

NESHAP Demolition Survey

For Asbestos Containing Building Materials



*Residential Property
1023 Garfield Avenue
Sheldon, IA*

For

*Sam Kooiker
City of Sheldon
416 9th Street
Sheldon, IA*

ALLOY
SPECIALTY



5850 Wenninghoff Road
Omaha, NE 68134
Phone: (402) 571-8833
Fax: (402) 571-7900
alloyspecialty@email.com

July 16, 2019

Sam Kooiker
City Administrator
City of Sheldon
416 9th Street
Sheldon, IA 51201

Re: NESHAP Demolition Survey for Asbestos Containing Building Materials
Alloy Specialty Project Number 19036

Dear Mr. Kooiker,

Please find enclosed the National Emission Standard Hazardous Air Pollutants (NESHAPS) Demolition survey report for the Residential Property, 1023 Garfield Avenue, Sheldon, IA. The assessment and analytical procedures were specifically for asbestos containing building materials. The site was reviewed on 7/5/2019.

Alloy Specialty collected ten (10) samples from the property for asbestos content. Of the ten (10) layers analyzed, three (3) individual materials were classified as containing greater than one percent (>1%) asbestos. Samples were analyzed by Environmental Hazard Services Lab, Lab #101882-00, via EPA Method 600/R-93/116.

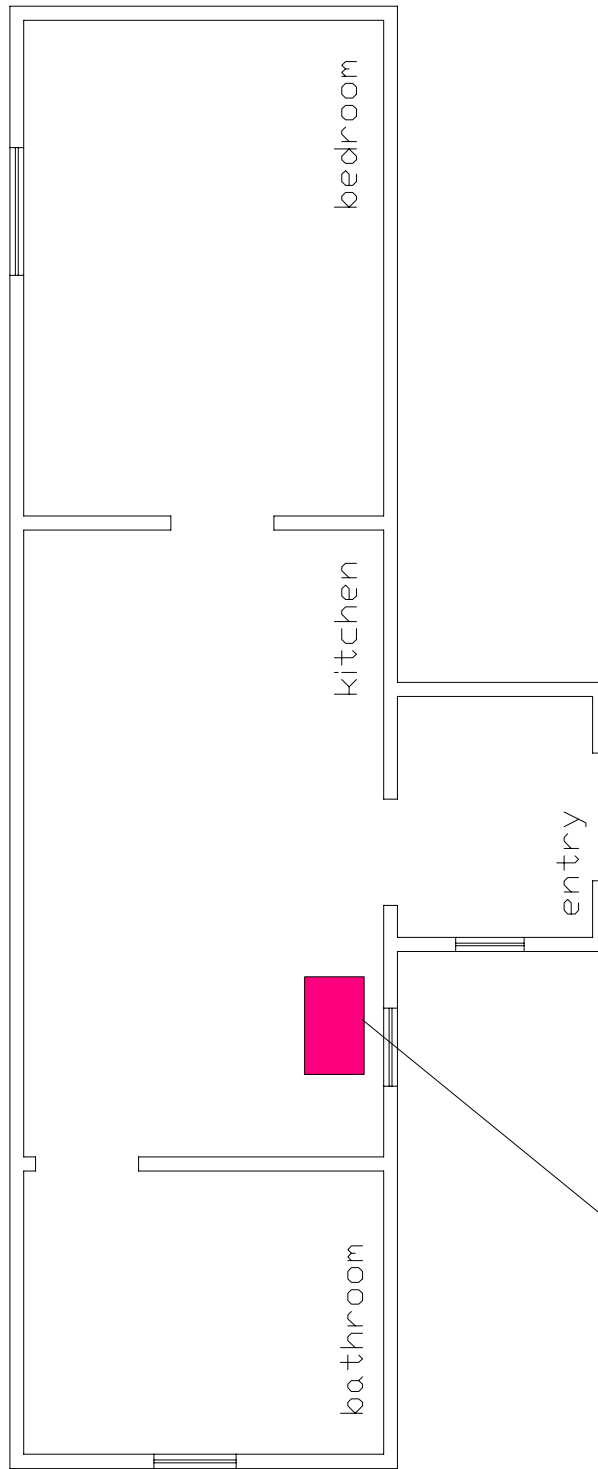
According to the State of Iowa's Department of Environmental Resource's NESHAPS standard, these materials (Sink Undercoating and Rolled Roofing with Tar) are classified as asbestos containing building materials (ACM) therefore they need to address any asbestos prior to Demolition of the property.

If you have any questions, please contact us.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Darwin D. Rohde", is written over a light gray rectangular background.

