



State of Oregon
Department of
Environmental
Quality

Oregon Department of Environmental Quality
April 20-21, 2016
Oregon Environmental Quality Commission meeting
Rulemaking, Action item C

Residential Demolition Asbestos Survey Rulemaking
(Asbestos 2016)

This file contains the following documents:

- EQC staff report
- Attachment A: Draft rules – markup version showing changes from current temporary rule
- Attachment B: Draft rules – no markup
- Attachment C: Markup rules showing changes from prior permanent rule

Three versions of the rules are attached to this report. This is because this rulemaking only makes permanent changes to the rule that were previously adopted in a temporary rule. Attachment A contains the proposed permanent rules with only changes from the current temporary rule illustrated. Attachment B is a draft final version of the proposed permanent rule with all changes incorporated. Attachment C is a marked up version of the rules showing the changes made in the temporary and current proposed permanent rules from the permanent version of the rules that preceded the current temporary rules.

DEQ recommendation to the EQC

DEQ recommends that the Environmental Quality Commission adopt the proposed rules in Attachment A as part of Chapter 340 of the Oregon Administrative Rules.

Overview

Short summary

The proposed rule amendments require an owner or operator to have an accredited inspector perform an asbestos survey before demolishing a residential building. The proposed rules will implement Senate Bill 705 and make permanent a temporary rulemaking that the Environmental Quality Commission approved Dec. 9, 2015.

In addition, the proposed rules contain exceptions to the survey requirement for residential buildings constructed after Jan. 1, 2004, and for demolitions where the owner or operator treats the entire building as friable asbestos containing material. The proposed rules also allow DEQ to consider, on a case-by-case basis, a written request for a waiver from the survey requirement. Finally, the proposed rules require the owner or operator to submit the asbestos survey report to DEQ, upon DEQ's request.

Brief history

During the 2015 Legislative Session, the Oregon Legislature enacted Senate Bill 705. The bill requires DEQ to adopt rules that prohibit demolishing a residential building without first having an accredited inspector perform an asbestos survey. On Dec. 9, 2015, the Environmental Quality Commission adopted temporary rules implementing Senate Bill 705. The temporary rules became effective Jan. 1, 2016, and will expire on June 29, 2016. The proposed permanent rules are identical to these temporary rules.

Regulated parties

These rules apply to any person who owns, controls, or supervises a residential building being demolished, and any person who owns, operates, controls, or supervises the demolition of a residential building.

Outreach efforts and public and stakeholder involvement

DEQ appointed an asbestos survey advisory committee and held a committee meeting Oct. 19, 2015. During the meeting the advisory committee reviewed a draft fiscal impact statement and provided input on proposed rule amendments similar to the temporary rules and the permanent rules currently under the permanent rulemaking process.

In addition, since the beginning of this rulemaking process, DEQ has responded to many calls inquiring about the rule changes. DEQ has also transmitted written guidance to licensed asbestos abatement contractors regarding the temporary rules.

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business. In addition, DEQ specifically requested comment about whether Jan. 1, 2004, is the appropriate date to begin excluding buildings from the asbestos survey requirement.

Summary of Significant public comments and responses

DEQ received two comments repeatedly during the comment period. The first comment urged DEQ to require the submittal of the residential asbestos survey to DEQ prior to demolition. The second comment urged that DEQ eliminate the Jan. 1, 2004, construction date exemption. One commenter suggested that the inclusion of a construction cut-off date contradicts EPA's regulations, which do not include a construction cut-off date.

DEQ has opted not to change the rules based on either of these comments. First, DEQ does not have the resources and staffing necessary to implement and oversee a requirement where DEQ receives every asbestos survey prior to demolition. To the second comment, SB 705 explicitly requires EQC to adopt a rule with a construction cut-off date exemption. Therefore, eliminating the construction cut-off would defy the legislative direction. However, in order to eliminate all potential conflict with EPA's regulations, DEQ has added the words "or installation" in OAR 340-248-0270(1).

In addition, DEQ has added the word "friable" to OAR 340-248-0250(2)(e) to clarify that the exemption only applies when all of the material is treated as *friable* asbestos containing material. This will ensure the most protective work practices are implemented and create the strongest protection to public health.

Brief summary of fiscal impact

DEQ's fiscal impact statement estimates that the rule changes will result in approximately 725 additional asbestos surveys being performed annually statewide. Each survey is estimated to cost approximately \$450-\$750, depending on the location and size of the residential building.

Statement of Need

What need would the proposed rule address?

The proposed rules address two needs. First, Senate Bill 705 requires DEQ to adopt rules prohibiting demolishing a residential building without first having an accredited inspector perform an asbestos survey. And second, the growth of Oregon's housing market has increased the quantity and speed of residential building demolitions, thereby creating a greater need to identify asbestos containing material before it is disturbed in the demolition process.

How would the proposed rule address the need?

The proposed rules address these needs by requiring an accredited inspector to perform an asbestos survey of a residential building prior to demolition. The survey requirement will reveal the presence of more asbestos containing materials before they are disturbed, lowering the risk of public exposure to harmful asbestos fibers.

How will DEQ know the rule addressed the need?

DEQ tracks the number of asbestos abatement projects licensed asbestos abatement contractors perform. DEQ expects that the residential demolition survey requirement will increase the number of licensed asbestos abatement projects by revealing otherwise unknown asbestos containing materials prior to demolition. An increase in asbestos abatement projects performed by licensed asbestos abatement contractors will likely reduce the risk of public exposure to harmful asbestos fibers. In addition, the proposed rules require the owner or operator to submit the asbestos survey to DEQ, upon DEQ's request. This requirement will allow DEQ oversight among the regulated community to ensure that the survey requirement is followed.

Rules affected, authorities, supporting documents

Lead division

Air Quality

Program or activity

Asbestos Program

Chapter 340 action

Amend OAR 340-248-0250, 340-248-0270

Statutory authority

ORS 468 & ORS 468A

Statute implemented

ORS 468A.745

Legislation

SB 705 (2015)

Documents relied on for rulemaking

Document title	Document location
Licensed Asbestos Abatement Contractors, June 17, 2015	Oregon Department of Environmental Quality 811 SW 6 th Avenue Portland, OR 97204
United States Geological Survey Asbestos Commodity Summary, 1996	http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/
United States Geological Survey Asbestos Commodity Summary, 2004	http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/
United States Geological Survey Asbestos Commodity Summary, 2005	http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/

Fee Analysis

This rulemaking does not involve fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact

DEQ expects that the residential demolition asbestos survey rules will add a direct annual collective cost to owners or operators of residential buildings in the amount of \$326,250 to \$543,750. This is the approximate total cost to pay for an estimated 725 additional asbestos surveys statewide, ranging from \$450 to \$750 per survey.

DEQ expects that the additional asbestos surveys will result in approximately 650 additional asbestos abatement projects per year. As a result of the additional asbestos abatement projects, the proposed rules will impose an indirect cost to residential developers and a significant increase in revenue to licensed asbestos abatement contractors. However, the current rules already require licensed asbestos abatement of asbestos containing material regardless of whether the asbestos containing material is revealed by an asbestos survey. In addition, the proposed rule will generate public health savings by reducing worker and public exposure to asbestos fibers from the approximately 650 additional residential demolitions that will be performed under the protective work practices and procedures of a proper asbestos abatement project.

Statement of Cost of Compliance

The Statement of Cost of Compliance is based on the following estimations:

- 1) The residential demolition asbestos survey rules will likely create approximately 725 additional asbestos surveys per year, state-wide. Based on recent demolition permits issued by the city of Portland and state-wide estimates from DEQ staff, DEQ estimates there are at least 1,000 residential demolition projects state-wide per year. Approximately 275 of the yearly 1,000 residential demolition projects were performed, at least in part, as an asbestos abatement project by a licensed asbestos abatement contractor. This leaves 725 residential demolitions for which DEQ did not receive notification of asbestos abatement.
- 2) Each year, the additional 725 asbestos surveys will generate approximately 650 additional asbestos abatement projects. DEQ estimates that approximately 90 percent of the residential buildings subject to the additional asbestos surveys are likely to reveal the presence of asbestos containing material.

DEQ assumes that a new survey requirement will make people more aware that asbestos is present and will result in more abatement projects and additional notifications.

State and federal agencies

DEQ does not expect that the asbestos survey rules will impose any direct fiscal or economic impact on any federal agency. However, the proposed rules will likely result in fiscal impacts to DEQ and the Oregon Construction Contractors Board. In addition, the proposed rules may result in increased communication between construction contractors, workers, or the public and the Oregon Occupational Safety and Health Division.

Oregon Construction Contractors Board

DEQ estimates that the proposed rules will increase the number of complaints that the agency will receive regarding licensed contractors. Responding to an increase in complaints may cost the Oregon Construction Contractors Board approximately \$1,000 per year and prevent staff from doing existing work.

DEQ

The proposed rules will likely impose a net financial burden on DEQ due to increased administrative costs.

