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RESPONSE TO COMMENTS

On Proposed Amendments to the Massachusetts Asbestos Regulation (310 CMR 7.15)

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

July 2019

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

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Commenters

Amherst DPW: Guilford B. Mooring II, Superintendent

Barnstable County Water Utilities Association: Paul Anderson, President

Bellingham DPW: Donald F. DiMartino, Director

Belmont DPW: Michael Bishop, Water Division Manager

Cruz Abatement and Contracting Services: Jo Ann Godin, Compliance Manager

Eversource Energy: Ruthanne Calabrese, Environmental Affairs Manager

Fairhaven DPW: Vincent D. Furtado, Superintendent

Falmouth DPW: Stephen Rafferty, Water Superintendent

J. Daniel Erwin, Industrial Hygienist

Kleinfelder: Kirsten Ryan, Project Manager

Jonathan A. Ellis

Marion Water Department: Robert C. Zora, Superintendent

Massachusetts Water Resources Authority: Stephen Venuti, Environmental Manager

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

Mattapoisett Water & Sewer Department: Henri Renaud, Superintendent

National Grid: Peter Harley, Environmental Manager

Ray Raposa

Sudbury Water District: Rebecca McEnroe, Superintendent

Terracon Consultants, Inc.: Vincent L. Giambrocco, Field Services Manager – Building Sciences

Tewksbury DPW: Kevin Hardiman, Town Engineer

TRC: Glenn N. Potter, Office Practice leader – Building Sciences and Industrial Hygiene

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

Utility Contractors Association of New England: Michael F. Lenihan

Wareham Fire District: Andrew L. Reid, Superintendent

Westborough DPW: John Walden, Director; Brian Antonioli, Operations Manager

WesTech: Dave Lucey, Technical Service Manager/AGL

Westford Water Department: Mark Warren, Environmental Compliance Manager

West Groton Water Supply District: Paul W. Curtin, Superintendent/General Manager

Woodard & Curran: Laura A. Stockbridge

List of Acronyms Used

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

ASHARA: the Asbestos School Hazard Abatement Reauthorization Act, 15 U.S.C. 2607(f), and the regulations promulgated thereunder, including the Asbestos Model Accreditation Plan (MAP), Appendix C to Subpart E of Part 763

ACM: Asbestos-Containing Material

ACWM: Asbestos-Containing Waste Material

CFR: Code of Federal Regulations

CMR: Code of Massachusetts Regulations

DLS: the Massachusetts Department of Labor Standards

EPA: the United States Environmental Protection Agency

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

HEPA: High Efficiency Particulate Air filtration

HVAC: facility heating, ventilation and air-conditioning systems

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

M.G.L.: Massachusetts General Laws

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

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

Responses to Comments

General Comments

Comment 1: Thank you for the information regarding changes being made to the current laws. I will make sure they are followed accordingly to the best of my ability. I do not oppose any of these changes. (Cruz Abatement and Contracting Services, LLC, Jo Ann Godin, Compliance Manager)

Response: Thank you for your comment.

Comment 2: U.S. EPA Region 1 reviewed the proposed Phase 1 amendments before they were published for public comment and informed MassDEP that EPA “had no comment,” but did not officially “approve” them. (USEPA, Sharon Hayes)

Response: Thank you for this clarification.

Comment 3: A written notification from MassDEP summarizing the Phase 1 Asbestos Regulation amendments referenced the end date of the public comment period as July 14, 2016, while the Notice of Public Hearings listed the end date of the public comment period as July 15. (USEPA, Sharon Hayes)

Response: The official end date to the public comment period was July 15, 2016. MassDEP accepted written comments through the close of business on that date. The public comment period was held open for more than two weeks after the last public hearing on these proposed regulation amendments, and more than seven weeks after the draft amendments were published on MassDEP’s website.

Comment 4: A central component of Executive Order No. 562 is that the regulation not exceed federal requirements. Therefore, MassDEP should revert its requirements back to the US EPA federal Asbestos NESHAP. Under NESHAP, Asbestos Cement Pipe is categorized as a Category II non-friable Asbestos Containing Material if it contains more than 1% asbestos. Non-friable material can be dealt with differently than friable material. MassDEP’s evaluation of the entire asbestos regulation should result in exclusion of Asbestos Cement Pipe from 310 CMR 7.15 entirely. This regulation provides municipalities and the regulated community with unnecessary cost without any additional public health or environmental protection benefit. (Comment from MWWA and 18 member organizations)

Response: Executive Order No. 562 (issued by Governor Baker on March 31, 2015) directed agencies to review all of their regulations and recommend “retaining or modifying only those regulations that are mandated by law or essential to the health, safety, environment or welfare of the Commonwealth’s residents. In order to find that a regulation meets this standard, the Agency must demonstrate, in its review, that: “... 3. the regulation does not exceed federal requirements or duplicate local requirements;...”.

To comply with this Executive Order, MassDEP drafted a work plan, and obtained public comment through stakeholder meetings (held in Spring 2015) and written comments. MassDEP’s work plan identified specific agency regulations for which amendments would be proposed (including the Asbestos Regulation). Other MassDEP regulations were proposed to be rescinded, and the remaining MassDEP regulations would be retained but evaluated in the future on a timetable established for each regulation.

MassDEP proposed to consider revisions to the Asbestos Regulations in two phases. In the first phase, the Department is proposing to incorporate provisions for asbestos-cement pipe that had previously been established in a guidance document and would also propose certain technical amendments.

