



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

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# Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

DEVAL L. PATRICK  
Governor

RICHARD K. SULLIVAN JR.  
Secretary

KENNETH L. KIMMELL  
Commissioner

## RESPONSE TO COMMENTS

### **2012 Regulatory Reform: Amendments to Air Pollution Control and Asbestos Regulations (310 CMR 7.00 and 310 CMR 7.15)**

**STATUTORY AUTHORITY: M.G.L. c. 111, Sections 142A through 142O**

**June 20, 2014**

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## Commenters

American Environmental Consultants, Inc: Gregory Hatch, Partner

Cardno ATC: Doug Rador, Director, Building Sciences Division; David C. Tiernan, Vice President

Cardno ATC: Edward Kolodziej, Senior Project Manager

Clean Air Environmental, Inc.: Kevin Goheen

Covanta Energy: Derek Grasso, Regional Environmental Manager

Covino Environmental Associates, Inc.: Glenn N. Potter, Director, Building Sciences Group

Covino Environmental Associates, Inc.: Laura A. Stockfisch, Project Manager, Special Projects

Jonathan A. Ellis

Gomes Removal Service, Daniel Gomes, Owner

Impresair Environmental Corp.: Maria Najarro, Supervisor

Massachusetts Department of Labor Standards: Heather Rowe, Director

Massachusetts Water Resources Authority: Leon Lataille, Environmental Manager

Massachusetts Water Works Association: Jennifer A. Pederson, Executive Director

New England Surface Maintenance, Inc.: Jim Doyle

Peter Greifer Enterprises, Inc.: Peter Greifer

S&S Abatement, LLC: Paul Scott, Bill Scott, owners

Philip G. Terrell, CIH

Town of Framingham, Department of Public Works: Kathleen R. Weeks, Senior Stormwater and Environmental Engineer

United States Environmental Protection Agency Region 1 - New England: Sharon Hayes, Manager, Toxics and Pesticides Unit

## List of Acronyms Used

AHERA: the U.S. Asbestos Hazard Emergency Response Act, 15 U.S.C. 2646 *et seq.*, and the regulations promulgated thereunder, including 40 CFR Part 763

ACM: Asbestos-Containing Material

ACWM: Asbestos-Containing Waste Material

ANF: Asbestos Notification Form (MassDEP ANF-001)

C&D: Construction and Demolition

CFR: Code of Federal Regulations

CMR: Code of Massachusetts Regulations

DLS: Massachusetts Department of Labor Standards

DOP: Dioctyl Phthalate

EPA: United States Environmental Protection Agency

Federal Asbestos NESHAP: the Asbestos National Emission Standard for Hazardous Air Pollutants, promulgated at 40 CFR Part 61, Subpart M

HEPA: High Efficiency Particulate Air filtration

HVAC: heating, ventilation and air-conditioning systems

LEAs: Local Educational Authorities (used in AHERA)

MassDEP: the Massachusetts Department of Environmental Protection (also referred to herein as “the Department”)

M.G.L.: Massachusetts General Laws

NOB: Non-Friable Organically Bound

OSHA: Occupational Safety and Health Administration of the United States Department of Labor

PLM: Polarized Light Microscopy

RACM: Regulated Asbestos-Containing Material (this term is used in the federal Asbestos NESHAP)

TEM: Transmission Electron Microscopy

TSCA: U.S. Toxic Substances Control Act, 15 U.S.C. 2601 *et. seq.*

## Responses to Comments

### General Comments

**Comment 1:** The authority to license asbestos contractors and consultants and to prescribe work practices and training for such entities lies primarily with the Massachusetts Department of Labor Standards (DLS) pursuant to Massachusetts General Laws chapter (M.G.L. c.) 149, Sections 6B (License for Business Activities Involving Asbestos) and 6C (Health and Safety of General Public and Asbestos Workers). Each agency's authority is best described as follows: DLS handles the "inside" of the containment (work practices/engineering controls/set up) and the Massachusetts Department of Environmental Protection (MassDEP) is responsible for the "outside" (no visible emission/proper storage and containerization and disposal). To the extent there is overlap in jurisdiction, the two agencies should work together to promulgate clear, consistent regulation.

**Response:** MassDEP agrees that the authority of this agency and of DLS is derived from separate state statutes. In addition, in 1976, the U.S. Environmental Protection Agency (EPA) delegated authority to MassDEP for implementation of the federal Asbestos National Emission Standard for Hazardous Air Pollutants (the federal Asbestos NESHAP), so MassDEP is responsible for compliance with those federal requirements in the Commonwealth. While it may be convenient to describe the authorities of MassDEP and DLS in "inside" vs. "outside" terms, the federal Asbestos NESHAP establishes work practice requirements for handling asbestos inside facilities that Massachusetts must implement under the terms of its delegation. These work practice requirements are designed to prevent visible emissions of asbestos to the air.

MassDEP and DLS have worked together extensively to ensure that the regulations of both agencies are clear and consistent. To ensure that this coordination continues into the future, MassDEP and DLS are developing a Memorandum of Agreement that describes the agencies' complimentary roles and responsibilities, and is designed to promote an integrated Commonwealth asbestos management program that will further the protection of worker safety, public health, public safety, and the environment.

**Comment 2:** As a general matter, some of the proposed revisions [e.g., 310 Code of Massachusetts Regulations (CMR) 7.15(3)(g), 310 CMR 7.15(4), 310 CMR 7.15(5)(a)-(d), 310 CMR 7.15(14), 310 CMR 7.15(18)b)] appear to be as or more stringent than the demolition and renovation standards of the Asbestos NESHAP requirements. Such provisions should enable MassDEP to further our agencies' mutual goals of better protecting human health and the environment, as noted in MassDEP's November 29, 2012 Background document to the Revisions.

**Response:** MassDEP recognizes that 310 CMR 7.15 is more stringent than the federal Asbestos NESHAP in some regards, particularly with respect to broader coverage of building types and quantities of asbestos-containing material that Massachusetts regulates. With some minor exceptions, these more stringent requirements (most of which were established in state regulation that pre-dated the promulgation of the federal Asbestos NESHAP) have been maintained in these amendments.

**Comment 3:** Overall, many of the proposed changes will not streamline the process because they will create more obstacles for building owners, contractors and public agencies to manage asbestos properly, and will effectively overwhelm the already over-extended MassDEP enforcement officials. The

proposed regulation casts a wide net and does not provide the necessary flexibility to allow the responsible building owner and contractor to continue to manage their asbestos in a proactive and responsible manner without having to constantly apply for MassDEP waivers. The rigidity of the proposed regulation will log jam rather than streamline the current system.

**Response:** MassDEP does not agree with this comment. The final regulation provides increased flexibility where possible that is consistent with our federal delegation and increases environmental protection.

**Comment 4:** Support the proposed regulations and agree that the notification exemptions in Section 7 for small, routine projects and the material specific work practices at 7.15 (11) through (13) are practical approaches. Flexibility in implementing asbestos abatement projects has been improved with the provisions for facility blanket notifications and alternative asbestos abatement work practice approvals.

**Response:** Thank you for your comment.

## Specific Comments

***Please note:** The Comments and Responses in this section are organized according to the order of the sections of the proposed asbestos regulation that was offered for public comment in 2012. As indicated below, in the final asbestos regulation, some of the sections of the proposed asbestos regulation have been renamed, renumbered or deleted.*

### 310 CMR 7.00, Definitions, 310 7.15(1), Definitions

**Comment 5:** MassDEP should simply adopt the existing definitions found in other asbestos regulations, preferably by regulatory reference, creating new terms only as a last resort.

**Response:** EPA, the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA) and DLS all define several key terms differently. MassDEP has revised several key definitions in the final regulation to be more consistent with other agencies' asbestos regulations and changed language as needed to help minimize confusion over particular terms. These definitions include: Asbestos Abatement Activity, Asbestos-Containing Material, Asbestos Inspection Report (which has been re-titled as "Asbestos Survey Report" and revised), Facility, Facility Component, Friable, Friable Asbestos-Containing Material, Operation and Maintenance Project or Work (which has been re-titled as "Incidental Maintenance Project or Work"), Inspection (which has been re-titled as "Survey"), Non-Friable, Non-Friable Asbestos-Containing Material, Work Area, and Work Practice Standards.

**Comment 6:** Facility: "any installation or establishment ... capable of emissions." How is emission defined?

**Response:** The Massachusetts Air Pollution Control Regulations (310 CMR 7.00) define "emission" to mean "any discharge or release of an air contaminant to the ambient air space."

**Comment 7, Asbestos Abatement Activity:** "Inspection, analysis and monitoring" should not be included in the definition of "Asbestos Abatement Activity." Inclusion of these terms would require those performing these types of work to file Asbestos Notification forms for the work and they would also be required to become licensed by DLS as Asbestos Contractors.

**Response:** In the final regulation, MassDEP removed the phrase "...and any associated activity including but not limited to inspection, analysis and monitoring" from the definition of "Asbestos Abatement Activity."

**Comment 8, Asbestos-Containing Material:** The threshold amount should be changed from "1% or more" to "greater than 1%" for consistency with the U.S. Asbestos Hazard Emergency Response Act (AHERA), the U.S. Toxic Substances Control Act (TSCA), the federal Asbestos NESHAP, OSHA and 453 CMR 6.00.

**Response:** MassDEP has not made this change. MassDEP's asbestos regulation has established the minimum concentration of asbestos to be 1% or more since its inception. This change would reduce the level of environmental protection provided by the MassDEP asbestos regulation. However, please note that, in the final rule, MassDEP has revised the definition of Asbestos-Containing Material (ACM) to mean "any material containing 1% or more asbestos as determined by a laboratory ...." This change, which removes the word "friable" from the definition, has been made to clarify that friable and non-friable materials containing 1% or more asbestos are regulated as ACM and the requirements of 310 CMR 7.15 must be met. Some regulated parties have misinterpreted the wording of the current definition of Asbestos-Containing Material to apply only to friable materials.

**Comment 9, Asbestos-Containing Material:** The language in this definition "as determined by a laboratory using EPA approved methods" is too vague. The specific analytical methods that should be used in particular circumstances should be specified.

**Response:** MassDEP revised this definition to specify that ACM is any material containing 1% or more asbestos as determined by a laboratory using EPA-approved protocols set forth in the "Method for the Determination of Asbestos in Bulk Building Materials" found in U.S. Environmental Protection Agency Report EPA/600/R-93/116.

**Comment 10, Asbestos-Containing Material:** MassDEP should clarify whether materials can be composited for sampling purposes and, if so, what materials.

**Response:** MassDEP has never allowed composite sampling of suspect ACM. This proposed definition is consistent with MassDEP's long-standing regulatory requirement that ACM is *any material* containing 1% or more asbestos. As such, each individual material or layer must continue to be analyzed individually and composite sampling is not allowed. Additionally, EPA's analytical method EPA/600/R-93/116 requires that samples be analyzed by individual layer and not composited.

**Comment 11, Asbestos-Containing Material:** What is the difference between Asbestos-Containing Material and asbestos contaminated material?

