271.31</b>
<b>Total Phase : 9400 -- Incentive Fee</b>	
Fees :	271.31
Expenses :	0.00
<b>Total :</b>	<b>271.31</b>

Total Project: 3293161676 -- HW Torch Lake/Museum Property 2,984.44



Monthly Project Financial Summary- through June 10, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
Torch Lake/Museum Property	Geadelmann	37156	McGowan	4500180294	6/10/16	1100	3293161676	\$ 40,752.00	\$ 3,168.34	\$ 17,311.63	\$ 23,440.37	42.5%	\$ 23,440.37	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ -	\$ -	\$ 88,599.00	0.0%	\$ 88,599.00	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 304.65	\$ 1,664.58	\$ 12,393.42	11.8%	\$ 12,393.42	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 3,472.99	\$ 18,976.21	\$ 124,432.79	13.2%	\$ 124,432.79	\$ 143,409.00	\$ -
Torch Lake/Museum Property	Geadelmann	37156	McGowan	4500180294	6/10/2016		3293161676	\$ 143,409.00	\$ 3,472.99	\$ 18,976.21	\$ 124,432.79	13.2%	\$ 124,432.79	\$ 143,409.00	\$ -

# Invoice

## Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04407893  
Invoice Date: 06/15/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 09/28/2016  
Terms: Net 105 Days

For Professional Services Rendered: 05/07/2016 to 06/10/2016

## Invoice Summary Totals

Phase: 1100 -- Identification/Site History	3,168.34
Phase: 9400 -- Incentive Fee	304.65
<b>TOTAL PHASE SUMMARY</b>	<b>3,472.99</b>
<b>Amount Due this Invoice</b>	<b>3,472.99</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	17,311.63	23,440.37
Phase: 2100 -- Remedial Investigation	88,599.00	0.00	88,599.00
Phase: 9400 -- Incentive Fee	14,058.00	1,664.58	12,393.42
<b>Total: 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>18,976.21</b>	<b>124,432.79</b>

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04407768	05/16/2016	15,503.22	15,503.22
J04407893	06/15/2016	3,472.99	3,472.99

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 06/15/2016  
Invoice # : J04407893

Phase : 1100 -- Identification/Site History

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	23.5	127.21	2,989.42
<b>Total : Senior</b>	<b>23.5</b>		<b>2,989.42</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>24.5</b>		<b>3,046.48</b>

**Other**

<u>Other</u>	<u>Amount</u>
ODC Fee	121.86
<b>Other Subtotal</b>	<b>121.86</b>

Total Phase : 1100 -- Identification/Site History

<b>Fees :</b>	<b>3,168.34</b>
<b>Expenses :</b>	<b>0.00</b>
<b>Total :</b>	<b>3,168.34</b>

Phase : 9400 -- Incentive Fee

<u>Other</u>	<u>Amount</u>
Fee	304.65
<b>Other Subtotal</b>	<b>304.65</b>

Total Phase : 9400 -- Incentive Fee

<b>Fees :</b>	<b>304.65</b>
<b>Expenses :</b>	<b>0.00</b>
<b>Total :</b>	<b>304.65</b>

Total Project: 3293161676 -- HW Torch Lake/Museum Property

3,472.99

Monthly Project Financial Summary- through July 1, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	7/1/16	1100	3293161676	\$ 40,752.00	\$ 2,168.99	\$ 19,480.62	\$ 21,271.38	47.8%	\$ 21,271.38	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ -	\$ -	\$ 88,599.00	0.0%	\$ 88,599.00	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 208.56	\$ 1,873.14	\$ 12,184.86	13.3%	\$ 12,184.86	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 2,377.55	\$ 21,353.76	\$ 122,055.24	14.9%	\$ 122,055.24	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	7/1/2016		3293161676	\$ 143,409.00	\$ 2,377.55	\$ 21,353.76	\$ 122,055.24	14.9%	\$ 122,055.24	\$ 143,409.00	\$ -

# Invoice

## Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04408094  
Invoice Date: 07/02/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 10/30/2016  
Terms: Net 120 Days

For Professional Services Rendered: 06/11/2016 to 07/01/2016

## Invoice Summary Totals

Phase: 1100 -- Identification/Site History	2,168.99
Phase: 9400 -- Incentive Fee	208.56
<b>TOTAL PHASE SUMMARY</b>	<b>2,377.55</b>
<b>Amount Due this Invoice</b>	<b>2,377.55</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	19,480.62	21,271.38
Phase: 2100 -- Remedial Investigation	88,599.00	0.00	88,599.00
Phase: 9400 -- Incentive Fee	14,058.00	1,873.14	12,184.86
<b>Total: 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>21,353.76</b>	<b>122,055.24</b>

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

## Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04407768	05/16/2016	15,503.22	15,503.22
J04407893	06/15/2016	3,472.99	3,472.99
J04408094	07/02/2016	2,377.55	2,377.55

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772



Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 07/02/2016  
Invoice # : J04408094

Phase : 1100 -- Identification/Site History

Fees			
Activity / Employee Name	Hours	Rate	Amount
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	2.5	200.79	501.99
<b>Total : Senior Project</b>	<b>2.5</b>		<b>501.99</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	12.0	127.21	1,526.52
<b>Total : Senior</b>	<b>12.0</b>		<b>1,526.52</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>15.5</b>		<b>2,085.57</b>

Other	Amount
ODC Fee	83.42
<b>Other Subtotal</b>	<b>83.42</b>

<b>Total Phase : 1100 -- Identification/Site History</b>	<b>Fees :</b>	<b>2,168.99</b>
	<b>Expenses :</b>	<b>0.00</b>
	<b>Total :</b>	<b>2,168.99</b>

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	208.56
Other Subtotal	208.56
Total Phase : 9400 -- Incentive Fee	Fees : 208.56
	Expenses : 0.00
	Total : 208.56

**Total Project:** 3293161676 -- HW Torch Lake/Museum Property 2,377.55

Monthly Project Financial Summary- through July 22, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	7/22/16	1100	3293161676	\$ 40,752.00	\$ 5,837.96	\$ 25,318.58	\$ 15,433.42	62.1%	\$ 15,433.42	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ -	\$ -	\$ 88,599.00	0.0%	\$ 88,599.00	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 487.78	\$ 2,360.92	\$ 11,697.08	16.8%	\$ 11,697.08	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 6,325.74	\$ 27,679.50	\$ 115,729.50	19.3%	\$ 115,729.50	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	7/22/2016		3293161676	\$ 143,409.00	\$ 6,325.74	\$ 27,679.50	\$ 115,729.50	19.3%	\$ 115,729.50	\$ 143,409.00	\$ -

# Invoice

## Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04408308  
Invoice Date: 07/29/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 11/25/2016  
Terms: Net 120 Days