MassDEP also conducted a broader stakeholder discussion about other revisions of the Asbestos Regulation in a second phase. .

None of the amendments being made in Phase 1 affect the federal requirements necessary for MassDEP to maintain its delegation of the federal Asbestos NESHAP. The amendments are also consistent with the provisions of the Massachusetts Clean Air Act, which allows MassDEP to establish standards that are more stringent than those established by the federal government to prevent “conditions of air pollution” in the Commonwealth. These provisions are necessary to ensure the protection of public health, welfare, safety, and the environment with respect to the management of asbestos in demolition and renovation activities in Massachusetts. The proposed changes to the standards for projects involving underground asbestos-cement pipe reflect the Department’s intent to balance public health and environmental protection needs with practical implementation standards. The additional standards and protective practices required for underground asbestos-cement pipe projects are allowed under the Massachusetts Clean Air Act and Executive Order No. 562.

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 amendments that were offered for public comment in May 2016.

310 CMR 7.15(1), Definitions

Comment 5, OWNER/OPERATOR: The definition of “Owner/Operator” in 310 CMR 7.00 (MassDEP’s Air Pollution Control Regulation) should include a reference to “contractors and subcontractors.” The definition of “Owner/Operator” in 310 CMR 7.15, the section of the Air Pollution Control regulation specific to Asbestos, includes a reference to “contractors and subcontractors.” (Michael F. Lenihan, UCANE)

Response: MassDEP did not propose to amend the definition of OWNER/OPERATOR in either of the two places where it appears in MassDEP’s Air Pollution Control Regulation (in the Definitions section of 310 CMR 7.00, and also in the Definitions section specific to Asbestos, 310 CMR 7.15). In June 2014, the definition of Owner/Operator in 310 CMR 7.00 was amended to conform to the corresponding definition in the federal Air Pollution Control Regulation; this definition continues to apply to the entire Air Pollution Control Regulation, of which the asbestos regulation is a part. The definition of Owner/Operator in the June 2014 amendments of the asbestos regulation applies specifically to asbestos abatement activities conducted pursuant to 310 CMR 7.15 and includes the term “contractors and subcontractors.” Since the Phase 1 amendment package did not propose to revise these definitions, MassDEP did not make the suggested change in the final Phase 1 amendments.

Comment 6, SURVEY: It is infeasible to identify, representatively sample, and assess suspect ACM located in all accessible and inaccessible areas, including, but not limited to wall cavities, areas above ceilings and under/between multiple layers of flooring that will be breached or otherwise affected by demolition or renovation activities” as would be required in the proposed amendment to the definition of SURVEY. The commenter cited several reasons why it may be infeasible to access all inaccessible areas, including: owner/tenants will not permit extensive destructive surveys; it may be infeasible to sample all the stud bay sections that will be affected by the demolition or renovation; above-ceiling spaces and utility shafts are often jam-packed with ducts, piping, conduits, wiring and other mechanical and electrical components; facility components may be buried under soil or asphalt or encased in concrete (e.g. foundation damp proofing, duct banks, original flooring covered by a concrete slab, etc.); the facility finishes may contain other hazardous materials (e.g. lead paint, PCBs); or safety hazards may

be present (e.g. electrical lines, gas lines, energized components, fall hazards, etc.) Remove the word “all” from the proposed addition to this definition, and adding “to the extent feasible” after “inaccessible areas.” (TRC: Glenn N. Potter, Building Sciences and Industrial Hygiene)

Response: MassDEP does not agree with this comment. To clarify the final regulation, MassDEP has removed “accessible and inaccessible” from the Survey definition, to clarify that the Survey needs to cover **all** areas that will be breached or otherwise affected by the demolition or renovation. The Asbestos NESHAP requires an owner/operator to thoroughly inspect a facility or facility component prior to any demolition or renovation activities to identify the presence of ACM that needs to be abated. Since EPA has delegated authority to implement the federal NESHAP program in Massachusetts to MassDEP, the state requirements can be no less stringent than the federal requirements. In order to satisfy the federal “thoroughly inspect” performance standard, the person conducting the survey must assess all areas where ACM or suspect ACM that will be affected by the demolition or renovation is located. To add qualifying language like “to the extent feasible” would make the survey requirement difficult to enforce because that language is subjective.

MassDEP believes that, in the vast majority of cases, it is feasible to conduct a thorough inspection in concert with a well-designed survey plan covering all areas that will be affected by demolition or renovation of a facility or facility component before the work starts. Since June 2014, the MassDEP Asbestos Regulation has required that prior to conducting a demolition or renovation, the owner/operator must engage a DLS-certified Asbestos Inspector to thoroughly inspect the facility or the portion of the facility where the work will be conducted for the presence of ACM.

In cases where, despite best efforts to comply with the thorough survey performance standard, some previously unidentified ACM is discovered in the course of a demolition or renovation project, a Non-Traditional Asbestos Abatement Work Practice Approval may be required. MassDEP may grant these approvals for site-specific situations in which “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...”

Comment 7, SURVEY: The Survey Report should include a description of the Survey limitations. (TRC: Glenn N. Potter, Building Sciences and Industrial Hygiene)

Response: MassDEP did not make this change in the final regulation. Any “Statement of Limitations” in a Survey Report is a contractual matter that may be addressed in the consultant services agreement between the owner and the consultant, and is not appropriate for the definition of a survey in MassDEP’s regulation. Please note that any limitations that consultants include in their Survey Reports do not relieve the Owner or Operator from their responsibility to have a thorough inspection conducted in accordance with 310 CMR 7.15(4).