The estimated 650 additional residential asbestos abatement projects will provide approximately \$65,000 in revenue to DEQ per year, or \$130,000 per biennium, from asbestos abatement project notification fees. OAR 340-248-0260(1)(a)(A) provides that the asbestos abatement project notification fee is \$100 for projects involving a residential building.

DEQ will incur costs in administering the residential demolition asbestos survey rules in the form of additional outreach and education, inspections, complaint response, and preparation for enforcement actions. DEQ performs onsite inspections of approximately 25 to 30 percent of residential asbestos abatement projects. These inspections take from three to five hours to perform, depending on the distance of the project from DEQ offices. The 2015 Legislature authorized DEQ to add a half-time position to perform the tasks associated with responding to the additional asbestos abatement projects. Initially the specialist would focus on outreach and education and transition into residential asbestos inspections. The existing asbestos fund could support the new position until additional notification fee revenues are collected.

Local governments

The proposed rule changes would not create any known direct fiscal or economic impact for local governments. These rules will likely not change local governments' demolition permitting processes. However, some local residential demolition code programs may elect to include an asbestos survey check requirement in residential demolition permitting forms.

Public

The proposed rule changes will likely add cost to a member of the public who purchases or owns a residential building requiring demolition. A purchaser or owner of a residential building requiring demolition will likely spend approximately \$450-\$750 for the asbestos survey, depending on the size and location of the building. DEQ estimates that there is a 90 percent chance the survey will produce a positive result for asbestos-containing material. In addition, if the survey confirms the presence of asbestos-containing material at the residential building, the purchaser or owner will likely spend approximately an additional \$2,000 to \$18,000 to properly abate the asbestos-containing material prior to or during demolition. Therefore, DEQ estimates that the proposed rule changes would likely add an average cost of approximately \$9,600 to the demolition of a residential building.

The proposed rule changes would also create positive fiscal and economic effects in public health and welfare. By requiring asbestos surveys the rule changes will identify additional sources of potential asbestos fiber release and require removal of those sources under protective asbestos work practices and procedures. This will result in positive health cost savings for workers and the public through reduced exposure to dangerous asbestos fibers

Large businesses - businesses with more than 50 employees

Most of the businesses affected by these proposed rule changes are small businesses. However, there are likely some large businesses that will be affected by these proposed rules. Depending on the business activity, large businesses will likely experience either a positive or negative fiscal impact as a result of these proposed rules.

Residential Developers. Many residential developers in Oregon may be considered large businesses. These businesses will likely experience negative fiscal impacts as a result of the proposed rules. Specifically, the cost of demolishing a residential building will likely increase by an average of approximately \$9,600. This additional cost may ultimately be passed on to the purchaser of the developed property.

Licensed Construction Contractors. The vast majority of the approximately 28,000 licensed residential construction contractors in Oregon are small businesses. However, there are some large business licensed residential construction contractors. These businesses will likely incur a direct cost of approximately \$450-\$750 to pay for an asbestos survey. This cost will likely pass through to the residential building developer.

Licensed Asbestos Abatement Contractors. Out of the 45 licensed asbestos abatement contractors in Oregon, approximately only two may be considered large businesses. Licensed asbestos abatement contractors will likely 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 \$18,000 depending on the amount asbestos-containing material.

Waste Disposers. Most, if not all, businesses that dispose of asbestos-containing material are large businesses. These businesses will likely experience a positive fiscal impact from these rules generated by an increase in identified asbestos-containing waste material in the construction and demolition waste stream. Waste haulers and transfer stations will also likely experience an increased flow of asbestos containing material. This may result in either positive or negative fiscal impacts.

Small businesses – businesses with 50 or fewer employees

Most of the businesses these proposed rule changes affect are small businesses. Depending on the business activity, small businesses will likely experience either a positive or negative fiscal impact as a result of these proposed rules.

Residential Developers. Many residential developers in Oregon may be considered small businesses. These businesses will likely experience negative fiscal impacts as a result of the proposed rules. Specifically, the cost of demolishing a residential building will likely increase by an average of approximately \$9,600.

Licensed construction contractors. The vast majority of the approximately 28,000 residential construction contractors are small businesses. These businesses will likely incur a direct cost of approximately \$450-\$750 to pay for an asbestos survey. This cost will likely pass through to the residential building developer

Licensed Asbestos Abatement contractors. The vast majority of the licensed asbestos abatement contractors are small businesses. Licensed asbestos abatement contractors will likely experience a positive fiscal impact from these rules generated by the increased demand for asbestos abatement

projects. Each project may generate an increase in revenue ranging from \$2,000 to \$18,000 depending on the amount of asbestos-containing material.

Accredited Asbestos Inspectors. The vast majority of the accredited asbestos inspectors are small businesses. These businesses will likely 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-\$750.

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.	-Estimated 28,000 licensed construction contractors -Estimated 45 licensed asbestos abatement contractors -Additional unknown number of active residential property development businesses. These businesses are likely 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 total cumulative direct cost of 326,250 to \$543,750 on residential developers to conduct an estimated additional 725 asbestos surveys. In addition, residential developers will incur increased costs for additional asbestos abatement projects. Finally, the draft rules will impose minimal administrative costs for the transmittal of asbestos survey reports to DEQ upon request.
c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.	The proposed rule changes will not affect these costs.
d. Describe how DEQ involved small businesses in developing this proposed rule.	DEQ convened an advisory committee that included small business representatives to discuss the proposed rule changes.

How DEQ involved small businesses in developing this rule

On Oct. 19, 2015, DEQ convened an advisory committee that included representatives from several small businesses.

Documents relied on for fiscal and economic impact

Document title	Document location
Licensed Asbestos Abatement Contractors, June 17, 2015	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204

Advisory committee

DEQ appointed an advisory committee. The committee's web page can be found here: [Asbestos Survey Advisory Committee](#).

The advisory committee had members from various areas of interest as listed in the Stakeholder and Public Involvement section listed below.

As ORS 183.33 requires, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant impact on small businesses and complies with ORS 183.540.

The committee reviewed the draft fiscal and economic impact statement and its findings are stated in the approved minutes dated Oct. 19, 2015. The committee found the following during its fiscal impact review:

- The upper end of the cost range for asbestos abatement projects should be approximately 50 percent higher outside the I-5 corridor. The cost of trucking and disposal increases in areas farther away from I-5.
- The estimate of 1,000 demolitions per year is too low. However, the advisory committee acknowledged that it is difficult to estimate because there is no central notification system for demolitions and rules vary significantly by local jurisdiction.
- There will be an impact on remodelers as well because these entities conduct "demolitions," as defined by DEQ rule when they demolish load bearing elements.
- There will be increased impact on other state agencies. The Oregon CCB estimates that this rule will increase the number of complaints that the agency will receive regarding licensed contractors. Responding to an increase in complaints may cost the CCB \$1,000/year and prevent staff from doing existing work.

The advisory committee concluded that proposed rule changes will have an adverse fiscal impact on small businesses. Specifically, the advisory committee suggested that some demolition projects will not be conducted because of additional costs. However, the advisory committee also noted that the proposed rules would have a positive fiscal impact on other small businesses, specifically asbestos

surveyors and abatement contractors. The committee determined that there is no way to change the rules to reduce the impact on small businesses.

As ORS 183.333 and 183.540 require, the committee considered how DEQ could reduce the rules' fiscal impact on small business by:

- Establishing differing compliance or reporting requirements or time tables for small business;
- Clarifying, consolidating or simplifying the compliance and reporting requirements under the rule for small business;
- Utilizing objective criteria for standards;
- Exempting small businesses from any or all requirements of the rule; or
- Otherwise establishing less intrusive or less costly alternatives applicable to small business.

Committee members determined that the proposed pre-demolition asbestos survey regulation would have an adverse fiscal impact on small business. Because of additional cost, some remodeling and building projects will not be conducted. However, there could be a positive impact of more business opportunities for surveyors and abatement services, and businesses may increase. Members stated that there is no way to reduce the impact of proposed regulations on small business, but many of the outreach and implementation recommendations could mitigate impacts through clarity of requirements and knowledge in the business community. Some members thought that the proposed survey cutoff date is not an objective criterion because it is not related to the historic presence of asbestos.

Committee members predicted that the regulation could cause an increase in illegal activities, that waste will be dumped illegally instead of being properly disposed of. This could also be accompanied by an increased number of unlicensed contractors doing work cheaper than licensed contractors. Illegal activities could result in higher costs for cleanup.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel.

DEQ determined the proposed rules may affect the development costs by increasing the cost of demolishing a residential building. In these instances, at a minimum, the cost of demolition will increase by the cost of the asbestos survey. At a maximum the cost of demolition will increase by the cost of the asbestos survey and the cost of asbestos abatement.

Federal relationship

Relationship to federal requirements

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so.

The proposed rules add requirements additional to those in federal requirements.

The federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos regulate asbestos abatement and disposal. Federal regulations require an asbestos survey before any demolition or renovation for any commercial or industrial building and for residential buildings with more than four dwelling units.