For Professional Services Rendered: 07/02/2016 to 07/22/2016

## Invoice Summary Totals

Phase: 1100 -- Identification/Site History	5,837.96
Phase: 9400 -- Incentive Fee	457.78
<b>TOTAL PHASE SUMMARY</b>	<b>6,295.74</b>
<b>Amount Due this Invoice</b>	<b>6,295.74</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	25,318.58	15,433.42
Phase: 2100 -- Remedial Investigation	88,599.00	0.00	88,599.00
Phase: 9400 -- Incentive Fee	14,058.00	2,330.92	11,727.08
<b>Total: 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>27,649.50</b>	<b>115,759.50</b>

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04407768	05/16/2016	15,503.22	15,503.22
J04407893	06/15/2016	3,472.99	3,472.99
J04408094	07/02/2016	2,377.55	2,377.55
J04408308	07/29/2016	6,295.74	6,295.74

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 07/29/2016  
Invoice # : J04408308

Phase : 1100 -- Identification/Site History

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	0.5	200.79	100.40
<b>Total : Senior Project</b>	<b>0.5</b>		<b>100.40</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	34.5	127.21	4,388.74
<b>Total : Senior</b>	<b>34.5</b>		<b>4,388.74</b>
<b>NA&amp;NC - Admin</b>			
Denson, Paulette T	0.2	71.52	14.30
<b>Total : Admin</b>	<b>0.2</b>		<b>14.30</b>
<b>NA&amp;NC - Technician</b>			
Potter, Edward K	0.3	57.56	17.27
<b>Total : Technician</b>	<b>0.3</b>		<b>17.27</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>36.5</b>		<b>4,577.77</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
McGowan, Michael J	745.30	1.000	745.30
<b>Total : Transportation</b>	<b>745.30</b>		<b>745.30</b>
<b>Other Travel</b>			
McGowan, Michael J	85.00	1.000	85.00
Sroonian, Sandra L	48.75	1.000	48.75
<b>Total : Other Travel</b>	<b>133.75</b>		<b>133.75</b>
<b>Auto/Mileage</b>			
McGowan, Michael J	32.40	1.000	32.40
Sroonian, Sandra L	7.56	1.000	7.56
<b>Total : Auto/Mileage</b>	<b>39.96</b>		<b>39.96</b>
<b>Lodging</b>			
McGowan, Michael J	97.01	1.000	97.01
<b>Total : Lodging</b>	<b>97.01</b>		<b>97.01</b>
<b>Meals (Including Tips)</b>			
McGowan, Michael J	26.12	1.000	26.12
Sroonian, Sandra L	34.94	1.000	34.94
<b>Total : Meals (Including Tips)</b>	<b>61.06</b>		<b>61.06</b>
<b>Total Reimbursable Expenses</b>			<b>1,077.08</b>
<b>Total Expenses</b>			<b>1,077.08</b>

Project Name : 3293161676

Invoice Date : 07/29/2016

Project Number : HW Torch Lake/Museum Property

Invoice # : J04408308

Other	Amount
ODC Fee	183.11
Other Subtotal	183.11

Total Phase : 1100 -- Identification/Site History

Fees :	4,760.88
Expenses :	1,077.08
Total :	5,837.96

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	457.78
Other Subtotal	457.78

Total Phase : 9400 -- Incentive Fee

Fees :	457.78
Expenses :	0.00
Total :	457.78

Total Project:	3293161676 -- HW Torch Lake/Museum Property	6,295.74
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Monthly Project Financial Summary- through August 19, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	8/19/16	1100	3293161676	\$ 40,752.00	\$ 8,287.50	\$ 33,606.08	\$ 7,145.92	82.5%	\$ 7,145.92	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ -	\$ -	\$ 88,599.00	0.0%	\$ 88,599.00	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 752.31	\$ 3,083.23	\$ 10,974.77	21.9%	\$ 10,974.77	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 9,039.81	\$ 36,689.31	\$ 106,719.69	25.6%	\$ 106,719.69	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	8/19/2016		3293161676	\$ 143,409.00	\$ 9,039.81	\$ 36,689.31	\$ 106,719.69	25.6%	\$ 106,719.69	\$ 143,409.00	\$ -

# Invoice

## Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04408374  
Invoice Date: 08/20/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 12/18/2016  
Terms: Net 120 Days

For Professional Services Rendered: 07/23/2016 to 08/19/2016

## Invoice Summary Totals

Phase : 1100 -- Identification/Site History	8,287.50
Phase : 9400 -- Incentive Fee	752.31
<b>TOTAL PHASE SUMMARY</b>	<b>9,039.81</b>
<b>Amount Due this Invoice</b>	<b>9,039.81</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	33,606.08	7,145.92
Phase: 2100 -- Remedial Investigation	88,599.00	0.00	88,599.00
Phase: 9400 -- Incentive Fee	14,058.00	3,083.23	10,974.77
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>36,689.31</b>	<b>106,719.69</b>

## Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04407768	05/16/2016	15,503.22	15,503.22
J04407893	06/15/2016	3,472.99	3,472.99
J04408094	07/02/2016	2,377.55	2,377.55
J04408308	07/29/2016	6,295.74	6,295.74
J04408374	08/20/2016	9,039.81	9,039.81

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 08/20/2016  
Invoice # : J04408374

Phase : 1100 -- Identification/Site History

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	1.0	200.79	200.80
<b>Total : Senior Project</b>	<b>1.0</b>		<b>200.80</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	57.0	127.21	7,250.95
<b>Total : Senior</b>	<b>57.0</b>		<b>7,250.95</b>
<b>NA&amp;NC - Admin</b>			
Denson, Paulette T	0.2	71.52	14.30
<b>Total : Admin</b>	<b>0.2</b>		<b>14.30</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>59.2</b>		<b>7,523.11</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
McGowan, Michael J	200.74	1.000	200.74
<b>Total : Transportation</b>	<b>200.74</b>		<b>200.74</b>
<b>Other Travel</b>			
McGowan, Michael J	109.85	1.000	109.85
<b>Total : Other Travel</b>	<b>109.85</b>		<b>109.85</b>
<b>Lodging</b>			
McGowan, Michael J	125.28	1.000	125.28
<b>Total : Lodging</b>	<b>125.28</b>		<b>125.28</b>
<b>Meals (Including Tips)</b>			
McGowan, Michael J	27.60	1.000	27.60
<b>Total : Meals (Including Tips)</b>	<b>27.60</b>		<b>27.60</b>
<b>Total Reimbursable Expenses</b>			<b>463.47</b>
<b>Total Expenses</b>			<b>463.47</b>

<u>Other</u>	<u>Amount</u>
ODC Fee	300.92
<b>Other Subtotal</b>	<b>300.92</b>

Total Phase : 1100 -- Identification/Site History

Fees : 7,824.03  
Expenses : 463.47  
Total : 8,287.50

Phase : 9400 -- Incentive Fee

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 08/20/2016  
Invoice # : J04408374