Comment 8, SURVEY: To promote regulatory consistency across government agencies, change the term “survey” back to “inspection” with its definition being: “INSPECTION means inspection as defined by Department of Labor standards in 453 CMR 6.02.” This would keep the definition the same even if DLS altered it in the future. (Jonathan Ellis)

Response: MassDEP agrees that DLS and MassDEP should strive to coordinate their asbestos regulations. However, the respective authority and mission of the two agencies are different, and, therefore, differences in the regulations are warranted in certain areas. MassDEP uses the term “survey” instead of “inspection” to distinguish the requirements under MassDEP’s regulations and DLS’s regulations. DLS’s mission includes delegation from EPA for the federal AHERA/ASHARA “Asbestos in

Schools” program. To implement these statutes, DLS needs a broad definition of “inspection” that ensures that asbestos is identified in school and other public buildings so it can be appropriately managed during building maintenance activities, as well as any other type of asbestos inspections. MassDEP is implementing the federal Asbestos NESHAP, which requires all ACM to be identified by a “thorough inspection” before the start of demolition or renovation work on a facility or facility component. As explained in the “Introduction” to the proposed amendments of 310 CMR 7.15, some inspections conducted to comply with requirements of AHERA/ASHARA do not meet the requirements for a thorough pre-demolition/renovation “Survey” that satisfies the requirements of the federal Asbestos NESHAP. To help clarify the types of inspections and surveys that do not satisfy the MassDEP requirements in the definition of a “Survey” (310 CMR 7.15(1)), MassDEP has removed references to specific types of AHERA/ASHARA inspections, and instead referred more generally to “inspections, surveillance and testing conducted for the purpose of compliance with AHERA.”

Comment 9, SURVEY: Remove the word “amount” from this definition, because it does not add value. Alternatively, change the term “amount” to “quantity,” to be consistent with OSHA’s construction standard, which states “Before work subject to this standard is begun, building and facility owners shall determine the presence, location, and quantity of ACM and/or PACM at the work site”. (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. The term “amount” is used in 40 CFR 61.145(a), the federal Asbestos NESHAP, where it specifies the amounts of Regulated Asbestos Containing Material (RACM) for which various NESHAP requirements apply. It is important to have an estimate of the amount of ACM that will be removed during an abatement project, as this information allows project managers to develop realistic plans for managing the material and for waste disposal. In the final regulation, MassDEP has also amended the first paragraph of 310 CMR 7.15(4), Survey Requirements to be consistent with the Survey definition in 310 CMR 7.15(1): a Survey must “identify the presence, location, amount, and condition of any ACM or suspect ACM...”

Comment 10, SURVEY: Delete the word “condition” from this definition and the survey provisions. EPA, OSHA, and DLS do not require that the condition of ACM or suspect ACM be identified during a pre-demolition/renovation survey. The inclusion of “condition” would represent an unnecessary financial burden. (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. Determining the condition of ACM is currently part of the existing definition of “survey” in the MassDEP Asbestos Regulation (310 CMR 7.15(1)) and MassDEP added it to the Survey section at 310 CMR 7.15(4)(a) to make them consistent. The word “condition” was originally included in the definition of “survey” in 2014 to make MassDEP’s definition of “survey” consistent with DLS’s definition of “inspection”, which reads in part “Any activity undertaken in a facility or location, subject to the requirements of these regulations for the purpose of determining the presence, location, and/or condition of friable or non-friable asbestos-containing material...”

Comment 11, SURVEY: Since MassDEP has already established a performance standard to conduct a thorough survey in the “Survey Requirements” section of the regulation (310 CMR 7.15(4)), clarifying this performance standard in the definition of a “Survey” provides little value. This clarification would be better addressed in a response to a “Frequently Asked Question,” which could be amended as necessary. (Jonathan Ellis)

Response: MassDEP agrees that the requirement is better located in 310 CMR 7.15(4) as part of the performance standards for Surveys, rather than in the definition. Therefore, MassDEP has made

clarifications to the Survey definition and has modified and moved the requirement for investigation of all areas for ACM to 310 CMR 7.15(4). This clarification of the Survey definition and performance standard is expected to result in more complete surveys and fewer surprises when previously unidentified ACM is encountered during a demolition or renovation. Please note that MassDEP published a “Frequently Asked Question” (FAQ) in June 2015 that addresses questions about the “Survey Requirements”. This FAQ may be expanded in the future to address questions about what a complete Survey must entail.

In addition to the revisions of the “Survey” definition described above, in the final regulation MassDEP has streamlined this definition. The phrase “representatively sample” has been deleted from the second sentence of this definition, because 310 CMR 7.15(4)(c) allows for the assumption that a suspect ACM contains asbestos without sampling. In addition, the third sentence (“This term includes record keeping performed in connection with such asbestos inspection activities and re-inspection of friable and non-friable ACM that has been previously identified.”) has been deleted, since 310 CMR 7.15(4), Survey Requirements, contains detailed instructions for the preparation of a written asbestos survey report.

310 CMR 7.15(3), Prohibitions

Comment 12, (f), Inoperable or out-of-service facility components: Commenter agrees with the proposed changes to 310 CMR 7.15(3)(f) to allow below-grade components that may contain asbestos containing material to remain in place unless they are disturbed or uncovered during excavation. (Eversource Energy: Ruthanne Calabrese, Environmental Affairs Manager)

Response: Thank you for your comment.

