



State of Oregon Department of Environmental Quality

# Proposed Asbestos 2018 Rulemaking Fiscal Impact Statement

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## Short summary

DEQ is reviewing the asbestos rules in Oregon Administrative Rule 340 Division 248 under the authority of Oregon Revised Statute 468A.700-.760. This review follows a previous rulemaking in 2015 for Senate Bill 705. The narrow scope for that rulemaking was in response to direction from the Legislature. The bill required DEQ to adopt rules for the performing of an asbestos survey before demolishing a residential building. The current asbestos rulemaking has a broader scope of rule review.

This rulemaking provides stakeholders and DEQ with an opportunity to evaluate and clarify regulations and standards for asbestos-related activities, where a potential for exposure to asbestos fibers exists. Proposed rule changes are drafted with consideration and influence of existing asbestos-related laws from the Environmental Protection Agency, Oregon Occupational Safety and Health Division, and laws in other U.S. cities and states. The limitations of this rulemaking include any statutory changes. This rulemaking process will engage a variety of stakeholders and public representatives to evaluate and provide policy recommendations, as necessary.

The rulemaking advisory committee provides recommendations on:

- Whether the rule will have a fiscal impact;
- What the extent of that impact will be; and
- Whether the rule will have a significant adverse impact on small businesses.

## Fiscal and Economic Impact

DEQ expects that the proposed rules will add a direct cost to the following:

1. **Residential Renovation Survey:** Renovation activities at residential buildings with four or fewer dwelling units would be required to have an asbestos survey.
2. **Nonfriable moved to friable disposal requirements:** Removing Nonfriable Asbestos Disposal Requirements section, 340-248-0290 and adding nonfriable to the Friable Asbestos Disposal Requirements section, 340-248-0280 may add minimal costs to contractors when packaging asbestos-containing waste material and disposing of asbestos-containing material at permitted disposal facilities authorized by DEQ. An example of an additional cost is the packaging of asbestos-containing material at the point of generation. Two plastic bags with a minimum thickness of 6 mil., will be required instead of using one plastic bag.
3. **Accredited laboratories for asbestos testing:** The addition of requiring laboratories to demonstrate proficiency through participation in a nationally recognized testing program or

an equivalent testing program to determine asbestos-containing material may add additional costs to owners or operators or to laboratories that are not currently participating in a recognized testing program or an equivalent testing program.

## Avoided Health Impacts

1. **Residential Renovation Survey:** Requiring asbestos surveys for residential renovations will identify sources of asbestos fibers for abatement that follows protective asbestos work practices. The result will be positive health cost savings through reduced exposure to asbestos fibers. According to the [Agency for Toxic Substances and Disease Registry](#), asbestos-containing materials can release tiny asbestos fibers, too small to see, into the air. Workers and others who breathed asbestos fibers over many years have developed asbestos-related diseases, including asbestosis, pleural disease, lung cancer, and mesothelioma.
2. **Nonfriable moved to friable disposal requirements:** There are contractors who currently package nonfriable asbestos-containing waste material as friable and may not experience an impact from this change. A reason for similar work practices for friable and nonfriable asbestos-containing material provided by contractors is to ensure a safer work environment for employees, neighbors and disposal facility workers because frequently, nonfriable asbestos-containing materials become friable by the forces expected to act upon the material in course of demolitions, renovations, and disposal. [The National Institute for Occupational Safety and Health](#) reports that when handled, asbestos can separate into microscopic-size particles that remain in the air and are easily inhaled. Persons occupationally exposed to asbestos have developed several types of life-threatening diseases, including asbestosis, lung cancer and mesothelioma. Although the use of asbestos and asbestos products has dramatically decreased in recent years, they are still found in many residential and commercial settings and continue to pose a health risk to workers and others.
3. **Accredited laboratories for asbestos testing:** Testing bulk samples analyzed by persons or laboratories that participate in a nationally recognized testing program with proficiency testing or an equivalent testing program ensures that a determination whether asbestos-containing material is present. This determination supports homeowners, contractors, employees, neighbors and disposal facility workers from improper or unknowingly handling asbestos-containing material in the course of demolitions, renovations and disposal. Accreditations or equivalent testing programs ensure integrity of testing materials for asbestos, appropriately trained staff, properly handled samples, and clear laboratory reporting.

## Statement of Cost of Compliance

The following estimations outline the approximate cost of compliance:

1. **Residential Renovation Survey:** A residential renovation survey rule may create approximately more than the 725 estimated additional yearly statewide surveys for demolitions discussed in the Senate Bill 705 rulemaking. Estimates for residential renovation surveys have the potential to change yearly and are currently estimated to be \$450 to \$650 for each residential renovation survey, including laboratory analysis and travel by an accredited asbestos inspector to perform the survey.

