



## **REQUEST FOR PROPOSALS**

### ***Towner's Woods Park: House and Poolhouse Building Asbestos Abatement and Demolition/Removal***

#### **Introduction**

Portage Park District owns Towner's Woods Park, including a house and pole building surrounding an in-ground pool located at 2241 Ravenna Road, Franklin Township, Portage County, Ohio. In anticipation of demolition, the Park District had commissioned an asbestos assessment, attached, which indicated the need and scope for abatement. Partial deconstruction and salvage of materials will be done prior to demolition. ***For the benefit of bidders, a pre-bid site visit will be held on Wednesday October 12, noon.***

#### **Project Scope: Contractors may submit proposals for parts I. and/or II. below:**

- I. Asbestos Abatement
  - a. Obtain and coordinate all necessary demolition permits on behalf of Portage Park District
  - b. Ensure tree preservation as directed by installing barriers to avoid root compaction and destruction.
  - c. Abate/remove asbestos per current regulations and asbestos report recommendations
- II. House Removal
  - a. Obtain and coordinate all necessary permits on behalf of Portage Park District
  - b. Coordinate with PPD on schedule for partial deconstruction by Habitat for Humanity
  - c. Sever and stub existing gas and electric utilities; remove propane tank(s).
  - d. Install stormwater management controls
  - e. Pump, crush and cover septic tank; prepare permit and closure report for regulating agencies.
  - f. Plug and close water well; prepare permit and closure report for regulating agencies.
  - g. Remove pool equipment. Crush and fill pool. Demolish and remove structures from park property; dispose properly.
  - h. Fill, grade, seed and mulch for site restoration

#### **Submittal of Proposal**

Submit one PDF of the proposal form labeled "Towner's Woods Demolition" via email or on paper by 2:00 p.m., Monday, October 24 to:

Christine Craycroft, Executive Director  
Portage Park District  
8505 Nicodemus Road, (Shalersville Township) Ravenna, OH 44266  
[ccraycroft@portageparkdistrict.org](mailto:ccraycroft@portageparkdistrict.org); cc: Craig Alderman: [calderman@portageparkdistrict.org](mailto:calderman@portageparkdistrict.org)

The proposal shall include at a minimum, the following information:

1. Statement of the qualifications and experience of the contractor and any subcontractors, including references and recent jobs relevant to proposed project.
2. Proposal Form, attached

***Towner's Woods Park: House and Poolhouse Building  
Asbestos Abatement and Demolition/Removal***

**PROPOSAL FORM**

Business Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Contact phone/email: \_\_\_\_\_

Subconsultants, if any; \_\_\_\_\_

**Lump Sum Fee Proposal**

I. Asbestos Abatement \$ \_\_\_\_\_

Estimated number of days to completion after contract award: \_\_\_\_\_

II. House and pool house removal  
\$ \_\_\_\_\_

Estimated number of days to completion after contract award: \_\_\_\_\_

Submitted by:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Printed Name \_\_\_\_\_



Towner's Woods Park: 2241 Ravenna Rd. House and Pole Building Demolition



## Asbestos Hazard Assessment Final Report

### Client Information

Client Name	Portage Park District
Client Contact Name	Christine Craycroft
Client Street Address	705 Oakwood Street, Suite G-4
Client City	Ravenna
Client State	Ohio
Client Zip Code	44266

### Site Information

Emerald Job Number	13540
Site Name	Portage Park District
Site Street Address	2241 Ravenna Road
Site City	Kent
Site Zip Code	44240
Build Year	1960
Square Footage	1560

### 1. General Project Information

<b>1.1 ASSESSMENT AND SAMPLING PROCEDURES</b>	<p>EEL conducted an asbestos hazard assessment of the facility located at the captioned site. This asbestos assessment report presents data that describes the condition and location of asbestos-containing material (ACM) identified at this facility. This assessment was conducted to identify all friable and non-friable asbestos-containing materials in the facility. Friable materials are materials that, when dry, can be crushed, pulverized, or reduced to powder by hand pressure.</p> <p>Bulk samples are collected using United States Environmental Protection Agency (EPA) guidelines in 40 CFR Part 763.86 for the type of suspect material sampled. Where practical, sample locations are determined using random sampling methods. Within each area, samples are collected where minimal damage will occur to facility structures or finishes. A particular suspect material may be found in several different locations within a facility. EPA does not require that these materials be sampled in each location, provided the materials are of the same type, age, appearance, have the same date of installation, and are sampled in accordance with Asbestos Hazard Emergency Response Act (AHERA) requirements to provide statistically reliable data that can be extrapolated onto all remaining non-sampled areas.</p> <p>EPA/AHERA-accredited inspectors determine the number of samples of each material to be collected, depending upon the material's category and the amount of material present. The objective of the AHERA protocol is to ensure that statistically reliable data is collected. This is accomplished by requiring or suggesting a minimum number of samples to be collected and, in some cases, by requiring the use of random sampling techniques to determine sample locations. However, in every case, AHERA relies on the judgment of inspectors experienced in AHERA methodology and with the type of facility being inspected.</p>
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## Asbestos Hazard Assessment Final Report