Comment 13, (f), Inoperable or out-of-service facility components...: Strike “or uncovered by excavation.” Simply uncovering a pipe should not necessitate its removal; only if the pipe has been damaged in some way should it need to be removed in accordance with the work practices in the Guidance. (Comment from MWWA and 19 member organizations). Buried AC piping that is out-of-service but in good condition should be allowed to remain in place, even if it is uncovered by excavation. (Michael F. Lenihan, UCANE)

Response: MassDEP has not made this change. Abandoned inoperable pipe is “Asbestos-Containing Waste Material” and therefore subject to the waste disposal requirements of 310 CMR 7.15(17), and the Solid Waste Site Assignment and Facility Management Regulations (310 CMR 16.00 and 310 CMR 19.000 respectively), which do not allow burial of Asbestos-Containing Waste Material at unapproved sites. To avoid the potential for disturbing abandoned facility components located underground, MassDEP believes it is required and cost-effective to remove abandoned underground facility components containing ACM at the time they are uncovered by excavation, even if the abandoned or out-of-service components are in good condition.

Consistent with this intent, MassDEP proposed clarifying language to 310 CMR 7.15(3)(f) in the draft regulation for public review that states “Inoperable or out-of-service facility components containing ACM and located underground do not need to be removed unless they are disturbed or uncovered by excavation.” It is worth noting, however, that the term “disturb” can include demolition and renovation activities beyond just excavation such as “pipe reaming” and “pipe bursting.” These are both examples of a disturbance (i.e., prohibited activity) that does not involve excavation. These activities are also prohibited by MassDEP Solid Waste Site Assignment and Facility Management rules referenced above.

Comment 14, (f), Inoperable or out-of-service facility components...: Replace and clarify paragraph (f) with the following language:

(f) No person shall neglect ACM on any exterior part of a facility including equipment, in a manner that would allow that ACM to become damaged, deteriorated, eroded, weathered, or through inaction otherwise result in the ACM being in poor condition, result in the production of visible emissions or asbestos debris, or result in the creation of a dumping ground.

- The asbestos-containing facility components must be safeguarded through vigilant periodic surveillance to prevent visible emissions from the exterior ACM or the creation of asbestos debris.
- Where exterior ACM is located on or above the ground, left unprotected from damaging elemental forces for a prolonged period of time, and/or is otherwise exposed directly to the outside air, the ACM must be removed from the facility or facility component prior to being abandoned or neglected.
- Where exterior ACM is located in the ground and is no longer in service, abandoned or otherwise out of service with no intent of restoring service the ACM must be noted on facility plans until it is removed from the facility or facility component either upon being exposed by excavation or the facility being demolished.

Note: the definition of “In poor condition” from NESHAP should be added to the definition section. 310 CMR 7.15(1): *In poor condition* means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material. (Jonathan Ellis)

Response: MassDEP has not made this change. The proposed alternative language is much narrower than the MassDEP prohibition in 310 CMR 7.15(3)(f); appears to focus exclusively on ACM on the exterior of a facility; would add a new requirement for owners/operators to conduct periodic surveillance; and would limit MassDEP’s ability to direct owners/operators to remove ACM only when the material’s binding loses its integrity, resulting in the production of visible emissions or asbestos debris, or resulting in the creation of a “dumping ground”. The prohibitions in 310 CMR 7.15(3)(f) and (g) (as clarified in the final regulation) require ACM to be removed before it creates these problematic situations.

Comment 15, (g): Remove the “duty to maintain ACM” in (g) as that is best addressed by another agency or governmental body; (i.e. those delegated to enforce 105 CMR 410.353.) (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. MassDEP does not agree with this interpretation of the proper role of the agency. The State Sanitary Code (105 CMR 410.353) cited by the commenter applies to occupied residences only. MassDEP is directed by its enabling statutes to protect public health, safety, welfare and the environment more broadly by preventing pollution or contamination of the atmosphere (MA Clean Air Act) and by ensuring that waste is properly managed (MA Solid Waste Acts).

Comment 16: If existing ACM (inside buildings above ground) is not serving its original intended purpose, but it is in a space labeled with asbestos warning signage, must the existing ACM be removed from the building? (Woodard & Curran: Laura A. Stockfisch)

Response: ACM located above ground or in buildings and other facilities must be removed if it is not in good condition and is not serving the purpose for which it was installed. This prohibition applies to asbestos-containing material on and/or in inoperable or out-of-service facility components that is

damaged or deteriorated to the point where the ACM is no longer attached as originally applied and/or is no longer serving the intended purpose for which it was originally installed. Warning signs by themselves cannot prevent people who access the area where the ACM is located from disturbing the ACM. This creates a risk of exposure to asbestos fibers to members of the public, and also potentially causing a release to outside air (i.e. a condition of air pollution).