DEQ assumes that a new survey requirement will increase public awareness that asbestos is present and will result in more notifications and abatement projects.

2. **Nonfriable moved to friable disposal requirements:** DEQ is unable to quantify the impact at this time for removing Nonfriable Asbestos Disposal Requirements section, 340-248-0290 and adding nonfriable to the Friable Asbestos Disposal Requirements section, 340-248-0280. At the time of this fiscal and economic impact statement, the cost for a box of 50 plastic bags that are 6-mil thickness, generally used to package friable asbestos-containing material in rule OAR 340-248-0280(2)(b) is \$60. The costs to deposit asbestos-containing waste material at a permitted disposal site authorized by DEQ may be a difference from \$10 to \$50 compared to a non-permitted disposal site authorized by DEQ to accept asbestos-containing material.
3. **Accredited laboratories for asbestos testing:** The approximate costs are below:

<b>Accreditation</b>	
National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP) includes ISO 17025:2005	Approximately \$20,000 over the first 2 years and an estimated \$15,000 over each subsequent two-year period (includes inspections). Annual Fee \$5,225. Assessment fee \$4,480. Initial assessment required and follow-up assessment after the first year. Assessments every other year after. Includes proficiency testing.
American Industrial Hygiene Association (AIHA), Industrial Hygiene Laboratory Accreditation Program (IHLAP). - ISO 17025:2017	Approximately \$13,000 over the first two years and an estimated \$9,000 over each subsequent two-year period. Annual Fee \$1,995. Annual application fee \$950. Assessment Fee \$1,600. Includes proficiency testing.
<b>Proficiency Analysis Testing</b>	
Bulk Asbestos Proficiency Analysis Testing Program (BAPAT), operated by AIHA.	Proficiency testing program provided by the AIHA Proficiency Analytical Testing Programs, LLC (AIHA PAT Programs, LLC) Estimated costs are \$2,685/year. BAPAT is not an accreditation program.

## State and federal agencies

1. **Residential Renovation Survey:** DEQ does not expect that the residential renovation asbestos survey rules will impose any additional direct fiscal or economic impact on any other state or federal agencies. There could be an increase in communication about asbestos abatement projects between asbestos industry professionals, disposal facilities, the public and Oregon Occupational Safety and Health Division, with insignificant fiscal impact.
2. **Nonfriable moved to friable disposal requirements:** DEQ does not expect that the addition of nonfriable to the friable asbestos disposal requirements section will impose any additional direct fiscal impact or economic impact on any other state or federal agencies.
3. **Accredited laboratories for asbestos testing:** DEQ does not expect that the addition of laboratory accreditation or proficiency testing program requirements will impose any additional direct fiscal impact or economic impact on any other state or federal agencies.

## DEQ

1. **Residential Renovation Survey:** The residential renovation asbestos survey rules may increase administrative costs to DEQ. OAR 340-248-0260(1)(a)(A) provides that the asbestos abatement project notification fee is flat rate of \$100 for projects involving a residential building. DEQ may incur initial additional costs in the form of education and outreach, inspections, complaint response, and preparation for enforcement actions.

DEQ inspections of residential renovation projects are currently more frequent than other projects. While removing the exemption for residential renovation surveys may impose additional work initially, a possible scenario may be that over time, the work may level off due to improved industry work practices and additional education and outreach about the rules.

2. **Nonfriable moved to friable disposal requirements:** DEQ may incur additional costs in the form of education and outreach with the addition of nonfriable to the friable asbestos disposal requirements section.
3. **Accredited laboratories for asbestos testing:** DEQ may incur additional costs in the form of education and outreach with the addition of laboratory accreditation or proficiency testing program requirements.

DEQ currently provides education and outreach to a wide array of audiences and plans to expand this outreach through partnerships with local governments and industry associations.

## Local governments

1. **Residential Renovation Survey:** The proposed rule changes for the residential renovation asbestos survey would not create any known direct fiscal or economic impact for local governments. These rules may not change local governments' residential renovation permitting processes. This change may support local government residential renovation code programs that elect to include an asbestos survey requirement in residential renovation permitting forms.
2. **Nonfriable moved to friable disposal requirements:** The proposed rule changes for the addition of nonfriable to the friable asbestos disposal requirements section would not create any known direct fiscal or economic impacts for local governments.
3. **Accredited laboratories for asbestos testing:** DEQ does not expect that the addition of laboratory accreditation or proficiency testing program requirements will impose any additional direct fiscal impact or economic impact on any other state or federal agencies.

## Public

1. **Residential Renovation Survey:** The proposed rule changes for the residential renovation asbestos survey will add cost to a member of the public who purchases or owns a residential building requiring renovation. A purchaser or owner of a residential building requiring renovation will spend approximately \$450-\$650 for the asbestos survey, depending on the size and location of the building. DEQ estimates that there is a chance the survey will

produce a positive result for asbestos-containing material when surveyed.