<b>1.2 METHOD OF LABORATORY ANALYSIS</b>	<p>Samples are analyzed in accordance with AHERA requirements using the following reference methods:</p> <ul style="list-style-type: none"> <li>• EPA Interim Method for the Detection of Asbestos in Bulk Insulation Samples (EPA 600/M4-82020, December 1982).</li> <li>• McCrone Research Institute's The Asbestos Particle Atlas.</li> </ul> <p>All bulk samples are analyzed using polarized light microscopy (PLM) visual area estimation (VAE). Friable materials containing asbestos estimated at less than ten percent by PLM-VAE are reanalyzed by PLM point counting. Additional treatment and tests may be used as required to accurately define composition (i.e., ashing, extractions, and transmission electron microscopy (TEM)). All bulk sample laboratory reports are verified through an established quality assurance (QA) procedure. Unused portions of samples are archived for a minimum of six months.</p>
<b>1.3 QUALITY CONTROL PROCEDURES</b>	<p>All samples are analyzed by laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP). These laboratories participate in the NVLAP, as well as the American Industrial Hygiene Association (AIHA) Bulk Asbestos Sample Quality Assurance Program. EEI verifies all sample data for accuracy by cross-referencing field data sheets, chain of custody forms, and field notes.</p>
<b>1.4 DETERMINATION OF ACM CLASSIFICATION</b>	<p>The positive identification of asbestos in a material or product can only be made through laboratory analysis. The asbestos content of a suspect material is determined by collecting a bulk sample and having it analyzed by PLM. The PLM technique determines the specific type of asbestos present in the bulk sample and VAE provides an estimate of the percentage of asbestos.</p> <p>The EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) - National Emission Standard for Asbestos (40 CFR Part 61, Subpart M) defines a non-friable asbestos-containing material as any material with an asbestos content greater than one percent as determined by PLM analysis, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. A friable material estimated to contain less than ten percent asbestos as determined by PLM-VAE must be analyzed by PLM point counting and determined to contain less than one percent asbestos in order to be considered a non-regulated ACM.</p> <p>A clarification memorandum issued by the EPA regarding the NESHAP regulation included the following statement:</p> <p>"The parties legally responsible for a building (owner or operator) may take a conservative approach to being regulated by the NESHAP. The responsible party may choose to act as though the building material is an asbestos-containing material (greater than 1%) at any level of asbestos content (even less than 1% asbestos). Thus, if the analyst detects asbestos in the sample and estimates the amount to be less than 10% by visual estimation, the parties legally responsible (owner or operator) for the building may (1) elect to assume the amount to be greater than 1% and treat the material as regulated asbestos-containing material or (2) require verification of the amount by point counting."</p> <p>Therefore, suspect material samples containing less than ten percent, but more than one- percent asbestos as determined by PLM-VAE are, for the purpose of this report, considered to be ACM. No distinction will be made between these materials and those classified as ACM by EPA definition. However, in most cases, material samples with asbestos content of one percent or less as determined by PLM-VAE are classified as "assumed ACM" and are so addressed in this report. Materials either "considered" or "assumed" ACM may be analyzed by PLM point counting to provide a more definitive result regarding the percentage of asbestos content.</p>
<b>1.5 ASSESSMENT LIMITS</b>	<p>EEI conducted an asbestos hazard assessment, as well as a sampling and analysis program, to determine if ACM is present, in accordance with the OSHA Asbestos in Construction standard, 29 CFR 1926.1101, and the AHERA regulation 40 CFR part 763. All activities were conducted in accordance with AHERA sampling protocols. Any suspect materials that are encountered in the facility that are not identified in this report must be assumed ACM until testing proves otherwise. Selective, accessible portions of the facility were visually inspected based on information provided and samples were secured for suspect asbestos containing materials. Potential materials may exist within walls and pipe chases or above ceilings that were inaccessible during the inspection, and may become visible during demolition/renovation activities.</p>