310 CMR 7.15(6), Notification Requirements

Comment 17a, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): Blanket notifications should be available for large scale pipe projects, in addition to projects involving less than 10 linear feet of pipe; Blanket notifications should be available for any project involving Asbestos-Cement Pipe. (Comments from MWWA and 19 member organizations)

Comment 17b, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): The limits of material allowed to be abated under a “limited maintenance project” (through a Facility Blanket Notification) should be less than 25 linear feet of ACM on pipe or less than 65 square feet of ACM on other facility components. [Eversource, Ruth Calabrese] “Limited maintenance projects” for work on asbestos-cement pipe should be allowed for projects that will encompass up to 25 linear feet of ACM on pipe and 60 square feet of ACM on other facility components (UCANE: Michael F. Linehan)

Response: For many years, MassDEP has made blanket notifications, which allow less than 10 working day notification of individual project segments, available for limited maintenance work and large-scale planned projects. MassDEP believes that it is necessary to establish quantitative limits on the scale of limited maintenance projects, but we agree that the proposed limits of 10 linear feet of ACM on pipe or 25 square feet of ACM on other facility components may be too limiting for public or private utilities working on pipes in their contiguous facility system network. Therefore, MassDEP has retained the 10 linear feet/25 square feet limitation for most facilities and facility components in the final regulation, but has added an expanded limit for public and private utilities working on asbestos-cement pipe to “up to 25 linear feet of ACM on pipe or up to 60 square feet of ACM on other facility components.” The language in the final regulation package has also been clarified to indicate that these numerical limits for a “limited maintenance project” are intended to apply to each section of the project for which individual notification is being made. This will allow the total quantity of ACM removed during the entire duration of a utility’s Blanket Notification to exceed the numerical limits for each individual section of the work.

Comment 18, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): Would communities working on large-scale utility projects that exceed the numerical limits of a “limited maintenance project” or on projects that take place over multiple locations within a contiguous utility system network be eligible for approval of a “large scale planned asbestos abatement project?” (UCANE: Michael F. Linehan)

Response: Owners and operators can choose to apply for either type of Blanket Notification Approval (the “limited maintenance project” or “large scale planned asbestos abatement project”), depending on which one is most appropriate for their project. “Limited maintenance projects” generally involve routine repair and maintenance activities (e.g., repairing pipe/valve leaks and broken or dislodged asbestos-containing floor tiles, installing light switches and electrical outlets, replacing damaged ceiling tiles). The term is intended to apply to work that is not scheduled but becomes necessary over the duration of the approval period because of routine repair and maintenance activities. The term “large scale planned asbestos abatement projects,” generally applies to planned activities in which a facility may have renovation work on-going in several areas over the course of a year (e.g., facility improvements such as replacing windows throughout a dormitory, replacing several boilers and associated piping in a multi-building development), or other planned work.

Comment 19, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): To provide greater certainty to the regulated community, several commenters suggested that paragraph (6)(j)(3) should be revised to say that MassDEP has to respond to the request for approval within 10 working days. (Comments from MWWA and 19 member organizations)

Response: MassDEP's timelines for the responding to permit applications are specified in 310 CMR 4.00. That regulation allows up to 20 days for review and approval/denial of the BWP AQ05 Blanket Notification approval application. 310 CMR 4.00 was not proposed to be amended as part of the Phase 1 Asbestos Regulation Amendments package. Therefore, MassDEP did not make this change in the final amendment of the asbestos regulation. This suggestion could be more appropriately addressed under Phase 2 regulatory revisions. Accordingly, it will be added to the list of issues under consideration in the Phase 2 discussions.

Comment 20, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): Will existing blanket notifications be affected by the proposed amendments or will existing blanket notifications continue to be in effect under the original conditions of issuance? (Woodard & Curran: Laura A. Stockfisch; National Grid: Peter Harley)

Response: The terms and conditions of any existing Blanket Notification Approval will remain in effect until it reaches its specified expiration date.

Comment 21, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): MassDEP should not include the new paragraph (j)(4). One benefit of filing a blanket notification is the advantage of having been pre-notified in the event of an emergency renovation project (i.e. the blanket approval number should also function as an emergency waiver number). This paragraph would prevent this as it would establish an advance notification period and makes no allowance for an emergency renovation project. (Jonathan Ellis)

Response: MassDEP did not remove the proposed paragraph (j)(4) in the final regulation. Each Facility's Blanket Notification approval only covers the specific set of asbestos abatement activities identified in the Application. Emergency Waivers are more appropriately used for unanticipated situations. The following are some examples: a demolition is ordered by a state or local government agency of a structurally unsound building or a building in imminent danger of collapse, or an emergency renovation operation (which, is defined in 310 CMR 7.15(1), in part as "...results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to prevent an unreasonable financial burden...").

Comment 22, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): Why is a case-by-case advance notification period within a blanket notification needed? MassDEP has established that it can manage compliance oversight with 24 hour advance notice in the event of suspension and resumption of asbestos abatement activities which is the essence of a blanket notification. (Jonathan Ellis)

Response: MassDEP has a long-standing practice of establishing the advance notification period under a Blanket approval on a case-by-case basis, which takes into consideration the nature of the activities specified in the Blanket Notification application. The Department needs to know in advance when specific abatements are scheduled to occur so that staff can plan inspections. The 24-hour notification of intermittent abatement activities within an asbestos abatement notification work period is not comparable to a Blanket Notification. Intermittent work involves a single abatement activity at a single facility location. Blanket approvals, by contrast, quite often involve multiple projects at numerous locations within a facility, so they warrant a longer notification period, albeit less than 10 working days. Therefore, MassDEP did not make this change in the final regulation.

Comment 23, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): For notification of abatement activities conducted under a blanket notification, is there a separate notification form or is the ANF-001 to be used for each notification? (Woodard & Curran: Laura A. Stockfisch)

Response: A separate Asbestos Notification Form (ANF-001/BWP AQ-04) must be filed for each abatement project conducted under a Blanket Notification. While the Blanket Notification waives part of the 10-working day notification period, MassDEP still needs to receive notifications of specific abatement projects conducted under a Blanket Notification to meet the requirements of the federal Asbestos NESHAP.

