Asbestos; Oregon’s “New Renovation Law”
Asbestos; Oregon’s “New Renovation Law”

Continued Education Instructor

Brian Denne

Credentials

Healthy Habitat.org
- Executive Director of Operations and Development.

Home Energy Score.com
- Founder / Owner
- Certified Energy Assessor

General Contractor
- Contractor since 1995
- President of the Portland Metropolitan Chapter of International Association of Certified Home Inspectors

Home Performance
- Board of Directors
- President of the Home Performance Guild of Oregon

Healthy Habitat.org is an Oregon 501(c)3 Nonprofit organization
What is Asbestos
The negative health effects associated with Asbestos.

Asbestos in our homes
How abundant is Asbestos in our homes, and why was it used (and still being used today)?

Oregon’s Law Requirements
How and why are surveys conducted, and who can conduct an Asbestos Survey.

Specialized Inspector Requirements
Only AHERA approved Surveyors, accredited Labs, and the Required Paperwork

Cost and Contractors
The costs associated with Asbestos Surveys and Mitigation. Finding the right Contractor for your remodel.

Asbestos is a natural occurring mineral that has been mined and used in a wide variety of household products and construction materials throughout the world.

This long thin natural fibrous mineral was used in the early 1900s onwards to increase the durability and life expectancy of products and goods. Though Asbestos is less used today then it was in the past, Asbestos materials are still imported into the U.S. and are highly used in other areas of the world.

The world’s perfect insulator
The natural fire-resistant property of Asbestos made it ideal for roofing, flooring, and thermal insulation. Asbestos material doesn’t burn so it makes the perfect heat barrier.

The “Cotton” of the Industrial Revolution
Once thought to be the perfect material, manufactures of home and industry products raced to find ways to add Asbestos into our daily lives.
**Health Effects**

Asbestos Fibers are easily inhaled into the lungs

Resulting in:
- Asbestosis (Lung Disease)
- Mesothelioma (Cancer of the Lung’s Mesothelial Tissue/Lining)
- Cancer (Malignant Cells/Tumor)

Treatable, but there is no cure for Asbestosis and Mesothelioma. Generally the healthy effects of Asbestos are not even detected until they are in advanced stages.

**How abundant was/is Asbestos**

Asbestos, Quebec

From 1870 to 2012, the largest Asbestos Mine in the world. In 2019 the town agreed to change its name as it is hindering the community’s economic development.

Over 5,000+ product and still counting

According to the National Cancer Institute, around 5,000 consumer products have contained Asbestos.

Asbestos in building materials

Where Asbestos can be located inside of our homes is almost limitless.
From 1884 to 1980’s Asbestos was the solution

**Consumer Products**

- Aprons
- Oven Mitts
- Upholstery
- Ironing Board Covers
- Drapes / Curtains
- Baby / Talcum Powder
- Hair Dryers
- Crock Pots
- Cigarette Filters
- Brake Pads
- Automobile Engine Gaskets
- Christmas Snow-like Materials
- Blankets
- Clothing
- Fertilizer
- Stove / Oven

**Now Asbestos is the problem**
Asbestos Today

Asbestos is still being imported into the U.S. every day.
- 705 Metric Tons of Raw Asbestos in 2016
- 343 Metric Tons of Raw Asbestos in 2015

Most of the Raw Asbestos being used today is in roofing materials, automobile breaks, commercial/industrial insulation applicant.

Old Laws and the New

Many Oregon’s know that if you demolish a home it needs to be tested for Asbestos first. But, did you know that this rule also applies to REMODELING projects?

*Rule applies to all Commercial buildings regardless of the date built.
*Rule applies to all residential buildings constructed before 2004.
Why prior to 2004 built residential homes?

The graph shows the 8 City/States that had the largest Raw Asbestos shipments brought into our Country ranked by over all weight.