**Response:** In the final rule, ACM is defined as any material containing 1% or more asbestos as determined by the sampling method EPA/600/R-93/116. The regulation does not define "asbestos contaminated material." There is a broad spectrum of materials that can become contaminated with asbestos fibers in a variety of ways and therefore must be dealt with on a case by case basis. It should be noted, however, that for waste disposal purposes, the definition of Asbestos-Containing Waste Material includes anything contaminated by asbestos in the course of a demolition or renovation project, including but not limited to asbestos waste from control devices, bags or containers that previously contained asbestos, contaminated clothing, materials used to enclose the work area during the demolition or renovation operation, and demolition or renovation debris (including material containing asbestos in concentrations that are less than 1%. Please see response to Comment 12 below).

**Comment 12, Asbestos-Containing Material:** Is material containing less than 1% asbestos regulated by MassDEP or not?

**Response:** Material containing less than 1% asbestos should be identified by a survey conducted before the demolition or renovation project starts (see 310 CMR 7.15(4) in the final regulation). This material is not subject to notification and the work practices prescribed by 310 CMR 7.15. However, waste material containing less than 1% asbestos that is generated by demolition or renovation activity is regulated as an “Asbestos-Containing Waste Material” (ACWM), whereupon it must be managed as prescribed by 310 CMR 7.15(15) through 310 CMR 7.15(18). To avoid contaminating non-asbestos waste at a job site with ACWM, material containing less than 1% asbestos should always be removed wet and in a manner that prevents asbestos fiber migration and contamination of surfaces in the work area. The resulting ACWM should be kept segregated from demolition or renovation debris or material that does not contain asbestos.

- Any waste material containing any amount of asbestos must be handled, packaged, labeled and disposed of as ACWM. ACWM includes material containing less than 1% asbestos.
- Any waste material that does not contain asbestos and becomes contaminated or mixed with material containing any amount of asbestos must be handled, packaged, labeled and disposed of as ACWM. If waste material that does not contain asbestos becomes commingled with waste material containing asbestos, all of the material must then be handled, packaged and disposed of as ACWM. Solid waste that has been contaminated or mixed with material containing any amount of asbestos cannot be sent to a solid waste facility that accepts construction and demolition debris. MassDEP’s permits for these facilities establish a “zero tolerance” threshold for asbestos to prevent the creation of asbestos-laden dust and air pollution as the material they receive is sorted and ground.

Any material that contains 1% or more asbestos must be abated in compliance with 310 CMR 7.15 before starting a demolition or renovation project that would affect the material.

**Comment 13, Asbestos-Containing Material:** MassDEP should return to the original definitions of ACM and ACWM that contain the word friable in each definition.

**Response:** MassDEP has revised the definition of Friable Asbestos-Containing Material to clarify when an ACM is considered friable. The word “friable” has been removed from the definition of ACM, to clarify that friable and non-friable materials containing 1% or more asbestos are regulated as ACM.

**Comment 14, Asbestos-Containing Waste Material:** This definition implies that readily cleanable objects that become contaminated could not be cleaned and reused, and would be required to be discarded as waste.

**Response:** MassDEP has historically permitted and will continue to allow non-porous items (i.e. metals, plastics) that become contaminated with asbestos to be decontaminated so they do not have to be managed as ACWM.

**Comment 15, Asbestos-Containing Waste Material:** The proposed language could be interpreted to include water, sewer and drainage pipe. The commenter requested that MassDEP distinguish between building materials and pipe in the ground.

**Response:** Section 310 CMR 7.15(3)(f) of the final regulation states that no person shall abandon or leave inoperable and/or out-of-service asbestos-containing facility components *that are located above ground and/or have been exposed by excavation on site*. Water, sewer and drainage pipe that has not been exposed by excavation can remain in place.

**Comment 16, Asbestos-Containing Waste Material:** By including ACM that has been taken out of service, this definition creates a large class of ACM as waste. Many schools and government buildings have wings, mechanical areas, crawl spaces, basements, and other areas that have been taken out of service. It's unlikely that these building owners (many of them governmental) have the resources to abate this newly created class of waste material.

**Response:** MassDEP agrees that resource constraints are an issue and notes that this definition does not create a new class of waste material. This definition does not apply to facilities or parts thereof that have been taken out of service but rather applies to ACM on inoperable or out-of-service facility components and ACM that is damaged or deteriorated to the point where it no longer is attached as originally applied and/or no longer is serving the intended purpose for which it was originally installed.

For example, vinyl asbestos floor tile that is in good condition, or asbestos containing pipe insulation that is in good condition and on an operational heating system, would not be considered ACWM even if located in a vacant portion of a building. Examples of out of service ACM that would be considered ACWM would be an asbestos containing boiler that has been disconnected, set aside and left on site after replacement and asbestos containing pipe insulation that is damaged or deteriorated to the point where it is no longer attached to the pipe and is not providing its intended insulating properties.

**Comment 17, Asbestos Contractor:** By including "inspection, analysis and monitoring" in the definition of "Asbestos Abatement Activity" businesses that perform inspection, analysis or monitoring of asbestos would then be required to be licensed by the Department of Labor Standards pursuant to 453 CMR 6.00 as an Asbestos Contractor.

**Response:** By revising the definition of "Asbestos Abatement Activity" as described in the Response to Comment 7 of this section, MassDEP has resolved this issue.

**Comment 18, Asbestos Inspection Report:** This term is well-defined elsewhere and is not needed.

**Response:** MassDEP changed the term "Asbestos Inspection Report" to "Asbestos Survey Report" to distinguish it from inspections required by AHERA and to be consistent with the federal Asbestos NESHAP pre-demolition survey requirement.

**Comment 19, Asbestos Inspection Report:** Will this definition require that a waiver be obtained when a client requests that a material or component be tested to determine asbestos content?

**Response:** MassDEP changed the term "Asbestos Inspection Report" to "Asbestos Survey Report" to distinguish it from inspections required under AHERA and to be consistent with the federal Asbestos NESHAP pre-demolition survey requirement. The final language does not require a waiver from MassDEP to conduct asbestos bulk sampling. Also, please see response to Comment 7 above.

**Comment 20, Demolition/Renovation:** Demolition and renovation are fundamentally different and each term should be defined separately.

**Response:** MassDEP disagrees that the terms are fundamentally different for most of the purposes for which they are used in 310 CMR 7.00. The dictionary definitions of 'demolition' and "renovation" with

respect to building projects that generate dust, noise and waste materials are in fact quite similar. MassDEP uses the terms “demolition” and “renovation” in its regulations regarding notifications and performance standards that address dust and noise from demolition and renovation projects (310 CMR 7.09 and 310 CMR 7.10), and a prohibition on the use of demolition debris as fuel for outdoor wood-fired boilers [310 CMR 7.26(50-54)]. The terms are also used in the definitions of “refuse,” “clean wood,” “municipal solid waste” and “yard waste,” to ensure that the origin of these materials is identified for purposes of the Municipal Waste Incinerator rule (310 CMR 7.08) and other regulations that address burning or handling of these waste materials (e.g., 310 CMR 7.07). EPA has correctly pointed out (see Comment 102) that narrower definitions of the separate terms “Demolition” and “Renovation” are needed in 310 CMR 7.15 to ensure that MassDEP’s asbestos regulation is consistent with critical provisions of the federal Asbestos NESHAPs that identify projects that would qualify for approval of non-traditional work practices (e.g., government ordered demolitions or emergency renovation operations). Therefore, MassDEP has revised the definition of the term “Demolition/Renovation” in 310 CMR 7.00 to clarify that this term applies to all of 310 CMR 7.00. In addition, MassDEP added specific definitions for “Demolition” and “Renovation” to 310 CMR 7.15 in response to a comment from EPA. The definitions of these terms in 310 CMR 7.15 are the same definitions that are used in the federal Asbestos NESHAP and will be used for 310 CMR 7.15 while the combined definition will apply to the rest of 310 CMR 7.00.

**Comment 21, Dumping Ground:** Dumping grounds should have a different standard rather than lumping them in with renovations or demolitions, as many of the provisions do not apply. MassDEP might also wish to distinguish between an “historic dumping ground” and illegal dumping of asbestos-containing materials.

**Response:** The final language addresses illegal disposal of asbestos-containing materials at locations which are not established or maintained for asbestos disposal pursuant to a valid site assignment or permit. MassDEP does not allow historic dumping grounds containing Asbestos-Containing Waste Material to remain unaddressed. Sites that contain ACWM that was placed there in the past may meet reportable conditions that must be addressed under M.G.L. c. 21E, or they must be addressed as dumping grounds under M.G.L. c. 111, section 150A, the Site Assignment Regulations for Solid Waste Facilities (310 CMR 16.00), and the Solid Waste Management Regulations (310 CMR 19.000).

**Comment 22, Facility:** MassDEP’s regulation appears to divide residential facilities into three categories: single-family residences, residences with 2-4 dwelling units, and everything else.

**Response:** MassDEP has always regulated asbestos abatement activity at all residential properties, and the final regulation continues this approach. MassDEP has revised the proposed exemption for homeowner notifications in the final regulation so that it only applies to limited non-friable asbestos abatement activity that is conducted by the owner of a single-family, owner-occupied residence. Please note that notifications continue to be required for abatements performed by asbestos contractors at single-family, owner-occupied residences.

**Comment 23, Friable, Friable Asbestos-Containing Material, Non-Friable, and Non-Friable Asbestos-Containing Material:** By including non-friable asbestos-containing material which may be rendered friable by mechanical means as “Friable Asbestos”, the term would essentially include all ACM.

**Response:** MassDEP agrees, and revised these definitions in the final regulation. The definition of Friable Asbestos-Containing Material now reads: “any ACM, that, when dry, can be crumbled, shattered,

pulverized or reduced to powder by hand pressure or any non-friable ACM that has been subjected to sanding, grinding, cutting, or abrading or has been crumbled, shattered or pulverized by mechanical means such as, but not limited to, the use of excavators, bulldozers, heavy equipment, or power and/or hand tools.”

**Comment 24, Friable:** How does this definition affect the current MassDEP policy # BWP-96-012 (Non-Friable Asbestos-Containing Material)?

**Response:** MassDEP revised the definition of Friable ACM in the final regulation (see response to Comment 23 above). MassDEP intends to rescind policy # BWP-96-012 when the final regulation is promulgated, since material-specific work practices for asbestos-containing asphalt roofing products and vinyl asbestos floor tile have been incorporated into the regulation.

**Comment 25, Friable:** This definition is greatly expanded. Other government agencies (EPA, OSHA, and DLS) define “friable” as material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. It is not appropriate to add “shattered” or “mechanical means” which don’t pertain to “friable.” The definition should parallel those used by other agencies, to streamline enforcement and to reduce confusion and errors.

**Response:** MassDEP agrees that the wording of the definition should be clarified and has revised the definition of Friable ACM to do so. Please see response to Comments 23 and 24 above.

**Comment 26, Friable Asbestos-Containing Material:** The words “shattered”, “crumble” and “pulverize” should be defined.