Other		Amount
Fee		752.31
Other Subtotal		752.31
Total Phase : 9400 -- Incentive Fee		
	Fees :	752.31
	Expenses :	0.00
	Total :	752.31
Total Project:		
3293161676 -- HW Torch Lake/Museum Property		9,039.81

Monthly Project Financial Summary- through September 23, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	IEAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	9/23/16	1100	3293161676	\$ 40,752.00	\$ 5,868.99	\$ 39,475.07	\$ 1,276.93	96.9%	\$ 1,276.93	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 13,920.60	\$ 13,920.60	\$ 74,678.40	15.7%	\$ 74,678.40	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 1,902.85	\$ 4,986.08	\$ 9,071.92	35.5%	\$ 9,071.92	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 21,692.44	\$ 58,381.75	\$ 85,027.25	40.7%	\$ 85,027.25	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	9/23/2016		3293161676	\$ 143,409.00	\$ 21,692.44	\$ 58,381.75	\$ 85,027.25	40.7%	\$ 85,027.25	\$ 143,409.00	\$ -



# Invoice

Remittance Address:  
 Amec Foster Wheeler Environment & Infrastructure, Inc.  
 24376 Network Place  
 Chicago, IL 60673-1376

Honeywell  
 1985 Douglas Drive N  
 MN10-132B  
 Golden Valley, MN 55422  
 Attention: Charles Geadelmann

Re : HW Torch Lake/Museum Property

Invoice # : J04408699  
 Invoice Date : 09/27/2016  
 Project : 3293161676  
 Contract Number : PO#4500180294 #37156  
 Due Date : 01/25/2017  
 Terms : Net 120 Days

For Professional Services Rendered: 08/20/2016 to 09/23/2016

## Invoice Summary Totals

Phase : 1100 -- Identification/Site History	5,868.99
Phase : 2100 -- Remedial Investigation	13,920.60
Phase : 9400 -- Incentive Fee	1,902.85

<b>TOTAL PHASE SUMMARY</b>	<b>21,692.44</b>
<b>Amount Due this Invoice</b>	<b>21,692.44</b>

## Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	39,475.07	1,276.93
Phase: 2100 -- Remedial Investigation	88,599.00	13,920.60	74,678.40
Phase: 9400 -- Incentive Fee	14,058.00	4,986.08	9,071.92
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>58,381.75</b>	<b>85,027.25</b>

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04408094	07/02/2016	2,377.55	2,377.55
J04408308	07/29/2016	6,295.74	6,295.74
J04408374	08/20/2016	9,039.81	9,039.81
J04408699	09/27/2016	21,692.44	21,692.44

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager : McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
 Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
 Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 09/27/2016  
Invoice # : J04408699

Phase : 1100 -- Identification/Site History

Fees			
Activity / Employee Name	Hours	Rate	Amount
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	0.5	200.79	100.40
Total : Senior Project	0.5		100.40
<b>NA&amp;NC - Senior Principal</b>			
Caryl, Joseph W	3.0	169.77	509.32
Caryl, Joseph W	2.0	169.77	339.55
Total : Senior Principal	5.0		848.87
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	32.0	127.21	4,070.72
Total : Senior	32.0		4,070.72
<b>NA&amp;NC - Senior</b>			
Kolimko, Keith B	2.0	121.97	243.93
Total : Senior	2.0		243.93
<b>NA&amp;NC - Project</b>			
Cunningham, Kurt L	3.5	92.08	322.28
Total : Project	3.5		322.28
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
Total : Assigned & Not Co-Located	1.0		57.06
Total Fees	44.0		5,643.26

Other		Amount
ODC Fee		225.73
Other Subtotal		225.73

Total Phase : 1100 -- Identification/Site History	Fees :	5,868.99
	Expenses :	0.00
	Total :	5,868.99

Phase : 2100 -- Remedial Investigation

Fees			
Activity / Employee Name	Hours	Rate	Amount
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	1.5	200.79	301.19
Total : Senior Project	1.5		301.19
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	57.0	127.21	7,250.94
Total : Senior	57.0		7,250.94
<b>NA&amp;NC - Project</b>			
Cunningham, Kurt L	26.0	92.08	2,394.10
Cunningham, Kurt L	2.0	92.08	184.16
Total : Project	28.0		2,578.26

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 09/27/2016  
Invoice # : J04408699

Phase : 2100 -- Remedial Investigation

Fees			
Activity / Employee Name	Hours	Rate	Amount
NA&NC - Technical Professional 1			
Gibney,Bonnie M	53.0	58.87	3,119.98
Total : Technical Professional 1	53.0		3,119.98
NA&NC - Staff I			
Havens,Kaitlyn P	2.5	53.93	134.82
Total : Staff I	2.5		134.82
Total Fees	142.0		13,385.19

Other	Amount
ODC Fee	535.41
Other Subtotal	535.41

Total Phase : 2100 -- Remedial Investigation	Fees :	13,920.60
	Expenses :	0.00
	Total :	13,920.60

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	1,902.85
Other Subtotal	1,902.85

Total Phase : 9400 -- Incentive Fee	Fees :	1,902.85
	Expenses :	0.00
	Total :	1,902.85

Total Project:	3293161676 -- HW Torch Lake/Museum Property	21,692.44
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Monthly Project Financial Summary- through October 21, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	WAR
HW Torch Lake/ Museum Property	Gadelmann	37156	McGowan	4500180294	10/21/16	1100	3293161676	\$ 40,752.00	\$ 1,080.74	\$ 40,555.81	\$ 196.19	99.9%	\$ 196.19	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 36,589.73	\$ 50,510.33	\$ 38,088.67	57.0%	\$ 38,088.67	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 3,408.11	\$ 8,394.19	\$ 5,663.81	59.7%	\$ 5,663.81	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 41,078.58	\$ 99,460.33	\$ 43,948.67	69.4%	\$ 43,948.67	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Gadelmann	37156	McGowan	4500180294	10/21/2016		3293161676	\$ 143,409.00	\$ 41,078.58	\$ 99,460.33	\$ 43,948.67	69.4%	\$ 43,948.67	\$ 143,409.00	\$ -

Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04408865  
Invoice Date: 10/23/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 02/20/2017  
Terms: Net 120 Days

For Professional Services Rendered: 09/24/2016 to 10/21/2016

Invoice Summary Totals

Phase : 1100 -- Identification/Site History	1,080.74
Phase : 2100 -- Remedial Investigation	36,589.73
Phase : 9400 -- Incentive Fee	3,408.11
<b>TOTAL PHASE SUMMARY</b>	<b>41,078.58</b>
<b>Amount Due this Invoice</b>	<b>41,078.58</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	40,555.81	196.19
Phase: 2100 -- Remedial Investigation	88,599.00	50,510.33	38,088.67
Phase: 9400 -- Incentive Fee	14,058.00	8,394.19	5,663.81
<b>Total : 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>99,460.33</b>	<b>43,948.67</b>

Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04408308	07/29/2016	6,295.74	6,295.74
J04408374	08/20/2016	9,039.81	9,039.81
J04408699	09/27/2016	21,692.44	21,692.44
J04408865	10/23/2016	41,078.58	41,078.58

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated)

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772



Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 10/23/2016  
Invoice # : J04408865

Phase : 1100 -- Identification/Site History

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb,Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>1.0</b>		<b>57.06</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
McGowan,Michael J	644.82	1.000	644.82
<b>Total : Transportation</b>	<b>644.82</b>		<b>644.82</b>
<b>Other Travel</b>			
McGowan,Michael J	57.39	1.000	57.39
<b>Total : Other Travel</b>	<b>57.39</b>		<b>57.39</b>
<b>Auto/Mileage</b>			
McGowan,Michael J	33.48	1.000	33.48
<b>Total : Auto/Mileage</b>	<b>33.48</b>		<b>33.48</b>
<b>Lodging</b>			
McGowan,Michael J	220.50	1.000	220.50
<b>Total : Lodging</b>	<b>220.50</b>		<b>220.50</b>
<b>Meals (Including Tips)</b>			
McGowan,Michael J	65.21	1.000	65.21
<b>Total : Meals (Including Tips)</b>	<b>65.21</b>		<b>65.21</b>
<b>Total Reimbursable Expenses</b>			<b>1,021.40</b>
<b>Total Expenses</b>			<b>1,021.40</b>

**Other**

<u>Other</u>	<u>Amount</u>
ODC Fee	2.28
<b>Other Subtotal</b>	<b>2.28</b>

**Total Phase : 1100 -- Identification/Site History**

**Fees :** 59.34  
**Expenses :** 1,021.40  
**Total :** 1,080.74

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy,Garret E	5.5	200.79	1,104.37
<b>Total : Senior Project</b>	<b>5.5</b>		<b>1,104.37</b>
<b>NA&amp;NC - Health/Safety</b>			
Mazur,John F	2.0	182.20	364.40
<b>Total : Health/Safety</b>	<b>2.0</b>		<b>364.40</b>

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 10/23/2016  
Invoice # : J04408865

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Principal</b>			
Caryl, Joseph W	2.5	169.77	424.44
Caryl, Joseph W	2.5	169.77	424.44
<b>Total : Senior Principal</b>	<b>5.0</b>		<b>848.88</b>
<b>NA&amp;NC - Health/Safety</b>			
Sundquist, Cynthia E	2.0	138.65	277.30
<b>Total : Health/Safety</b>	<b>2.0</b>		<b>277.30</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	90.5	127.21	11,512.46
<b>Total : Senior</b>	<b>90.5</b>		<b>11,512.46</b>
<b>NA&amp;NC - Project</b>			
Kempf, Carrie L	15.0	94.83	1,422.42
<b>Total : Project</b>	<b>15.0</b>		<b>1,422.42</b>
<b>NA&amp;NC - Project</b>			
Cunningham, Kurt L	99.5	92.08	9,162.06
Cunningham, Kurt L	11.5	92.08	1,058.92
<b>Total : Project</b>	<b>111.0</b>		<b>10,220.98</b>
<b>NA&amp;NC - Staff II</b>			
Saigh, Douglas R	2.5	84.09	210.23
<b>Total : Staff II</b>	<b>2.5</b>		<b>210.23</b>
<b>NA&amp;NC - Admin</b>			
Denson, Paulette T	0.5	71.52	35.76
<b>Total : Admin</b>	<b>0.5</b>		<b>35.76</b>
<b>NA&amp;NC - Staff II</b>			
Franklin, Peggy E	0.8	70.36	56.29
<b>Total : Staff II</b>	<b>0.8</b>		<b>56.29</b>
<b>NA&amp;NC - Admin</b>			
Osenroth, Sarah K	8.2	68.07	558.14
<b>Total : Admin</b>	<b>8.2</b>		<b>558.14</b>
<b>NA&amp;NC - Admin I</b>			
Rauser, Amy	2.1	63.98	134.37
<b>Total : Admin I</b>	<b>2.1</b>		<b>134.37</b>
<b>NA&amp;NC - Technical Professional 1</b>			
Gibney, Bonnie M	113.0	58.87	6,651.99
Gibney, Bonnie M	2.5	58.87	147.17
<b>Total : Technical Professional 1</b>	<b>115.5</b>		<b>6,799.16</b>
<b>NA&amp;NC - Admin</b>			
Kestner, Paige M	0.5	54.41	27.20
<b>Total : Admin</b>	<b>0.5</b>		<b>27.20</b>
<b>NA&amp;NC - Staff I</b>			
Havens, Kaitlyn P	7.4	53.93	399.07
<b>Total : Staff I</b>	<b>7.4</b>		<b>399.07</b>

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 10/23/2016  
Invoice # : J04408855

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Staff I</b>			
Weeks,Adam R	1.0	53.00	53.00
<b>Total : Staff I</b>	<b>1.0</b>		<b>53.00</b>
<b>Total Fees</b>	<b>369.5</b>		<b>34,024.03</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
Cunningham,Kurt L	869.06	1.000	869.06
<b>Total : Transportation</b>	<b>869.06</b>		<b>869.06</b>
<b>Other Travel</b>			
Cunningham,Kurt L	13.00	1.000	13.00
<b>Total : Other Travel</b>	<b>13.00</b>		<b>13.00</b>
<b>Lodging</b>			
Cunningham,Kurt L	81.75	1.000	81.75
<b>Total : Lodging</b>	<b>81.75</b>		<b>81.75</b>
<b>Meals (Including Tips)</b>			
Cunningham,Kurt L	74.19	1.000	74.19
<b>Total : Meals (Including Tips)</b>	<b>74.19</b>		<b>74.19</b>
<b>Analytical Lab</b>			
Quantem Laboratories LLC	158.80	1.050	166.74
<b>Total : Analytical Lab</b>	<b>158.80</b>		<b>166.74</b>
<b>Total Reimbursable Expenses</b>			<b>1,204.74</b>
<b>Total Expenses</b>			<b>1,204.74</b>

<u>Other</u>	<u>Amount</u>
ODC Fee	1,360.96
<b>Other Subtotal</b>	<b>1,360.96</b>

<b>Total Phase : 2100 -- Remedial Investigation</b>	<b>Fees :</b>	<b>35,384.99</b>
	<b>Expenses :</b>	<b>1,204.74</b>
	<b>Total :</b>	<b>36,589.73</b>

Phase : 9400 -- Incentive Fee

Other	Amount
Fee	3,408.11
Other Subtotal	3,408.11
Total Phase : 9400 -- Incentive Fee	Fees : 3,408.11
	Expenses : 0.00
	Total : 3,408.11