Comment 24, Facility Blanket Notifications, 310 CMR 7.15 (6)(j): “Limited Maintenance Project” should be defined in the regulation. (UCANE: Michael F. Lenihan)

Response: MassDEP did not add a definition for “Limited Maintenance Project” in the final regulation. Establishing quantitative limits on work that qualifies as a “limited maintenance project” is intended to clarify expectations about the use of this term, and these limits are more appropriately included in 310 CMR 7.15(6)(j).

310 CMR 7.15(7), Specific Asbestos Abatement Work Practice Standards

Comment 25: Retitle this section “General Requirements for Asbestos Abatement Activities.” The insertion of the word “General” is intended to distinguish this section from later sections describing material-and method-specific work practices found in 310 CMR 7.15 (9) through (13). The use of the expression “Requirements for Asbestos Abatement Activities” would be more consistent with the majority of subsequent section titles. (Jonathan Ellis)

Response: MassDEP has added “General” to the title of this section in the final regulation. However, MassDEP did not make any other changes to the title. The term “Work Practice Standards” accurately describes the type of requirements contained in this section.

Comment 26, 310 CMR 7.15(7)(e)5., Work Area Ventilation: This requirement should be revised to be consistent with a similar requirement in the DLS regulation at 453 CMR 6.14(c). by inserting “whenever possible” at the end of the phrase “Make-up air entering the Work Area shall pass through the decontamination system.” (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. Adding the qualifying language “whenever possible” would effectively render this requirement unenforceable. If a project needs to deviate from standard work practices, the owner/operator has the option to apply for a Non-Traditional Asbestos Abatement Approval.

310 CMR 7.15(9), Requirements for Asbestos Glovebag Operations

Comment 27, 310 CMR 7.15(9)(e): It is not practical to require the use of rewettable fiberglass cloth to render intact the portion of a facility component at the point where the glovebag will be attached, primarily because rewettable fiberglass cloth is not air tight and takes several hours to dry. Recommend deleting this reference from the regulation. (Jonathan Ellis)

Response: In the final regulation, MassDEP has removed the sentence referring to the use of rewettable fiberglass cloth so that other materials may be used to meet the performance standard. MassDEP notes that the remaining sentences in 310 CMR 7.15(9)(e) clearly maintain the performance standard that any friable ACM in the immediate area of the glovebag installation must be rendered intact before the

glovebag operation starts and maintained in that state during the glovebag operation. All openings in the glovebag must be sealed against leakage.

Comment 28, 310 CMR 7.15(9)(g): Delete the word “removed” from paragraph 310 CMR 7.15(9)(g): “Any ACM that has been exposed as a result of the glovebag operation shall be ~~removed~~, encapsulated or enclosed so as to prevent the leakage of asbestos fibers prior to the removal of the glovebag.” This edit will make the MassDEP requirement consistent with similar language in DLS’s regulation that predates the MassDEP requirement. (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation, but added a comma after the word “encapsulated” to help clarify that removal, encapsulation, or enclosure can be chosen as appropriate for the specific situation, to prevent the leakage of asbestos fibers before the glovebag is detached.

310 CMR 7.15(12), Requirements for Exterior Asbestos-Containing Cementitious Shingles, Siding and Panels

Comment 29: In section (12) Requirements for Exterior Asbestos-Containing Cementitious Shingles, Siding and Panels that the subsections are mis-numbered. There is no (a) but two (c) paragraphs. (MWWA)

Response: Thank you for pointing out this numbering error. We have confirmed that this error is not in the Secretary of State’s official version of 310 CMR 7.15, but appears to have been introduced in MassDEP unofficial copy of the draft regulation that was used as the basis for the proposed amendments that were published for public comment. The paragraph numbering has been corrected in the final regulation.

310 CMR 7.15(12A), Requirements for Underground Asbestos-Cement Pipe *General Comment*

Comment 30: Why is a section on AC Pipe being added to the regulation in the Phase 1 amendment package? Why were provisions from MassDEP’s 2012 Asbestos Cement Pipe Guidance Document not incorporated into the 2014 amendments of 310 CMR 7.15? Why not wait for the conclusion of the Phase 2 discussions, which may result in the de-regulation of asbestos-cement pipe? (MWWA: 18 member organization). One commenter suggested that MassDEP chose not to include specific provisions for asbestos-cement pipe in the 2014 amendments because doing so would have delayed publication of a new fee regulation covering Non-Traditional Work Practice Approvals, and that MassDEP needed to promulgate final amendments of the asbestos regulation before an upcoming gubernatorial election. (Jonathan Ellis)

Response: MassDEP has regulated asbestos-cement pipe as an “Asbestos-Containing Material” since the agency promulgated its first asbestos regulation in 1986. In the mid-2000’s, questions were raised about how municipal water and sewerage agencies could efficiently handle this material and still comply with MassDEP’s asbestos regulation. These questions arose during a national discussion of the costs (including environmental and health impacts) and benefits of a technique for dismantling unused asbestos-cement pipe called “pipe bursting.” MassDEP worked with the Massachusetts Water Works Association and the Utility Contractor’s Association of New England (UCANE) to develop guidance that was published in 2011, which described specific recommended work practices for water and sewerage agencies’ work on asbestos-cement pipe.