**Response:** MassDEP believes that the dictionary definitions for these terms are sufficient and did not define them in the final regulation.

**Comment 27, Friable Asbestos-Containing Material:** Will this definition affect the management of asbestos-containing cement pipe and MassDEP’s “Asbestos Cement Pipe Guidance Document”?

**Response:** MassDEP revised the definition of Friable Asbestos-Containing Material to clarify that asbestos-containing cement pipe may be maintained in place underground unless it is exposed by excavation or otherwise handled in a manner so as to become friable. Please see response to Comment 23 and 24 above. The final regulation will not affect the management of asbestos-containing cement pipe, and the removal, handling, packaging and disposal procedures outlined in MassDEP’s “Asbestos Cement Pipe Guidance Document” will remain in effect.

**Comment 28, Friable Asbestos-Containing Material:** The following language should be added to this definition to clarify that it covers material that is regulated as “friable” by the Asbestos NESHAP: “Friable ACM also includes asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos that have been subjected to sanding, grinding, cutting or abrading.”

**Response:** MassDEP agrees and revised this definition to include “...non-friable ACM that has been subjected to sanding, grinding, cutting, or abrading or has been crumbled, shattered or pulverized by mechanical means....”

**Comment 29, Friable Asbestos-Containing Material:** Polarized Light Microscopy (PLM) point count analysis should be used to re-analyze friable materials with a result between 1-10%, and the point count results should take precedence over other analytical results. Some commenters also suggested that

specific methods such as Transmission Electron Microscopy (TEM) and Non-friable Organically Bound (NOB) be required in certain circumstances.

**Response:** MassDEP did not make this change. The final regulation specifies that ACM is any material containing 1% or more asbestos as determined by the sampling method EPA/600/R-93/116. This method allows point counting but does not require its use and does not state that point counting results take precedence over visual estimation results. MassDEP has added a provision to the definition of ACM that allows the Department to require the use of other analytical methods (such as TEM or NOB) in response to specific situations or conditions.

**Comment 30, Friable Asbestos-Containing Material, Non-Friable Asbestos- Containing Material:** MassDEP should use the same terms and definitions employed by EPA and DLS, such as the terms Regulated Asbestos-Containing Material (RACM), Category I non-friable ACM, and Category II non-friable ACM.

**Response:** MassDEP has not adopted these federal Asbestos NESHAP terms in its asbestos regulations because MassDEP regulates a broader universe of materials and regulates those materials more stringently than EPA does under the federal Asbestos NESHAP. MassDEP's terms are defined in a way to provide greater protection for public health and the environment by ensuring that friable ACM and non-friable ACM are fully regulated. The use of different terms also signals to regulated parties that the materials regulated under MassDEP's regulations are different than those regulated by EPA and DLS.

**Comment 31, Inspection:** The waste ban inspections performed by Construction and Demolition (C&D) Processing Facility Operation and Maintenance Third-Party Inspectors or other employees of C&D Waste Transfer Stations should be added to the items that are not an asbestos inspection. To comply with the DLS rules of inspection, these inspectors would need to assume that every material was suspect unless it had an accompanying inspection report (which should be a requirement under the MassDEP standard).

**Response:** MassDEP did not intend to include asbestos surveys conducted in accordance with 31 CMR 7.15 in the inspections of regulated Solid Waste Management Facilities that are conducted by Third Party Inspectors under 310 CMR 19.000. In the final asbestos regulation, MassDEP has changed "inspection" to "survey" to avoid confusion with DLS's and AHERA's inspection requirements. The requirement for a pre-demolition or renovation survey is being added to 310 CMR 7.15 for consistency with the survey requirement in the federal Asbestos NESHAP.

**Comment 32, Operation and Maintenance Project Work:** The proposed definition of "Operation and Maintenance Project Work" is not consistent with the term as used in AHERA and the DLS regulations at 453 CMR 6.00.

**Response:** In the final regulation, MassDEP has re-titled this definition to be "Incidental Maintenance Project or Work" to avoid confusion with the term "Operation and Maintenance Project Work" that is defined in AHERA and the DLS regulations at 453 CMR 6.00.

**Comment 33, Operation and Maintenance Project Work:** This term is not needed and confusing. The threshold amounts of material to be regulated under this definition were arbitrarily chosen.

**Response:** MassDEP disagrees with this comment and feels that it is necessary to address the very small projects that would fit under Incidental Maintenance Project Work (titled "Operation and Maintenance Project Work" in the draft regulation). MassDEP and DLS worked together to create these standards.

**Comment 34, Operation and Maintenance Project or Work:** How will small projects involving all other asbestos-containing materials (plaster, pipe insulation, ceiling tiles, etc.) be addressed? Will the quantities of <3 square or <3 linear feet remain the standard for all materials not otherwise specified?

**Response:** 310 CMR 7.15 has never had a qualifying threshold for the amount of ACM that would be affected by a demolition or renovation action ACM. The <3 square or <3 linear feet threshold is part of the current DLS regulation at 453 CMR 6.00 but is not contained in the final version of 310 CMR 7.15. The final MassDEP regulation establishes material quantity thresholds only in the definition of Incidental Maintenance Project or Work. Any asbestos abatement activity that does not meet the conditions needed to qualify as an Operation and Maintenance Project or Work (re-titled as “Incidental Maintenance Project or Work” in the final rule) is subject to all the applicable requirements of 310 CMR 7.15, including notification and work practices. Also, please note that MassDEP’s on-line notification system serves both agencies. Therefore, a notification form should be filed when either agency requires notification.

**Comment 35, Operation and Maintenance Project or Work:** Who can perform Operation and Maintenance work? What constitutes a properly trained person to perform a visual inspection under the proposed regulations?

**Response:** DLS determines who can perform asbestos abatement activities and what licensing, training and certification is required. See DLS’s regulation, 453 CMR 6.00.

**Comment 36, Owner-Occupied, Single Family Residence:** For clarity, the phrase “for uses such as” should be replaced with “used for” in the definition of Owner-Occupied, Single Family Residence.

**Response:** MassDEP did not make this change, because the list of uses for residential property is not exhaustive.

**Comment 37, Owner/Operator:** Why was “Contractor” deleted from the definition of this term in 310 CMR 7.00, but included in the proposed definition of Owner/Operator in 310 CMR 7.15?

**Response:** The definition of Owner/Operator has been amended in 310 CMR 7.00 and continues to apply to the entire Air Pollution Control Regulation, of which the asbestos regulation is a part (except those sections that specifically state otherwise), which is why the term “contractor” was removed. A more specific definition of Owner/Operator has been included in the final asbestos regulation. It applies specifically to asbestos abatement activities conducted pursuant to 310 CMR 7.15 and includes the word “contractor.”

**Comment 38, Suspect Asbestos-Containing Material:** The use of the term “all non-fiberglass” insulation appears to include materials commonly assumed not to contain asbestos, such as black or grey rubber pipe insulation.

**Response:** MassDEP revised this definition to remove the word “all” before the term “non-fiberglass insulation” to clarify that some non-fiberglass insulation such as rubber may not be considered suspect ACM.

**Comment 39, Suspect Asbestos-Containing Material:** This term should be eliminated, and a more specific term “Non-suspect Asbestos-Containing Material” should be defined.

**Response:** MassDEP did not make this change. EPA has issued substantial guidance about the types of materials that are considered to be “Suspect ACM,” and this term is widely used in the industry.

**Comment 40:** A definition should be added for “Window Painting and/or Repair Work”, and it should exclude window replacement.

**Response:** MassDEP did not make this change. MassDEP will continue to regulate window replacement work involving ACM to ensure that asbestos-containing caulking and glazing are properly removed, handled and disposed.

**Comment 41, Work Area:** This definition is slightly broader than the definition contained in 453 CMR 6.00, and would result in confusion among regulated entities.

**Response:** MassDEP’s proposed definition is slightly broader than the definition contained in 453 CMR 6.00 to enable the Department to regulate any actual or potential threat that may cause a condition of air pollution.

**Comment 42:** Multiple definitions under 310 CMR 7.15(1) lack specific clarity and raise questions and concerns about potential substantive differences between 310 CMR 7.15 and the federal Asbestos NESHAP. Some definitions could exclude certain activities from regulation under 310 CMR 7.15 that are not excluded from the requirements of the federal Asbestos NESHAP, including but not limited to “Facility”, “Emergency Demolition/Renovation Operation”, and “Operation and Maintenance Project or Work”. For example, “Facility” as defined by 310 CMR 7.15(1) could be interpreted to exclude “ship”, which is expressly included in the definition of “Facility” in 40 Code of Federal Regulations (CFR) Part 61, Subpart M. Additionally, EPA has interpreted the federal definition of “Facility” to include multiple residential buildings demolished as part of a single project or “installation” even if the buildings are not located on the same, adjacent or contiguous property. We suggest that MassDEP revise the proposed definitions in 310 CMR 7.15(1) to more closely follow those in the Asbestos NESHAP.

**Response:** MassDEP has revised these definitions in the final regulation to improve clarity and consistency with the Asbestos NESHAP. The term “Facility” has been revised to include ships. However, this definition continues to apply to individual structures, so it is more stringent than the federal definition (which, as noted, applies to multiple buildings that are located on the same, adjacent or contiguous property). The term “Emergency Demolition/Renovation Operation” has been deleted, and a new term, “Emergency Renovation Operation,” has been added to the final regulation instead. The term “Operation and Maintenance Project or Work” has been renamed “Incidental Maintenance Project or Work” and the scope of the activities covered by this term has been clarified to conform to the federal Asbestos NESHAP.

### **310 CMR 7.15(3), Prohibitions**

**Comment 43, 310 CMR 7.15(3)(a), Causing or contributing to a condition of air pollution...:** The phrases “causes or contributes” and “poses an actual or potential threat” are far too vague.

**Response:** These terms have been used in the Massachusetts Air Pollution Control regulations for many years including 310 CMR 7.01, which imposes a blanket prohibition on causing or creating air pollution and 310 CMR 7.15. As early as 1980, 310 CMR 7.15 stated that “No person shall cause suffer allow or permit the spray application of asbestos fiber or the application or handling of said material by means which, in the opinion of the Department, may cause or contribute to a condition of air pollution”. There is a body of case law that interprets these terms. The terms apply to other air pollutants as well as asbestos.

**Comment 44, 310 CMR 7.15(3)(b), No person shall prevent access to asbestos-containing material for subsequent removal:** The federal Asbestos NESHAP (40 CFR 61.145) includes this language in the body of the text. It does not need to be separated.

**Response:** This language has historically been part of 310 CMR 7.15 and is needed to ensure that the regulation is at least as strict as the federal Asbestos NESHAP. MassDEP believes it is important to highlight this as a prohibition to ensure that the regulated community is aware of the requirement.

**Comment 45, 310 CMR 7.15(3)(c), No person shall spray asbestos-containing material on any facility or facility component, and (e), No person shall install or reinstall asbestos-containing insulating material on a facility or facility component...:** These two prohibitions are actually separate standards under the federal Asbestos NESHAP. The NESHAP wording should be used to align the regulations for those contractors who might not be based in Massachusetts.