Total Project: 3293161676 -- HW Torch Lake/Museum Property 41,078.58



2033 Heritage Park Drive  
Oklahoma City, OK 73120

# INVOICE

Invoice Number: 1610006  
Invoice Date: Oct 21, 2016  
Page: 1

**Bill To:**

AMEC Novi-MI  
46850 Magellan Dr STE 190  
Novi, MI 48377

**Ship to:**

AMEC Novi-MI  
46850 Magellan Dr STE 190  
Novi, MI 48377

3293161676.2100.01

Customer ID	Customer PO	Payment Terms	
B894	Project # 3293161676	Net 30 Days	
Sales Rep ID	Shipping Method	Ship Date	Due Date
			11/20/16

Quantity	Description	Unit Price	Amount
200.00	PCM Cassettes	0.55	110.00
1.00	Shipping	39.59	39.59
C012904340			

Subtotal	149.59
Sales Tax	9.21
Total Invoice Amount	158.80
Payment/Credit Applied	
<b>TOTAL</b>	<b>158.80</b>

Check/Credit Memo No:

1.5% per month on past due amounts

Monthly Project Financial Summary- through November 25, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	11/25/16	1100	3293161676	\$ 40,752.00	\$ 147.63	\$ 40,703.44	\$ 48.56	99.9%	\$ 48.56	\$ 40,752.00	\$ -
						2100		\$ 88,599.00	\$ 13,162.91	\$ 63,673.24	\$ 24,925.76	71.9%	\$ 24,925.76	\$ 88,599.00	\$ -
						9400		\$ 14,058.00	\$ 2,202.82	\$ 10,597.01	\$ 3,460.99	75.4%	\$ 3,460.99	\$ 14,058.00	\$ -
								\$ 143,409.00	\$ 15,513.36	\$ 114,973.69	\$ 28,435.31	80.2%	\$ 28,435.31	\$ 143,409.00	\$ -
HW Torch Lake/ Museum Property	Geadelmann	37156	McGowan	4500180294	11/25/2016		3293161676	\$ 143,409.00	\$ 15,513.36	\$ 114,973.69	\$ 28,435.31	80.2%	\$ 28,435.31	\$ 143,409.00	\$ -



Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HW Torch Lake/Museum Property

Invoice #: J04409055  
Invoice Date: 12/01/2016  
Project: 3293161676  
Contract Number: PO#4500180294 #37156  
Due Date: 03/31/2017  
Terms: Net 120 Days

For Professional Services Rendered: 10/22/2016 to 11/25/2016

Invoice Summary Totals

Phase: 1100 -- Identification/Site History	147.63
Phase: 2100 -- Remedial Investigation	13,162.91
Phase: 9400 -- Incentive Fee	2,202.82
<b>TOTAL PHASE SUMMARY</b>	<b>15,513.36</b>
Amount Due this Invoice	15,513.36

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 1100 -- Identification/Site History	40,752.00	40,703.44	48.56
Phase: 2100 -- Remedial Investigation	88,599.00	63,673.24	24,925.76
Phase: 9400 -- Incentive Fee	14,058.00	10,597.01	3,460.99
<b>Total: 3293161676 -- HW Torch Lake/Museum Property</b>	<b>143,409.00</b>	<b>114,973.69</b>	<b>28,435.31</b>

Outstanding Invoices for This Project

Number	Date	Amount	Balance
J04408374	08/20/2016	9,039.81	9,039.81
J04408699	09/27/2016	21,692.44	21,692.44
J04408865	10/23/2016	41,078.58	41,078.58
J04409055	12/01/2016	15,513.36	15,513.36

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161676  
 Project Number : HW Torch Lake/Museum Property

Invoice Date : 12/01/2016  
 Invoice # : J04409056

Phase : 1100 -- Identification/Site History

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Principal</b>			
Caryl, Joseph W	0.5	169.77	84.89
<b>Total : Senior Principal</b>	<b>0.5</b>		<b>84.89</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Whitcomb, Julie	1.0	57.06	57.06
<b>Total : Assigned &amp; Not Co-Located</b>	<b>1.0</b>		<b>57.06</b>
<b>Total Fees</b>	<b>1.5</b>		<b>141.95</b>

**Other**

	<u>Amount</u>
ODC Fee	5.68
<b>Other Subtotal</b>	<b>5.68</b>

Total Phase : 1100 -- Identification/Site History

Fees : 147.63  
 Expenses : 0.00  
 Total : 147.63

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	5.0	200.79	1,003.97
<b>Total : Senior Project</b>	<b>5.0</b>		<b>1,003.97</b>
<b>NA&amp;NC - Senior Principal</b>			
Caryl, Joseph W	2.0	169.77	339.54
<b>Total : Senior Principal</b>	<b>2.0</b>		<b>339.54</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	35.5	127.21	4,515.95
<b>Total : Senior</b>	<b>35.5</b>		<b>4,515.95</b>
<b>NA&amp;NC - Project</b>			
Cunningham, Kurt L	40.0	92.08	3,683.23
Cunningham, Kurt L	7.0	92.08	644.57
<b>Total : Project</b>	<b>47.0</b>		<b>4,327.80</b>
<b>NA&amp;NC - Senior Technician II</b>			
Cunningham, Bruce D	0.3	79.56	23.87
<b>Total : Senior Technician II</b>	<b>0.3</b>		<b>23.87</b>
<b>NA&amp;NC - Admin</b>			
Denson, Paulette T	0.5	71.52	35.76
<b>Total : Admin</b>	<b>0.5</b>		<b>35.76</b>
<b>A&amp;NC - Assigned &amp; Not Co-Located</b>			
Siewert, Erin D	0.5	70.96	35.48
<b>Total : Assigned &amp; Not Co-Located</b>	<b>0.5</b>		<b>35.48</b>