In addition to what is required under federal regulation, the proposed rules also require an asbestos survey before the demolition of any residential building built before January 1, 2004. This additional requirement benefits the public health by revealing asbestos containing material in residential neighborhoods before it is disturbed during demolition. Once the asbestos is identified as such it is more likely to be subjected to protective work practices.

DEQ is proposing rules that exceed federal regulations because SB 705 requires DEQ to do so.

What alternatives did DEQ consider if any?

DEQ has not considered alternative to the residential survey requirement because SB 705 clearly requires DEQ to adopt this rule.

Land Use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with state wide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
 - Resources, objectives or areas identified in the statewide planning goals, or
 - Present or future land uses identified in acknowledged comprehensive plans

To determine whether the proposed rules involve programs or actions that affect land use, DEQ reviewed its Statewide Agency Coordination plan, which describes the DEQ programs that have been determined to significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Open Spaces, Scenic and Historic Areas, and Natural Resources
6	Air, Water and Land Resources Quality
9	Ocean Resources
11	Public Facilities and Services
16	Estuarial Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program – Goal 16
- Water quality and sewage disposal systems – Goal 16
- Water quality permits and oil spill regulations – Goal 19

Determination

DEQ determined that these proposed rules do not affect land use under OAR 340-018-0030 or DEQ's State Agency Coordination Program.

Stakeholder and public involvement

Background

DEQ appointed an advisory committee that met once on Oct. 19, 2015. The committee members and the segment they represent are described below. Information about the committee and its findings can be found on the committee's web page: [SB 705 Asbestos Survey Advisory Committee](#).

The committee members were:

Sector/Description	Name	Representation
1. State agencies		
Oregon OSHA	Kathleen Kincade	State agency worker health and safety
Construction Contractors Board	Tim Lenihan	State agency contractor regulations
2. Local air authorities Advisory, not voting		
Southwest Clean Air Authority	Gerry Strawn	Sister agency in SW Washington
Lane Regional Air Protection Agency	Robbye Lanier	Sister agency in Lane County
3. Local government		
City of Portland Portland Bureau of Development Services	Nancy Thorington	Portland development and review advisory committee
Counties Tillamook County Solid Waste Program	Dave McCall	County solid waste management
Cities League of Oregon Cities	Erin Doyle	City perspectives statewide
Metro	Bruce Philbrick	Solid waste management
4. Trade associations		
Oregon Home Builders Association	Scott Barrie	Home building industry perspectives
Oregon Remodeler's Association Olson & Jones Construction	Jeff Jones	Remodeling industry perspectives
Oregon Recycling and Refuse Association Gresham Sanitary Service	Larry Head	Refuse collection perspectives

Sector/Description	Name	Representation
Oregon Recycling and Refuse Association Republic Services	Brian May	Refuse disposal perspectives
5. Asbestos abatement contractors		
Lake Oswego Insulation	John Mayer	Portland and statewide contractor
Performance Abatement Services	Darren Watts	Portland and statewide contractor
Enviromex Contracting	Areli Rodriguez	Willamette Valley and minority owned contractor
SMAF Environmental E	John Hill	Eastern Oregon contractor
6. Asbestos training providers		
Asbestos Training Project	Ed Edinger	Statewide asbestos trades training provider
7. Asbestos surveyors		
Bullseye Analytical	Marilyn Bull	Willamette Valley asbestos surveyor
PBS Environmental	Derek May	Statewide asbestos surveyor
Eastern Oregon Environmental Recovery	Dave Ammons	Eastern Oregon asbestos surveyor
8. Construction businesses		
Contractor Fish Construction NW, Inc.	Justin Wood	Construction contractor and Home Builders Association perspectives
Deconstruction Contractor Lovett Deconstruction	Der Lovet	Deconstruction contractor perspective
9. Citizens		
Neighborhood representative	Maryhelen Kincaid	Involved citizen at neighborhood level
Citizen representative United Neighborhoods for Reform	John Sandie	Involved citizen and participated in legislative discussions

Meeting notifications

To notify people about the advisory committee's activities, DEQ:

- On Oct. 6, 2015, sent GovDelivery bulletins, a free e-mail subscription service, to the following lists containing 11754 recipients:
 - Air Toxics Statewide

- Asbestos Issues
- Hazardous Waste Permits
- Hazardous Waste Training
- Rulemaking
- SB 705 Asbestos Survey Rulemaking
- On Oct. 6 and 14, 2015, DEQ emailed a list of interested parties containing approximately 205 names, describing the rulemaking and explaining how to obtain more information and to sign up for advisory committee meeting notices
- Added advisory committee announcements to DEQ's calendar of public meetings at [DEQ Calendar](#)
- Provided notice of meetings and links to committee information through a news release and postings on Facebook and Twitter

Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee discussed the following topics: the scope and applicability of the proposed rules, the appropriate date for the exemption year, the existing owner occupant exemption statute (ORS 468A.755), recordkeeping and notification, outreach and implementation, and disposal issues.

EQC prior involvement

DEQ shares general rulemaking information with EQC through the monthly Director's Report. In addition, EQC approved identical temporary rules Dec. 9, 2015.

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business. This document includes a summary of comments and DEQ responses.

Public hearings and comment

DEQ held one public hearing. DEQ received four public comments during the hearing. Later sections of this document include a summary of comments received, DEQ's responses, and a list of the commenters. Original comments are on file with DEQ.

Presiding Officers' Record

Hearing 1

Meeting location: DEQ Headquarters Office, 811 SW 6th Avenue, Portland, OR 97204
 Meeting date and time: Jan. 19, 2016, at 7:01 p.m.
 Presiding Officer: Jill Inahara.

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to sign the registration list, or if attending by phone, to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for GovDelivery email notices.

As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice.

DEQ added all names and affiliations of hearing participants who testified to the commenter section of this staff report. The commenter list includes a cross reference to the hearing number. DEQ added all written and oral comments presented at each hearing to the summary of comments and agency responses section of this staff report.

Informational Meetings

DEQ held an information meeting on Jan. 19, 2016, at 6 p.m. at DEQ's Headquarters office at 811 SW 6th Avenue in Portland, prior to the public hearing. During the information meeting, DEQ presented the rule changes and answered questions from the public attendees.

Summary of comments and DEQ responses

For public comments received by the close of the public comment period, the following table organizes comments into nine (9) categories with cross references to the commenter number. DEQ's response follows the summary. Original comments are on file with DEQ.

Comment 1

DEQ received eighteen (18) comments in this category from commenters 1, 2, 3, 4, 5, 6, 7, 8, 15, 17, 19, 20, 21, 22, 24, 26, and 28.

DEQ should require an owner or operator to submit the asbestos survey to DEQ prior to the demolition of a residential building instead of only requiring submittal of the survey upon request by DEQ. Specifically, DEQ should change the draft language of OAR 340-248-0270(2) by replacing the words "upon request by the department," with "prior to demolition." The draft rule is not sufficient to protect the public health. Without requiring submittal of the asbestos survey prior to demolition, DEQ cannot ensure compliance with the asbestos survey requirement.

Response

At this time, DEQ does not have the requisite information to understand the resources and staffing necessary to implement and oversee an automatic survey submittal requirement. DEQ will study the issue during the remainder of 2016 and consider requiring automatic survey submittal requirements for both demolition and renovation activities during a planned 2017 rulemaking. DEQ will continue to respond to complaints regarding residential demolitions and perform random inspections of asbestos abatement projects. The continued enforcement of the asbestos rules, including the residential asbestos survey requirement, will continue to deter noncompliance.

Comment 2

DEQ received nine (9) comments in this category from commenters 9, 12, 14, 15, 17, 18, 19, 21, 28, and 29.

DEQ should eliminate the January 1, 2004, construction date that exempts a residential building from the asbestos survey requirement because there are imported construction materials still being used that contain asbestos fibers. There should be no construction cut-off date for requiring an asbestos survey before demolition, at least until there is better data regarding the risk of asbestos exposure from more recently built homes. Other states, such as Colorado, do not have construction cut-off dates.

One commenter suggested that the construction cut-off date was contrary to EPA's rules which require surveys without a construction cut-off exemption. Furthermore this commenter argued that DEQ could not create rules that are in conflict with EPA's regulations. Alternatively, another commenter suggested that DEQ push the construction cut-off date back to some time in the early- to mid-1990's.

Response

SB 705 requires EQC to adopt a construction date exemption rule. The bill states, “[t]his section does not apply to a residence or residential building constructed on or after a date identified by the commission by rule.” Therefore, the law requires DEQ to adopt this exemption. DEQ determined that it was the intent of the legislature for EQC to adopt a rule with a construction date exemption that clearly set a cut-off date sometime in the past. Other states, such as Colorado, do not have the same statutory requirements.