During the same time period, MassDEP was developing amendments to update the 1986 asbestos regulation, and planned to incorporate a number of Department policies into these amendments. These amendments were proposed for public comment in 2012 and promulgated in 2014. Through an

oversight, MassDEP did not propose to include specific regulatory provisions for asbestos-cement pipe in the proposed amendments that were offered for public comment, and therefore, did not include these specific provisions in the amendments promulgated in 2014.

After the 2014 amendments were promulgated, the Massachusetts Water Works Association and the UCANE requested that, in addition to specific work practices for repair and replacement of underground asbestos-cement pipe, this work needed additional relief from the requirements added in 2014 for all pre-demolition/renovation surveys to be conducted by a DLS-certified asbestos inspector, and for all post-abatement visual inspections to be conducted by a DLS-certified asbestos project monitor.

The 2011 Guidance was updated in 2015 to include a statement that MassDEP would exercise its enforcement discretion for these provisions at projects involving repair/replacement of underground asbestos-cement pipe, as long as the surveys and visual inspections were conducted and documented by work crew members who had been trained in a DLS-approved course. However, MassDEP understood that an enforcement discretion policy provides less certainty than regulatory provisions for regulated entities, and decided to incorporate specific provisions for underground asbestos-cement pipe into the asbestos regulation at the earliest possible opportunity, which arose through the Department's plan for implementing Executive Order No. 562.

The timing of the promulgation of the 2014 amendments was not driven by associated amendments of MassDEP's Timely Action and Fee Regulation (310 CMR 4.00) or the gubernatorial election of 2014.

Comment 31: Will DEP and DLS continue to rely on the AC Pipe Guidance Document and the 8 Hr. AC Pipe training course as the principal items governing the handling and removal of underground AC pipe in the Commonwealth? (UCANE: Michael F. Lenihan)

Response: MassDEP will continue to rely on the training courses approved by DLS to ensure that the workers who conduct surveys and visual inspections understand what they need to look for and what documentation is required. One such course was developed through a collaborative effort between two key stakeholders, the Massachusetts Water Works Association (MWWA) and the UCANE, in consultation with a DLS-certified Training Provider. In April 2011, DLS approved an 8-hour initial training course for AC pipe workers developed by this group of stakeholders.

At the request of UCANE, MassDEP will update the AC Pipe Guidance Document to reflect the language in the final regulation, and will continue to make it available via MassDEP's web site. The Guidance will continue to describe the pertinent MassDEP's regulatory requirements for these projects (including provisions for packaging, labeling, transportation and disposal of asbestos-containing waste material) that are addressed in other sections of 310 CMR 7.15. The Guidance will also continue to provide one-page forms for documenting pre-demolition/renovation surveys and post-abatement visual inspections.

Comment 32: Electric and gas utility crews frequently encounter asbestos or suspect asbestos materials requiring abatement under difficult conditions. As much of this occurs during maintenance of natural gas and electric infrastructure, those activities should be exempted from this regulation, or always covered under the blanket notification language. (Eversource: Ruthanne Calabrese, Environmental Affairs Manager)

Response: MassDEP did not make this change in the final regulation. MassDEP recognizes that, as with water and sewerage pipe repair and replacement, electric and gas utility work on asbestos-cement pipe cannot always meet the general asbestos work practice, survey and visual inspection requirements in the regulations. Therefore, MassDEP expanded the applicability of its guidance when it was updated in

2015 to include work on underground electricity and gas asbestos-cement pipes owned by public and private utilities. This expanded applicability has been incorporated into the asbestos regulation with the final Phase 1 amendments. These provisions take into account the safety and timing issues that all public and private utilities face when digging up streets to access asbestos-cement pipe. In addition, asbestos-cement pipe (no matter who owns it) is regulated under the federal Asbestos NESHAP when certain quantity thresholds are exceeded and certain work practices are employed. Since EPA delegated the authority to implement the federal Asbestos NESHAP in the Commonwealth to MassDEP, the utilities' repair and replacement of asbestos-containing material in their electric and natural gas infrastructure will continue to be regulated by 310 CMR 7.15.

Comment 33: A direct reference to the AC Pipe Guidance Document should be inserted into Section 12(A) of the proposed regulations to improve clarity. (UCANE: Michael F. Lenihan)

Response: MassDEP has not included a reference to the guidance in the final regulation. If the Guidance were referenced in the regulation, it could only be revised or updated through a corresponding formal rule-making pursuant to M.G.L. c. 30A. MassDEP would like to maintain the flexibility to publish updates to its technical and policy guidance documents on a regular basis.

Specific Asbestos-Cement Pipe Section Comments

310 CMR 7.15(12A) (a), Applicability

Comment 34: MassDEP should allow the requirements of 310 CMR 7.15(12A) to apply to asbestos abatement activity involving abandoned underground system networks as well as underground asbestos-cement pipe that is part of or supports operating system networks owned by public and private utilities (e.g., pipes conveying drinking water, sanitary sewage, storm water, electricity, and gas). As more and more AC piping systems are being replaced or being abandoned every year, it should be clear that abandoned AC piping needs to be handled in the same manner as an active system. (Michael F. Linehan, UCANE)

Response: MassDEP agrees and in the final regulation has extended the work practices in this section to abandoned underground asbestos-cement pipe that is owned or operated by public or private utilities as well as pipe in underground operating system networks. Accordingly, MassDEP removed language that limited applicability to operating system networks. MassDEP also added "or operated" to the applicability section to make this section consistent with other references to "owner/operator."