Project Name : 3293161676  
 Project Number : HW Torch Lake/Museum Property

Invoice Date : 12/01/2016  
 Invoice # : J04409055

Phase : 2100 -- Remedial Investigation

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Staff II</b>			
Franklin,Peggy E	1.1	70.36	77.40
<b>Total : Staff II</b>	<b>1.1</b>		<b>77.40</b>
<b>NA&amp;NC - Admin</b>			
Osenroth,Sarah K	3.0	68.07	204.20
<b>Total : Admin</b>	<b>3.0</b>		<b>204.20</b>
<b>NA&amp;NC - Technical Professional 1</b>			
Gibney,Bonnie M	5.0	58.87	294.34
<b>Total : Technical Professional 1</b>	<b>5.0</b>		<b>294.34</b>
<b>NA&amp;NC - Admin</b>			
Kestner,Paige M	0.5	54.41	27.20
<b>Total : Admin</b>	<b>0.5</b>		<b>27.20</b>
<b>NA&amp;NC - Staff I</b>			
Weeks,Adam R	0.6	53.00	31.80
<b>Total : Staff I</b>	<b>0.6</b>		<b>31.80</b>
<b>Total Fees</b>	<b>101.0</b>		<b>10,917.31</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
McGowan,Michael J	1,323.62	1.000	1,323.62
<b>Total : Transportation</b>	<b>1,323.62</b>		<b>1,323.62</b>
<b>Other Travel</b>			
Cunningham,Kurt L	7.50	1.000	7.50
McGowan,Michael J	71.47	1.000	71.47
<b>Total : Other Travel</b>	<b>78.97</b>		<b>78.97</b>
<b>Auto/Mileage</b>			
McGowan,Michael J	33.48	1.000	33.48
<b>Total : Auto/Mileage</b>	<b>33.48</b>		<b>33.48</b>
<b>Lodging</b>			
McGowan,Michael J	268.40	1.000	268.40
<b>Total : Lodging</b>	<b>268.40</b>		<b>268.40</b>
<b>Meals (Including Tips)</b>			
McGowan,Michael J	45.13	1.000	45.13
<b>Total : Meals (Including Tips)</b>	<b>45.13</b>		<b>45.13</b>
<b>Other Cost</b>			
FedEx - 332043838	59.31	1.000	59.31
<b>Total : Other Cost</b>	<b>59.31</b>		<b>59.31</b>
<b>Total Reimbursable Expenses</b>			<b>1,808.91</b>
<b>Total Expenses</b>			<b>1,808.91</b>

Project Name : 3293161676  
Project Number : HW Torch Lake/Museum Property

Invoice Date : 12/01/2016  
Invoice # : J04409055

Other	Amount
ODC Fee	436.69
Other Subtotal	436.69

Total Phase : 2100 -- Remedial Investigation	Fees :	11,354.00
	Expenses :	1,808.91
	Total :	13,162.91

Phase : 9400 -- Incentive Fee

Unit Pricing Expenses

	Doc Nbr	Doc Date	Qty	UOM	Rate	Amount
Incentive Fee True Up	J04112916	11/25/2016	1,096.89	Dollar(s)	1.00	1,096.89
<u>2/3 qtr fee reconcile</u>						
Total : Incentive Fee True Up			1,096.89			1,096.89
Total Unit Pricing Expenses						1,096.89
Total Expenses						1,096.89

Other	Amount
Fee	1,105.93
Other Subtotal	1,105.93

Total Phase : 9400 -- Incentive Fee	Fees :	1,105.93
	Expenses :	1,096.89
	Total :	2,202.82

Total Project:	3293161676 -- HW Torch Lake/Museum Property	15,513.36
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Monthly Project Financial Summary- through November 25, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EMC	VAR
HWCGS Museum Prop- ACM Removal	Geadelmann	37156	McGowan	450019590	11/25/16	510001	3293161707	\$ 8,626.00	\$ 5,462.69	\$ 5,462.69	\$ 3,163.31	63.3%	\$ 3,163.31	\$ 8,626.00	\$ -
						520001		\$ 13,400.00	\$ -	\$ -	\$ 13,400.00	0.0%	\$ 13,400.00	\$ 13,400.00	\$ -
						571001		\$ 316,349.00	\$ 52,546.04	\$ 52,546.04	\$ 263,802.96	16.6%	\$ 263,802.96	\$ 316,349.00	\$ -
								\$ 338,375.00	\$ 58,008.73	\$ 58,008.73	\$ 280,366.27	17.1%	\$ 280,366.27	\$ 338,375.00	\$ -
HWCGS Museum Prop- ACM Removal	Geadelmann	37156	McGowan	450019590	11/25/2016		3293161707	\$ 338,375.00	\$ 58,008.73	\$ 58,008.73	\$ 280,366.27	17.1%	\$ 280,366.27	\$ 338,375.00	\$ -



Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HWCGS Museum Prop-ACM Removal

Invoice #: J04409058  
Invoice Date: 12/01/2016  
Project: 3293161707  
Contract Number: PO#4500195490 #37156  
Due Date: 03/31/2017  
Terms: Net 120 Days

For Professional Services Rendered: 10/30/2016 to 11/30/2016

Invoice Summary Totals

Phase: 510001 -- Project Management	5,462.69
Phase: 571001 -- RA (Soil Removal)	52,546.04
<b>TOTAL PHASE SUMMARY</b>	<b>58,008.73</b>
<b>Amount Due this Invoice</b>	<b>58,008.73</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 510001 -- Project Management	8,626.00	5,462.69	3,163.31
Phase: 520001 -- Final Report	13,400.00	0.00	13,400.00
Phase: 571001 -- RA (Soil Removal)	316,349.00	52,546.04	263,802.96
<b>Total: 3293161707 -- HWCGS Museum Prop-ACM Removal</b>	<b>338,375.00</b>	<b>58,008.73</b>	<b>280,366.27</b>

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04409058	12/01/2016	58,008.73	58,008.73

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.  
Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161707  
Project Number : HWCGR Museum Prop-ACM Removal

Invoice Date : 12/01/2016  
Invoice # : J04409058

Phase : 510001 -- Project Management

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	46.0	110.05	5,062.13
<b>Total : Senior</b>	<b>46.0</b>		<b>5,062.13</b>
<b>Total Fees</b>	<b>46.0</b>		<b>5,062.13</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Other Cost</b>			
FedEx - 332043838	20.90	1.000	20.90
<b>Total : Other Cost</b>	<b>20.90</b>		<b>20.90</b>
<b>Total Reimbursable Expenses</b>			<b>20.90</b>
<b>Total Expenses</b>			<b>20.90</b>

**Other**

<u></u>	<u>Amount</u>
ODC Fee	379.66
<b>Other Subtotal</b>	<b>379.66</b>

Total Phase : 510001 -- Project Management

Fees : 5,441.79  
Expenses : 20.90  
Total : 5,462.69

Phase : 571001 -- RA (Soil Removal)

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Senior Project</b>			
Bondy, Garret E	1.0	173.70	173.70
<b>Total : Senior Project</b>	<b>1.0</b>		<b>173.70</b>
<b>NA&amp;NC - Senior Principal</b>			
Caryl, Joseph W	25.5	146.87	3,745.09
Caryl, Joseph W	0.5	146.87	73.43
<b>Total : Senior Principal</b>	<b>26.0</b>		<b>3,818.52</b>
<b>NA&amp;NC - Senior</b>			
McGowan, Michael J	26.0	110.05	2,861.20
<b>Total : Senior</b>	<b>26.0</b>		<b>2,861.20</b>
<b>NA&amp;NC - Project</b>			
Cunningham, Kurt L	174.0	79.66	13,860.36
Cunningham, Kurt L	59.0	79.66	4,699.77
<b>Total : Project</b>	<b>233.0</b>		<b>18,560.13</b>
<b>NA&amp;NC - Staff II</b>			
Saigh, Douglas R	42.0	72.75	3,055.34
Saigh, Douglas R	30.0	72.75	2,182.38
<b>Total : Staff II</b>	<b>72.0</b>		<b>5,237.72</b>