DEQ reviewed the United States Geological Survey’s (USGS) asbestos commodity summaries and found that Jan. 1, 2004, marked a time when the US consumption of asbestos containing construction materials reached significantly low levels. By January 1, 2004, domestic production of asbestos containing materials had completely ceased. At that time, domestic consumption of asbestos containing materials was approximately less than one-tenth of the level consumed in the early 1990’s, after the Environmental Protection Agency (EPA) began regulating asbestos as a hazardous air pollutant under the Clean Air Act. DEQ recognizes that there may still be some imported construction materials that contain asbestos. Therefore, the January 1, 2004, construction date exemption is both reasonable and protective of human health.

ORS 183.332 requires agencies to “attempt to adopt rules that correspond with equivalent federal laws and rules.” DEQ has made one small change to ensure that OAR 340-248-0270(1) does not conflict with federal laws.

Under federal law, an asbestos survey must be performed prior to any demolition or renovation activity at a “facility.” 40 CFR § 61.145(a). However, EPA defines “facility” as “excluding residential buildings having four or fewer dwelling units.” 40 CFR § 61.141. Therefore, under federal law, the survey requirement does not apply any activity at, for example, a single family home. In this way, Oregon’s new asbestos survey requirement for demolitions at residential buildings constructed before Jan. 1, 2004, is more expansive and more protective of public health than the corresponding federal law.

However, EPA also defines “facility,” to include an “installation.” 40 CFR § 61.141. And, EPA defines an installation as “any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator.” 40 CFR § 61.141. In the circumstance of a group of residential buildings constructed after January 1, 2004, under the control of the same owner, federal law may require a survey and the proposed rule may not. To eliminate this minor inconsistency, DEQ has inserted the words “or installation” into OAR 340-248-0270(1) to ensure that DEQ’s rules are at least as stringent as EPA’s.

Comment 3

DEQ received one (1) comment in this category from commenter 11.

DEQ should set a square footage exemption. For example, under 300 square feet of material would not require testing.

Response

DEQ's residential asbestos survey requirement applies to *demolitions* of residential buildings constructed before Jan. 1, 2004. "Demolition," is defined as "the wrecking or removal of any load-supporting structural member of a facility together with any related handling operations[.]" OAR 340-248-00010(19). A demolition, in all likelihood involves a significant amount of subject material. However, DEQ determined that there was no reasonable way to establish a minimum amount of subject material exemption to the survey rule. The "three square feet" exemption of OAR 340-248-0250(2)(e) remains unchanged.

Comment 4

DEQ received one (1) comment in this category from commenter 14.

In other states, such as California and Colorado, asbestos survey inspectors must be accredited as an EPA / Asbestos Hazard Emergency Response Act (AHERA) inspector and pass a state exam. The state of Oregon should impose similar certification standards and mandate a state exam.

Response

ORS 468A.700 – 760 and OAR 340, Division 248 impose similar accreditation, certification, and licensing standards. Under OAR 340-248-0010(39) an asbestos survey must be conducted by an accredited inspector. An "accredited inspector" is a person that has completed training under EPA federal regulations under 40 CFR Part 763. OAR 340-248-0010(1). Furthermore, DEQ requires annual contractor licensing under OAR 340-248-0120 and annual worker certification testing under OAR 340-248-0130.

Comment 5

DEQ received one (1) comment in this category from commenter 16.

The costs associated with these DEQ rules will prohibit small communities from condemning old dilapidated structures for removal and clean up. It can cost up to \$18,000 to remove a single wide trailer with asbestos.

Response

As part of this rulemaking process DEQ completed a fiscal impact statement analyzing the fiscal and economic impacts of the new residential asbestos survey requirement. In addition, the advisory committee provided input for DEQ's fiscal analysis. DEQ determined that the new rules would likely result in inspectors performing an additional 725 asbestos surveys per year. Each survey costs approximately \$450-750. The surveys will likely identify asbestos containing materials before they are disturbed, thereby increasing the likelihood that these materials will be handled and abated using the protective work practices and procedures. However, the underlying requirement to abate the asbestos containing materials properly remains unchanged. Therefore, the new rules do not impose additional direct costs greater than the survey costs.

Comment 6

DEQ received one (1) comment in this category from commenter 18.

The rules should include clear directions regarding how and where asbestos debris is handled and disposed.

Response

OAR 340-248-0270(4) provides for the work practices required for the handling of asbestos and OAR 340-248-0280 and 0290 provide clear direction on the standard for the disposal of both friable and non-friable material.

Comment 7

DEQ received three (3) comments in this category from commenters 3, 9, and 18.

Renovations of asbestos contaminated buildings should fall under the same scrutiny as demolitions.

Response

SB 705 specifically required EQC to adopt rules imposing the survey requirement for demolitions of residential buildings but not renovations. Furthermore, the protective work practice requirements of OAR 340-248-0270(4) and the disposal requirements of OAR 340-248-0280 and 0290 apply to all asbestos abatement projects, including renovations, regardless of whether a survey is required. DEQ will consider expanding survey requirements for residential renovations during a planned 2017 rulemaking.

Comment 8

DEQ received one (1) comment in this category from commenter 27.

The new survey rules shift much of the burden of identifying asbestos-containing materials to processing and transfer facilities. As a result Metro has implemented a survey requirement for all drop-box loads of construction and demolition waste. This is because, when viewed at the point of disposal, it is impossible to tell whether the material came from a demolition or a renovation activity. The survey requirement should also apply to remodeling and renovation activities and all generators, including homeowners conducting their own work.

Response

DEQ's residential asbestos survey requirements impose the obligation to perform the residential asbestos survey on the "owner or operator of a facility," that is subject to the demolition, not the disposal site or transfer station. OAR 340-248-0270(1). The rule changes do not shift any burden onto transfer facilities. The friable and nonfriable asbestos disposal requirements of OAR 340-248-0280 and -0290 remain unchanged by this rulemaking.

However, DEQ does recognize the difficulty or near impossibility in identifying which construction and demolition waste material came from a demolition versus a renovation. ORS 468A.755(1) exempts owner occupants performing asbestos abatement projects from some requirements, but it does not exempt owner occupants from the residential demolition survey requirement.

Comment 9

DEQ received seven (7) comments or portions of comments that were not relevant to this rulemaking. These comments are numbered 9, 10, 13, 18, 19, 23, and 25.

Response

These comments contained questions and statements that are unrelated to the limited scope of the current rulemaking.

Commenters

Comments received by close of public comment period

The table below lists people and organizations that submitted public comments about the proposed rules by the deadline. Original comments are on file with DEQ.

List of Commenters				
#	Name	Organization	Comment Category	Hearing #
1	Linda Nettekoven	Demolition Tool Kit Task Force	1	
2	Susan Pearce	Southwest Neighborhoods, Inc.	1	
3	Marianne Fitzgerald	Citizen	1, 7	
4	Kathryn van der Horst	Southwest Neighborhoods, Inc.	1	
5	Joan Pinkert	Southwest Neighborhoods, Inc.	1	
6	Vijay Balakrishnan	Citizen	1	
7	Robert McCullough	Eastmoreland Neighborhood Assn.	1	
8	Sam Pearson	Southwest Neighborhoods, Inc.	1	
9	David Stover	Citizen	1, 2, 7, 9	
10	Sharlene Noell	Citizen	9	
11	Dan ford	First Student School Bus	3	
12	Jim Baker	Health Safe Inspections, Inc.	2	
13	Mary Ann Schwab	Community Advocate	9	
14	James Dunlop	Citizen	2,4	
15	Graham & Suzanne Matthews	Citizen	1,2	
16	Carl Patenode	City of Drain	5	
17	Mary Ann Schelb	Citizen	1, 2	
18	Sharon Genasci	NWDS Air Quality Committee	2, 6, 7	
19	Judith Parsons	Citizen	1, 2, 9	1
20	Amy Brewer	Clear Light Neighborhood Coalition	1	
21	Dean Gisvold	Irvington Community Association	1, 2	

List of Commenters

#	Name	Organization	Comment Category	Hearing #
22	Teresa O'Neil	Citizen	1	
23	Jim Brown	Citizen	9	
24	Chris Eykamp	Citizen	1	
25	Joan McNamara	Irvington Community Association	9	
26	Ruth Gundle	The Eighth Mountain Press	1	
27	Bruce Philbrick	Metro	8	
28	John Sandie	United Neighborhoods for Reform	1, 2	1
29	Bob Gordon	IRS Environmental	2	1

Implementation

Notification

The proposed rules would become effective upon filing immediately after EQC adopts them. DEQ will notify affected parties by sending a GovDelivery notice to the list for this rulemaking.

Five-year review

[ORS 183.405](#)

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review. DEQ based its analysis on the law in effect when EQC adopted these rules.

Exemption from five-year rule review

The Administrative Procedures Act exempts all of the proposed rules from the five-year review because the proposed rules would amend or repeal an existing rule. ORS 183.405(4).

Key to Identifying Changed Text:

~~Deleted Text~~

New/inserted text

~~Text deleted from one location~~ - and moved to another location

DIVISION 248

ASBESTOS REQUIREMENTS

Asbestos Emission Standards and Procedural Requirements

340-248-0250

Asbestos Abatement Project Exemptions

(1) Any person who conducts or provides for the conduct of an asbestos abatement project must comply with the provisions of OAR 340 division 248 except as provided in this rule.