## Asbestos Hazard Assessment Final Report


### 2. Hazard Communication

	The information contained in this report should be conveyed to contractors that will be working in the facility to satisfy the hazard communication requirements of the OSHA Asbestos in Construction Standard, 29 CFR 1926.1101. Materials containing asbestos may remain in the building.
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### 3. Recommendations

	<p>The assessment represented by this report was conducted to meet the regulatory requirements for the demolition/renovation of facilities. Based on the general NESHAP requirements, EEI recommends that all regulated asbestos containing material (RACM), both friable and non-friable that may become friable (that are present in quantities at, or in excess of, the regulatory limits of 260 linear feet of RACM on pipes, 160 square feet of RACM on other facility components, or 35 cubic feet of RACM on other facility components), be removed prior to demolition/renovation. All ACM which remains within the facility is required to be listed in the Notice of Demolition or Renovation to the local representative of the EPA in compliance with NESHAPS.</p> <p>This recommendation is based on standard demolition/renovation practices and their impact on building materials. In the event particular demolition/renovation techniques are to be used, (e.g. mechanical crushing, grinding, etc.) all non-friable asbestos containing materials shall be assessed for their potential to become friable during the non-standard demolition process. If the utilized non-standard demolition/renovation procedures are assessed and it is determined that they will render the asbestos containing materials friable, the material becomes RACM and must be abated prior to demolition/renovation. Any additional ACM or PACM identified in this report that may become friable during demolition/renovation activities shall also be removed prior to demolition/renovation.</p> <p>This report describes the locations of ACM identified in the facility located at the captioned site. Please refer to Appendix A for a summary of suspect materials and detailed recommendations. Please refer to Appendix B for sample locations and laboratory results. EEI represents that our services are performed within the limits prescribed by applicable regulations and in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representation is made to the client, expressed or implied, and no warranty or guarantee is included or intended.</p> <p>The classification of friability is based on the building inspector's observations at the time of the inspection. Deterioration over time can affect the friability of the building materials. If there is an extended delay between the survey and the abatement and/or demolition of the building, EEI recommends that a visual inspection by a qualified inspector be conducted prior to abatement and demolition to determine if the condition of the materials have changed since the survey. Current guidance from regulatory agencies recommend a survey or inspection be conducted within a year prior to the demolition.</p>
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### Inspector Information





Inspector Name	Mercedes Dahler
Inspector Certification Number	ES36225
Date of Inspection	08-03-2020
Inspector Signature	

### Suspect Materials

#### Suspect Materials - # 1

## Asbestos Hazard Assessment Final Report


### Section 1

<b>Material Description</b>	Plaster ceiling	
<b>Homogeneous Area</b>	PC-1	
<b>Material Quantity</b>	1600 SF	
<b>Is the material Asbestos Containing?</b>	No	
<b>Material Location</b>	Throughout main floor	
<b>Material Photos</b>	 <p>Typical view of plaster ceilings</p>	 <p>Typical view of plaster ceilings</p>
	 <p>Typical view of plaster ceilings</p>	 <p>Typical view of plaster ceilings</p>

### Suspect Materials - # 2

#### Section 1

## Asbestos Hazard Assessment Final Report

<b>Material Description</b>	Drywall ceiling and joint compound
<b>Homogeneous Area</b>	DC-1
<b>Material Quantity</b>	1600 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Chrysotile
<b>Percentage</b>	2
<b>Was the sample point counted?</b>	No
<b>Condition</b>	Friable
<b>Material Location</b>	Throughout main floor beneath plaster
<b>Material Photos</b>	 <p>Typical view of plaster ceiling on drywall ceilings</p>