**Response:** MassDEP did not make this change. MassDEP's asbestos regulations have included a ban on spraying ACM onto any facility or facility component and a ban on installing or reinstalling asbestos-containing insulating material for many years. Historically, 310 CMR 7.15 has been more stringent than the federal Asbestos NESHAP, which allows the spraying and installation of ACM onto facilities/facility components under certain circumstances. MassDEP is keeping its long-standing language regarding spraying and installation in order to maintain the same level of environmental and public health protection that has been provided by its asbestos regulations.

**Comment 46, 310 CMR 7.15(3)(d), Use of Encapsulants:** It is unclear who will be making the determination of damage and how it needs to be documented. Is the contractor allowed to make this decision or does s/he need to hire a Massachusetts licensed asbestos inspector to make the determination?

**Response:** DLS determines who can perform what asbestos assessment activities and what licensing, training and certification is required. See 453 CMR 6.00.

**Comment 47, 310 CMR 7.15(3)(d), Use of Encapsulants:** This prohibition is not an emission standard and falls within the scope of DLS, rather than MassDEP. This prohibition should be deleted from the regulations.

**Response:** Application of an encapsulant to severely damaged or deteriorated asbestos-containing material can cause and/or expedite the delamination of the ACM from the substrate by adding weight to the material and thus can cause a release/threat of release of asbestos into the air, which is under MassDEP's jurisdiction. Therefore, MassDEP did not make this change.

**Comment 48, 310 CMR 7.15(3)(f), Abandonment of inoperable/out-of-service facility components:** The proposed prohibition may have a significant impact on the management of asbestos cement pipe which would no longer be allowed to be left in the ground. Abandoned asbestos cement pipe should not be treated the same as building debris, but should be allowed to be abandoned *in situ*, as is currently the practice.

**Response:** In the final regulation, 310 CMR 7.15(3)(f) states that no person shall abandon or leave inoperable and/or out-of-service asbestos-containing facility components *that are located above ground and/or have been exposed by excavation on site*. Please see response to Comment 27 above.

**Comment 49, 310 CMR 7.15(3)(f), Abandonment of inoperable/out-of-service facility components:** Prohibiting the abandonment of asbestos in place would cause significant hardship to many building owners without appreciable public benefit.

**Response:** This prohibition applies to inoperable and/or out-of-service facility components with Asbestos-Containing Material that is not in good condition, as originally applied and serving the intended purpose for which it was originally installed. This is not allowed under the existing regulation and the amended language in the final regulation provides clarification of that to limit the potential for confusion. There is significant public benefit to ensuring that building owners maintain ACM in good condition to protect workers, tenants and the general public.

**Comment 50, 310 CMR 7.15(3)(f), Abandonment of inoperable/out-of-service facility components:** I cannot find language in 310 CMR 7.15 where this is “otherwise permitted”. “In good condition, as originally applied” isn’t realistic. Even using the word “intact” as defined by OSHA and putting the word “friable” as properly defined in front of “asbestos-containing material” could save this provision. Only school buildings regulated by AHERA must maintain all thermal system insulation ACM and its covering in an intact state and undamaged condition. Isolation of functional space as a “least burdensome option” is available to Local Educational Authorities (LEAs). While OSHA and the EPA, through OSHA’s Worker Protection Rule, require the communication of the hazard and for the presence, location and quantity of ACM or “Presumed ACM,” it does not require the material to be maintained. It is allowable to have damaged, deteriorated, or delaminated ACM in a building, provided the airborne concentration is not above the Permissible Exposure Limit of 0/1 f/cc as an 8 hour time-weighted average. How does this provision [of MassDEP’s draft regulation] pertain to the prevention of pollution or contamination of the atmosphere? This provision has no reasonable likelihood of being achieved, is ripe for selective prosecution, is designed to generate revenue for the commonwealth through administrative penalties and does not take into account the economic impact to the stakeholders. Further, it does not set a timeframe to achieve compliance. This provision falls outside the authority of MassDEP.

**Response:** While MassDEP disagrees with the statement that this provision falls outside its authority, the phrase “as originally applied” has been deleted from paragraph 310 CMR 7.15(3)(g) in the final regulation. 310 CMR 7.15 has never allowed delaminated ACM to remain unaddressed in a building as it is considered Asbestos-Containing Waste Material, and the revised regulation continues this prohibition. There is a significant public benefit to ensuring that building owners maintain ACM in good condition to protect workers, tenants and the general public.

**Comment 51, 310 CMR 7.15(3)(f), Abandonment of inoperable/out-of-service facility components and (g), “...no person shall fail to maintain asbestos-containing material in a facility in good condition:”** The prohibitions imply that abandoned boilers and other components must be abated and removed. Is there a grandfather clause for components removed from service prior to the date of the effectiveness of these changes?

**Response:** There is no “grandfather clause” for components removed from service prior to the effective date of these changes. This was not allowed under the existing regulation, and the final language clarifies that to limit the potential for confusion. In addition, this prohibition applies to inoperable and/or out-of-service asbestos-containing facility components that are not in good condition. It also applies to situations where the Asbestos-Containing Material has deteriorated and is not serving the intended purpose for which it was originally installed.

**Comment 52, 310 CMR 7.15(3)(g), “...no person shall fail to maintain asbestos-containing material in a facility in good condition...:”** Will a contractor be in violation for applying an encapsulant, such as rewettable fiberglass cloth, to repair damaged asbestos-containing material? Such a repair would meet the requirements of “maintained in good condition” but not the requirement for “as originally applied.”

**Response:** A contractor applying rewettable fiberglass cloth to repair damaged ACM and to restore ACM to good condition would not be in violation as long as the work is performed in accordance with the applicable sections of 310 CMR 7.15. The phrase “as originally applied” has been deleted from paragraph 310 CMR 7.15(3)(g) in the final regulation.

**Comment 53, 310 CMR 7.15(3)(g), “...no person shall fail to maintain asbestos-containing material in a facility in good condition...:”** This section would require the removal of nearly all old floor tile that is worn or not in the condition it was in when originally installed. It would also require the removal of many other types of asbestos-containing building material that are perfectly safe. Public schools would be heavily affected by this regulation change.

**Response:** This prohibition is compatible with US EPA’s AHERA regulation under which all schools (public and private) housing grades K-12 are required to maintain ACM in good condition. The term “serving the intended purpose for which it was originally installed” for floor tile would mean that the tile is adhered to the substrate and is providing a functional floor covering. Floor tiles or pieces of broken floor tiles that are no longer attached to the floor would be examples of ACM not being maintained in good condition. The phrase “as originally applied” has been deleted from paragraph 310 CMR 7.15(3)(g) in the final regulation.

**Comment 54, 310 CMR 7.15(3)(h), “false, inaccurate, incomplete, or misleading statements”:** This prohibition is already covered in the Asbestos Notification form since the person signing the application must attest that the information is correct.

**Response:** The language of the final regulation is intended to ensure that all submittals, including Asbestos Notification Forms (ANF-001 form), made to MassDEP are true, accurate and complete. In addition to the ANF form, MassDEP often reviews other submittals such as Waste Shipment Records, bulk and other types of air sampling results, asbestos inspection reports, and proposals for Non-Traditional Asbestos Abatement Work Practice Approvals. This language is intended to cover those submittals as well.

**Comment 55, 310 CMR 7.15(3)(h), “false, inaccurate, incomplete, or misleading statements”:** If a work plan is submitted and then not followed, was the submitted plan “any false, inaccurate, incomplete or misleading statement(s)” or is it an owner or operator ignoring the plan?

**Response:** If a work plan is submitted to MassDEP that does not contain any false, inaccurate, incomplete or misleading statements, the failure to carry out the plan in accordance with 310 CMR 7.15 does not make the document itself false, inaccurate, incomplete or misleading. In such situations, the owner/operator who failed to comply with the asbestos regulations would be cited for the applicable violations.

### **310 CMR 7.15(4), Provisions for Owners of Owner-Occupied, Single-Family Residences**

**Please note:** In the final regulation, MassDEP moved the notification exemption for owners of single-family homes doing abatement work on non-friable materials at their homes to a new paragraph under

*“Notification Requirements” that lists all of the notification exemptions [310 CMR 7.15(6)(f)] and deleted the text of the proposed section 310 CMR 7.15(4). The final regulation also exempts owners of single-family homes doing work on non-friable materials at their homes from the requirements to conduct a pre-construction survey (see 310 CMR 7.15(4)) and to conduct a post-abatement visual survey (see 310 CMR 7.15(8)).*

**Comment 56, 310 CMR 7.15(4):** The federal Asbestos NESHAP, for which MassDEP has been delegated implementation and enforcement authority, does not include residential buildings having four or fewer dwelling units. Currently MassDEP waives the notification fee for owner-occupied residential properties with four or fewer units but extends the emission standards to all residential properties. DLS defines a facility as “Any private or public building or structure including but not limited to those used for institutional, residential, (including single family homes), commercial or industrial purposes and vessels while ashore or in drydock”.

**Response:** EPA allows MassDEP to adopt more stringent and broader rules than the federal Asbestos NESHAP. In 1986, MassDEP adopted a major revision of 310 CMR 7.15 to implement the 1984 federal NESHAP regulations. The original asbestos regulations (promulgated by the Massachusetts Department of Public Health) covered all structures (including residential) and MassDEP did not change this approach when it revised its regulations in 1986. MassDEP has maintained this requirement in its asbestos regulation. The final regulation has been modified to be consistent with DLS’ definition of “facility.”

**Comment 57, 310 CMR 7.15(4):** Why was the definition of “owner occupied” reduced from “less than four family” to “single family?”

**Response:** MassDEP’s asbestos regulation has covered abatements at all residences since its inception. The term “Owner-Occupied, Single-Family Residence” is a new term, and MassDEP will rely on the common definition of “owner-occupied” in implementing the final regulation. Please note that, while work on certain non-friable material at single-family residences by the owner of the residence has been exempted from notification, the exemption only applies if the abatement activity does not cause the non-friable material to become friable, and it only applies to activities which are not required to be conducted by an asbestos contractor who holds a DLS license.

**Comment 58, 310 CMR 7.15(4):** The word “homeowner” is not defined. If a single family residence has a mortgage, is the bank a “homeowner” or a “lender?” Why was the term changed from owner/operator? In this section, MassDEP places the burden on the layman homeowner rather than the licensed asbestos abatement contractor. This means administrative penalties could only be assessed to the homeowner unlike the owner or operator standard under the federal Asbestos NESHAP.

**Response:** In the final regulation (310 CMR 7.15(6)(f)3.), the notification exemption is available for owners of single-family residences who are conducting their own asbestos abatement work at their residences. This term does not include a mortgage holder unless the mortgage holder has foreclosed on the property, and the property was offered as collateral for the loan.