Project Name : 3293161707  
Project Number : HWCGR Museum Prop-ACM Removal

Invoice Date : 12/01/2016  
Invoice # : J04409058

Phase : 571001 -- RA (Soil Removal)

**Fees**

<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
<b>NA&amp;NC - Admin I</b>			
Rauser,Amy	0.2	55.35	11.07
<b>Total : Admin I</b>	<b>0.2</b>		<b>11.07</b>
<b>NA&amp;NC - Technician</b>			
McKeever,Randall E	124.0	49.53	6,141.72
McKeever,Randall E	36.0	49.53	1,783.08
<b>Total : Technician</b>	<b>160.0</b>		<b>7,924.80</b>
<b>NA&amp;NC - Staff I</b>			
Weeks,Adam R	45.5	45.85	2,085.95
Weeks,Adam R	31.5	45.85	1,444.12
<b>Total : Staff I</b>	<b>77.0</b>		<b>3,530.07</b>
<b>Total Fees</b>	<b>595.2</b>		<b>42,117.21</b>

**Reimbursable Expenses**

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Transportation</b>			
Cunningham,Kurt L	1,458.14	1.000	1,458.14
<b>Total : Transportation</b>	<b>1,458.14</b>		<b>1,458.14</b>
<b>Other Travel</b>			
Cunningham,Kurt L	223.81	1.000	223.81
McKeever,Randall E	23.74	1.000	23.74
<b>Total : Other Travel</b>	<b>247.55</b>		<b>247.55</b>
<b>Auto/Mileage</b>			
Weeks,Adam R	513.00	1.000	513.00
<b>Total : Auto/Mileage</b>	<b>513.00</b>		<b>513.00</b>
<b>Lodging</b>			
Cunningham,Kurt L	2,643.00	1.000	2,643.00
Weeks,Adam R	939.40	1.000	939.40
<b>Total : Lodging</b>	<b>3,582.40</b>		<b>3,582.40</b>
<b>Meals (Including Tips)</b>			
Cunningham,Kurt L	652.59	1.000	652.59
McKeever,Randall E	417.15	1.000	417.15
Weeks,Adam R	131.06	1.000	131.06
<b>Total : Meals (Including Tips)</b>	<b>1,200.80</b>		<b>1,200.80</b>
<b>Supplies &amp; Equipment</b>			
Cunningham,Kurt L	195.29	1.000	195.29
McKeever,Randall E	8.58	1.000	8.58
<b>Total : Supplies &amp; Equipment</b>	<b>203.87</b>		<b>203.87</b>
<b>Equipment</b>			
Cunningham,Kurt L	10.57	1.000	10.57
<b>Total : Equipment</b>	<b>10.57</b>		<b>10.57</b>
<b>Other Cost</b>			
Cunningham,Kurt L	49.53	1.000	49.53
Weeks,Adam R	4.18	1.000	4.18
<b>Total : Other Cost</b>	<b>53.71</b>		<b>53.71</b>

Project Name : 3293161707	Invoice Date : 12/01/2016
Project Number : HWCGR Museum Prop-ACM Removal	Invoice # : J04409058

Phase : 571001 -- RA (Soil Removal)

<i>Total Reimbursable Expenses</i>	<i>7,270.04</i>
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<i>Total Expenses</i>	<i>7,270.04</i>
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<b>Other</b>	<b>Amount</b>
ODC Fee	3,158.79
<b>Other Subtotal</b>	<b>3,158.79</b>

Total Phase : 571001 -- RA (Soil Removal)	Fees :	45,276.00
	Expenses :	7,270.04
	Total :	52,546.04

Total Project:	3293161707 -- HWCGR Museum Prop-ACM Removal	58,008.73
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Monthly Project Financial Summary- through December 9, 2016

Honeywell Project Name	Honeywell RM	Honeywell Project #	AMEC FW Proj Manager	Honeywell PO#	Inv Thru Date	Cost Code	AMEC FW Project #	Budget	Spent Last Month	Spent to Date	Remaining Budget	% Based on Actual Spent	ETC	EAC	VAR
HWCGR Museum Prop- ACM Removal	Gadelmann	37156	McGowan	450019590	12/9/16	510001	3293161707	\$ 8,626.00	\$ 887.25	\$ 6,349.94	\$ 2,276.06	73.6%	\$ 2,276.06	\$ 8,626.00	\$ -
						520001		\$ 13,400.00	\$ -	\$ -	\$ 13,400.00	0.0%	\$ 13,400.00	\$ 13,400.00	\$ -
						571001		\$ 316,349.00	\$ 178,663.33	\$ 231,209.37	\$ 85,139.63	73.1%	\$ 85,139.63	\$ 316,349.00	\$ -
								\$ 338,375.00	\$ 179,550.58	\$ 237,559.31	\$ 100,815.69	70.2%	\$ 100,815.69	\$ 338,375.00	\$ -
HWCGR Museum Prop- ACM Removal	Gadelmann	37156	McGowan	450019590	12/9/2016		3293161707	\$ 338,375.00	\$ 179,550.58	\$ 237,559.31	\$ 100,815.69	70.2%	\$ 100,815.69	\$ 338,375.00	\$ -



Invoice

Remittance Address:

Amec Foster Wheeler Environment & Infrastructure, Inc.  
24376 Network Place  
Chicago, IL 60673-1376

Honeywell  
1985 Douglas Drive N  
MN10-132B  
Golden Valley, MN 55422

Attention: Charles Geadelmann

Re: HWCGS Museum Prop-ACM Removal

Invoice #: J04409118  
Invoice Date: 12/13/2016  
Project: 3293161707  
Contract Number: PO#4500195490 #37156  
Due Date: 04/12/2017  
Terms: Net 120 Days

For Professional Services Rendered: 12/01/2016 to 12/09/2016

Invoice Summary Totals

Phase: 510001 -- Project Management	887.25
Phase: 571001 -- RA (Soil Removal)	178,663.33
<b>TOTAL PHASE SUMMARY</b>	<b>179,550.58</b>
<b>Amount Due this Invoice</b>	<b>179,550.58</b>

Project Summary

Phase	Authorized Budget	Total Billed To Date	Remaining Budget
Phase: 510001 -- Project Management	8,626.00	6,349.94	2,276.06
Phase: 520001 -- Final Report	13,400.00	0.00	13,400.00
Phase: 571001 -- RA (Soil Removal)	316,349.00	231,209.37	85,139.63
<b>Total: 3293161707 -- HWCGS Museum Prop-ACM Removal</b>	<b>338,375.00</b>	<b>237,559.31</b>	<b>100,815.69</b>

Outstanding Invoices for This Project			
Number	Date	Amount	Balance
J04409058	12/01/2016	58,008.73	58,008.73
J04409118	12/13/2016	179,550.58	179,550.58

Should the remit address or bank account details on this invoice not match those held in your records, and/or you have been notified by our company through phone, email, or letter to change any of our details, please authenticate any change with our Treasury Supervisor at 770-360-0508.