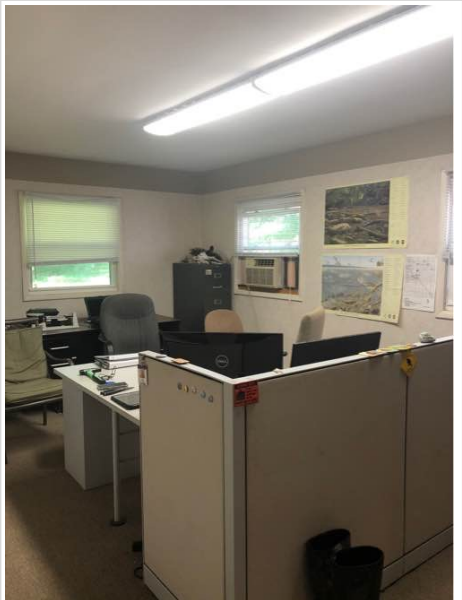
### Suspect Materials - # 3

#### Section 1

<b>Material Description</b>	Drywall walls and joint compound
<b>Homogeneous Area</b>	DWJ-1
<b>Material Quantity</b>	3000 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Chrysotile
<b>Percentage</b>	2
<b>Was the sample point counted?</b>	No
<b>Condition</b>	Friable
<b>Material Location</b>	Throughout main floor and portions of the basement




## Asbestos Hazard Assessment Final Report

Material Photos	 <p>Typical view of drywall walls in basement</p>	 <p>View of drywall walls on the 1st floor</p>
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### Suspect Materials - # 4

#### Section 1


Material Description	Blown in insulation	
Homogeneous Area	BI-1	
Material Quantity	1000 SF	
Is the material Asbestos Containing?	No	
Material Location	South exterior wall	
Material Photos	 <p>View of blown in found in the south exterior wall in the family room</p>	

### Suspect Materials - # 5

#### Section 1


Material Description	Ceiling panel large holes	
Homogeneous Area	CP-1	
Material Quantity	700 SF	

## Asbestos Hazard Assessment Final Report

Is the material Asbestos Containing?	No
Material Location	Basement
Material Photos	 <p>Typical view of ceiling panels with large pinhole texture</p>

### Suspect Materials - # 6

#### Section 1


Material Description	Ceiling panel worm texture
Homogeneous Area	CP-2
Material Quantity	25 SF
Is the material Asbestos Containing?	No
Material Location	Basement
Material Photos	 <p>View of large pinhole and worm texture ceiling panels</p>

### Suspect Materials - # 7

#### Section 1

Material Description	Window caulking
Homogeneous Area	WC-1
Material Quantity	3 SF
Is the material Asbestos Containing?	No
Material Location	Exterior window, 1

## Asbestos Hazard Assessment Final Report

Material Photos	 <p>View of the window with window caulking and glazing</p>	
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### Suspect Materials - # 8

#### Section 1


Material Description	Window glazing
Homogeneous Area	WG-1
Material Quantity	3 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Chrysotile
Percentage	2
Was the sample point counted?	No
Condition	Friable
Material Location	Exterior window, 1

### Suspect Materials - # 9

#### Section 1



Material Description	Ceramic floor tile and adhesive, stone pattern
Homogeneous Area	CT-1
Material Quantity	100 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable

## Asbestos Hazard Assessment Final Report

<b>Material Location</b>	Entry way
<b>Material Photos</b>	 <p>View of the ceramic floor tile at the entry way</p>

### Suspect Materials - # 10



#### Section 1

<b>Material Description</b>	Ceramic wall tile and adhesive, white
<b>Homogeneous Area</b>	CT-2
<b>Material Quantity</b>	20 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Assumed
<b>Condition</b>	Non-Friable
<b>Material Location</b>	Kitchen, bathroom
<b>Material Photos</b>	<div>  <p>Ceramic wall tile in kitchen</p> </div> <div>  <p>Ceramic wall tile above and beside the shower</p> </div>

### Suspect Materials - # 11

#### Section 1

## Asbestos Hazard Assessment Final Report

<b>Material Description</b>	Brown sheet floor and adhesive
<b>Homogeneous Area</b>	SF-1
<b>Material Quantity</b>	80 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Assumed
<b>Condition</b>	Non-Friable
<b>Material Location</b>	Bathrooms on main floor
<b>Material Photos</b>	 
	<p>View of brown sheet floor</p> <p>View of brown sheet floor</p>


## Suspect Materials - # 12

### Section 1

<b>Material Description</b>	Shower surround main floor
<b>Homogeneous Area</b>	SS-1
<b>Material Quantity</b>	40 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Assumed
<b>Condition</b>	Non-Friable
<b>Material Location</b>	Northwest bathroom



## Asbestos Hazard Assessment Final Report


<b>Material Photos</b>		
View of shower surround		

### Suspect Materials - # 13

#### Section 1

Material Description	Shower surround basement
Homogeneous Area	SS-2
Material Quantity	40 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable
Material Location	Basement shower