(2) The following asbestos abatement projects are exempt from certain provisions of this Division as listed in this Section:

(a) Asbestos abatement conducted inside a single private residence is exempt from OAR 340-248-0110 through 340-248-0180, 340-248-0210 through 340-248-0240 and 340-248-0260 through 340-248-0270 if the residence is occupied by the owner and the owner occupant is performing the asbestos abatement work.

(b) Asbestos abatement conducted outside of a single private residence by the owner is exempt from the notification requirements contained in OAR 340-248-0260, if the residence is not a rental property, a commercial business, or intended to be demolished.

(c) Renovation activities at residential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1).

(d) Demolition activities at residential buildings with four or fewer dwelling units, that were constructed after January 1, 2004, are exempt from the provisions of OAR 340-248-0270(1).

(e) Demolition activities at residential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1) if all of the materials at the affected facility are treated, removed, handled, managed, transported and disposed of as friable asbestos-containing material.

(f) Projects involving the removal of mastics and roofing products that are fully encapsulated with a petroleum-based binder and are not hard, dry, or brittle are exempt from OAR 340-248-0110 through 340-248-0280 provided the materials are not made friable.

(g) Projects involving the removal of less than three square feet or three linear feet of asbestos-containing material are exempt from OAR 340-248-0110 through 340-248-0180 and the notification requirements in 340-248-0260 provided that the removal of asbestos is not the primary objective, is part of a needed repair operation, and the methods of removal comply with OAR 437 division 3 "Construction" Subsection Z and **29 C.F.R. § 1926.1101(g) (1998)**. Asbestos abatement projects may not be subdivided into smaller sized units in order to qualify for this exemption.

(h) Projects involving the removal of asbestos-containing materials that are sealed from the atmosphere by a rigid casing are exempt from OAR 340-248-0110 through 340-248-0280, provided the casing is not broken or otherwise altered such that asbestos fibers could be released during removal, handling, and transport to an authorized disposal site.

(3) Any person who removes non-friable asbestos-containing material not exempted under OAR 340-248-0250(2) must comply with the following:

(a) Submit asbestos removal notification and the appropriate fee to the Department Business Office on a Department form in accordance with OAR 340-248-0260.

(b) Remove nonfriable asbestos materials in a manner that ensures the material remains nonfriable.

(c) A nonfriable asbestos abatement project is exempt from the asbestos licensing and certification requirements under OAR 340-248-0100 through 340-248-0180. The exemption ends whenever the asbestos-containing material becomes friable.

(4) Emergency fire fighting is not subject to this division.

(5) Asbestos containing waste material that is handled and disposed of in compliance with a solid waste permit issued pursuant to ORS 459 is not subject to OAR 340-248-0205(1).

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88 (and corrected 6-3-88), ef. 6-1-88; DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90 & 7-8-91); DEQ 8-1990, f. 3-13-90, cert. ef. 4-23-90; DEQ 18-1991, f. & cert. ef. 10-7-91; Section (1)(a) - (d) renumbered from 340-025-0465(4)(a) - (d); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0466; DEQ 19-1994, f. 9-6-94, cert. ef. 10-1-94; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5620; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03

340-248-0270

Asbestos Abatement Work Practices and Procedures

(1) Except as OAR 340-248-0250 provides, prior to performing a demolition or renovation activity on a facility [or an installation](#) the owner or operator of a facility must have an accredited inspector thoroughly survey the affected facility, or part of the facility where the demolition or renovation operation will occur, for the presence of asbestos-containing material, including nonfriable asbestos material.

(2) The owner or operator of a facility that requires a survey under OAR 340-248-0270(1) must send a copy of the survey report to the department upon request by the department and keep a copy of the survey report onsite at the facility during any demolition or renovation activity.

(3) For demolitions of residential buildings, the department may approve, on a case-by-case basis, requests to waive the asbestos survey requirement of OAR 340-248-0270(1). The owner or operator of the residential building must submit a written request to the department, along with supporting documentation that demonstrates to the department's satisfaction that a survey is not warranted. The owner or operator of the residential building must obtain the department's written approval waiving the asbestos survey requirement prior to any demolition activity. The owner or operator of the residential building must maintain as readily available at the demolition site a copy of the department's written approval under this rule.

(4) Except as OAR 340-248-0250 provides, any person who conducts or provides for the conduct of an asbestos abatement project must employ the following procedures:

(a) Remove all asbestos-containing materials before any activity begins that would break up, dislodge, or disturb the materials or preclude access to the materials for subsequent removal. Asbestos-containing materials need not be removed if:

(A) They are on a facility component that is encased in concrete or other similar material and are adequately wetted whenever exposed during demolition;

(B) They were not discovered before demolition and cannot be removed because of unsafe conditions as a result of the demolition.

(b) Upon discovery of asbestos-containing materials found during demolition the owner or operator performing the demolition must:

(A) Stop demolition work immediately;

(B) Notify the Department immediately of the occurrence;

(C) Keep the exposed asbestos-containing materials and any asbestos-contaminated waste material adequately wet at all times until a licensed asbestos abatement contractor begins removal activities;

(D) Have the licensed asbestos abatement contractor remove and dispose of the asbestos-containing waste material.

(c) Asbestos-containing materials must be adequately wetted when they are being removed. In renovation, maintenance, repair, and construction operations, where wetting would unavoidably damage equipment or is incompatible with specialized work practices, or presents a safety hazard, adequate wetting is not required if the owner or operator:

(A) Obtains prior written approval from the Department for dry removal of asbestos-containing material;

(B) Keeps a copy of the Department's written approval available for inspection at the work site;

(C) Adequately wraps or encloses any asbestos-containing material during handling to avoid releasing fibers;

(D) Uses a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the asbestos abatement project.

(d) When a facility component covered or coated with asbestos-containing materials is being taken out of the facility as units or in sections:

(A) Adequately wet any asbestos-containing materials exposed during cutting or disjointing operation;

(B) Carefully lower the units or sections to ground level, not dropping them or throwing them;

(C) Asbestos-containing materials do not need to be removed from large facility components such as reactor vessels, large tanks, steam generators, but excluding beams if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material; and

(ii) The component is encased in leak-tight wrapping; and

(iii) The leak-tight wrapping is labeled according to OAR 340-248-0280(2)(b) during all loading and unloading operations and during storage.

(e) For friable asbestos materials being removed or stripped:

(A) Adequately wet the materials to ensure that they remain wet until they are disposed of in accordance with OAR 340-248-0280;

(B) Carefully lower the materials to the floor, not dropping or throwing them;

(C) With prior written approval from the Department, transport the materials to the ground via dust-tight chutes or containers if they have been removed or stripped above ground level and were not removed as units or in sections.

(D) Enclose the area where friable asbestos materials are to be removed with a negative pressure enclosure prior to abatement unless written approval for an alternative is granted by the Department.

(E) A minimum of one viewing window will be installed in all enclosures, including negative pressure enclosures, in accordance with the following:

(i) Each viewing window must be a minimum of two feet by two feet and be made of a material that will allow a clear view inside the enclosure.

(ii) For large enclosures, including negative pressure enclosures, install one viewing window for every 5,000 square feet of area when spatially feasible.

(f) Any person that demolishes a facility under an order of the State of Oregon or a local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse must comply with the following:

(A) Obtain written approval from the Department for an ordered demolition procedure before that demolition takes place; and

(B) Send a copy of the order and an asbestos abatement project notification (as described in OAR 340-248-0260) to the Department before commencing demolition work; and

(C) Keep a copy of the order, Department's approval, and the notification form at the demolition site during all phases of demolition until final disposal of the project waste at an authorized landfill; and

(D) Keep asbestos-containing materials and asbestos contaminated debris adequately wet during demolition and comply with the disposal requirements set forth in OAR 340-248-0280 or 340-248-0290.

(g) Persons performing asbestos abatement outside full negative pressure containment must obtain written approval from the Department before using mechanical equipment to remove asbestos-containing material.

(h) Before a facility is demolished by intentional burning, all asbestos-containing material must be removed and disposed of in accordance with OAR 340-248-0010 through 340-248-0290.

(i) None of the operations in section (1) through (4) of this rule may cause any visible emissions. Any local exhaust ventilation and collection system or vacuuming equipment used during an asbestos abatement project, must be equipped with a HEPA filter or other filter of equal or greater collection efficiency.

(j) The Director may approve, on a case-by-case basis, requests to use an alternative to the requirements contained in this rule. The contractor or facility owner or operator must submit a written description of the proposed alternative and demonstrate to the Director's satisfaction that the proposed alternative provides public health protection equivalent to the protection that would be provided by the specific requirement, or that such level of protection cannot be obtained for the asbestos abatement project.