**Comment 59, 310 CMR 7.15(4):** If a homeowner does his or her own abatement, he or she will not have to wait 10 days to do the work, but must continue to live in the house for the next six months. If a homeowner hires a professional abatement contractor, how does this notification exemption apply? Can the professional contractor take advantage of the other notification exemptions for removal of asbestos-containing asphaltic roofing and siding material, window painting and repair work that will disturb asbestos-containing glazing and caulking compounds, exterior asbestos-containing cementitious

shingles, sidings and panels (up to 100 SF), and asbestos operations and maintenance projects (up to 100 SF of floor and 32 SF of sheetrock)?

**Response:** This notification exemption will apply to owners of single-family residences who conduct the asbestos abatement work at their residences themselves, and does not apply to the contractors they hire. The exemption is limited to work involving the specific types of non-friable ACM that are specified in the regulation. Please note that the notification exemptions that were proposed for abatements involving specific types of non-friable ACM (proposed in 310 CMR 7.15(7)(b)1 and (b)2) have been removed from the final regulation. In the final regulation, notifications will *not* be required by either owners/operators or contractors for projects involving less than 100 square feet of exterior asbestos-containing cementitious shingles (310 CMR 7.15(6)(f)1.) or sidings and panels or for projects that qualify as Incidental Maintenance Projects or Work (310 CMR 7.15(6)(f)2.).

**Comment 60, 310 CMR 7.15(4):** This homeowner provision should be removed as it is DLS who has authority in this regard pursuant to MGL c. 149, §6C.

**Response:** MassDEP agrees and has deleted most of the proposed section 310 CMR 7.15(4). In addition, the notification exemptions for limited abatement work involving certain types of non-friable ACM have moved to a new paragraph for notification exemptions under “Notification Requirements” at 310 CMR 7.15(6)(f). The notification exemption is only available for homeowners who are allowed by DLS to do work involving asbestos themselves. Please see response to Comment 1 in the General Comments section regarding DLS and MassDEP authority.

**Comment 61, 310 CMR 7.15(4):** The exemption for notification by homeowners will mean that asbestos abatement contractors will lose a portion of their residential business that they cannot afford to lose at this time.

**Response:** In the final regulation, MassDEP retained a limited homeowner notification exemption for owners who occupy and perform certain non-friable asbestos abatement activities at their own single family residences. MassDEP believes that much of the removal work exempted from notification by this section is currently being conducted by homeowners (rather than licensed abatement contractors) under the existing regulation and therefore, the impact on the amount of work going to contractors is expected to be small.

**Comment 62, 310 CMR 7.15(4)(a):** Will homeowners be allowed to inspect their own homes to determine whether their activities will disturb ACM, and if so whether the material is friable or non-friable? How does this requirement relate to the notification exemption for work on cementitious shingles, siding, or panels (310 CMR 7.15(4)(c)) or demolition or renovation involving abatement of other non-friable ACM (310 CMR 7.15(4)(d)) and how homeowners would recognize “other non-friable ACM”?

**Response:** In the final regulation, homeowners who are performing work on non-friable materials in their own single-family homes are not required to have their homes inspected for the conditions noted above. MassDEP has removed sections 310 CMR 7.15(4)(a), 310 CMR 7.15(4)(c) and 310 CMR 7.15(4)(d) from the final regulation. Homeowners would also be exempt from notification for projects that meet the criteria for Incidental Maintenance Projects, and for projects involving 100 square feet or less of exterior asbestos-containing cementitious shingles, sidings and panels.

**Comment 63, 310 CMR 7.15(4)(b),(c), and (d):** These sections advise owners of single family residences that they may use an abatement contractor, and requires compliance with 310 CMR 7.15, making no mention of 453 CMR 6.00. DLS's regulations [453 CMR 6.14(2) and (3)] provide that homeowners are required to have a licensed Asbestos Supervisor on site and use properly trained asbestos workers. By omitting this critical cross reference, work on single family homes could be subject to fines by DLS even if the work complies with the proposed DEP regulation. More importantly, it may result in unsafe removal of asbestos by untrained individuals.

**Response:** MassDEP agrees and has deleted these provisions from the final regulation.

**Comment 64, 310 CMR 7.15(4)(c):** This section of the final regulation does not have a provision for what happens if the material becomes friable during the process. Using the new definition of "friable," if a shingle is dropped, it would shatter.

**Response:** If a homeowner causes a non-friable material to become friable, a notification must be filed with MassDEP, and DLS's requirements must be complied with.

**Comment 65, 310 CMR 7.15(4)(d):** How can the provision that an owner must occupy a home for six months after they do an asbestos removal be enforced?

**Response:** MassDEP agrees and this provision has been removed from the final regulations.

**Comment 66, 310 CMR 7.15(4)(e):** By exempting homeowners from notification when they perform these abatement activities, there is no way to track whether the requirements of the regulation are being met.

**Response:** MassDEP will continue to respond to complaints of improper asbestos abatement activity and intends to partner with local officials to stay informed of any issues regarding work done by homeowners who perform the limited allowable non-friable asbestos abatement activities at their own single-family residences.

### **310 CMR 7.15(5), Inspection Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renamed and renumbered and now appears in the final regulation as 310 CMR 7.15(4): Survey Requirements.*

**Comment 67, 310 CMR 7.15(5)(a):** The reference to specific federal regulations in this paragraph and specifically the reference to 40 CFR 763.87 will prohibit the use of laboratories that hold Class B Certifications, which authorize them to use PLM for the analysis of bulk asbestos samples originating in all facilities and locations subject to the requirements of 453 CMR 6.00, except school buildings and other facilities subject to the requirements of AHERA. MassDEP intended to propose regulatory requirements for a thorough survey to determine the presence of ACM prior to renovation or demolition. AHERA inspection protocols are not considered thorough. The commenter proposed alternative language.

**Response:** MassDEP agrees and has removed the references to 40 CFR 763.85, 40 CFR 763.86 and 40 CFR 763.87 in the final regulation because they were not necessary to establish the requirements for the surveys required by this section. As noted in the response to Comment 31 above, the requirement for a

pre-demolition or renovation survey is being added to 310 CMR 7.15 for consistency with the survey requirement in the federal Asbestos NESHAP.

**Comment 68, 310 CMR 7.15(5)(a):** Once inspections are explicitly added to the regulation, they will become subject to 310 CMR 5.00, Administrative Penalty. Will individual inspectors who miss ACM in an inspection be subject to administrative penalties, or would the owner or operator of the demolition or renovation activity be held responsible? If inspectors are the ones assessed the penalty, it seems they would be taking on all of the risk and receiving none of the reward. Enforcement of this provision might result in a significant reduction in asbestos inspectors performing needed NESHAP inspections.

The commenter also proposed detailed alternative language that would place responsibility for a thorough inspection with the owner or operator of demolition or renovation activities, and would also describe in detail the specific information and data sources that should be addressed in an inspection, as well as detailed sampling requirements and procedures for inspecting specific types of common asbestos-containing material. The commenter notes that this proposal could be established in guidance rather than in regulation.

**Response:** MassDEP did not make changes to the final regulation regarding the format and content of the survey. With regard to the questions concerning penalties and those responsible under the scenarios raised, under 310 CMR 7.15, the owner/operator of a facility is responsible for engaging a DLS-licensed inspector to meet the survey requirements, which are found in 310 CMR 7.15(4) in the final regulation. In a situation where it turns out that a survey did not identify all of the ACM that was present in a facility, the specific facts of the situation would determine whether or not enforcement might be taken.

**Comment 69, 310 CMR 7.15(5)(d):** Section (5)(d) requires that the owner/operator maintain a copy of the written asbestos inspection report “available at the facility” for review by the Department. The commenter has many locations that are unstaffed and impractical for storage of such inspection reports and recommends that Section (5)(d) be changed as follows: “the owner/operator shall maintain a copy of the written asbestos inspection report and shall furnish the report to the Department upon request.”

**Response:** MassDEP agrees and has revised this section to allow asbestos inspection reports for unstaffed facilities to be maintained at the owner/operator’s regular place of business.

### **310 CMR 7.15(6), Removal Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renumbered and now appears in the final regulation as 310 CMR 7.15(5): Removal Requirements.*

**Comment 70, 310 CMR 7.15(6)(b):** Will MassDEP interpret this paragraph in such a way that Sections 7.15(10), 7.15(11), 7.15(12), and 7.15(13) do not apply if the ACM is friable or will be rendered friable by the demolition or renovation operations? If this is not MassDEP’s intention, MassDEP should consider adding the following language to 310 CMR 7.15(10), (11), (12) and (13): “For activities that disturb friable ACM, discharge no visible emissions to the outside air during the collection, processing, packaging, or transporting of any asbestos-containing waste.”

**Response:** MassDEP agrees. MassDEP did not intend for 310 CMR 7.15(6)(b) to apply to the specific materials described in sections 310 CMR 7.15(10)-(13). The final regulation [310 CMR 7.15(9)(a), 310

CMR 7.15(10)(j), 310 CMR 7.15(11)(q), and 310 CMR 7.15(12)(i)] includes the language suggested by this commenter. MassDEP included the word “material” at the end of the suggested phrase to be consistent with definitions in 310 CMR 7.15 and the federal Asbestos NESHAP. MassDEP is also adding “ACM” to clarify that activities involving either ACM or ACWM should not cause visible emissions to the outside air.

**Comment 71, 310 CMR 7.15(6)(b):** A commenter suggested adding the language in italics: “remove or encapsulate any friable ACM and any presumed or assumed ACM *or friable ACM* that has been *or will be* exposed *or created* as a result of any demolition/renovation, in accordance with 310 CMR 7.15(8).”

**Response:** The phrase “or friable ACM” already appears in the text of the section that addresses Removal Requirements. In the final regulation [310 CMR 7.15(5)(b)], MassDEP changed the language to include the phrase “or will be exposed or created.”

### **310 CMR 7.15(7), Notification Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renumbered and now appears in the final regulation as 310 CMR 7.15(6): Notification Requirements.*

**Comment 72, 310 CMR 7.15(7):** There are two notification periods within Massachusetts: a 10 working day MassDEP period and a 10 calendar day DLS period. They should be brought into alignment.

**Response:** MassDEP did not make this change. EPA’s federal Asbestos NESHAP requires notification to be made at least 10 working days in advance, and MassDEP’s regulation must be at least as stringent to fulfill its delegation obligation.

**Comment 73, 310 CMR 7.15(7):** Will notifications for each project be required for asbestos project monitoring services (air sample analysis, monitoring and bulk sampling)? If so, will emergency waivers be available? How quickly will they be turned around?

**Response:** No notification will be required for asbestos project monitoring services under the final regulation. MassDEP removed the phrase “...and any associated activity including but not limited to inspections, analysis and monitoring” from the definition of “Asbestos Abatement Activity.”

**Comment 74, 310 CMR 7.15(7)(b)(1) and (b)(2), Notification Exemptions for the Removal of Asbestos-Containing Asphaltic Roofing and Siding Materials and Window Painting and/or Repair Work that Results in the Disturbance of Asbestos-Containing Glazing and Caulking Compounds:** These proposed notification exemptions could exclude projects that would otherwise be subject to the notification requirement under the federal Asbestos NESHAP. Abatement projects involving these materials could be exempt from notification under 7.15(5)(b)(1) and (b)(2), but notification would still be required under the federal Asbestos NESHAP depending on a variety of factual circumstances, including the presence of certain types of ACM. These sections should be revised to be consistent with the notification requirements of the Asbestos NESHAP and to not exclude material which meets the federal definition of Regulated Asbestos-Containing Material from notification requirements. Otherwise, exemptions from notification provided by 310 CMR 7.15(7)(b)(1) and (b)(2) could pose a risk of liability for parties involved for non-compliance with the federal asbestos requirements.