## Asbestos Hazard Assessment Final Report


Material Photos		
	View of basement shower surround	

### Suspect Materials - # 14

#### Section 1

Material Description	Ceramic wall tile and adhesive, blue speckles
Homogeneous Area	CT-3
Material Quantity	40 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable
Material Location	Northeast bathroom

## Asbestos Hazard Assessment Final Report


<b>Material Photos</b>	 <p>View of ceramic wall tile</p>	
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### Suspect Materials - # 15

#### Section 1

Material Description	Tub surround
Homogeneous Area	TS-1
Material Quantity	20 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable
Material Location	Northeast bathroom

## Asbestos Hazard Assessment Final Report

Material Photos		
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View of tub surround

### Suspect Materials - # 16

#### Section 1

Material Description	9"x9" brown floor tile and mastic
Homogeneous Area	FT-1
Material Quantity	100 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable
Material Location	Closet on main floor, between offices

## Asbestos Hazard Assessment Final Report

<b>Material Photos</b>	 <p>View of the 9"x9" floor tile beneath carpet in the closet between the offices</p>	
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### Suspect Materials - # 17

#### Section 1

<b>Material Description</b>	Stair tread and mastic
<b>Homogeneous Area</b>	STM-1
<b>Material Quantity</b>	20 SF
<b>Is the material Asbestos Containing?</b>	Yes
<b>Type of Asbestos</b>	Assumed
<b>Condition</b>	Non-Friable
<b>Material Location</b>	Basement stairs



## Asbestos Hazard Assessment Final Report

Material Photos		
	View of stair tread	

### Suspect Materials - # 18

#### Section 1

Material Description	Ceramic floor tile and adhesive, gray
Homogeneous Area	CT-4
Material Quantity	10 SF
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Non-Friable
Material Location	Basement by shower

## Asbestos Hazard Assessment Final Report


Material Photos		
	View of ceramic floor tile in basement	

### Suspect Materials - # 19

#### Section 1


Material Description	Coal fired furnace
Homogeneous Area	CFF-1
Material Quantity	1 each. Gaskets potentially within furnace are assumed to be asbestos containing.
Is the material Asbestos Containing?	Yes
Type of Asbestos	Assumed
Condition	Friable
Material Location	Basement. Gaskets potentially within furnace are assumed to be asbestos containing.

## Asbestos Hazard Assessment Final Report

Material Photos	 <p>View of furnace in basement. Gaskets inside assumed asbestos (friable)</p>	
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### Suspect Materials - # 20

#### Section 1

Material Description	Asphalt roof system	
Homogeneous Area	ASR-1	
Material Quantity	2000 SF	
Is the material Asbestos Containing?	Yes	
Type of Asbestos	Assumed	
Condition	Non-Friable	
Material Location	Exterior	
Material Photos	 <p>View of roof</p>	

August 5, 2020

Emerald Environmental  
1621 Saint Clair Ave  
Kent, OH 44240

**CLIENT PROJECT:** 2241 Ravenna Rd, 13540  
**CEI LAB CODE:** B203933

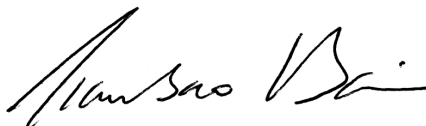
Dear Customer:

Enclosed are asbestos analysis results for PLM Bulk samples received at our laboratory on August 4, 2020. The samples were analyzed for asbestos using polarizing light microscopy (PLM) per the EPA 600 Method.

Sample results containing >1% asbestos are considered asbestos-containing materials (ACMs) per EPA regulatory requirements. The detection limit for the EPA 600 Method is <1% asbestos by weight as determined by visual estimation.

Thank you for your business and we look forward to continuing good relations.

Kind Regards,



Tianbao Bai, Ph.D., CIH  
Laboratory Director

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## **ASBESTOS ANALYTICAL REPORT**

### **By: Polarized Light Microscopy**

Prepared for

**Emerald Environmental**

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CLIENT PROJECT: 2241 Ravenna Rd, 13540