(k) Final Air Clearance Sampling Requirements apply to projects involving more than 160 square feet or 260 linear feet of asbestos-containing material. Before containment around such an area is removed, the person performing the abatement must have at least one air sample collected that documents that the air inside the containment has no more than 0.01 fibers per cubic centimeter of air. The air sample(s) collected may not exceed 0.01 fibers per cubic centimeter of air. The Department may grant a waiver to this section or exceptions to the following requirements upon receiving an advanced written request:

(A) The air clearance samples must be performed and analyzed by a party who is National Institute of Occupational Safety and Health (NIOSH) 582 certified and financially independent from the person(s) conducting the asbestos abatement project;

(B) Before final air clearance sampling is performed the following must be completed:

(i) All visible asbestos-containing material and asbestos-containing waste material must be removed according to the requirements of this section;

(ii) The air and surfaces within the containment must be sprayed with an encapsulant;

(iii) Air sampling may commence when the encapsulant has settled sufficiently so that the filter of the sample is not clogged by airborne encapsulant;

(iv) Air filtration units must remain on during the air-monitoring period.

(C) Air clearance sampling inside containment areas must be aggressive and comply with the following procedures:

(i) Immediately before starting the sampling pumps, direct exhaust from a minimum one horse power forced air blower against all walls, ceilings, floors, ledges, and other surfaces in the containment;

(ii) Then place stationary fans in locations that will not interfere with air monitoring equipment and then directed toward the ceiling. Use one fan per 10,000 cubic feet of room space;

(iii) Start sampling pumps and sample an adequate volume of air to detect concentrations of 0.01 fibers of asbestos per cubic centimeter according to NIOSH 7400 method;

(iv) When sampling is completed turn off the pump and then the fan(s);

(v) As an alternative to meeting the requirements of paragraphs (A) through (D) of this subsection, air clearance sample analysis may be performed according to Transmission Electron Microscopy Analytical Methods prescribed by **40 CFR 763, Appendix A to Subpart E (Interim Transmission Electron Microscopy Analytical Methods)**.

(D) The person performing asbestos abatement projects requiring air clearance sampling must submit the clearance results to the Department on a Department form. The clearance results must be received by the Department within 30 days after the completion date of the asbestos abatement project.

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88, ef. 6-1-88 (and corrected 6-3-88); DEQ 18-1991, f. & cert. ef. 10-7-91; Renumbered from 340-025-0465(6) - (12); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0468; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5640; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03

DIVISION 248

ASBESTOS REQUIREMENTS

Asbestos Emission Standards and Procedural Requirements

340-248-0250

Asbestos Abatement Project Exemptions

(1) Any person who conducts or provides for the conduct of an asbestos abatement project must comply with the provisions of OAR 340 division 248 except as provided in this rule.

(2) The following asbestos abatement projects are exempt from certain provisions of this Division as listed in this Section:

(a) Asbestos abatement conducted inside a single private residence is exempt from OAR 340-248-0110 through 340-248-0180, 340-248-0210 through 340-248-0240 and 340-248-0260 through 340-248-0270 if the residence is occupied by the owner and the owner occupant is performing the asbestos abatement work.

(b) Asbestos abatement conducted outside of a single private residence by the owner is exempt from the notification requirements contained in OAR 340-248-0260, if the residence is not a rental property, a commercial business, or intended to be demolished.

(c) Renovation activities at residential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1).

(d) Demolition activities at residential buildings with four or fewer dwelling units, that were constructed after January 1, 2004, are exempt from the provisions of OAR 340-248-0270(1).

(e) Demolition activities at residential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1) if all of the materials at the affected facility are treated, removed, handled, managed, transported and disposed of as friable asbestos-containing material.

(f) Projects involving the removal of mastics and roofing products that are fully encapsulated with a petroleum-based binder and are not hard, dry, or brittle are exempt from OAR 340-248-0110 through 340-248-0280 provided the materials are not made friable.

(g) Projects involving the removal of less than three square feet or three linear feet of asbestos-containing material are exempt from OAR 340-248-0110 through 340-248-0180 and the notification requirements in 340-248-0260 provided that the removal of asbestos is not the primary objective, is part of a needed repair operation, and the methods of removal comply with

OAR 437 division 3 "Construction" Subsection Z and **29 C.F.R. § 1926.1101(g) (1998)**. Asbestos abatement projects may not be subdivided into smaller sized units in order to qualify for this exemption.

(h) Projects involving the removal of asbestos-containing materials that are sealed from the atmosphere by a rigid casing are exempt from OAR 340-248-0110 through 340-248-0280, provided the casing is not broken or otherwise altered such that asbestos fibers could be released during removal, handling, and transport to an authorized disposal site.

(3) Any person who removes non-friable asbestos-containing material not exempted under OAR 340-248-0250(2) must comply with the following:

(a) Submit asbestos removal notification and the appropriate fee to the Department Business Office on a Department form in accordance with OAR 340-248-0260.

(b) Remove nonfriable asbestos materials in a manner that ensures the material remains nonfriable.

(c) A nonfriable asbestos abatement project is exempt from the asbestos licensing and certification requirements under OAR 340-248-0100 through 340-248-0180. The exemption ends whenever the asbestos-containing material becomes friable.

(4) Emergency fire fighting is not subject to this division.

(5) Asbestos containing waste material that is handled and disposed of in compliance with a solid waste permit issued pursuant to ORS 459 is not subject to OAR 340-248-0205(1).

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88 (and corrected 6-3-88), ef. 6-1-88; DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90 & 7-8-91); DEQ 8-1990, f. 3-13-90, cert. ef. 4-23-90; DEQ 18-1991, f. & cert. ef. 10-7-91; Section (1)(a) - (d) renumbered from 340-025-0465(4)(a) - (d); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0466; DEQ 19-1994, f. 9-6-94, cert. ef. 10-1-94; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5620; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03

340-248-0270

Asbestos Abatement Work Practices and Procedures

(1) Except as OAR 340-248-0250 provides, prior to performing a demolition or renovation activity on a facility or an installation the owner or operator of a facility must have an accredited inspector thoroughly survey the affected facility, or part of the facility where the demolition or

renovation operation will occur, for the presence of asbestos-containing material, including nonfriable asbestos material.

(2) The owner or operator of a facility that requires a survey under OAR 340-248-0270(1) must send a copy of the survey report to the department upon request by the department and keep a copy of the survey report onsite at the facility during any demolition or renovation activity.

(3) For demolitions of residential buildings, the department may approve, on a case-by-case basis, requests to waive the asbestos survey requirement of OAR 340-248-0270(1). The owner or operator of the residential building must submit a written request to the department, along with supporting documentation that demonstrates to the department's satisfaction that a survey is not warranted. The owner or operator of the residential building must obtain the department's written approval waiving the asbestos survey requirement prior to any demolition activity. The owner or operator of the residential building must maintain as readily available at the demolition site a copy of the department's written approval under this rule.

(4) Except as OAR 340-248-0250 provides, any person who conducts or provides for the conduct of an asbestos abatement project must employ the following procedures:

(a) Remove all asbestos-containing materials before any activity begins that would break up, dislodge, or disturb the materials or preclude access to the materials for subsequent removal. Asbestos-containing materials need not be removed if:

(A) They are on a facility component that is encased in concrete or other similar material and are adequately wetted whenever exposed during demolition;

(B) They were not discovered before demolition and cannot be removed because of unsafe conditions as a result of the demolition.

(b) Upon discovery of asbestos-containing materials found during demolition the owner or operator performing the demolition must:

(A) Stop demolition work immediately;

(B) Notify the Department immediately of the occurrence;

(C) Keep the exposed asbestos-containing materials and any asbestos-contaminated waste material adequately wet at all times until a licensed asbestos abatement contractor begins removal activities;

(D) Have the licensed asbestos abatement contractor remove and dispose of the asbestos-containing waste material.

(c) Asbestos-containing materials must be adequately wetted when they are being removed. In renovation, maintenance, repair, and construction operations, where wetting would unavoidably

damage equipment or is incompatible with specialized work practices, or presents a safety hazard, adequate wetting is not required if the owner or operator:

(A) Obtains prior written approval from the Department for dry removal of asbestos-containing material;

(B) Keeps a copy of the Department's written approval available for inspection at the work site;

(C) Adequately wraps or encloses any asbestos-containing material during handling to avoid releasing fibers;

(D) Uses a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the asbestos abatement project.

(d) When a facility component covered or coated with asbestos-containing materials is being taken out of the facility as units or in sections:

(A) Adequately wet any asbestos-containing materials exposed during cutting or disjoining operation;

(B) Carefully lower the units or sections to ground level, not dropping them or throwing them;

(C) Asbestos-containing materials do not need to be removed from large facility components such as reactor vessels, large tanks, steam generators, but excluding beams, if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material; and

(ii) The component is encased in leak-tight wrapping; and

(iii) The leak-tight wrapping is labeled according to OAR 340-248-0280(2)(b) during all loading and unloading operations and during storage.