Darwin D. Rohde
President
18-0705 State of Iowa Asbestos Inspector, Management Planner



Asbestos Containing Sink Under Coating

TITLE

1023 Garfield Avenue
Sheldon, Iowa

SHEET

Asbestos Materials
Interior

PROJECT NO.

19036

DWG NO

2

SCALE

None

ALLOY
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NESHAP Demolition Survey

For Asbestos Containing Building Materials

<u>Date of Report:</u>	7/12/2019
<u>Site Address:</u>	Residential Property 1023 Garfield Avenue Sheldon, IA
<u>Site Contact:</u>	Sam Kooiker City Administrator City of Sheldon 416 9th Street Sheldon, IA 51201
<u>Inspector:</u>	Alloy Specialty ▪ Darwin D. Rohde <i>18-0705 State of Iowa Asbestos Inspector, Management Planner</i>
<u>Site History:</u>	The structure was a former Residential Property structure. At the time of the inspection the building was un-occupied.
<u>Inspection Time:</u>	7/5/2019
<u>Limitations:</u>	The inspector had access to all areas of the structure, but without heavy equipment or demolition equipment, the inspector could not gain access to areas that were out of the proposed scope of services, i.e. trenching, excavation, full-scale interior demolition, etc. The inspection team reviewed the building to the best of their professional ability.
<u>Field Inspection:</u>	<p>The inspector examined the entire scope of work. Suspect materials were collected throughout these locations.</p> <p>No mechanical or construction prints were secured or provided during the inspection.</p> <p>Quantifications of materials were completed in the field and no verification per architectural prints was done at the time of the issuance of this report. Asbestos containing building materials quantities should be verified prior to demolition to assure validity.</p>

Laboratory for Asbestos:

Environmental Hazards Services, LLC
7469 Whitepine Road
Richmond, VA 23237
NVLAP 101882-0

Laboratory Method for Asbestos Identification

Polarized Light Microscopy is primarily used to identify asbestos in bulk samples of building materials. It forms the basis for the identification and classification of asbestos containing materials (ACM) such as thermal system insulation, spray applied plasters and coatings, floor tile, ceiling tile, construction adhesives, and caulks.

EPA Method 600/R-93/116. The analysis includes testing of bulk building materials for asbestos by performing a visual estimation using the EPA Method 600/R-93/116. This method is the most widely used method for estimating asbestos in bulk building materials and works well for most sample types. However, it might require the more detailed method of point counting for accurate estimation of asbestos in samples with low asbestos concentration. This method is also not applicable for samples containing large amounts of fine fibers below the resolution of the PLM (< 0.3 microns).

Samples:

A total of 10 suspect bulk asbestos samples were taken from various materials throughout the site. Materials sampled were:

- Interior Wall Systems
- Flooring Materials
- Ceiling Systems
- Mechanical Systems
- Exterior roofing Materials

Sampling Method

Alloy Specialty uses the method described in 40 CFR Part 763.86, Sampling (for asbestos) for collecting bulk asbestos samples. This method describes sampling for surfacing material, thermal system insulation, and miscellaneous material. 40 CFR Part 763.92(a) (1) and (2), and 40 CFR Part 763, Subpart. E, Appendix C also contain ancillary topics related to project management and planning that are suggested for bulk asbestos sampling.

The sampler or sampling team identifies areas with suspect materials to be sampled for asbestos. Materials that might be suspect for asbestos may include, but are not limited to, thermal system insulation, joint compound, roofing material, gaskets, floor coverings, decorative coatings, and wire insulation. The sampler uses a sampling tool appropriate for each kind of material and collects samples in airtight containers for subsequent laboratory analysis.



**Sampling Method
(cont.)**

The sampler always uses a clean tool to collect the sample, and special attention is paid to avoid creation of airborne asbestos. This method is intended to provide material to a laboratory where the fibers can be quantified and qualitatively identified as a specific type of asbestos or non-asbestiform fiber.

Sample location, study site, sample description, time, date and project identification number are recorded in the logbook, and pictures may be taken of the samples.

**How many samples
are required to be
taken and analyzed?**

No sampling is required if the inspector suspects that the materials are ACM and treats them as ACM. However, for a suspect material to be classified as non-ACM, a minimum number of samples must be collected and analyzed. The following summarizes the minimum number of samples for collection and analysis. A homogeneous material is a material that appears to be uniform when properties such as age, color, and texture are compared.

Thermal System Insulation (TSI)

Thermal System Insulation includes materials such as boiler insulation, pipe insulation, duct work insulation, furnace gaskets and vermiculite.