<table>
<thead>
<tr>
<th>City/State</th>
<th>Total Asbestos Shipments, 2000-2010</th>
<th>Percent of Raw Asbestos</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>10</td>
<td>5,248,133</td>
</tr>
<tr>
<td>Orleans, LA</td>
<td>42</td>
<td>2,075,254</td>
</tr>
<tr>
<td>Newark, NJ</td>
<td>7</td>
<td>2,068,280</td>
</tr>
<tr>
<td>Long Beach, CA</td>
<td>3</td>
<td>2,019,082</td>
</tr>
<tr>
<td>San Juan, PE</td>
<td>3</td>
<td>77,995</td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td>3</td>
<td>57,078</td>
</tr>
<tr>
<td>Mobile, AL</td>
<td>2</td>
<td>54,439</td>
</tr>
<tr>
<td>Norfolk, VA</td>
<td>1</td>
<td>28,219</td>
</tr>
</tbody>
</table>

In the News – February 12, 2020

A news article which addresses the fact that Asbestos products are far too common in today’s construction materials.

Surveys, Accreditations, and Paperwork

AHERA Inspector
Only an accredited AHERA (Asbestos Hazard Emergency Response Act) inspector may perform an Asbestos Survey.

NVLAP Accredited Lab
NVLAP (National Voluntary Lab Accreditation Program) approved Labs can provide test results for Oregon Asbestos Surveys.

The Paperwork
The actual Survey Report, along with several other document required by the state of Oregon.
Is an AHERA Inspector the same as my home inspector?

No, AHERA Inspectors are not the same as home inspectors. Their training and qualifications are provided by different agencies.

Only E.P.A. qualified trainers can provide Asbestos Surveyor Training and certify an individual as an AHERA Inspector.

What takes place in an Asbestos Survey

**Materials Classification and Identification**

The Surveyor will conduct a visual inspection of all suspect materials which may contain Asbestos. This information is then documented in a samples log.

**Sample Collecting and Labeling**

Using bladed tools, and coring devices, the Surveyor will remove, bag, and tag samples of suspect materials. Generally a minimal number of 3 samples are collected from each surface.

**Photography and Floor Plan Sketching**

Each item that had materials removed form it will be photographed to be used in the report. A floor plan sketch will be created identifying where in the room(s)/building each material we removed from.

**The Lab Report**

The NVLAP Lab will provide results in 1 to 7 days based on the requested turn around time from the Surveyor. When the report is completed it will provide information on what items tested positive for Asbestos, and what % of the material is made up of Asbestos.

**Completion of Documents and Reporting**

The state of Oregon has very specific requirement of what information is to be included in the Asbestos Survey Report.
Reading an Asbestos Report

Detailed reports are emailed to you, and your client, that are easy to read and guide you through the next steps to take.

Asbestos Survey Report

Tested Positive for Asbestos

PROPERTY PROFILE
ADDRESS: [Address]
REPORT CREATED FOR: [Name]
PHONE: [Phone Number]
EMAIL: [Email]

FURTHER REQUIRED DOCUMENTS NEEDED FOR THIS PROJECT:

- List of Collected Material Samples and Results
- The Completed Chair of Custody for the Materials
- A complete copy of the Laboratory Report including:
  - Laboratory Name, Address, Phone Number, Analyst’s Name
  - Unique Sample Identification Number
- Recommendations and response action (if the property contains Asbestos)
- Detailed description of any limitations of the Asbestos Survey, or
  any hazardous areas on the face of the property
- Certificate of the Accredited Asbestos Inspector who performed the Survey
- Sketch of areas under construction, and location of Hazardous Materials

DOCUMENTS ATTACHED TO THIS REPORT INCLUDE:

- Detailed asbestos report
- Asbestos survey results
- Action plan for asbestos removal
- Hazard assessment report
- cuddle and clean plan
- Site survey
- Material Sampling and Analysis Report
- Laboratory Report
- Site Safety Plan
- Response Plan

What is Asbestos?
Asbestos is a group of naturally occurring fibrous minerals that are very strong, heat-resistant, and non-combustible. Asbestos fibers have been used as construction materials in various products such as roofing shingles, ceiling and floor tiles, insulation, and friction materials. These fibers can cause serious health issues if they are inhaled, ingested, or absorbed through the skin.
Asbestos Survey Report

RECOMMENDATION / RESPONSE ACTION FOR MATERIALS THAT CONTAIN ASBESTOS:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommendation</th>
<th>Response Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Remove</td>
<td></td>
<td></td>
</tr>
<tr>
<td>002</td>
<td>Encapsulate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>003</td>
<td>Abate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>004</td>
<td>Paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>005</td>
<td>Sandblasting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

At each performed towards the recommendation. Response actions above need to comply with the Department of Environmental Quality Rules, Chapter 240, Division 8, Asbestos Requirements. Visit the DEQ website and provide the information: https://www.deq.state.or.us/deq/display/division/rules.action?division=15&section=15C

LIMITATIONS OF THE ASBESTOS SURVEY OR INACCESSIBLE AREAS:

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>All items</td>
<td></td>
</tr>
<tr>
<td>All items</td>
<td></td>
</tr>
<tr>
<td>All items</td>
<td></td>
</tr>
</tbody>
</table>

LIMITS OF THE ASBESTOS INSPECTION: The asbestos inspection is limited to the readily accessible and visible systems and components of the property inspected.