2. **Nonfriable moved to friable disposal requirements:** The proposed rule changes for the addition of nonfriable to the friable asbestos disposal requirements section may add a minimal cost to members of the public that work with a certified asbestos abatement contractor to properly abate and dispose of asbestos-containing material. These costs are generally internalized into the contractor’s project costs.
3. **Accredited laboratories for asbestos testing:** The proposed rule change for laboratory accreditation or proficiency testing program requirements may add a cost to members of the public if using a laboratory for asbestos analysis that is not currently accredited or participating in a proficiency testing program. The costs are generally internalized into the laboratory costs.

### Impacts to large and small businesses for residential renovation survey

	<b>Large businesses, more than 50 employees</b>	<b>Small businesses, 50 or fewer employees</b>
<b>Residential Developers</b>	These businesses may experience negative fiscal impacts from the cost of renovating a residential building with four or fewer dwelling units by the cost of the survey estimated to be \$450 to \$650. This additional cost may ultimately be passed on to the purchaser of the renovated property.	
<b>Licensed Construction Contractors<sup>1</sup></b>	The majority of the 38,000 licensed construction contractors in Oregon are estimated to be large businesses.	Approximately 25 percent of the 38,000 licensed construction contractors in Oregon are small businesses.
	Large and small business licensed for residential construction may incur a direct cost as a result of the proposed rule changes for the residential renovation asbestos survey estimated to be \$450 to \$650. This additional cost may ultimately be passed on to the purchaser of the renovated property.	
<b>Licensed Asbestos Abatement Contractors</b>	An estimated two of the approximate 55 licensed asbestos abatement contractors in Oregon may be considered large businesses.	An estimated 53 of approximate 55 licensed asbestos abatement contractors may be considered small businesses.
	Licensed asbestos abatement contractors will experience a positive fiscal impact from these rules generated by the increased demand for asbestos abatement projects. Each project may net increased revenue ranging from \$2,000 to \$10,000 depending on	

<sup>1</sup> The 38,000 number of licensed construction contractors is provided Construction Contractors Board, and the percent that is attributed to small and large businesses of that amount comes from the Oregon Department of Employment using a broad category selection of types of construction contractors.

	the amount asbestos-containing material to be abated. This cost will pass through to the residential building owner.	
<b>Waste Disposal Facilities</b>	<p>Businesses that dispose of asbestos-containing material that are large or small may experience a positive fiscal impact from these rules generated by an increase in identified asbestos-containing waste material at the generation point, in the construction and renovation waste stream.</p> <p>Permitted disposal sites may experience an increased flow of asbestos containing material. This may result in either positive or negative fiscal impacts.</p>	
<b>Accredited Asbestos Inspectors</b>	Large businesses may or may not experience a positive impact depending on the business model of the large business to work on surveys for residential renovations with four or fewer units.	Many accredited asbestos inspectors for residential renovations are small businesses. These businesses may experience a positive fiscal impact from these proposed rules generated by the increased demand for asbestos surveys. Each survey may generate an increase in revenue ranging from \$450-\$650.

### **Impacts to large and small businesses, for nonfriable moved to friable disposal requirements**

	<b>Large businesses, more than 50 employees</b>	<b>Small businesses, 50 or fewer employees</b>
<b>Residential Developers</b>	The proposed rule changes for the addition of nonfriable to the friable asbestos disposal requirements rule section may add a minimal cost indirectly to a total project costs, from licensed construction contractors packaging the nonfriable asbestos-containing material as friable for disposal and disposal of the asbestos-containing waste material. This additional cost may ultimately be passed on to the purchaser of the renovated property.	
<b>Licensed Construction Contractors</b>	The proposed rule changes for the addition of nonfriable to the friable asbestos disposal requirements section may add a direct cost when packaging the nonfriable asbestos-containing material as friable for disposal and disposal of the asbestos-containing waste material. This cost may pass through to the building owner.	

<b>Waste Disposal Facilities</b>	<p>The proposed rule changes may have a positive impact on the waste disposal facilities that have procedures designed to reduce the health risks of customers and workers that come from exposure to asbestos fibers. In most cases, the nonfriable asbestos-containing waste material requirements at permitted disposal facilities are as rigorous or are similar to requirements for friable asbestos-containing waste material provided in OAR 340-248-0280 Friable Asbestos Disposal Requirements, even though this is not currently required in OAR 340, Division 248.</p> <p>The proposed rule changes may reduce the costs to non-permitted disposal facilities by reducing the need to survey suspect loads and hire certified asbestos abatement contractors to clean up a site where asbestos was identified. More information about practices of permitted disposal sites can be found on an <a href="#">information paper for this rulemaking online.</a></p>
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**Impacts to large and small businesses, for accredited laboratories for asbestos testing requirements**

