November 30, 2017

**Illinois Department of Transportation** 

Bureau of Land Acquisition IDOT Administration Building, Room 212 2300 South Dirksen Parkway Springfield, IL 62764

Attn: Ms. Laura Mlacnik, P.G

Engineer of Land Acquisition Bureau of Land Acquisition

Re: Asbestos Survey Report

Work Order No: 625
Parcel No. 1MF0116
Single Family Residence

205 Elm Road

Barrington, Illinois 60010 PSI Project No. 00472669

Dear Ms. Mlacnik, P.G:

In accordance with our agreement, Professional Service Industries, Inc. (PSI) has performed an Asbestos Survey of the above referenced property. Please find one copy of the final report enclosed.

Thank you for choosing PSI as your consultant for this project. If you have any questions, or if we can be of additional service, please call us at (708) 236-0720.

Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, INC.

Ronald Tulke

Project Executive/ Administrator

Enclosures Mr. Michael Cullian, District 1



#### **ASBESTOS SURVEY REPORT**

Route: U.S. 14 Section: At CN RR County: Lake

Parcel No: 1MF0116

IDOT Job No: R-91-001-15 IDOT Work Order No: 625

Single Family Residence 205 Elm Road Barrington, Illinois 60010

#### **PREPARED FOR**

Illinois Department of Transportation **Bureau of Land Acquisition** 2300 South Dirksen Parkway Springfield, Illinois 62764

#### **PREPARED BY**

Professional Service Industries, Inc. 4421 W. Harrison Street Hillside, IL 60162

Phone: (708) 236-0720

Fax: (708) 236-0721

Intertek-PSI Project No. 00472669

November 30, 2017



#### **ASBESTOS SURVEY REPORT**

Route: U.S. 14 Section: At CN RR County: Lake

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#### PREPARED FOR

Illinois Department of Transportation Bureau of Land Acquisition 2300 South Dirksen Parkway Springfield, Illinois 62764

November 30, 2017

Thomas Novatka, IDPH Inspector Inspector License No: 100-08002

**Ronald Tulke** 

Project Coordinator Project Executive

Jeff Chapman

**Quality Assurance Manager** 

This report has been prepared for the exclusive use of the Illinois Department of Transportation (IDOT) and affiliates thereof. Results are based solely on the methodology stated in this report and the report should be relied upon in its entirety. Any reliance a third party makes of this report is the responsibility of such third party



#### **SECTION**

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Laboratory Results and Chain of Custody Documentation Inspector & Laboratory Certifications Abatement Cost Estimates





#### **SITE INFORMATION:**

Route:	<u>U.S. 14</u>	Address:	205 Elm Road
County:	<u>Lake</u>	Address:	
IDOT Job No:	R-91-001-15	City, State Zip	Barrington, Illinois 60010
Section:	At CN RR	Property Type:	Single Family Residence
Parcel No:	1MF0116	Construction Date:	1965
IDOT Work Order No:	<u>625</u>	Building Size (sqft):	2,822 SF

ASBESTOS CONTAINING MATERIALS								
Survey Date By Whom:	November 16, 2017 PSI, Inc. Tom Novatka 100-08002	Firm Inspector IDPH License No.						
Results:								
Number of Materia	l Types Sampled:	<u>6</u>						
Number of Samples	Collected:	<u>18</u>						
Number of Materia	ls Testing Positive:	1						
Was Friable ACM Fo	ound?	<u>No</u>						
Were Roofing Mate	rials Sampled?	<u>Yes</u>						
Are There Unique S Requirements?	tate or Local	<u>No</u>						
Laboratory Utilized	:							
Name: Address:								
<b>Building Access Lim</b>	itations:							
<u>None</u>								



ACM SURVEY RESULTS - Parcel No. 1MF0116
Single Family Residence
205 Elm Road
Barrington, Illinois 60010