**Response:** MassDEP agrees and did not include the notification exemptions proposed in sections 310 CMR 7.15(b)(1) and (b)(2) of the draft regulation in the final regulation.

**Comment 75, 310 CMR 7.15(7)(b)1. and 2.:** If DLS still requires notification for glazing, caulking, siding, and roofing work, how do we notify them and not MassDEP?

**Response:** MassDEP and DLS accept notifications using a common form (ANF-001 form) and filing system. Therefore, when one agency is notified, the other agency is also notified even though only one agency requires notification. Please note that, the notification exemptions for glazing, caulking, and asphaltic siding and roofing work proposed in the draft regulation have not been included in the final regulation.

**Comment 76, 310 CMR 7.15(7)(b)(4), Notification Exemption for Asbestos Operation and Maintenance Projects:** Projects involving less than three square or three linear feet of any material should be exempt from notification. This would be similar to the DLS regulations and lessen the burden for notification review by the DEP.

**Response:** “Operation and Maintenance Project or Work” has been re-titled “Incidental Maintenance Work” to eliminate confusion between the terms as used in the proposed 310 CMR 7.15 and in the DLS regulations. MassDEP did not change the threshold amount of material for these projects. Please see the response to Comment 34.

**Comment 77, 310 CMR 7.15(7)(b)(7), Waiver Requirements:** The specified criteria for which a waiver of the notification requirements may be granted under 310 CMR 7.15(7)(b)(7) are broader than what the Asbestos NESHAP allows for less-than-10-day notifications. The Department would be allowed to approve a waiver in “emergency or unforeseen circumstances, as defined by the Department,” but the revision does not establish criteria for the Department to make this determination. Waivers granted under this section for circumstances in which such waivers are not allowed by the federal Asbestos NESHAP could present the recipient of the waiver with potential unanticipated liability under the federal asbestos rules. We suggest that MassDEP revise the proposed language of this section to be consistent with the federal Asbestos NESHAP certain specified factual circumstances.

**Response:** MassDEP agrees and the applicable section in the final regulation [310 CMR 7.15(6)(i)] was revised to limit waivers from the requirement to notify MassDEP of abatements at least 10 working days in advance of the start of the work to only those circumstances in which the federal Asbestos NESHAP allows less-than-10-day notifications: emergency renovations [40 CFR 61.145(a)(3)] and government-ordered demolitions [40 CFR 61.145(a)(4)(iv)].

**Comment 78, 310 CMR 7.15(7)(b)(7):** If asbestos inspections and project monitoring are included in the definition of Asbestos Abatement, then a 10-day notification would be required for inspections. Will emergency waivers be available for these activities? How quickly would MassDEP turn around waiver requests?

**Response:** Asbestos inspections and project monitoring have been removed from the definition of Asbestos Abatement Activity, and are not subject to the requirement to notify MassDEP and DLS ten days in advance of starting these tasks.

**Comment 79, 310 CMR 7.15(7)(b)(7)c., Waiver Requirements:** As drafted, it appears that consultants will no longer be able to request waivers for their clients. Our clients typically prefer that a consultant contact MassDEP, not the abatement contractor.

**Response:** Neither the draft nor the final regulation limits the entities who can request a waiver of the advance notification period.

**Comment 80, 310 CMR 7.15(7)(e)4, Notification Exemption for Asbestos Operations and Maintenance Projects or Work:** 453 CMR 6.03(9), (10) and 6.13(2)(c) require notification to the state of projects that will disturb a minimum of 160 square ft/260 linear ft or 35 cubic yards of asbestos-containing material. DEP's proposed regulation sets a much lower threshold of 100 square feet for such work. The conflict would result in a contractor being fined by MassDEP where it is in compliance with the DLS regulation.

**Response:** Contractors must meet the requirements of both MassDEP and DLS regulations or be potentially subject to enforcement. Since MassDEP's on-line notification system serves both agencies, a notification form should be filed when either agency requires notification. Please see response to Comment 34.

### **310 CMR 7.15(8), Specific Asbestos Abatement Work Practice Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renamed and renumbered and now appears in the final regulation as 310 CMR 7.15(7): Specific Asbestos Abatement Work Practice Standards.*

**Comment 81, 310 CMR 7.15(8):** The work practices are well-thought out and quite helpful. I welcome these additions to the standard.

**Response:** Thank you for your comment.

**Comment 82, 310 CMR 7.15(8):** It is redundant and unnecessary for the DEP to require specific asbestos removal work practices for projects in the Commonwealth. The genesis of current asbestos work practices is federal OSHA requirements to promote worker safety. EPA has complimentary but not overlapping regulations which protect the environment. It seems to me that DEP is encroaching on the DLS mission to protect workers. Why have two state agencies regulating and enforcing the same activities? This is a nightmare scenario for small business stakeholders and probably bad for the taxpayer as well.

Additionally, in virtually copying and pasting the work practices of 453 CMR 6.14 the department is repeating and compounding the mistakes made decades ago when those regulations were first formed. They may have been written by people who had little or no practical field experience in abatement and are too rigid to be applied on many projects. Some examples of this are as follows:

1) "Floor coverings shall consist of.....with the edges turned up to cover at least the bottom 12 inches of the adjoining wall." This is an idealized situation which works well in a structure such as an office building. It won't work in a boiler room with a dirty field stone foundation. It also won't work when constructing a small enclosure inside a larger room like you might do to remove asbestos from a small boiler.

2) "following asbestos abatement activity, all contaminated surfaces shall be decontaminated.....An inch of soil shall be removed from dirt floors." This regulation doesn't take into account that "contaminated soil" comes in many forms. Asbestos contamination on the surface of hard packed dirt can be easily removed using standard techniques and High Efficiency Particulate Air (HEPA) filtration vacuuming. Removing asbestos contamination from the sandy soil on a Cape Cod property might require you to go deeper than one inch. Given that even a small amount of soil can weigh thousands of pounds and cost thousands of dollars to dispose of, this level of specificity is unreasonable.

If these new DEP work practice regulations are implemented, enforcement will initially be high and to the letter. DEP can expect a blizzard of waiver requests. I personally will request a waiver of the double ceiling poly on most of my projects since many involve boiler room work in residences where a real fire and safety hazard exists. I can only hope that the waiver process will be as smooth and efficient as the current notification process is.

**Response:** MassDEP disagrees with the statement that it is redundant and unnecessary for the Department to require specific asbestos removal work practices for projects in the Commonwealth. MassDEP's authority and that of DLS are derived from separate state and federal statutes. In addition, EPA delegated authority to MassDEP for implementation of the federal Asbestos NESHAP in 1976 and updated this delegation subsequently due to changes in the federal Asbestos NESHAP and/or MassDEP's asbestos regulations in 1982, 1983, and 1992. While it may be convenient to describe the authorities of MassDEP and DLS in "inside" vs. "outside" terms, the federal Asbestos NESHAP also establishes work practice requirements for handling asbestos inside facilities that MassDEP must implement under the terms of its delegation and that are designed to protect the public health and environment. The final regulation removed language solely aimed at worker protection and allows the option of cleaning and decontaminating work area ceilings in lieu of covering them with poly sheeting. MassDEP and DLS are developing a Memorandum of Agreement that describes the agencies' complimentary roles and responsibilities, and is designed to promote an integrated Commonwealth asbestos management program that will further the protection of worker safety, public health, public safety, and the environment.

**Comment 83, 310 CMR 7.15(8):** Language should be added to the introductory paragraph for this section to establish a general work practice standard: "No visible emissions: discharge no visible emissions to the outside air during the collection, processing, packaging, or transporting of any asbestos-containing waste."

**Response:** This general standard was added to the final regulation [see 310 CMR 7.15(7)(a)], but was revised to use the term "asbestos-containing waste material" for consistency with the terms used in 310 CMR 7.15 and the federal Asbestos NESHAP. MassDEP is also adding "ACM" to clarify that activities involving either ACM or ACWM should not cause visible emissions to the outside air.

**Comment 84, 310 CMR 7.15(8)(b), Work Area Preparation Requirements:** The requirements set forth in this section mirror those set forth in 453 CMR 6.14(4)(a) but exclude a critical component – the requirement of a sign in/sign out log for persons entering and leaving the abatement area. A contractor who does not employ a sign in/sign out log would be in compliance with the proposed MassDEP regulation but would be subject to a civil citation and penalty by DLS.

**Response:** MassDEP is not including the specific requirement for a sign in/sign out log in abatement work areas, but recognizes that this is a DLS requirement. This requirement is intended to protect the safety of workers in the abatement area, and is therefore not within MassDEP's purview. This is an example of a requirement that is important to one agency's mission but not the other. To ensure that people performing abatements understand that MassDEP and DLS regulations differ in key respects, MassDEP has added a provision in the Applicability section of the regulation [310 CMR 7.15(2)], directing readers of this regulation to other applicable regulations (including those promulgated by DLS and EPA). In addition, MassDEP plans to work with DLS to ensure that the training materials provided by Massachusetts-recognized trainers reflect the requirements of both agencies.

**Comment 85, 310 CMR 7.15(8)(b)(7), Covering of Floor, Ceiling and Wall Surfaces:** This section adds a new requirement to cover ceiling surfaces in the abatement area, but DLS does not require covering of the ceiling in its regulation. Covering ceilings in the abatement area may be difficult to implement in the field and seems excessive.

**Response:** The final regulation (310 CMR 7.15(7)(c)5.) allows the option of cleaning and decontaminating work area ceilings in lieu of covering them with poly sheeting. This section has been modified to allow a ceiling surface in an abatement area to either be covered before starting the abatement or to be cleaned and decontaminated at the end of the abatement. This should provide flexibility for abatements in buildings with very high ceilings where covering is not practical, but should also ensure that any asbestos fibers that are carried to a ceiling are removed before the abatement work can be considered to be complete. Please see the response to Comment 1 about differences between MassDEP and DLS regulations.

**Comment 86, 310 CMR 7.15(8)(c), Equipment Decontamination Facility Requirements:** This regulation mirrors 453 CMR 6.14(4)(b) except for the critical component that warm water be supplied to the decontamination facility and that workers must use it to decontaminate themselves. A contractor who complies with the proposed DEP regulation would be subject to a fine by DLS, and more importantly, could endanger his workers by possible exclusion of this critical safety measure.

**Response:** The requirements that the decontamination facility be supplied with warm water and that warm water be used for worker decontamination are designed to protect worker safety, but do not relate to preventing visible emissions outside the building in which the abatement takes place. Therefore, MassDEP has not included these requirements in 310 CMR 7.15 although they remain requirements of DLS regulations. Please see the response to Comment 1 above regarding differences between MassDEP and DLS regulations.