(e) For friable asbestos materials being removed or stripped:

(A) Adequately wet the materials to ensure that they remain wet until they are disposed of in accordance with OAR 340-248-0280;

(B) Carefully lower the materials to the floor, not dropping or throwing them;

(C) With prior written approval from the Department, transport the materials to the ground via dust-tight chutes or containers if they have been removed or stripped above ground level and were not removed as units or in sections.

(D) Enclose the area where friable asbestos materials are to be removed with a negative pressure enclosure prior to abatement unless written approval for an alternative is granted by the Department.

(E) A minimum of one viewing window will be installed in all enclosures, including negative pressure enclosures, in accordance with the following:

(i) Each viewing window must be a minimum of two feet by two feet and be made of a material that will allow a clear view inside the enclosure.

(ii) For large enclosures, including negative pressure enclosures, install one viewing window for every 5,000 square feet of area when spatially feasible.

(f) Any person that demolishes a facility under an order of the State of Oregon or a local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse must comply with the following:

(A) Obtain written approval from the Department for an ordered demolition procedure before that demolition takes place; and

(B) Send a copy of the order and an asbestos abatement project notification (as described in OAR 340-248-0260) to the Department before commencing demolition work; and

(C) Keep a copy of the order, Department's approval, and the notification form at the demolition site during all phases of demolition until final disposal of the project waste at an authorized landfill; and

(D) Keep asbestos-containing materials and asbestos contaminated debris adequately wet during demolition and comply with the disposal requirements set forth in OAR 340-248-0280 or 340-248-0290.

(g) Persons performing asbestos abatement outside full negative pressure containment must obtain written approval from the Department before using mechanical equipment to remove asbestos-containing material.

(h) Before a facility is demolished by intentional burning, all asbestos-containing material must be removed and disposed of in accordance with OAR 340-248-0010 through 340-248-0290.

(i) None of the operations in section (1) through (4) of this rule may cause any visible emissions. Any local exhaust ventilation and collection system or vacuuming equipment used during an asbestos abatement project, must be equipped with a HEPA filter or other filter of equal or greater collection efficiency.

(j) The Director may approve, on a case-by-case basis, requests to use an alternative to the requirements contained in this rule. The contractor or facility owner or operator must submit a written description of the proposed alternative and demonstrate to the Director's satisfaction that

the proposed alternative provides public health protection equivalent to the protection that would be provided by the specific requirement, or that such level of protection cannot be obtained for the asbestos abatement project.

(k) Final Air Clearance Sampling Requirements apply to projects involving more than 160 square feet or 260 linear feet of asbestos-containing material. Before containment around such an area is removed, the person performing the abatement must have at least one air sample collected that documents that the air inside the containment has no more than 0.01 fibers per cubic centimeter of air. The air sample(s) collected may not exceed 0.01 fibers per cubic centimeter of air. The Department may grant a waiver to this section or exceptions to the following requirements upon receiving an advanced written request:

(A) The air clearance samples must be performed and analyzed by a party who is National Institute of Occupational Safety and Health (NIOSH) 582 certified and financially independent from the person(s) conducting the asbestos abatement project;

(B) Before final air clearance sampling is performed the following must be completed:

(i) All visible asbestos-containing material and asbestos-containing waste material must be removed according to the requirements of this section;

(ii) The air and surfaces within the containment must be sprayed with an encapsulant;

(iii) Air sampling may commence when the encapsulant has settled sufficiently so that the filter of the sample is not clogged by airborne encapsulant;

(iv) Air filtration units must remain on during the air-monitoring period.

(C) Air clearance sampling inside containment areas must be aggressive and comply with the following procedures:

(i) Immediately before starting the sampling pumps, direct exhaust from a minimum one horse power forced air blower against all walls, ceilings, floors, ledges, and other surfaces in the containment;

(ii) Then place stationary fans in locations that will not interfere with air monitoring equipment and then directed toward the ceiling. Use one fan per 10,000 cubic feet of room space;

(iii) Start sampling pumps and sample an adequate volume of air to detect concentrations of 0.01 fibers of asbestos per cubic centimeter according to NIOSH 7400 method;

(iv) When sampling is completed turn off the pump and then the fan(s);

(v) As an alternative to meeting the requirements of paragraphs (A) through (D) of this subsection, air clearance sample analysis may be performed according to Transmission Electron

Microscopy Analytical Methods prescribed by 40 CFR 763, Appendix A to Subpart E (Interim Transmission Electron Microscopy Analytical Methods).

(D) The person performing asbestos abatement projects requiring air clearance sampling must submit the clearance results to the Department on a Department form. The clearance results must be received by the Department within 30 days after the completion date of the asbestos abatement project.

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88. ef. 6-1-88 (and corrected 6-3-88); DEQ 18-1991, f. & cert. ef. 10-7-91; Renumbered from 340-025-0465(6) - (12); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0468; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5640; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03

Key to Identifying Changed Text:

~~Deleted Text~~

New/inserted text

~~Text deleted from one location -~~ and moved to another location

DIVISION 248

ASBESTOS REQUIREMENTS

Asbestos Emission Standards and Procedural Requirements

340-248-0250

Asbestos Abatement Project Exemptions

(1) Any person who conducts or provides for the conduct of an asbestos abatement project must comply with the provisions of OAR 340 division 248 except as provided in this rule.

(2) The following asbestos abatement projects are exempt from certain provisions of this Division as listed in this Section:

(a) Asbestos abatement conducted inside a single private residence is exempt from OAR 340-248-0110 through 340-248-0180, 340-248-0210 through 340-248-0240 and 340-248-0260 through 340-248-0270 if the residence is occupied by the owner and the owner occupant is performing the asbestos abatement work.

(b) Asbestos abatement conducted outside of a single private residence by the owner is exempt from the notification requirements contained in OAR 340-248-0260, if the residence is not a rental property, a commercial business, or intended to be demolished.

(c) Renovation activities at r~~R~~esidential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1).

(d) Demolition activities at residential buildings with four or fewer dwelling units, that were constructed after January 1, 2004, are exempt from the provisions of OAR 340-248-0270(1).

(e) Demolition activities at residential buildings with four or fewer dwelling units are exempt from the provisions of OAR 340-248-0270(1) if all of the materials at the affected facility are treated, removed, handled, managed, transported and disposed of as friable asbestos-containing material.

(f) Projects involving the removal of mastics and roofing products that are fully encapsulated with a petroleum-based binder and are not hard, dry, or brittle are exempt from OAR 340-248-0110 through 340-248-0280 provided the materials are not made friable.

(g) Projects involving the removal of less than three square feet or three linear feet of asbestos-containing material are exempt from OAR 340-248-0110 through 340-248-0180 and the notification requirements in 340-248-0260 provided that the removal of asbestos is not the primary objective, is part of a needed repair operation, and the methods of removal comply with ~~are in compliance with~~ OAR 437 division 3 "Construction" Subsection Z and 29 C.F.R. § 1926.1101(g)(i) through (iii) (1998). Asbestos abatement projects may not be subdivided into smaller sized units in order to qualify for this exemption.

(h) Projects involving the removal of asbestos-containing materials that are sealed from the atmosphere by a rigid casing are exempt from OAR 340-248-0110 through 340-248-0280, provided the casing is not broken or otherwise altered such that asbestos fibers could be released during removal, handling, and transport to an authorized disposal site.

(3) Any person who removes non-friable asbestos-containing material not exempted under OAR 340-248-0250(2) must comply with the following:

(a) Submit asbestos removal notification and the appropriate fee to the Department Business Office on a Department form in accordance with OAR 340-248-0260.

(b) Remove nonfriable asbestos materials in a manner that ensures the material remains nonfriable.

(c) A nonfriable asbestos abatement project is exempt from the asbestos licensing and certification requirements under OAR 340-248-0100 through 340-248-0180. The exemption ends whenever the asbestos-containing material becomes friable.

(4) Emergency fire fighting is not subject to this division.

(5) Asbestos containing waste material that is handled and disposed of in compliance with a solid waste permit issued pursuant to ORS 459 is not subject to OAR 340-248-0205(1).

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88 (and corrected 6-3-88), ef. 6-1-88; DEQ 4-1990, f. & cert. ef. 2-7-90 (and corrected 5-21-90 & 7-8-91); DEQ 8-1990, f. 3-13-90, cert. ef. 4-23-90; DEQ 18-1991, f. & cert. ef. 10-7-91; Section (1)(a) - (d) renumbered from 340-025-0465(4)(a) - (d); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0466; DEQ 19-1994, f. 9-6-94, cert. ef. 10-1-94; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 22-1995, f. & cert. ef. 10-6-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5620; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03

340-248-0270

Asbestos Abatement Work Practices and Procedures

(1) Except as OAR 340-248-0250 provides, p~~Prior to performing a demolition or renovation activity on a facility or an installation, the owner or operator of a facility must have an accredited inspector thoroughly survey the affected facility, or part of the facility where the demolition or renovation operation will occur, for the presence of asbestos-containing material, including nonfriable asbestos material.~~

(2) The owner or operator of a facility that requires a survey under OAR 340-248-0270(1) must send a copy of the survey report to the department upon request by the department and keep a copy of the survey report onsite at the facility during any demolition or renovation activity.