- At least three (3) samples from each homogeneous material of TSI.
- At least one (1) sample from patched TSI that is less than six square feet.
- For pipe fittings, in a manner sufficient to determine if the material is asbestos-containing.

Surfacing Material

Surfacing material includes materials such as spray-applied fireproofing, troweled-on plasters or ceiling textures.

- At least three samples from homogeneous materials of 1000 square feet or less;
- At least five samples from homogeneous materials of greater than 1000 square feet but less than 5000 square feet;
- At least seven samples from homogeneous materials of greater than 5000 square feet.

How many samples are required to be taken and analyzed? (cont.)

Miscellaneous Material and Non-friable Suspect ACM

Miscellaneous materials include all materials that are not TSI or Surfacing Materials, such as floor tile, ceiling tile and linoleum.

- For each homogeneous material, a sufficient number of samples are required to be collected and analyzed to determine if the material is ACM.
- Samples are not required to be collected from homogeneous materials that the certified inspector has determined to be non-asbestos-containing material, such as fiberglass or rubber.

Findings

The inspection at Residential Property, 1023 Garfield Avenue, had identified **positive asbestos** containing materials.

- Sink Undercoating
- Rolled Roofing with Tar

Regulatory Compliance Issues:

All facility renovation/demolitions require a submittal to the Iowa Department of Environmental Resources and Iowa's NESHAP Program. This two-page demolition notification form is submitted to the State of Iowa (even if no asbestos is identified).

A ten (10) day notification period is required prior to the start of any demolition or remediation activities. This notification must be filed with the State of Iowa. Each filed notification has associated fees based on either filing of the notification or based on the amount and type of materials addressed during the remediation.

The property **has** identified non-friable materials. The identified materials must be removed prior to demolition, because of their composition. All materials must be removed in accordance to regulatory laws of the EPA, State of Iowa, and OSHA.

All disposal records must be documented. Documentation must be kept for thirty years



PHOTO 1:
Exterior overview of the South and West elevations of the house.



PHOTO 2:
Exterior overview of the North and East elevations of the house.



PHOTO 3:
Exterior overview of the South and West elevations of the garage.



PHOTO 4:
Exterior overview of the north yard adjacent to the garage. Scrap metal and misc. household items.



PHOTO 5:
North of garage, a former dog house and kennel area. Now filled with trees.



PHOTO 6:
East interior of garage. Parts of equipment, mailboxes, truck parts.



PHOTO 7:
Interior of garage, a boat was discovered.



PHOTO 8:
Roof of house. Multiple layers of rolled shingles and tars. Original rolled roofing with tar and the second layer of the four layers are **asbestos containing**.

Attachment 1

Identification Table for Asbestos Containing Materials

Residential Property
1023 Garfield Avenue
Sheldon, IA

<i>Material</i>	<i>Location</i>	<i>Classification</i>	<i>Quantification</i>
Sink Undercoating	Kitchen	Non-friable, Category II	1 Sink
Rolled Roofing with Tar Original Roofing and 2 nd Layer of Roofing Materials	Roof	Non-Friable, Category I	336 sq. ft

Notes:

- i. Quantifications of materials were completed in the field and no verification per architectural prints was done at the time of the issuance of this report. Asbestos containing building materials quantities should be verified prior to renovation to assure validity.
- ii. Materials in **red** are **friable** asbestos containing materials in this table.
- iii. Abbreviations

sq. ft. -- Square Feet	ln. ft. -- linear feet
MF -- Mechanical Fittings	O.D. -- Outside Diameter
- iv. *State of Iowa's DNR NESHAP department has requested all asbestos containing resilient sheet flooring be classified as friable

Attachment 2



Environmental Hazards Services, L.L.C.
 7469 Whitepine Rd
 Richmond, VA 23237
 Telephone: 800.347.4010

Asbestos Bulk Analysis Report

Report Number: 19-07-01130

Client: Alloy Specialty, Inc
 5850 Wenninghoff Road
 Omaha, NE 68134

Received Date: 07/08/2019
Analyzed Date: 07/09/2019
Reported Date: 07/11/2019

Project/Test Address: 19036; 1023 Garfield Ave; Sheldon, IA

Client Number:
 201400

Laboratory Results

Fax Number:
 402-571-7900

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
19-07-01130-001	1 Shed Roof Layer 1 Rolled Roofing		Black Fibrous; Black Pliable to Brittle; Pale Gray Aggregate; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
19-07-01130-002	2 Shed Roof Layer 2 Rolled Roofing		Black Fibrous; Black Pliable to Brittle; Black/Off- White Aggregate; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
19-07-01130-003	3 House Roof Layer 1 Rolled Roofing		Black Fibrous; Black Pliable to Brittle; Off-White Aggregate; Inhomogeneous	NAD	40% Cellulose 60% Non-Fibrous
19-07-01130-004	4 House Roof Layer 2 Rolled Roofing		Black Fibrous; Black/Black to Pale Gray Pliable to Brittle; Green/Off-White Aggregate; Inhomogeneous	NAD	55% Cellulose 45% Non-Fibrous