THE ASBESTOS INSPECTION AND REPORT ARE NOT A GUARANTEE OR WARRANTY that all materials inspected and samples collected do or do not contain asbestos, or that asbestos material containing asbestos do or will not exist. Asbestos may exist even though visible evidence of such may not be present or accessible during the inspection.

Sample # 001
Sample # 002
Sample # 003
Sample # 004
Sample # 005
Sample # 006
### Chain of Custody Record

**Project Name/Address:**

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Sample Description</th>
<th>Date Sampled</th>
<th>F.L.M.</th>
<th>Note</th>
</tr>
</thead>
</table>

**Internal Lab For Only:**

<table>
<thead>
<tr>
<th>Pre-Laboratory</th>
<th>Post-Laboratory</th>
<th>Preparation Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>By:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**ASN 1**

### DEQ Project Notification Form

**For Abatement of Frangible Asbestos-Containing Material**

**Project Category**

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Description</th>
</tr>
</thead>
</table>

**Abatement Project:**

- Emergency Abatement Project (Emergency order requires a 95% file increase):
  - Emergency Order:
    - Date:
    - Reason for Emergency:
      - [List examples: fire or water damage, hazardous condition, etc.]

**Job Site:**

<table>
<thead>
<tr>
<th>Job Site</th>
<th>Abatement Contractor Name</th>
<th>DEQ License Number</th>
</tr>
</thead>
</table>

**Contractor:**

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
</table>

**Abatement Work:**

<table>
<thead>
<tr>
<th>Work Description</th>
<th>Hours of Abatement Work</th>
<th>Initial P.C.</th>
<th>Final P.C.</th>
</tr>
</thead>
</table>

**Abatement Work:**

<table>
<thead>
<tr>
<th>Work Description</th>
<th>Hours of Abatement Work</th>
<th>Initial P.C.</th>
<th>Final P.C.</th>
</tr>
</thead>
</table>

**Abatement Work:**

<table>
<thead>
<tr>
<th>Work Description</th>
<th>Hours of Abatement Work</th>
<th>Initial P.C.</th>
<th>Final P.C.</th>
</tr>
</thead>
</table>

**Final Report:**

<table>
<thead>
<tr>
<th>Final Report</th>
<th>Signed By</th>
<th>Date</th>
</tr>
</thead>
</table>

---

**Turn page over**
Costs and finding Contractors

<table>
<thead>
<tr>
<th>RESIDENTIAL ASBESTOS SURVEY (INSPECTION)</th>
<th>RESIDENTIAL ASBESTOS SURVEY (INSPECTION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$149 + Sample Costs</td>
<td>$249 + Sample Costs</td>
</tr>
<tr>
<td>1-2 Rooms or Garage Desuilte</td>
<td>8 Rooms or More</td>
</tr>
<tr>
<td>Accredited AHERA (Asbestos) Building Inspector</td>
<td>Accredited AHERA (Asbestos) Building Inspector</td>
</tr>
<tr>
<td>Quick turnaround times on reports</td>
<td>Quick turnaround times on reports</td>
</tr>
<tr>
<td>Easy online scheduling</td>
<td>Easy online scheduling</td>
</tr>
<tr>
<td>(Call for Commercial Survey Rates)</td>
<td>(Call for Commercial Survey Rates)</td>
</tr>
</tbody>
</table>

Order Now

---

HealthyHabitat.org

MAKING A DIFFERENCE IN THE HEALTH, SAFETY, AND ENERGY USED INSIDE OF OUR HOMES

RESIDENTIAL & COMMERCIAL PROPERTY TESTING

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What is Asbestos?