LAB CODE: B203933

TEST METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

REPORT DATE: 08/05/20

TOTAL SAMPLES ANALYZED: 17

# SAMPLES >1% ASBESTOS: 5



# Asbestos Report Summary

By: POLARIZING LIGHT MICROSCOPY

PROJECT: 2241 Ravenna Rd, 13540

LAB CODE: B203933

METHOD: EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

Client ID	Layer	Lab ID	Color	Sample Description	ASBESTOS %
2241-0803-01	Layer 1	B69807A	White	Plaster Skim Coat	None Detected
	Layer 2	B69807A	Gray	Plaster Base Coat	None Detected
	Layer 1	B69807B	Off-white	Joint Compound	Chrysotile 2%
	Layer 2	B69807B	White,Brown	Drywall	None Detected
2241-0803-02	Layer 1	B69808A	White	Plaster Skim Coat	None Detected
	Layer 2	B69808A	Gray	Plaster Base Coat	None Detected
		B69808B	White,Brown	Drywall	None Detected
2241-0803-03	Layer 1	B69809	White	Plaster Skim Coat	None Detected
	Layer 2	B69809	Gray	Plaster Base Coat	None Detected
2241-0803-04	Layer 1	B69810	White	Plaster Skim Coat	None Detected
	Layer 2	B69810	Gray	Plaster Base Coat	None Detected
2241-0803-05	Layer 1	B69811A	White	Plaster Skim Coat	None Detected
	Layer 2	B69811A	Gray	Plaster Base Coat	None Detected
		B69811B	White,Brown	Drywall	None Detected
2241-0803-06	Layer 1	B69812	Off-white	Joint Compound	Chrysotile 2%
	Layer 2	B69812	White,Brown	Drywall	None Detected
2241-0803-07	Layer 1	B69813	Tan	Joint Compound	Chrysotile 2%
	Layer 2	B69813	White,Brown	Drywall	None Detected
2241-0803-08		B69814	Brown	Insulation	None Detected
2241-0803-09		B69815	Brown	Insulation	None Detected
2241-0803-10		B69816	White,Tan	Ceiling Panel	None Detected
2241-0803-11		B69817	White,Tan	Ceiling Panel	None Detected
2241-0803-12		B69818	White,Tan	Ceiling Panel	None Detected
2241-0803-13		B69819	White,Tan	Ceiling Panel	None Detected
2241-0803-14		B69820	Brown	Window Caulking	None Detected
2241-0803-15		B69821	Brown	Window Caulking	None Detected
2241-0803-16		B69822	Brown,Gray	Window Glazing	Chrysotile 2%
2241-0803-17		B69823	Brown,Gray	Window Glazing	Chrysotile 2%

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Emerald Environmental  
1621 Saint Clair Ave  
Kent, OH 44240

**Lab Code:** B203933  
**Date Received:** 08-04-20  
**Date Analyzed:** 08-04-20  
**Date Reported:** 08-05-20

**Project:** 2241 Ravenna Rd, 13540

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID	Lab	Lab	NON-ASBESTOS COMPONENTS				ASBESTOS
Lab ID	Description	Attributes	Fibrous		Non-Fibrous		%
<b>2241-0803-01</b> Layer 1 B69807A	Plaster Skim Coat	Homogeneous			75%	Binder	None Detected
		White			25%	Silicates	
		Non-fibrous Bound					
Layer 2 B69807A	Plaster Base Coat	Homogeneous			60%	Perlite	None Detected
		Gray			40%	Binder	
		Non-fibrous Bound					
Layer 1 B69807B	Joint Compound	Heterogeneous			58%	Binder	2% Chrysotile
		Off-white			40%	Calc Carb	
		Non-fibrous Bound			<1%	Paint	
Layer 2 B69807B	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	None Detected
		White,Brown					
		Fibrous Bound					
<b>2241-0803-02</b> Layer 1 B69808A	Plaster Skim Coat	Homogeneous			75%	Binder	None Detected
		White			25%	Silicates	
		Non-fibrous Bound					
Lab Notes: No joint compound present.							
Layer 2 B69808A	Plaster Base Coat	Homogeneous			60%	Perlite	None Detected
		Gray			40%	Binder	
		Non-fibrous Bound					
B69808B	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	None Detected
		White,Brown					
		Fibrous Bound					

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Emerald Environmental  
1621 Saint Clair Ave  
Kent, OH 44240