	<b>Large businesses, more than 50 employees</b>	<b>Small businesses, 50 or fewer employees</b>
<b>Residential Developers</b>	<p>The proposed rule changes for the addition of testing bulk samples analyzed by persons or laboratories that participate in a nationally recognized testing program with proficiency testing or an equivalent testing program may add a cost to total project costs for residential developers that are required to survey residential renovation (in draft rule) or demolition projects. This additional cost may ultimately be passed on to the purchaser of a renovated property.</p>	
<b>Licensed Construction Contractors</b>	<p>The proposed rule changes for the addition of testing bulk samples analyzed by persons or laboratories that participate in a nationally recognized testing program with proficiency testing or an equivalent testing program may add a cost to total project costs for licensed construction contractors if they are providing services that include asbestos surveys performed by an accredited inspector. This cost may pass through to the building owner.</p>	
<b>Laboratories</b>	<p>Many of the labs are representative of small businesses with 50 or fewer employees. If the laboratory is not currently participating in a nationally recognized testing program with proficiency testing or an equivalent testing program, the laboratory costs will increase to cover the participation costs of the accreditation or proficiency testing program. This cost may pass through to the laboratory client.</p>	

**a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.**

- Estimated 38,000 licensed construction contractors (a mix of large and small).
- Estimated 55 licensed asbestos abatement contractors (a mix of large and small).
- Unknown number of total laboratories that provide asbestos testing for Oregon projects. DEQ estimates 17 laboratories in Oregon and Washington at minimum that perform this work.
- Additional unknown number of active residential property development businesses. These businesses may be diverse in size, ranging from sole proprietorships to national property development companies.

**b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.**

Projected direct cost for professional services required for residential surveys of \$450 to \$650 to conduct more than the estimated 725 asbestos surveys for residential demolitions discussed in the Senate Bill 705 rulemaking. The draft rules will impose minimal administrative costs for the electronic transmittal of asbestos survey reports to DEQ upon request.

The projected direct cost for a laboratory that is not currently participating in a nationally recognized testing program with proficiency testing or an equivalent testing program for recordkeeping or other administrative activities is unknown.

**c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.**

Licensed asbestos abatement contractors may pay an estimated additional \$60 per box of 50, 6-mil thick plastic bags for any additional packaging or other additional packaging methods used instead of plastic bags to meet the disposal requirements. Costs for disposal may increase by \$10 to \$50 at permitted disposal facilities.

The projected increase in direct costs for a laboratory that is not currently participating in a nationally recognized testing program with proficiency testing is unknown. Direct costs for equipment, supplies and labor to participate in a testing program may not increase.

**d. Describe how DEQ involved small businesses in developing this proposed rule.**

DEQ convened a 24-member advisory committee that included small business representatives to discuss the proposed rule changes. During the meetings, DEQ provided several opportunities for input from the public audience that included small businesses.

## Documents relied on for fiscal and economic impact

Document title	Document or website location
Licensed Asbestos Abatement Contractors, October 30, 2017	Oregon Department of Environmental Quality 700 NE Multnomah Street, Suite 600, Portland Oregon 97232
Agency for Toxic Substances and Disease Registry, <a href="http://www.atsdr.cdc.gov/asbestos/overview.html">U.S. Department of Health &amp; Human Services</a>	<a href="https://www.atsdr.cdc.gov/asbestos/overview.html">https://www.atsdr.cdc.gov/asbestos/overview.html</a>
National Institute for Occupational Safety and Health (NIOSH) Respiratory Health Division	<a href="https://www.cdc.gov/niosh/topics/asbestos/">https://www.cdc.gov/niosh/topics/asbestos/</a>
Asbestos 2017 Rulemaking Advisory Committee meeting notes, Sep. 28, 2017 (Number of licensed construction contractors.)	<a href="http://www.oregon.gov/deq/Rulemaking%20Docs/rasbestos2018m1notes.pdf">http://www.oregon.gov/deq/Rulemaking%20Docs/rasbestos2018m1notes.pdf</a>
National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP)	<a href="https://www.nist.gov/nvlap/about-nvlap">https://www.nist.gov/nvlap/about-nvlap</a>
American Industrial Hygiene Association (AIHA), Industrial Hygiene Laboratory Accreditation Program (IHLAP)	<a href="https://www.aihaaccreditedlabs.org/LabAccreditationPrograms/IHLAP/Pages/default.aspx">https://www.aihaaccreditedlabs.org/LabAccreditationPrograms/IHLAP/Pages/default.aspx</a>
Bulk Asbestos Proficiency Analysis Testing Program, operated by AIHA (BAPAT)	<a href="https://www.aihapat.org/Programs/Pages/default.aspx">https://www.aihapat.org/Programs/Pages/default.aspx</a>