Asbestos is the name given to a number of naturally-occurring fibrous minerals that are very strong, heat-resistant and extremely durable. Because of these properties, asbestos has been used in construction materials to make items such as roofing shingles, ceiling and floor tiles, insulation, adhesives, cement siding, sheetrock, vinyl materials, and much more.

FURTHER REQUIRED DOCUMENTS NEEDED FOR THIS PROJECT:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Required</th>
<th>Provide by</th>
<th>Deliver to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos Survey Report</td>
<td>Yes</td>
<td>Health Habitat.org</td>
<td>Property Owner or Improvement Contractor</td>
</tr>
<tr>
<td>ASN 1 DEQ Notification</td>
<td>Yes</td>
<td>Property Owner, Operator, or Abatement Contractor</td>
<td>Oregon State Department of Environmental Quality</td>
</tr>
<tr>
<td>ASN 6 DEQ Notification</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>ASN 8 DEQ Notification</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

DOCUMENTS ATTACHED TO THIS REPORT INCLUDE:

- List of Collected Material Samples and Results
- The Completed Chain of Custody for the Materials
- A complete Copy of the Laboratory Report including:
  - Laboratory Name, Address, Phone Number, Analyst’s Name
  - Unique Sample Identification Number
- Recommendations and response action (if the property contains Asbestos)
- Detailed description of any limitations of the Asbestos Survey, or inaccessible areas at the time of the Survey
- Certificate of the Accredited Asbestos Inspector who performed the Survey
- Sketch of area under construction, and location of found Asbestos Materials
This Home’s Estimated Energy Costs

$1,765
Per Year

Home Energy Score

Assessment Date: 02/02/2018
Score Expiration Date: 02/02/2026

ASSESSOR:
Brian Denne
Home Energy Score.com LLC

PHONE: 971-246-0487
EMAIL: briandenne@gmail.com
CCB LICENSE #: 216961

How Much Energy is This Home Likely to Use?

Electric: 7,202 kWh/yr ......................... $828
Natural Gas: 859 therms/yr ..................... $936
Other: _____ gal/yr .............................. $0

Total Energy Costs Per Year $1,765

This Home’s Carbon Footprint:

What should my home’s carbon footprint be? Between now and 2030, Portlanders should reduce carbon pollution per household to 3 metric tons per year to reach our climate goals.

- Actual energy use and costs may vary based on occupant behavior and other factors.
- Estimated energy costs were calculated based on current utility prices ($0.12/kwh for electricity; $1.09/therm for natural gas; $2.58/gal for heating oil; $2.21/gal for propane).
- Carbon footprint is based only on estimated home energy use. Carbon emissions are estimated based on utility and fuel-specific emissions factors provided by the OR Department of Energy.
- Relisting 2-7 years after the assessment date requires a free reprint of the Report from www.greenbuildingregistry.com/portland to update energy and carbon information.
- This report meets Oregon’s Home Energy Performance Score Standard and complies with Portland City Code Chapter 17.108.
Notice regarding Radon measurement levels:
The Environmental Protection Agency’s (E.P.A.) recommended “Take Action Level” is 4.0 pCi/L and above. At this level, or above this level, it is recommended that you take immediate steps towards reducing the Radon present in the building. The average indoor Radon level is estimated at about 1.3 pCi/L, and roughly 0.4 pCi/L of radon is normally found in the outside air. Note that Radon levels below 4 pCi/L still pose a risk, and that the E.P.A. has stated that there is no true safe levels of Radon, and that you may want to consider reducing Radon levels in a building that has measured readings between 2 and 4 pCi/L.

### Detailed Measurement Data:

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radon [pCi/L]</td>
<td>0.0</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Temperature [°F]</td>
<td>65.5</td>
<td>79.2</td>
<td>70.2</td>
</tr>
<tr>
<td>Humidity [%rH]</td>
<td>43</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>Pressure [kPa]</td>
<td>100.57</td>
<td>101.94</td>
<td>101.19</td>
</tr>
</tbody>
</table>

### Radon Measured / Motion Events:

- Radon [pCi/L]
- Motion events (dotted line)

---

**Profile**

**Address:**
16250 NW Johnson St.
Portland, OR 97229

**Report Created For:**
Thomas Smith

**Code:**
B/S/R/C

**Report Number:**
27000071632018083119401

**Report Date:**
08/31/18

**Serial Number:**
2700007163

**Measurement Start Date:**
08/28/18

**Measurement End Date:**
08/30/18

**Location of Equipment:**
Basement

**Measurement By:**
Brian Denne
HealthyHabitat.Org

**Phone:**
503.330.1514

**Email:**
info@healthyhabitat.org

**CCB License #:**
224451

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**HealthyHabitat.org**
Caring for the places we live, work, and play.