**Lab Code:** B203933  
**Date Received:** 08-04-20  
**Date Analyzed:** 08-04-20  
**Date Reported:** 08-05-20

**Project:** 2241 Ravenna Rd, 13540

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS		ASBESTOS %
			Fibrous	Non-Fibrous	
<b>2241-0803-03</b> Layer 1 B69809	Plaster Skim Coat	Homogeneous		75% Binder	None Detected
		White		25% Silicates	
		Non-fibrous			
		Bound			
Layer 2 B69809	Plaster Base Coat	Homogeneous		60% Perlite	None Detected
		Gray		40% Binder	
		Non-fibrous			
		Bound			
<b>2241-0803-04</b> Layer 1 B69810	Plaster Skim Coat	Homogeneous		75% Binder	None Detected
		White		25% Silicates	
		Non-fibrous			
		Bound			
Layer 2 B69810	Plaster Base Coat	Homogeneous		60% Perlite	None Detected
		Gray		40% Binder	
		Non-fibrous			
		Bound			
<b>2241-0803-05</b> Layer 1 B69811A	Plaster Skim Coat	Homogeneous		75% Binder	None Detected
		White		25% Silicates	
		Non-fibrous			
		Bound			
Layer 2 B69811A	Plaster Base Coat	Homogeneous		60% Perlite	None Detected
		Gray		40% Binder	
		Non-fibrous			
		Bound			
B69811B	Drywall	Heterogeneous	20% Cellulose	80% Gypsum	None Detected
		White,Brown			
		Fibrous			
		Bound			

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Emerald Environmental  
1621 Saint Clair Ave  
Kent, OH 44240

**Lab Code:** B203933  
**Date Received:** 08-04-20  
**Date Analyzed:** 08-04-20  
**Date Reported:** 08-05-20

**Project:** 2241 Ravenna Rd, 13540

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
<b>2241-0803-06</b>	Joint Compound	Heterogeneous			58%	Binder	<b>2% Chrysotile</b>
Layer 1		Off-white			40%	Calc Carb	
B69812		Non-fibrous			<1%	Paint	
		Bound					
Layer 2	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	None Detected
B69812		White,Brown					
		Fibrous					
		Bound					
<b>2241-0803-07</b>	Joint Compound	Heterogeneous			58%	Binder	<b>2% Chrysotile</b>
Layer 1		Tan			40%	Calc Carb	
B69813		Non-fibrous			<1%	Paint	
		Bound					
Layer 2	Drywall	Heterogeneous	20%	Cellulose	80%	Gypsum	None Detected
B69813		White,Brown					
		Fibrous					
		Bound					
<b>2241-0803-08</b>	Insulation	Homogeneous	100%	Cellulose			None Detected
B69814		Brown					
		Fibrous					
		Loose					
<b>2241-0803-09</b>	Insulation	Homogeneous	100%	Cellulose			None Detected
B69815		Brown					
		Fibrous					
		Loose					
<b>2241-0803-10</b>	Ceiling Panel	Heterogeneous	60%	Cellulose	15%	Perlite	None Detected
B69816		White,Tan	20%	Fiberglass	5%	Paint	
		Fibrous					
		Loosely Bound					

# ASBESTOS BULK ANALYSIS

By: POLARIZING LIGHT MICROSCOPY

**Client:** Emerald Environmental  
1621 Saint Clair Ave  
Kent, OH 44240

**Lab Code:** B203933  
**Date Received:** 08-04-20  
**Date Analyzed:** 08-04-20  
**Date Reported:** 08-05-20

**Project:** 2241 Ravenna Rd, 13540

## ASBESTOS BULK PLM, EPA 600 METHOD

Client ID Lab ID	Lab Description	Lab Attributes	NON-ASBESTOS COMPONENTS				ASBESTOS %
			Fibrous		Non-Fibrous		
2241-0803-11 B69817	Ceiling Panel	Heterogeneous	60%	Cellulose	15%	Perlite	None Detected
		White,Tan	20%	Fiberglass	5%	Paint	
		Fibrous					
		Loosely Bound					
2241-0803-12 B69818	Ceiling Panel	Heterogeneous	60%	Cellulose	15%	Perlite	None Detected
		White,Tan	20%	Fiberglass	5%	Paint	
		Fibrous					
		Loosely Bound					
2241-0803-13 B69819	Ceiling Panel	Heterogeneous	60%	Cellulose	15%	Perlite	None Detected
		White,Tan	20%	Fiberglass	5%	Paint	
		Fibrous					
		Loosely Bound					
2241-0803-14 B69820	Window Caulking	Homogeneous			95%	Caulk	None Detected
		Brown			5%	Binder	
		Non-fibrous					
		Bound					
2241-0803-15 B69821	Window Caulking	Homogeneous			95%	Caulk	None Detected
		Brown			5%	Binder	
		Non-fibrous					
		Bound					
2241-0803-16 B69822	Window Glazing	Heterogeneous			98%	Binder	2% Chrysotile
		Brown,Gray			<1%	Paint	
		Non-fibrous					
		Bound					
2241-0803-17 B69823	Window Glazing	Heterogeneous			98%	Binder	2% Chrysotile
		Brown,Gray			<1%	Paint	
		Non-fibrous					
		Bound					