**Comment 87, 310 CMR 7.15(8)(c), Decontamination Facility Requirements:** These requirements address the health and safety of asbestos abatement workers. This would appear to fall outside of MassDEP's regulatory authority to protect the general public and the environment. These issues are extensively addressed in both OSHA's and DLS's standards. These agencies have the regulatory mandate to protect workers.

**Response:** MassDEP has deleted the first three requirements proposed for this paragraph, as we agree that they focus more on worker protection. However, the requirements for proper decontamination of equipment remain [see 310 CMR 7.15(7)(d)], since contaminated equipment can be a source of asbestos emissions into outside air as equipment is moved from one job site to another.

**Comment 88, 310 CMR 7.15(8)(d), Requirements for Work Area Ventilation Systems:** This section of the regulation will require audible alarms on all ventilation equipment. For an asbestos abatement contractor to replace their entire equipment stock at one time would be an economic hardship. MassDEP should phase in this requirement over a 2-3 year period. This would reduce the hardship by allowing contractors to spread the expense over the phase in period.

**Response:** MassDEP agrees and revised the final regulation to provide a three year phase-in period to allow contractors adequate time to retrofit existing HEPA equipment or obtain new units that are equipped with audible alarms (see 310 CMR 7.15(7)(e)3.).

**Comment 89, 310 CMR 7.15(8)(d), Requirements for Work Area Ventilation System:** Will new HEPA filters be required for each project and has the Department considered requiring dioctyl phthalate (DOP) testing of HEPA filtered systems?

**Response:** The final regulation does not specify that new HEPA filters must be used for each project or require dioctyl phthalate testing of the work area ventilation system, but requires that systems meet the performance standards specified in 310 CMR 7.15 (7)(e).

**Comment 90, 310 CMR 7.15(8)(d)(1), Requirements for Work Area Ventilation System:** This paragraph states that “Compliance with 453 CMR 6.14(4)(c ) is not required for asbestos abatement activities where glovebags are the sole means of abatement removal or repair.” DLS’s regulation [453 CMR 6.14(4)(c)] provides that the use of work area ventilation is optional when glove bags are used as the sole means of asbestos removal/repair. DEP’s language is not necessary, given the provision in 453 CMR 6.14(4)(c).

**Response:** The reference to DLS’s regulation has been deleted and replaced with a reference to 310 CMR 7.15(7)(e), to clarify that, where glovebags are used as the sole means of abatement removal or repair, a work area ventilation system is not needed.

**Comment 91, 310 CMR 7.15(8)(e), Removal and Clean Up Requirements:** These provisions are inconsistent with DLS’s “Work procedures” for cleanup set forth in 453 CMR 6.14(4)(d).

**Response:** Please see response to Comment 1 above that discusses how MassDEP and DLS plan to work together to implement requirements that are included in the regulations of one of the agencies but not the other.

**Comment 92, 310 CMR 7.15(8)(e)4., Clean Up:** Is the removal of an inch of soil required regardless of the condition of the asbestos-containing materials in the area with a dirt floor?

**Response:** This language, which has been retained in the final regulation (see 310 CMR 7.15(7)(f)4.), is consistent with the DLS regulation that requires the removal of an inch of soil in a work area with a dirt floor regardless of the condition of the asbestos-containing materials.

### **310 CMR 7.15(9), Clearance Monitoring Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renamed and renumbered and now appears in the final regulation as 310 CMR 7.15(8): Visual Inspection Requirements.*

**Comment 93, 310 CMR 7.15(9)(a), Visual Inspections:** This section refers to the conduct of visual inspections at the conclusion of abatement, stating that such inspections will be conducted in accordance with 310 CMR 7.15. Such inspections are prescribed by DLS regulation 453 CMR 6.14(5). The proposed DEP regulation could result in a fine to a contractor who complied with the DLS regulation.

**Response:** MassDEP has deleted the Clearance Air Monitoring requirements from 310 CMR 7.15. The title of this section has been changed to “Visual Inspection Requirements,” and responsibility for ensuring that visual inspections are conducted at the end of an asbestos abatement activity is assigned to the facility owner/operator.

**Comment 94, 310 CMR 7.15(9):** The requirement that a Project Monitor not be an employee of the contractor would appear to be in conflict with the requirement that collected clearance air samples is now an asbestos abatement activity.

**Response:** MassDEP agrees and has removed the phrase "...and any associated activity including but not limited to inspections, analysis and monitoring" from the definition of "Asbestos Abatement Activity" in the final regulation.

### **310 CMR 7.15(11), (12), (13) and (14), Requirements for specific types of building materials**

**Please note:** *These section of the proposed asbestos regulation has been renumbered and now appear in the final regulation as 310 CMR 7.15(10), (11), (12), and (13).*

**Comment 95, 310 CMR 7.15(11), (12), (13) and (14):** Many of the work practice requirements set forth in these sections complement the requirements set forth in 453 CMR 6.13 and 6.14. However, because the proposed DEP regulations prescribe additional requirements, the regulations are inconsistent with the DLS requirements and could cause confusion among the regulated community.

**Response:** Please see response to Comment 1 which discusses how MassDEP and DLS plan to work together to implement requirements that are included in the regulations of one of the agencies but not the other.

**Comment 96, 310 CMR 7.15(11), (12), (13) and (14):** The emission control and waste disposal requirements for the specific types of ACM addressed by these sections could be implemented in a way that would be less stringent and possibly less protective of human health and the environment than the analogous Asbestos NESHAP provisions would be for the same types of ACM or activities. Under the federal Asbestos NESHAP, important applicability determinations depend upon, among other things, whether and in what quantities RACM may be involved in a potentially regulated operation. RACM includes friable ACM, but may also include other kinds of ACM depending on the type of such material, its condition, and the methods by which it will be removed. For example, ACM asphalt roofing products that use other bituminous or resinous binders and are in good condition are typically classified as a "Category I non-friable material" and are not considered to be RACM. But, the same type of material, if subjected to sanding, grinding, cutting, or abrading during the course of a demolition or renovation project, would be considered to be RACM, and in sufficient quantities, could trigger the full panoply of Asbestos NESHAP requirements addressing notification, emission control, and waste disposal.

The proposed revisions in these sections do not distinguish between emission control and waste disposal requirements applicable to friable vs. non-friable ACM. It is possible that the same ACM that would be classified as RACM under the Asbestos NESHAP (and thereby subject to the wetting standard) could under 310 CMR 7.15 come out from under the wetting requirement completely in circumstances where such wetting would, without further qualification, "create safety hazards" [for example, see 310 CMR 7.15(11)(e) and 7. 15(11)(h)].

**Response:** MassDEP has revised the language of these sections to address these concerns. In the final regulation, the proposed exemptions for asbestos-containing asphalt roofing materials and asbestos-containing gypsum wallboard and joint compound were removed, so that these materials are subject to regulation at least as stringent as that required by the federal Asbestos NESHAP.

**Comment 97, 310 CMR 7.15(12), Requirements for Window Painting and/or Repair Work that Result in the Disturbance of Asbestos-Containing Glazing and/or Caulking Compounds:** Will these requirements apply to removal of window caulking and glazing prior to removal for demolition or replacement?

**Response:** Yes, the requirements would apply to removal of asbestos-containing window caulking and/or glazing prior to either demolition or replacement.

**Comment 98, 310 CMR 7.15(14) (d), Work Practice Requirements for Asbestos Operation and Maintenance Projects or Work, Requirements for the Removal of Asbestos Floor Tile, Sheet Floor Coverings as Operations and Maintenance Projects or Work:** The procedures outlined in this section appear to indicate that asbestos-containing floor tile can be handled as a non-friable material and removed without constructing a full containment. The procedures specifically state that asbestos-containing floor tile may be hit with a hammer to remove it from the floor. This appears to contradict the regulation's definition of friable, which states that using hand tools makes a non-friable material become friable

**Response:** The regulation [310 CMR 7.15(13)] does not allow the asbestos-containing floor tile to be struck with a hammer and specifies the use of methods that minimize breakage. The regulation requires the tiles to be wetted and removed individually, but it allows the *removal tool*, not the tile, to be struck with a hammer to facilitate release of the tile from the substrate.

**Comment 99, 310 CMR 7.15(14) (d), Work Practice Requirements for Asbestos Operation and Maintenance Projects or Work:** What are the requirements for abating asbestos-containing materials that are not specifically identified in the definition of "Operation and Maintenance Projects or Work"?

**Response:** Any asbestos abatement activity that does not meet the conditions needed to qualify as Incidental Maintenance Project Work is subject to all the requirements of 310 CMR 7.15.

Incidental Maintenance Project Work (proposed as "Operation and Maintenance Project Work") is limited to work involving 100 square feet or less of asbestos-containing floor tile and associated mastics and/or 32 square feet or less of asbestos-containing gypsum wallboard and/or joint compound. General work practice requirements as well as material-specific work practice requirements are specified in 310 CMR 7.15(13) for projects involving these materials in quantities that do not exceed the applicable quantity thresholds.

**Comment 100, 310 CMR 7.15(14) (d), Work Practice Requirements for Asbestos Operation and Maintenance Projects or Work, Requirements for the Removal of Asbestos Floor Tile, Sheet Floor Coverings as Operations and Maintenance Projects or Work:** The procedures outlined in this section appear to indicate that asbestos-containing sheet flooring can be handled as a non-friable material and removed without constructing a full containment. Since the asbestos is generally contained in the paper backing layer, not the vinyl top layer of sheet floor, it should not be considered a non-friable material.

**Response:** MassDEP agrees and has removed asbestos-containing sheet floor covering from the list of materials for which asbestos abatement work might qualify as Incidental Maintenance Project Work under 310 CMR 7.15(13).

### **310 CMR 7.15(15), Alternative Asbestos Abatement Work Practice Approvals**

**Please note:** *This section of the proposed asbestos regulation has been renamed and renumbered and now appears in the final regulation as 310 CMR 7.15(14): Non-Traditional Asbestos Abatement Work Practice Approvals.*

**Comment 101, 310 CMR 7.15(15):** This section would establish a state requirement that is not as stringent as the federal Asbestos NESHAP, with which regulated entities must comply regardless of a MassDEP approval. The Asbestos NESHAP allows specific deviations from the normal wetting or notification requirements of the rule if certain factual circumstances are met (e.g., freezing temperatures or ordered demolitions of structurally unsound buildings). In addition, wetting may not be required in cases where specific circumstances exist regarding equipment damage or safety hazards [see 40 C.F.R. §§ 61.145(c)(3)(i) and 61.145(c)(3)(ii)]. These deviations are granted on a case-specific basis according to criteria set forth in the Asbestos NESHAP and are not open-ended exemptions. Under such specific situations, the Asbestos NESHAP regulation and Massachusetts' NESHAP Delegation provide MassDEP with adequate authority to grant some flexibility to a regulated entity regarding standards which may otherwise be required under ordinary circumstances.