Environmental Hazards Services, L.L.C

Client Number: 201400

Report Number: 19-07-01130

Project/Test Address: 19036; 1023 Garfield Ave; Sheldon, IA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
19-07-01130-005	5 House Roof Layer 3 Rolled Roofing		Black Fibrous; Black/Black to Gray Pliable to Brittle; Green Aggregate; Inhomogeneous	3% Chrysotile	35% Cellulose 62% Non-Fibrous
Total Asbestos: 3%					
Chrysotile present in black to gray pliable to brittle sealant/mastic-type material.					
19-07-01130-006	6 House Roof Layer 4 Rolled Roofing		Black Pliable to Brittle; Black Fibrous; Green Aggregate; Inhomogeneous	5% Chrysotile	30% Cellulose 5% Hair 60% Non-Fibrous
Total Asbestos: 5%					
Chrysotile present in black pliable to brittle sealant/mastic-type material.					
19-07-01130-007	7 Kitchen Insulation		Yellow Fibrous; Homogeneous	NAD	3% Cellulose 92% Fibrous Glass 5% Non-Fibrous
19-07-01130-008	8 Kitchen Ceiling		Off-White Brittle; Tan Fibrous; Inhomogeneous	NAD	10% Cellulose 8% Fibrous Glass 82% Non-Fibrous
19-07-01130-009	9 Bathroom Wall		Off-White Brittle; Tan Fibrous; Inhomogeneous	NAD	8% Cellulose 10% Fibrous Glass 82% Non-Fibrous
19-07-01130-010	10 Kitchen Sink Undercoating		Dark Brown Coarse Powder; Tan Fibrous; Inhomogeneous	2% Chrysotile	50% Cellulose 48% Non-Fibrous
Total Asbestos: 2%					
Chrysotile present in dark brown coarse powder.					

Environmental Hazards Services, L.L.C

Client Number: 201400

Report Number: 19-07-01130

Project/Test Address: 19036; 1023 Garfield Ave; Sheldon, IA

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
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QC Sample: 32-M22010-2

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Mark Case

Reviewed By Authorized Signatory: Melissa Kanode

Missy Kanode
QA/QC Clerk

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

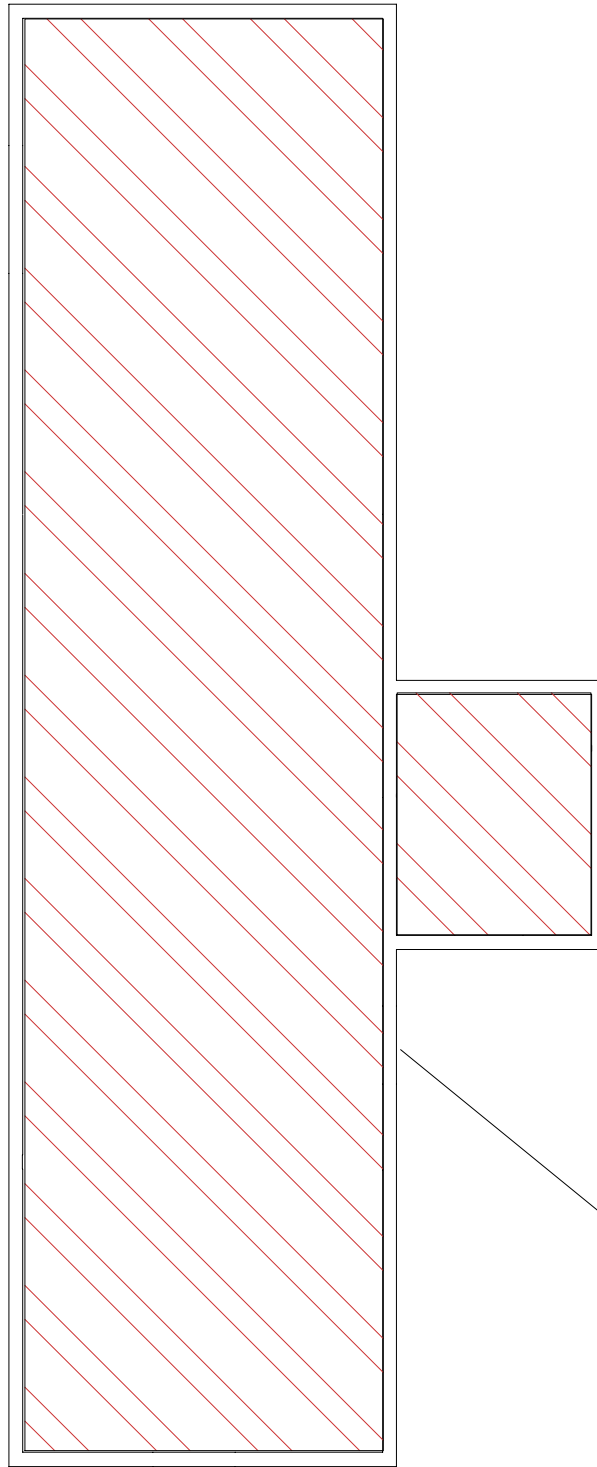
Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.


* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

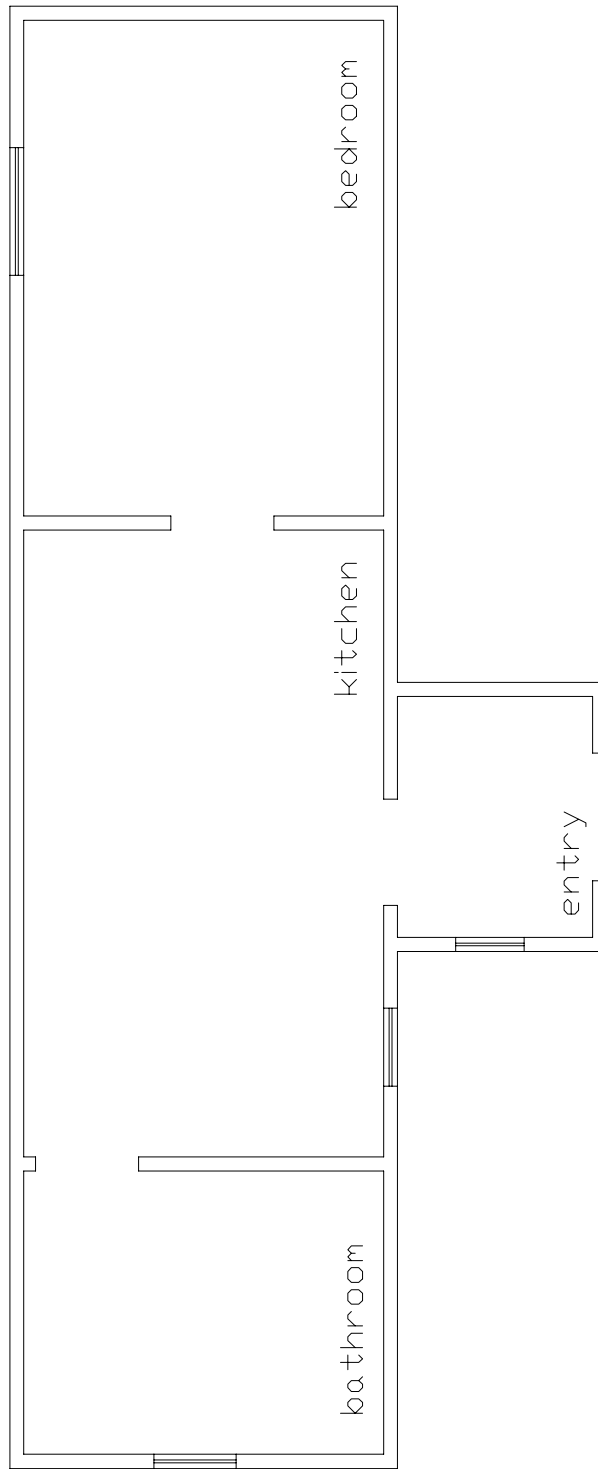
LEGEND: NAD = no asbestos detected

Attachment 3



Asbestos Containing Rolled Roofing
With Tar Adhesives. Original and 2nd
Layer of Roofing.

TITLE 1023 Garfield Avenue Sheldon, Iowa	SHEET Asbestos Materials Exterior	PROJECT NO. 19036	
	DWG NO 3	SCALE None	



TITLE

1023 Garfield Avenue
Sheldon, Iowa

SHEET

Site Orientation

PROJECT NO.

19036

DWG NO

1

SCALE

None