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**Nonprofit 501(c)(3) organization**

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RADON REPORT
0.2 Pci/L

Your Average Radon Reading
In Measured Volume

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Flip over to learn more about reducing Radon levels for this property!
What is Lead-Based Paint?

Lead-Based Paint, commonly referred to as Lead Paint, is a paint (or paint like material) that contains lead which was added during the manufacturing of the product. Prior to 1978 most manufacturers of Paints (and some varnish/stain products) added Lead to these materials to accelerate the dry time, increase the products durability, and aid in the resistance to moisture and color loss.

However, from 1978 onward the United States has restricted the use of Lead in our household paints due to the fact that the metal is highly toxic and the dust from these paints can be ingested, or inhaled, causing damage to the brain and vital organs. The vast majority of homes built prior to 1978 do contain lead based paint.

DOCUMENTS ATTACHED TO THIS REPORT INCLUDE:

- A List of Collected Material Samples and their results
- A Test Kit and Swab Identification Number for each sample tested
- Recommendations and response action if Lead was detected
- Detailed description of any limitations of the Lead-Based Paint Testing, or inaccessible areas at the time of the testing
- A Copy of the L.R.R.P. Certificate from the individual who performed the Lead-Based Paint Testing
- Photos of areas tested, and locations on the property were Lead is found to be present

Results Overview

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of different samples tested at this location</td>
<td>10</td>
</tr>
<tr>
<td>Number of samples that tested positive for Lead</td>
<td>6</td>
</tr>
<tr>
<td>Further Action Recommended</td>
<td>YES</td>
</tr>
</tbody>
</table>
测量提供者：503-330-1514

(BASIC FLOOR PLAN)

15730 SW Warren Dr. Beaverton, OR 97007

<table>
<thead>
<tr>
<th>部分</th>
<th>平方英尺</th>
</tr>
</thead>
<tbody>
<tr>
<td>主层</td>
<td>1331 Sq. Ft.</td>
</tr>
<tr>
<td>上层</td>
<td>1224 Sq. Ft.</td>
</tr>
<tr>
<td>总面积</td>
<td>2555 Sq. Ft.</td>
</tr>
<tr>
<td>车库</td>
<td>484 Sq. Ft.</td>
</tr>
</tbody>
</table>

说明：请注意，此平面图用于市场推广目的，仅供参考。楼梯（楼）可能在平面图上出现两次，测量可能已被调整以表示楼梯从被计数多次的总体尺寸中。所有参与此房地产交易的各方应自行验证所有测量，以确保在列出或出售该物业之前。

John Doe, Broker Licensed in OR
Phone: 503-555-5555
Email: Johndoe@NWHomeRealty.com

Northwest Home Realty
1900 NW 167th Pl. Ste 110
Beaverton, OR. 97006

Each office is Independently owned & Operated

Disclaimer: Note this floor plan is for marketing purposes and is to be used as guide only. Stairwell(s) reflect areas that might appear twice on the floor plan, and measurements may have been altered to represent stairwells from being counted multiple times in the overall footage count. All parties involved with this real estate transaction should verify for themselves all measurements prior to the listing or sale of the property.
(DELCUXE FLOOR PLAN)

15730 SW Warren Dr. Beaverton, OR 97007

Main 1331 Sq. Ft.
Upper 1224 Sq. Ft.
Total Area 2555 Sq. Ft.
Garage 484 Sq. Ft.

Measurement provided by:

HealthyHabitat.org
503-330-1514

John Doe, Broker Licensed in OR
Phone: 503-555-5555
Email: Johndoe@NWHomeRealty.com

Northwest Home Realty
1900 NW 167th Pl. Ste 110
Beaverton, OR. 97006

Each office is independently owned & operated

Disclaimer: Note this floor plan is for marketing purposes and is to be used as guide only. Stairwell(s) reflect areas that might appear twice on the floor plan, and measurements may have been altered to represent stairwells from being counted multiple times in the overall footage count. All parties involved with this real estate transaction should verify for themselves all measurements prior to the listing or sale of the property.