However, the proposed language of 310 CMR 7.15(15) appears to establish a far broader range of MassDEP discretion and to confer much greater authority for approving alternatives to compliance than the limited flexibility provided by the Asbestos NESHAP under specific factual circumstances. This portion of the proposed revision is drafted more like the alternative emission control or waste disposal standards EPA is authorized to approve under 40 C.F.R. §§61.150(a)(4) and 61.149(c)(2), but which under 40 C.F.R. §61.157, may not be transferred to a state in an Asbestos NESHAP delegation of authority. These provisions may cause confusion for members of the regulated community about potential liabilities raised by unintended noncompliance with federal Asbestos NESHAP requirements and about the impact such provisions could have on a duly-delegated Asbestos NESHAP program authorized by EPA. MassDEP should revise the proposed language to limit eligibility for approvals under 310 CMR 7.15(15), consistent with case-specific criteria established by the Asbestos NESHAP requirements.

**Response:** MassDEP has revised the relevant portion of its regulation (see 310 CMR 7.15(14), which is now titled "Non-Traditional Asbestos Abatement Work Practice Approvals") to limit the range of situations in which the agency will entertain applications for the use of non-traditional asbestos abatement work practices to those:

- Where a facility has been ordered by a state or local government agency to be demolished because the facility is structurally unsound and in danger of imminent collapse;
- Where ACM or ACWM was not accessible for testing and was therefore not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed;
- Where asbestos abatement activity is conducted as part of an Emergency Renovation Operation;
- Where asbestos abatement activity is conducted to clean up and decontaminate a facility or portion of a facility as a result of asbestos abatement activities not conducted in compliance

with 310 CMR 7.15 or ACM deterioration that, if not immediately attended to, presents a safety or public health hazard;

- Where wetting would unavoidably damage equipment or present a safety hazard at a facility that is being renovated; and
- That involve bulk loading of ACM and/or ACWM.

The final regulation [310 CMR 7.15(14)(b)] clarifies that any Non-Traditional Asbestos Abatement Approval granted by MassDEP applies only to a specific facility or facility component and is non-transferable. MassDEP has also added the federal Asbestos NESHAPs definitions of “demolition,” “renovation” and “emergency renovation operation” to clarify the scope of the projects eligible for application for a non-traditional asbestos abatement approval.

MassDEP has also established performance standards for abatements that proceed under Non-Traditional Asbestos Abatement Approvals [see 310 CMR 7.15(14)(c)], to clarify that: non-traditional work practices will only be approved where MassDEP is persuaded that the allowed activities will not result in a discharge of visible emissions to the outside air; ACM and ACWM will be kept adequately wet until it is placed and sealed into containers as required by the provisions of 310 CMR 7.15; and the activities covered by the approval will be consistent with applicable requirements of the federal Clean Air Act, the federal Asbestos NESHAP, and DLS’s statute and regulations.

**Comment 102, 310 CMR 7.15(15):** This section outlines a procedure for a contractor to receive approval for alternative work practice procedures. While the procedures outlined in the section are clear, there is no time given for the review period. It also does not state whether the approval is to be assumed to be given if there is no response in the stated time period. This makes it impossible for a contractor to give a customer an accurate schedule for completion.

**Response:** Non-Traditional Asbestos Abatement Work Practice Approvals are not presumptive approvals. MassDEP intends to propose permit fees and timelines for issuing decisions on Non-Traditional Asbestos Abatement Work Practice Approvals through the public rulemaking process, so that final regulations regarding fees and timelines for these approvals can be promulgated as amendments to 310 CMR 4.00 (MassDEP’s regulations regarding Timely Action Schedule and Fee Provisions).

### **310 CMR 7.15(16), Asbestos-Containing Waste Material Packaging Requirements**

**Please note:** *This section of the proposed asbestos regulation has been renumbered and now appears in the final regulation as 310 CMR 7.15(15): Asbestos-Containing Waste Material Packaging Requirements.*

**Comment 103, 310 CMR 7.15(16)(e):** This paragraph would allow MassDEP to approve alternative waste packaging methods without limitation, and could allow MassDEP to approve an alternative method that is not allowed by the Asbestos NESHAP. The proposed language should be revised to limit eligibility for approvals of alternative waste packaging methods to be consistent with the case-specific criteria established in the Asbestos NESHAP.

**Response:** The language allowing MassDEP unlimited discretion to approve alternative waste packaging methods has been deleted from the final regulation.

### **310 CMR 7.15(18), Asbestos-Containing Waste Material Storage and Disposal Requirements**

**Please note:** This section of the proposed asbestos regulation has been renumbered and now appears in the final regulation as 310 CMR 7.15(17): Asbestos-Containing Waste Material Storage and Disposal Requirements.

**Comment 104, 310 CMR 7.15(18)(b):** This section appears to require that any contractor with a trailer at their place of business will have to become a permitted waste transfer facility, even if the trailer remains less than 30 days. This would add an additional level of paperwork, be an economic hardship, and is not consistent with current practice which allows contractors to utilize a temporary storage site (usually a closed container) between the site of generation and the transporter or transfer station. Most small asbestos jobs do not generate nearly enough waste to fill a container or trailer. Contractors cannot be required to transfer small quantities of asbestos to the landfill on a daily basis.

**Response:** The final regulation allows properly packaged ACWM to be stored at either: (1) a refuse transfer station facility approved to manage ACWM; or (2) the site of the ACWM's generation while the asbestos abatement activity is ongoing. ACWM can remain at its storage site for up to 30 calendar days after the asbestos abatement activity has been completed and the clearance monitoring requirements set forth in 310 CMR 7.15(8) have been met. Additionally, MassDEP's Guidelines for Storage, Consolidation and Transfer of Asbestos Waste (February 1988) identify temporary storage (up to 30 days) of properly containerized asbestos waste at the place of business of a DLS -licensed asbestos contractor as an activity that *does not require a solid waste site assignment* provided that the contractor has removed the stored asbestos waste from the site of generation, that the asbestos waste storage container is covered, the premises are secured and the storage is not in conflict with any other federal, state or local laws or regulations. These Guidelines will remain in effect after promulgation of the final regulation although MassDEP plans to update and clarify some aspects of the Guidelines at a future date.

### **Training**

**Comment 105:** What level of training is required of roofing contractors who work with asbestos-containing roofing and siding materials? Will additional training be required for those who conduct the repair and removal of asbestos cement pipe? MassDEP and DLS should work together to codify the training requirements in a Guidance Document.

**Response:** DLS determines who can perform what asbestos abatement activities and what licensing, training and certification is required. While MassDEP and DLS worked cooperatively to develop MassDEP's "Asbestos Cement Pipe Guidance Document," DLS has jurisdiction over the level of training required for those working with asbestos-containing materials.

**Comment 106:** The requirement that Massachusetts solid waste management facilities have for asbestos inspector training is not uniformly applied across all facilities' Authorizations to Operate, and the type of training cited is a poor fit for solid waste management facilities. Some facilities have requirements for Asbestos Inspector Training [in accordance with 453 CMR 6.07(2)(a)(1)], while other facilities have no specific requirements. Furthermore, asbestos inspector training is, at present, focused on training building inspectors to assess existing buildings and structures for the presence of ACM, and much of this training is related to how to properly conduct AHERA assessments of schools per federal requirements. This training has nothing to do with conditions on the tipping floor of a solid waste management facility. We suggest that MassDEP contact the commenter's current training contractor, to

discuss ways to develop an asbestos inspector training program that better fits solid waste and construction/demolition management facilities. These facilities need training that looks at “end of pipe” materials, rather than existing buildings and structures.

**Response:** Training requirements for asbestos inspectors at Solid Waste Management facilities are not the subject of this regulation. DLS determines who can perform what asbestos abatement activities and what licensing, training and certification is required. Please see 43 CMR 6.00.

**Comment 107:** A separate course curriculum should be developed for third-party inspectors conducting waste ban and operations/maintenance inspections at Construction and Demolition Waste Transfer Stations and Processing Facilities. Commenter made detailed suggestions for curriculum content.

**Response:** Third party inspections at Solid Waste Management facilities are not the subject of this regulation. DLS accredits asbestos training providers and approves the curricula of the courses they teach.

### Miscellaneous

**Comment 108:** The various and possibly inconsistent uses of the terms “adequately wet,” “thoroughly wet” and “wet” throughout the Revisions creates the potential for confusion by suggesting multiple wetting standards which, we assume, are not intended by MassDEP.

**Response:** All references in the final regulation have been changed to “adequately wet.”

**Comment 109:** MassDEP has told utilities that they cannot flow-fill or line Asbestos Cement Pipe. MassDEP should consider allowing abandoned pipe to be flow-filled and left in the ground. This would increase the safety of abandoned pipe by preventing its deterioration to a point where it could collapse. Allowance should also be made for utilities that want to line pipe. Both of these practices can be done without exposure to asbestos fibers.

**Response:** MassDEP has not made these changes. The issues surrounding the flow-filling and lining of Asbestos Cement Pipe are addressed in MassDEP’s Asbestos Cement Pipe Guidance, dated June 2011 (<http://www.mass.gov/eea/docs/dep/air/laws/acpguid.pdf>).

**Comment 110:** This would be the perfect opportunity to address the ongoing, improper removal of vermiculite (Zonolite) attic insulation in the Commonwealth. As an asbestos removal contractor I have looked at dozens of vermiculite-filled attics in the last decade. I bid on the removal jobs but I get very few of them due to the high cost. My sense is that most of these jobs eventually get done by insulation and remodeling contractors, using gasoline powered insulation vacuums to blow the vermiculite directly into open waste containers. No negative pressure enclosure is used and no notification to DEP occurs. I think that a specific mention of vermiculite and the work practices required would eliminate the confusion surrounding this work.

**Response:** Materials containing less than 1% asbestos, which include but are not limited to vermiculite, may become regulated as ACWM if in the course of a demolition or renovation project they are handled in a manner that contaminates other demolition or renovation materials. The final regulation continues MassDEP’s historical approach of regulating materials containing less than 1% asbestos when their handling results in the generation of waste that meets the definition of Asbestos-Containing Waste

Material. In such circumstances, the waste generated must be handled as ACWM (see response to Comment 12). MassDEP will continue to address these situations on a case-by-case basis.

**Comment 111:** When will the “homeowners’ guidance document” be available for review? It could affect everything and create more questions.

**Response:** MassDEP plans to develop guidance for homeowners about their responsibilities under the final regulation, and will work with DLS to ensure that the guidance explains the types of licensed or certified contractors that are needed for commonly encountered situations. MassDEP also plans to work with local building inspection departments and retailers of construction materials to make this guidance widely available to Massachusetts homeowners.

**Comment 112:** In addition to providing a homeowner guidance document, MassDEP should prepare similar guidance for abatement professionals and the compliance inspectors so everyone could be on the same page.

**Response:** MassDEP intends to work with DLS to ensure that accredited asbestos training providers offer proper training and guidance to the asbestos abatement professionals.

**Comment 113:** There was a misspelling in 310 CMR 7.15(7) in the sentence starting with “The start date on the asbestos notification form shall encompass”. The “shall” should be “shall.”

**Response:** MassDEP made that change.