Project Manager: McGowan, Michael J

Terms: Net thirty (30) days (unless otherwise negotiated).

Please quote invoice number with remittance.

Direct all billing inquiries to [michael.j.mcgowan@amecfw.com](mailto:michael.j.mcgowan@amecfw.com).  
Please visit our website at <http://www.amecfw.com>

U.S. Federal Tax ID # 91-1641772

Project Name : 3293161707  
Project Number : HWCGR Museum Prop-ACM Removal

Invoice Date : 12/13/2016  
Invoice # : J04409118

Phase : 510001 -- Project Management

Fees			
<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
NA&NC - Senior			
McGowan,Michael J	7.5	110.05	825.35
<b>Total : Senior</b>	<b>7.5</b>		<b>825.35</b>
<b>Total Fees</b>	<b>7.5</b>		<b>825.35</b>
Other			
			<u>Amount</u>
ODC Fee			61.90
<b>Other Subtotal</b>			<b>61.90</b>
<b>Total Phase : 510001 -- Project Management</b>		<b>Fees :</b>	<b>887.25</b>
		<b>Expenses :</b>	<b>0.00</b>
		<b>Total :</b>	<b>887.25</b>

Phase : 571001 -- RA (Soil Removal)

Fees			
<u>Activity / Employee Name</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
NA&NC - Senior Principal			
Caryl,Joseph W	1.5	146.87	220.30
<b>Total : Senior Principal</b>	<b>1.5</b>		<b>220.30</b>
NA&NC - Senior			
McGowan,Michael J	12.5	110.05	1,375.59
<b>Total : Senior</b>	<b>12.5</b>		<b>1,375.59</b>
NA&NC - Project			
Cunningham,Kurt L	40.0	79.66	3,186.30
Cunningham,Kurt L	56.0	79.66	4,460.81
<b>Total : Project</b>	<b>96.0</b>		<b>7,647.11</b>
NA&NC - Technician			
McKeever,Randall E	31.0	49.53	1,535.43
McKeever,Randall E	3.0	49.53	148.59
<b>Total : Technician</b>	<b>34.0</b>		<b>1,684.02</b>
<b>Total Fees</b>	<b>144.0</b>		<b>10,927.02</b>
Reimbursable Expenses			
<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
Transportation			
Caryl,Joseph W	733.46	1.000	733.46
McKeever,Randall E	8.00	1.000	8.00
Saigh,Douglas R	772.69	1.000	772.69
<b>Total : Transportation</b>	<b>1,514.15</b>		<b>1,514.15</b>
Other Travel			
Caryl,Joseph W	97.51	1.000	97.51
McKeever,Randall E	151.58	1.000	151.58
Saigh,Douglas R	166.50	1.000	166.50

Project Name : 3293161707  
Project Number : HWCGR Museum Prop-ACM Removal

Invoice Date : 12/13/2016  
Invoice # : J04409118

Phase : 571001 -- RA (Soil Removal)

Reimbursable Expenses

<u>Vendor Name</u>	<u>Cost</u>	<u>Multiplier</u>	<u>Amount</u>
<b>Total : Other Travel</b>	<b>415.59</b>		<b>415.59</b>
<b>Lodging</b>			
Caryl,Joseph W	170.11	1.000	170.11
McKeever,Randall E	2,532.70	1.000	2,532.70
Saigh,Douglas R	785.76	1.000	785.76
<b>Total : Lodging</b>	<b>3,488.57</b>		<b>3,488.57</b>
<b>Meals (Including Tips)</b>			
Caryl,Joseph W	147.11	1.000	147.11
McKeever,Randall E	388.79	1.000	388.79
Saigh,Douglas R	277.58	1.000	277.58
<b>Total : Meals (Including Tips)</b>	<b>813.48</b>		<b>813.48</b>
<b>Subcontractor</b>			
Terra Contracting Services	152,896.24	1.050	160,541.05
<b>Total : Subcontractor</b>	<b>152,896.24</b>		<b>160,541.05</b>
<b>Supplies &amp; Equipment</b>			
McKeever,Randall E	10.35	1.000	10.35
<b>Total : Supplies &amp; Equipment</b>	<b>10.35</b>		<b>10.35</b>
<b>Other Cost</b>			
FedEx - 332043838	133.59	1.000	133.59
<b>Total : Other Cost</b>	<b>133.59</b>		<b>133.59</b>

**Total Reimbursable Expenses** **166,916.78**

**Total Expenses** **166,916.78**

<u>Other</u>	<u>Amount</u>
ODC Fee	819.53
<b>Other Subtotal</b>	<b>819.53</b>

Total Phase : 571001 -- RA (Soil Removal)

Fees : 11,746.55  
Expenses : 166,916.78  
Total : 178,663.33

Total Project: 3293161707 -- HWCGR Museum Prop-ACM Removal 179,550.58



A GLEIS COMPANY

TERRAContracting.NET

5100 W. MICHIGAN AVE  
KALAMAZOO, MI. 49006  
P 269.375.9595 | F 269.375.2830

AMEC Foster Wheeler Environmental  
Attention: Michael McGowan  
46850 Magellan Drive Ste 190  
Novi, Michigan 48377

Invoice # 25873

Date 12/9/2016

Remit To Address:  
Terra Contracting Services  
62962 Collections Center Drive  
Chicago IL, 60693-0629

Project # 3293161676

DESCRIPTION	QUANTITY	UOM	RATE	AMOUNT\$
Mobilization/Demobilization	1.00	LS	\$25,131.14	\$25,131.14
Clean-Up Stamp Mill Foundations	14.00	EA	\$ 2,379.67	\$33,315.38
Excavate Existing Soils 6" Below Grade	111.00	CY	\$ 433.37	\$48,104.07
ACM Mastic Removal	9.00	EA	\$ 2,246.61	\$20,219.49
Clean-Up ACM on Top of Ground	1.00	LS	\$ 4,991.67	\$ 4,991.67
Install 1/4" Steel Plates	14.00	EA	\$ 474.51	\$ 6,643.14
Backfill Trenches	0.50	LS	\$14,782.70	\$ 7,391.35
Saturday Overtime Work (Change Order 1)	1.00	LS	\$ 2,700.00	\$ 2,700.00
Plates Over Tunnel (Change Order 2)	1.00	LS	\$ 4,400.00	\$ 4,400.00

JOB NUMBER: AS 161075

INVOICE TOTAL	\$ 152,896.24
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**INVOICES NOT PAID WITHIN 30 DAYS WILL BE CHARGED INTEREST AT THE RATE OF 1.5% PER MONTH ON THE UNPAID BALANCE OR AT THE HIGHEST LAWFUL RATE, WHICHEVER IS LESS.**