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**LEGEND:**      Non-Anth      = Non-Asbestiform Anthophyllite  
                      Non-Trem      = Non-Asbestiform Tremolite  
                      Calc Carb      = Calcium Carbonate

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**METHOD:** EPA 600 / R93 / 116 and EPA 600 / M4-82 / 020

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**REPORTING LIMIT:** <1% by visual estimation

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**REPORTING LIMIT FOR POINT COUNTS:** 0.25% by 400 Points or 0.1% by 1,000 Points

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**REGULATORY LIMIT:** >1% by weight

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Due to the limitations of the EPA 600 method, nonfriable organically bound materials (NOBs) such as vinyl floor tiles can be difficult to analyze via polarized light microscopy (PLM). EPA recommends that all NOBs analyzed by PLM, and found not to contain asbestos, be further analyzed by Transmission Electron Microscopy (TEM). Please note that PLM analysis of dust and soil samples for asbestos is not covered under NVLAP accreditation. *Estimated measurement of uncertainty is available on request.*

This report relates only to the samples tested or analyzed and may not be reproduced, except in full, without written approval by Eurofins CEI. Eurofins CEI makes no warranty representation regarding the accuracy of client submitted information in preparing and presenting analytical results. Interpretation of the analytical results is the sole responsibility of the client. Samples were received in acceptable condition unless otherwise noted. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.

Information provided by customer includes customer sample ID and sample description.

**ANALYST:**



Kathryn Wescott

**APPROVED BY:**



Tianbao Bai, Ph.D., CIH  
 Laboratory Director

2241 Ravenna Rd

**EMERALD**  
ENVIRONMENTAL, INC.

## ASB/Lead BULK SAMPLE LOG

B203933

B69807-

B69823

(17)

LGN: \_\_\_\_\_

EMERALD PROJECT #: 13540DATE: Aug. 3, 2020

Turnaround: Business Days

☐ Same Day ☐ 3rd Day☐ 24 Hour ☐ 5th Day☒ 2nd Day

Company: Emerald Environmental Inc.

Contact: Mercedes Dahler

Address: 1621 St. Clair Ave

City: Kent

State: Ohio 44240

Phone: (330) 677-0785

Fax: (330) 677-1567

Email Results To: mdahler

@Emerald-Environmental.com

Asbestos ☒Reporting Units: ☒ % volume (ASB) PLM☐ mg/kg or ppm (Pb)Lead ☐☐ % weight (Pb)☐ mg/cm2 or ug/ft2 (Pb)

ANALYTICAL NOTES: Report PLM Visual and PLM Point Count analytical results on separate reports

SAMPLE NUMBER	MATERIAL DESCRIPTION	HA#	LOCATION
2241-0803-01	Plaster ceiling on Drywall <sup>lath</sup>	PC-1 D0-1	<sup>North</sup> South West Office <sup>North</sup>
-02	↓	↓	<sup>North</sup> South East Office <sup>East</sup>
-03	Plaster ceiling	PC-1	Kitchen South
-04	↓	↓	Family Room SW <del>NE</del>
-05	↓	↓	<del>Family Room</del> SW Bathroom
-06	Drywall walls and	DWJ-1	South West Office N wall
-07	↓ joint compound	↓	South East Office W wall
-08	Blown in insulation	BI-1	Family Room wall S
-09	↓	↓	Family Room wall S
-10	ceiling panel large holes	CP-1	Basement North
-11	↓	↓	Basement central
-12	ceiling panel worm texture	CP-2	Basement North
-13	↓	↓	Basement South
-14	Window Caulking	WC-1	South window
-15	↓	↓	South window
-16	Window glazing	WG-1	South window
-17	↓	↓	South window

NOTES:

Relinquished by: MDahler 8/13/20 <sup>1200</sup>

Date/Time

Received by: G 8/14 9:50

Date/Time

Relinquished by: \_\_\_\_\_

Date/Time

Received by: \_\_\_\_\_

Date/Time

EUROFINS CEI, INC.  
SAMPLES ACCEPTEDMD