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL#	MATERIAL DESCRIPTION	LOCATION	F/NF <sup>1</sup>	COND. <sup>2</sup>	% ACM <sup>3</sup>	# SAMPLES	QUANTITY (ENG/MET)					
01	Roofing Shingles	House, garage and porch roofs	NF	Good	ND	3	2,380 sf 221.1 SM					
02	Drywall/joint compound	Throughout	F	Good	ND/ND	3	13,500 SF 1,254.2 SM					
03	White with square pattern self-stick floor tile	Mud room	NF	Good	ND	3	80 SF 7.4 SM					
04	Window glazing	House and garage windows	NF,	Good	ND	3	1,010 LF 304.8 IM					
05	Chimney caulking	Between house and chimney	NF	Good	ND	3	30 LF 9.1 IM					
06	12" x 12" parquet style self-stick floor tile	Basement utility room and basement area 2	NF	Good	2% Chrysotile	3	410 SF 38.1 SM					
TOTAL Q	TOTAL QUANTITY OF ACM											
ESTIMAT	ED ABATEMENT COST	ESTIMATED ABATEMENT COST										

F = Friable; NF = Nonfriable

Friability is further defined in section 4.

Either good, fair or poor.

Cond. = Condition Of Materials

ND = None Detected

<sup>\*</sup> Point Count Analysis



#### **PURPOSE**

The purpose of this study was to identify those building materials that contain asbestos.

#### **ESCORT**

The inspector was escorted through the facility by Ms. Chris Maloney, IDOT District 1.

#### AUTHORIZATION

Authorization to perform this study was given by the Illinois Department of Transportation in the form of Work Order Authorization 625, dated July 18, 2017, and executed by Ms. Laura R. Mlacnik, P.E., Acting Bureau Chief of Land Acquisitions, Illinois Department of Transportation.

This report has been prepared for the exclusive use of the Illinois Department of Transportation and governmental affiliates thereof.

#### **BUILDING OBSERVATIONS**

The facility inspected is a two-story wood structure with basement and an asphalt-shingled roof. The heating, ventilation and air conditioning (HVAC) system is a forced air system operated by natural gas. Interior walls and ceilings are drywall. Floors are wood and covered with vinyl and ceramic floor tile. The building exterior is sheathed with wood siding.





Intertek-PSI warrants that the findings contained herein have been prepared with the level of care and skill exercised by experienced and knowledgeable environmental consultants who are appropriately licensed or otherwise trained to perform asbestos assessments pursuant to OSHA and NESHAP as well as state and local requirements as applicable.

The survey included inspection of materials above or behind suspended ceilings or other non-permanent structures. Intertek-PSI attempted to inspect or sample inaccessible areas such as behind walls or within ductwork and did attempt to dismantle parts of the structure as necessary to gain access to materials and to survey inaccessible areas.

Inaccessible is defined as areas of the building that could not be tested (sampled) without destruction of the structure or a portion of the structure. In the event that access to a portion of the building was not obtained (which otherwise would have been tested), such limitations are specifically identified in Section 1 of this report.

As directed by the client, Intertek-PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminates in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of Intertek-PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.



Inspection and sampling procedures were performed in accordance with the guidelines published by the Environmental Protection Agency (EPA) in 40 CFR Part 763 Subpart E, October 30, 1987. Sampling procedures include collection of at least three (3) samples of all suspect materials as recommended by EPA Guidance document 700/B-92/001, February 1992. The inspection and survey described below was performed by an EPA accredited inspector.

#### GENERAL ORGANIZATION

Before commencing the survey, the inspector spoke with the Client, to discuss the survey approach, the need for unrestricted access and construction related information issues such as building age as well as, prior construction activities.

The survey consisted of three major activities: visual inspection, sampling, and quantification of building materials. Although these activities are listed separately, they are integrated tasks.

#### VISUAL INSPECTION

An initial building walkthrough was conducted to determine the presence and condition of suspect materials that were accessible and/or exposed. Materials that were similar in general appearance were grouped into homogeneous sampling areas.

#### Homogeneous Material Classifications

A preliminary walkthrough of the building was conducted to determine areas of materials that were visually similar in color; texture, general appearance, and which appeared to have been installed at the same time. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were also noted.