(3) For demolitions of residential buildings, the department may approve, on a case-by-case basis, requests to waive the asbestos survey requirement of OAR 340-248-0270(1). The owner or operator of the residential building must submit a written request to the department, along with supporting documentation that demonstrates to the department's satisfaction that a survey is not warranted. The owner or operator of the residential building must obtain the department's written approval waiving the asbestos survey requirement prior to any demolition activity. The owner or operator of the residential building must maintain as readily available at the demolition site a copy of the department's written approval under this rule.

(4) Except as OAR 340-248-0250 provides~~d for in OAR 340-248-0250, any person who conducts or provides for the conduct of an asbestos abatement project must employ the following procedures must be employed by any person who conducts or provides for the conduct of an asbestos abatement project:-~~

~~(1) Prior to performing a demolition or renovation activity on a facility the owner or operator of a facility must have an accredited inspector thoroughly survey the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos-containing material, including nonfriable asbestos material.~~

~~(2) The owner or operator of a facility that requires a survey pursuant to OAR 340-248-0270(1) must keep a copy of the survey report onsite at the facility during any demolition or renovation activity.~~

~~(a3)~~ Remove all asbestos-containing materials before any activity begins that would break up, dislodge, or disturb the materials or preclude access to the materials for subsequent removal. Asbestos-containing materials need not be removed if: ~~before demolition if:~~

~~(Aa)~~ They are on a facility component that is encased in concrete or other similar material and are adequately wetted whenever exposed during demolition;

~~(Bb)~~ They were not discovered before demolition and cannot be removed because of unsafe conditions as a result of the demolition.

(4b) Upon discovery of asbestos-containing materials found during demolition the owner or operator performing the demolition must:

(Aa) Stop demolition work immediately;

(Bb) Notify the Department immediately of the occurrence;

(Ce) Keep the exposed asbestos-containing materials and any asbestos-contaminated waste material adequately wet at all times until a licensed asbestos abatement contractor begins removal activities;

(Dd) Have the licensed asbestos abatement contractor remove and dispose of the asbestos-containing waste material.

(c5) Asbestos-containing materials must be adequately wetted when they are being removed. In renovation, maintenance, repair, and construction operations, where wetting would unavoidably damage equipment or is incompatible with specialized work practices, or presents a safety hazard, adequate wetting is not required if the owner or operator:

(Aa) Obtains prior written approval from the Department for dry removal of asbestos-containing material;

(Bb) Keeps a copy of the Department's written approval available for inspection at the work site;

(Ce) Adequately wraps or encloses any asbestos-containing material during handling to avoid releasing fibers;

(Dd) Uses a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the asbestos abatement project.

(d6) When a facility component covered or coated with asbestos-containing materials is being taken out of the facility as units or in sections:

(Aa) Adequately wet any asbestos-containing materials exposed during cutting or disjointing operation;

(Bb) Carefully lower the units or sections to ground level, not dropping them or throwing them;

(Ce) Asbestos-containing materials do not need to be removed from large facility components such as reactor vessels, large tanks, steam generators, but excluding beams if the following requirements are met:

(iA) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material; and

(iiB) The component is encased in leak-tight wrapping; and

(iii) The leak-tight wrapping is labeled according to OAR 340-248-0280(2)(b) during all loading and unloading operations and during storage.

(e) For friable asbestos materials being removed or stripped:

(A) Adequately wet the materials to ensure that they remain wet until they are disposed of in accordance with OAR 340-248-0280;

(B) Carefully lower the materials to the floor, not dropping or throwing them;

(C) With prior written approval from the Department, transport the materials to the ground via dust-tight chutes or containers if they have been removed or stripped above ground level and were not removed as units or in sections.

(D) Enclose the area where friable asbestos materials are to be removed with a negative pressure enclosure prior to abatement unless written approval for an alternative is granted by the Department.

(E) A minimum of one viewing window will be installed in all enclosures, including negative pressure enclosures, in accordance with the following:

(i) Each viewing window must be a minimum of two feet by two feet and be made of a material that will allow a clear view inside the enclosure.

(ii) For large enclosures, including negative pressure enclosures, install one viewing window for every 5,000 square feet of area when spatially feasible.

(f) Any person that demolishes a facility under an order of the State of Oregon or a local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse must comply with the following:

(A) Obtain written approval from the Department for an ordered demolition procedure before that demolition takes place; and

(B) Send a copy of the order and an asbestos abatement project notification (as described in OAR 340-248-0260) to the Department before commencing demolition work; and

(C) Keep a copy of the order, Department's approval, and the notification form at the demolition site during all phases of demolition until final disposal of the project waste at an authorized landfill; and

(D) Keep asbestos-containing materials and asbestos contaminated debris adequately wet during demolition and comply with the disposal requirements set forth in OAR 340-248-0280 or 340-248-0290.

(g9) Persons performing asbestos abatement outside full negative pressure containment must obtain written approval from the Department before using mechanical equipment to remove asbestos-containing material.

(h10) Before a facility is demolished by intentional burning, all asbestos-containing material must be removed and disposed of in accordance with OAR 340-248-0010 through 340-248-0290.

(i11) None of the operations in section (1) through (4) of this rule may cause any visible emissions. Any local exhaust ventilation and collection system or vacuuming equipment used during an asbestos abatement project, must be equipped with a HEPA filter or other filter of equal or greater collection efficiency.

(j12) The Director may approve, on a case-by-case basis, requests to use an alternative to the requirements contained in this rule. The contractor or facility owner or operator must submit a written description of the proposed alternative and demonstrate to the Director's satisfaction that the proposed alternative provides public health protection equivalent to the protection that would be provided by the specific requirement, or that such level of protection cannot be obtained for the asbestos abatement project.

(k13) Final Air Clearance Sampling Requirements apply to projects involving more than 160 square feet or 260 linear feet of asbestos-containing material. Before containment around such an area is removed, the person performing the abatement must have at least one air sample collected that documents that the air inside the containment has no more than 0.01 fibers per cubic centimeter of air. The air sample(s) collected may not exceed 0.01 fibers per cubic centimeter of air. The Department may grant a waiver to this section or exceptions to the following requirements upon receiving an advanced written request:

(Aa) The air clearance samples must be performed and analyzed by a party who is National Institute of Occupational Safety and Health (NIOSH) 582 certified and financially independent from the person(s) conducting the asbestos abatement project;

(Bb) Before final air clearance sampling is performed the following must be completed:

(iA) All visible asbestos-containing material and asbestos-containing waste material must be removed according to the requirements of this section;

(iiB) The air and surfaces within the containment must be sprayed with an encapsulant;

(iiiC) Air sampling may commence when the encapsulant has settled sufficiently so that the filter of the sample is not clogged by airborne encapsulant;

(ivD) Air filtration units must remain on during the air-monitoring period.

(Ce) Air clearance sampling inside containment areas must be aggressive and comply with the following procedures:

- (iA) Immediately before starting the sampling pumps, direct exhaust from a minimum one horse power forced air blower against all walls, ceilings, floors, ledges, and other surfaces in the containment;
- (Bii) Then place stationary fans in locations that will not interfere with air monitoring equipment and then directed toward the ceiling. Use one fan per 10,000 cubic feet of room space;
- (iiiC) Start sampling pumps and sample an adequate volume of air to detect concentrations of 0.01 fibers of asbestos per cubic centimeter according to NIOSH 7400 method;
- (ivD) When sampling is completed turn off the pump and then the fan(s);
- (vE) As an alternative to meeting the requirements of paragraphs (A) through (D) of this subsection, air clearance sample analysis may be performed according to Transmission Electron Microscopy Analytical Methods prescribed by **40 CFR 763, Appendix A to Subpart E (Interim Transmission Electron Microscopy Analytical Methods)**.
- (Dd) The person performing asbestos abatement projects requiring air clearance sampling must submit the clearance results to the Department on a Department form. The clearance results must be received by the Department within 30 days after the completion date of the asbestos abatement project.

Stat. Auth.: ORS 468 & ORS 468A

Stats. Implemented: ORS 468A.745

Hist.: DEQ 96, f. 9-2-75, ef. 9-25-75; DEQ 22-1982, f. & ef. 10-21-82; DEQ 9-1988, f. 5-19-88. ef. 6-1-88 (and corrected 6-3-88); DEQ 18-1991, f. & cert. ef. 10-7-91; Renumbered from 340-025-0465(6) - (12); DEQ 4-1993, f. & cert. ef. 3-10-93; DEQ 18-1993, f. & cert. ef. 11-4-93; Renumbered from 340-025-0468; DEQ 15-1995, f. & cert. ef. 6-16-95; DEQ 14-1999, f. & cert. ef. 10-14-99, Renumbered from 340-032-5640; DEQ 1-2002, f. & cert. ef. 2-4-02; DEQ 19-2002(Temp), f. & cert. ef. 12-23-02 thru 6-21-03; DEQ 9-2003, f. 5-21-03, cert. ef. 6-21-03