Following the EPA inspection protocol, each identified suspect homogeneous material was placed in one of the following EPA classifications:

- 1. Surfacing Materials (spray or trowel applied to building members)
- 2. Thermal System Insulation (materials generally applied to various mechanical systems)
- Miscellaneous Materials (any materials which do not fit either of the above categories)



#### Friability Classifications

A regulated asbestos-containing material (RACM) as defined by National Emissions Standard for Hazardous Air Pollutants (NESHAP) is any (a) Friable asbestos material, (b) Category I non-friable ACM that has becomes friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Following the EPA inspection protocol, each identified suspect homogeneous material was placed in one of the following EPA classifications:

- Friable ACM Materials NESHAP defines a friable ACM as any material containing more than one percent asbestos, which, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I Non-friable ACM NESHAP defines a Category I non-friable ACM
  as packing, gaskets, resilient floor covering (except vinyl sheet flooring
  products which are considered friable), and asphalt roofing products which
  contain more than one percent asbestos.
- Category II Non-friable ACM NESHAP defines a Category II non-friable ACM
  as any material, except for a Category I non-friable ACM, which contains
  more than one- percent asbestos and cannot be reduced to a powder by
  hand pressure when dry.

#### SAMPLING PROCEDURES

Following the walkthrough, the inspector collected selected samples of accessible materials identified as suspect asbestos-containing materials (ACM). Samples were collected in general accordance with EPA AHERA (40 CFR 763) guidelines. A minimum of three (3) samples were collected of each material. Samples of materials were taken as randomly as possible while again attempting to sample already damaged areas so as to minimize disturbance of the material.



#### QUANTIFICATION

Quantities of accessible and/or exposed materials that were suspected of containing asbestos were estimated using visual estimation by an IDPH licensed asbestos inspector. This visual estimation was performed in accordance with generally accepted practices in

the asbestos industry. These values are sufficiently accurate for the purpose of documenting the presence of asbestos within its space for the purpose of identifying abatement control conditions or for general policy considerations. Actual quantities may differ between visually estimated values and physical measurements. If a licensed asbestos abatement contractor is engaged to remove asbestos containing materials, the abatement contractor is responsible for verifying reported quantities of ACM.

#### LABORATORY PROCEDURES

#### Method of Analysis

Analysis was performed at Intertek-PSI's NVLAP accredited Laboratory in Pittsburgh, PA. A chain-of-custody, documenting the possession of the samples from the time they were collected until they have been analyzed and stored, was submitted with the bulk samples. The original chain-of-custody accompanied the materials at all times. Custody documentation began at the time the sample was collected and a copy of the chain-of-custody record was retained by each transferor.

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, paper, etc.) and non-fibrous constituents. Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample, using a stereoscope.

All bulk samples were analyzed by Polarized Light Microscopy (PLM) with dispersion staining as described by the method of the determination of asbestos in bulk insulation, EPA/600/R-93/116, July 1993. This is a standard method of analysis in optical mineralogy and the currently accepted method for the determination of asbestos in bulk samples. A suspect material is immersed in a solution of known refractive index and subjected to



illumination by polarized light. The characteristic color displays which result enable mineral identification.

It should be noted that some ACM may not be accurately identified and/or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy method. Transmission Electron Microscopy (TEM) is required for a more definitive analysis of these materials.

For bulk samples of friable materials which are found to contain <10% asbestos, Point Count Analysis as described by the method for the determination of asbestos in accordance with Environmental Protection Agency's (EPA) "Interim Method for Identification of Asbestos in Bulk Insulation Samples" (40 CFR 763, Appendix A, Subpart F), is often utilized. As part of this method, a bulk sample is reduced, in an effort to dissolve any non-asbestos constituents, such as calcite. As a result of this reduction process, a concentrated sample is then obtained and analyzed. A minimum number of counts for each sample are 400. The number of identified asbestos points is divided by 400, then multiplied by 100 in order to calculate the percentage. Each asbestos type is quantified individually.

#### Laboratory Quality Control Program

Intertek-PSI laboratories maintain an in-house quality control program. This program involves blind reanalysis of ten percent of all samples, precision and accuracy controls, and use of standard bulk reference materials.

#### **LIMITATIONS**

Based on our project understanding, the limitations of this survey are as follows:

 Intertek-PSI did not provide sampling on any system which may present a hazard to the inspection team such as energized electrical systems or within confined spaces



If the asbestos-containing materials identified in this report will be disturbed through future maintenance, renovation or demolition activities, they will be subject to the requirements set forth in all applicable local, state, and federal regulations. In addition, prior to any future maintenance, renovation or demolition activities, the areas noted as inaccessible during this project will require a survey for asbestos containing materials.

Prior to the initiation of a project that would involve abatement of asbestos containing materials, a detailed engineering cost estimate and project design is recommended. The engineering cost estimate will incorporate such variables as scheduling and phasing of the project, the size and extent of the project, seasonal factors, operational factors and other restrictions, respiratory protection, alternate abatement options, and type of replacement material. These are considerations that were not included in this scope of work or were unknown at the time of development of budgetary estimate. An engineering cost estimate would also include professional fees, such as for project design, project management, air monitoring and other expenses such as construction supervision.

It should be noted that some ACM might not be accurately identified and/or quantified by PLM. As an example, the original fabrication of vinyl floor tiles routinely involved milling of asbestos fibers to extremely small sizes. As a result, these fibers may go undetected under the standard polarized light microscopy methods. Transmission Electron Microscopy (TEM) is required for a more definitive analysis of these materials. This survey revealed the presence of floor tile with less than 1% asbestos via PLM analysis. Intertek-PSI recommends additional analysis by TEM as described above and recommended by the Illinois Department of Public Health. Please contact Intertek-PSI to request additional testing within 30 days of this report.

The following notices, permits and licenses are necessary for abatement work as of the date of this report. The contractor is cautioned to verify these requirements as applicable to the final project scope and confirm that no new requirements exist.

#### **Local Air Quality Board**

Written notification is required by the Illinois Environmental Protection Agency at least 10 working days prior to beginning any asbestos abatement project activities on regulated asbestos-containing materials where the quantities are at least 160 square feet, 260 linear feet, or 35 cubic feet. IEPA is the state contact for the federal EPA (NESHAP) on these matters.



#### **IDPH**

Written notification is required by the Illinois Department of Public Health (IDPH) at least two (2) working days prior to beginning any asbestos abatement project activities on friable or non-friable asbestos-containing materials whose quantities exceed 3 square feet or 3 linear feet, but do not exceed 160 square feet or 260 linear feet.

#### **Permits**

Contractor must obtain all county and/or local municipal permits or licenses required for asbestos abatement work.

#### Licenses

Contractor must maintain current licenses as required by the Illinois Department of Public Health (IDPH) and Illinois Department of Transportation (IDOT) for the removal, transporting, disposal, or other regulated activity.

Federal regulations which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

U.S. Department of Labor, Occupational Safety and Health Administration:

**Asbestos Regulations** 

Title 29, Part 1910, Section 1001 of the Code of Federal Regulations Final Rule

Title 29, Part 1926, Section 1101 of the Code of Federal Regulations Respiratory Protection

Title 29, Part 1910, Section 134 of the Code of Federal Regulations Construction Industry

Title 29, Part 1926, of the Code of Federal Regulations

Access to Employee Exposure & Medical Records

Title 29, Part 1910, Section 20 of the Code of Federal Regulations Hazard Communication

Title 29, Part 1910, Section 1200 of the Code of Federal Regulations Specifications for Accident Prevention Signs and Tags

Title 29, Part 1910, Section 145 of the Code of Federal Regulations

Environmental Protection Agency (EPA) including but not limited to:

Worker Protection Rule
40 CFR Part 763, Subpart G
CPTS 62044, FLR 2843-9
Federal Register, Vol. 50, No. 134, 7/12/85
P28530-28540







Regulation for Asbestos
Title 40, Part 61, Subpart A of the
Code of Federal Regulations

**National Emission Standard for Asbestos** 

Title 40, Part 61, Subpart M of the Code of Federal Regulations including NESHAP Revision; Final Rule, Federal Register; Tuesday, November 20, 1990.

Asbestos Hazard Emergency Response Act (AHERA)

Regulations 40 CFR 763 Subpart E

U.S. Department of Transportation (DOT) including but not limited to:

<u>Hazardous Substances: Final Rule</u> Regulation 49 CFR, Parts 171 and 172

State of Illinois

Asbestos Abatement Act (105 ILCS 105)

<u>Commercial and Public Building Asbestos Abatement Act</u> (225 ILCS 207)

Rules for Asbestos Abatement for Public and Private Schools
And Commercial and Public Buildings in Illinois
(77 Ill. Adm.Code 855)

Standards which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

American National Standards Institute (ANSI)

Fundamentals Governing the Design and Operation of Local Exhaust Systems Publication 29.2-79

Practices for Respiratory Protection Publication Z88.2-80









North Face



## South Face

205 Elm Road	Parcel No.	1MF0116
Lake, County	Work Order No.	625
Barrington, Illinois	PSI Project No.	00472669





East Face

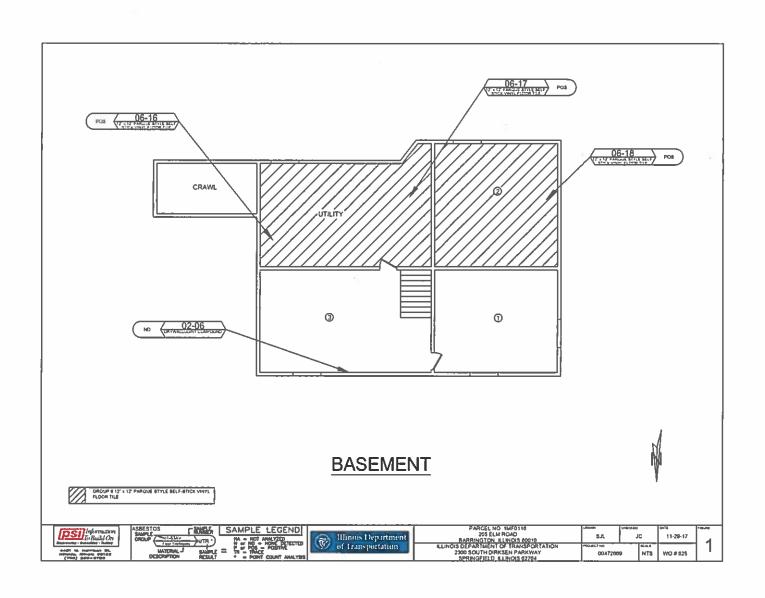


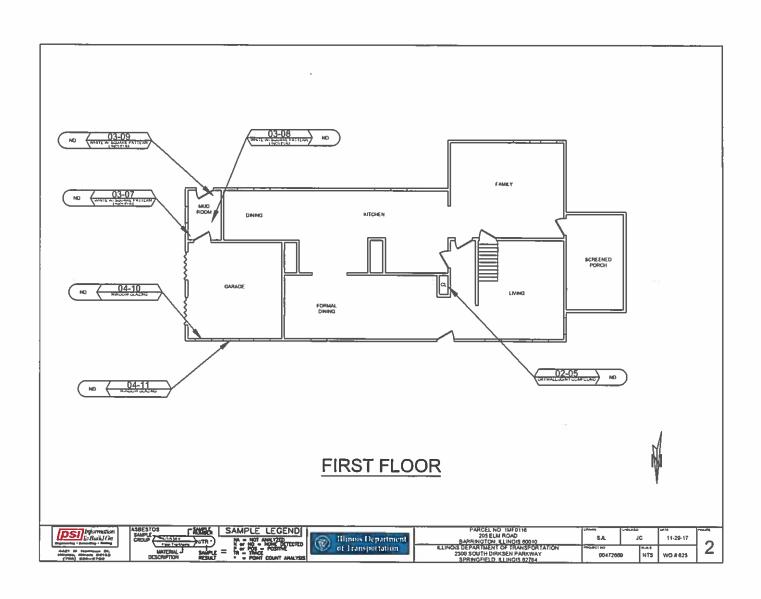
West Face

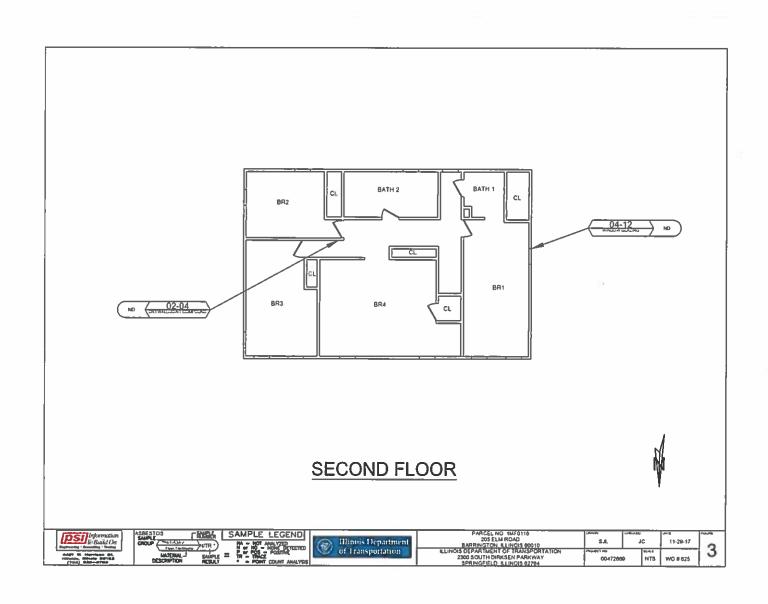
205 Elm Road	Parcel No.	1MF0116
Lake, County	Work Order No.	625
Barrington, Illinois	PSI Project No.	00472669

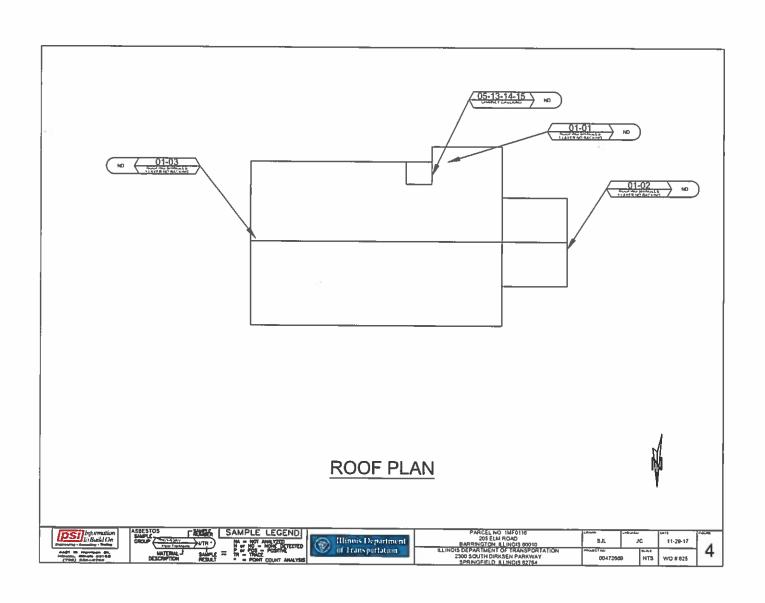














# LABORATORY RESULTS & CHAIN OF CUSTODY DOCUMENTATION



#### REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS

TESTED FOR: PSI, Inc.

4421 Harrison St., Ste. 510

Hillside, IL 60162

Attn: Ron Tulke

Project ID: 00472669

**IDOT WO#625** 

Parcel: 1MF0116

205 Elm Road, Barrington, IL 60010

Date Received: 11/20/2017

Date Completed: 11/29/2017

Date Reported: 11/29/2017

Analyst:	D	an Anderson Work Ord	er: 1711527	Page: 1 of 2				
Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.)  Analyst's Comment	Asbestos Content (Percent and Type)	Non-ashestos Fibers (Percent and Type)				
01-01	001A	(1) Black, Shingle, Homogeneous	NO ASBESTOS DETECTED	15% Fibrous Glass				
01-02	002A	(1) Black, Shingle, Homogeneous	NO ASBESTOS DETECTED	15% Fibrous Glass				
01-03	003A	(1) Black, Shingle, Homogeneous	NO ASBESTOS DETECTED	15% Fibrous Glass				
02-04	004A	<ul><li>(1) Gray, Drywall, Homogeneous</li><li>(2) Beige, Joint Compound, Homogeneous</li></ul>	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported				
02-05	005A	<ul><li>(1) Gray, Drywall, Homogeneous</li><li>(2) Beige, Joint Compound, Homogeneous</li></ul>	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported				
02-06	006A	<ul><li>(1) Gray, Drywall, Homogeneous</li><li>(2) Beige, Joint Compound, Homogeneous</li></ul>	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	15% Cellulose Fiber None Reported				
03-07	007A	(1) White, Flooring, Homogeneous	NO ASBESTOS DETECTED	5% Cellulose Fiber				
03-08	A800	(1) White, Flooring, Homogeneous	NO ASBESTOS DETECTED	5% Cellulose Fiber				
03-09	009A	(1) White, Flooring, Homogeneous	NO ASBESTOS DETECTED	5% Cellulose Fiber				
04-10	010A	(1) Gray, Glazing, Homogeneous	NO ASBESTOS DETECTED	None Reported				
34-11	011A	(1) Gray, Glazing, Homogeneous	NO ASBESTOS DETECTED	None Reported				
04-12	012A	(1) Gray, Glazing, Homogeneous	NO ASBESTOS DETECTED	None Reported				
<b>05-13</b>	013A	(1) White, Caulking, Homogeneous	NO ASBESTOS DETECTED	None Reported				

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA 600/M4-82-020). Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative Transmission Electron Microscopy is currently the only method that can be used to determine if the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight. NVLAP Lab Code 101350-0.

Respectfully submitted,

PSI, Inc.

**Approved Signatory** 

George Skarupa

Analyst:	D	an Anderson Work Ore	der: 1711527	Page: 2 of 2				
Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)				
05-14	014A	(1) White, Caulking, Homogeneous	NO ASBESTOS DETECTED	None Reported				
05-15	015A	(1) White, Caulking, Homogeneous	NO ASBESTOS DETECTED	None Reported				
06-16	016A	<ul><li>(1) Brown, Floor Tile, Homogeneous</li><li>(2) Transparent, Mastic, Homogeneous</li></ul>	2% Chrysotile NO ASBESTOS DETECTED	None Reported None Reported				
06-17	017A	Sample Not Tested						
06-18	018A	Sample Not Tested						

Report Notes: (PT) Point Count Results

Quantitation is based on a visual estimation of the relative area of bulk sample components, unless otherwise noted in the "Comments" section of this report. The results are valid only for the item tested. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Method used: E.P.A. Interim Method for the Determination of Asbestos in Bulk Insulation Samples (EPA 600/M4-82-020). Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative Transmission Electron Microscopy is currently the only method that can be used to determine if the material can be considered or treated as non-asbestos containing. Samples will be disposed of within 30 days unless notified in writing by the client. No part of this report may reproduced, except in full, without written permission of the laboratory. The reporting limit is 1% by weight. NVLAP Lab Code 101350-0.

Respectfully submitted,

PSI, Inc.

Approved Signatory George Skarupa

#### CHAIN OF CUSTODY - ASB/LEAD/IH

1711527

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Email:			ulki											Email	l:		ron.tulke@psiusa.com										
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# **INSPECTOR & LABORATORY CERTIFICATIONS**



ID NUMBER 100 - 08002 ISSUED 4/13/2017 EXPIRES 05/15/2018

THOMAS A NOVATKA 8532 W GREGORY ST #3N CHICAGO, IL 60656

Environmental Health



ENDORSEMENTS

TC EXPIRES

INSPECTOR

3/17/2018

PROJECT MANAGER AIR SAMPLING PROFESSIONAL

3/16/2018

Alteration of this license shall result in legal action
This license issued under authority of the State of Illinois
Department of Public Health
This license is valid only when accompanied by a valid
training course certificate



# Asbestos Building Inspector Refresher

# THIS CERTIFIES THAT Tom Novatka

Has successfully completed the IL & IN Approved Asbestos Training Course and passed the Examination for purposes of accreditation under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by the Amerisafe Training Services, 3990 Enterprise Court, Aurora IL 60504. (630) 862-2650

CLASS DATES: 3/17/2017

LOCATION:

merisale

**EXAMINATION:** 

3/17/2017

**EXPIRATION** 

3/17/2018

**CERTIFICATE NUMBER: 108525X05S100806** 



#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

#### **PSI**

PSI, Inc. 850 Poplar Street Pittsburgh, PA 15220 Ms. Catherine McNamee

Phone: 412-922-4010 x286 Fax: 412-922-4014 Email: cathy.mcnamee@psiusa.com

http://www.psiusa.com

#### **ASBESTOS FIBER ANALYSIS**

#### **NVLAP LAB CODE 101350-0**

#### **Bulk Asbestos Analysis**

Code

**Description** 

18/A01

EPA -- Appendix E to Subpart E of Part 763 -- Interim Method of the Determination of Asbestos in

**Bulk Insulation Samples** 

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

#### Airborne Asbestos Analysis

Code

**Description** 

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program



# **ABATEMENT COST ESTIMATE**



#### ABATEMENT BUDGET ESTIMATE

Provided below is a summary of budget estimates for removal of asbestos containing materials. A detailed table is attached.

• Estimate for abatement of all asbestos containing material

\$3,140.00

Costs for abatement may increase depending on materials that may reside within areas that were inaccessible at the time of this survey.

#### ABATEMENT BUDGET ESTIMATE METHODOLOGY

Quantification of suspect asbestos-containing materials was conducted using visual estimation by an IDPH licensed asbestos inspector. This visual estimation was performed in accordance with generally accepted practices in the asbestos industry. These values are sufficiently accurate for the purpose of documenting the presence of asbestos within its space for the purpose of identifying abatement control conditions or for general policy considerations. Actual quantities may differ between visually estimated values and physical measurements. If a licensed asbestos abatement contractor is engaged to remove asbestos containing materials, the abatement contractor is responsible for verifying reported quantities of ACM.

PSI used recognized standard engineering principles in developing the unit cost budgetary estimate for removal of the listed asbestos-containing materials (ACM) and assumed ACM contained in this facility. This is an estimate for removal only, intended for general policy decisions regarding program development and planning. The figures are as of the date of the report and cover only the removal contractor's fees. Not included are items such as indirect or hidden costs, such as employee relocation during the project, lost revenues, etc. These items are considered during the development of an engineering cost estimate, which is beyond the scope of this study. Other variables included in an engineering cost estimate are the project schedule and phasing, size of the project, and other factors that can affect project cost.

Prior to the initiation of a project that would involve abatement, a detailed engineering cost estimate and project design is recommended. The engineering cost estimate will incorporate such variables as scheduling and phasing of the project, the size and extent of the project, seasonal factors, operational factors and other restrictions, respiratory protection, alternate abatement options, and type of replacement material. An engineering cost estimate would also include professional fees, such as for project design and management, and other expenses, such as on-site air monitoring and construction supervision.



#### ABATEMENT COST SCHEDULE

Material Description - Description of the homogenous asbestos-containing material.

<u>Quantity</u> - This indicates the quantity of material present, expressed in appropriate units. Quantities have been determined by on-site measurement or plan take-offs. Where access is restricted, best estimates were determined from whatever information was available.

Unit Cost - The cost of removal per linear foot or square foot or other unit.

Removal Cost - (Quantity) x (Unit Cost)



### ABATEMENT COST SCHEDULE FOR ASBESTOS CONTAINING MATERIALS

Parcel No. 1MF0116
Single Family Residence
205 Elm Road
Barrington, Illinois 60010

The following costs are an estimate only for the removal of asbestos-containing materials. Please refer to Removal Budget Estimate Methodology for clarification.

Asbestos-Containing Materials	Quantity	Unit Cost	Removal Cost
12" x 12" Parque Style Self Stick Vinyl Floor Tile	410 SF	\$4.00	\$1,640.00
Contractor mobilization	1	\$1,000.00	\$1,000.00
Subtotal			2,640.00
Consultant Fee			\$500.00
Total:	****		\$3,140.00

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