Comment 35: The procedures in this section should apply to asbestos-cement pipe regardless of whether it is underground or not. MassDEP has failed to account for asbestos cement pipe that may have started underground but emerges to traverse a river or lower road by running along bridge or other support. (Jonathan Ellis)

Response: The work practices in 310 CMR 7.15(12A) apply specifically to underground asbestos-cement pipe and not to above-ground pipe. Many of the requirements are not pertinent for the abatement of aboveground piping, such as excavation methods and the need for containment. Therefore, it would not be appropriate to broaden this section to include aboveground piping.

Comment 36: The requirements of 310 CMR 7.15(12A) should apply to asbestos abatement activity involving asbestos-cement pipe *conduit and ducting* that is part of or supports operating system networks owned by public and private utilities. (Jonathan Ellis)

Response: In the final regulation, MassDEP has not extended 310 CMR 7.15(12A) to asbestos-cement pipe “conduit and ducting,” as these terms encompass a much wider universe of cement products than asbestos-cement pipe, and their repair and replacement is more amenable to the general work practice standards established in 310 CMR 7.15(7).

Comment 37: In paragraph (a)1 of the “Applicability” section, it is not necessary to specify which of the General Asbestos Abatement Work Practice Standards [310 CMR 7.15(7)] are replaced by the provisions of 310 CMR 7.15(12A). It would be better to add language to 310 CMR 7.15(7) establishing which of that section’s provisions are replaced by requirements in the material-specific sections 310 CMR 7.15(10) – (13). (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. This language in 310 CMR 7.15(12A) serves as an indicator of what requirements apply to underground asbestos-cement pipe.

Comment 38: Underground Orangeburg pipe should be included in these standards due to the fact that it is composed of a similar material, involves similar removal means and methods, and has similarly low potential for exposure to fiber release. (Ruthann Calabrese, Eversource)

Response: Orangeburg pipe is bituminized fiber pipe made from layers of wood pulp and pitch pressed together to hold its shape. It is a completely different material from asbestos-cement pipe. It would be inappropriate to expand the applicability of the new requirements for asbestos-cement pipe to Orangeburg pipe for which the repair and removal methods would necessarily be different. Therefore, MassDEP did not expand the applicability of 310 CMR 7.15(12A) to Orangeburg Pipe.

Comment 39: The provision of 310 CMR 7.15(12A)(a)3. that “owners/operators shall comply with all other requirements of 310 CMR 7.15 when conducting asbestos abatement activity involving underground asbestos-cement pipe” is superfluous and should be deleted. (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. This sentence serves to indicate that requirements in addition to those specified in 310 CMR 7.15(12A) apply to repair and replacement of underground asbestos-cement pipe.

310 CMR 7.15(12A)(b) Survey:

Comment 40: The changes made to the Guidance Document in May of 2015 allowed for conditional enforcement discretion by MassDEP on the requirement to have a DLS-certified asbestos inspector prepare a survey report. However, the requirement for pre-repair/replacement inspections never should have been put into the regulations for AC Pipe work. It was good that MassDEP provided conditional enforcement discretion, but the requirement should be completely eliminated. (MWWA, 18 member organizations)

Response: MassDEP did not eliminate the requirements for surveys for asbestos-cement pipe in the final regulation. The survey requirement was added to the Asbestos Regulation in 2014 to ensure that all of the requirements of the federal Asbestos NESHAP are addressed in the Massachusetts regulation. The NESHAP Standard for Demolition and Renovation establishes that, “[t]o determine which requirements of...this section apply to the owner or operator of the demolition or renovation activity, and prior to the commencement of the demolition or renovation, **thoroughly inspect** the affected facility or part of the facility where demolition or renovation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM.” [40 CMR 61.145(a)]

Since EPA delegated the authority to implement the Asbestos NESHAP in Massachusetts to MassDEP, MassDEP cannot be less stringent than the Asbestos NESHAP and therefore must require a thorough inspection/survey prior to any demolition or renovation activity. This includes asbestos-cement pipe, which is classified by EPA as a Category II nonfriable ACM.

Comment 41: 310 CMR 7.15(12A)(a)4.: MassDEP does not have the authority to overrule DLS by stating who can and cannot perform an inspection. Under DLS regulation they [sic] cannot perform an inspection unless they are either an inspector or have been granted a written exclusion in accordance with 453 CMR 6.01. (Jonathan Ellis)

Response: Through consultation with DLS, MassDEP has learned that DLS does not require that certified inspectors conduct the pre-demolition or renovation surveys of underground cement pipes. However, where these pipes contain asbestos, they are regulated as a “Category II non-friable ACM” by the federal Asbestos NESHAP, and, pursuant to NESHAP, MassDEP must require a thorough inspection before demolition or renovation work starts, to ascertain whether ACM is present. Because DLS has said that it does not require pre-demolition/renovation surveys of asbestos-cement pipe, MassDEP, pursuant to its authority under the Massachusetts Clean Air Act (M.G.L. c. 111, sections 2B-C and 142A-142M), is requiring that workers must be trained to perform these surveys. Please note that DLS has approved curricula for training of workers for asbestos cement pipe work regulated by this subsection.

Comment 42: The provision of 310 CMR 7.15(12A)(b)(1)a. that allows as-built plans or other documents identifying whether specific cement pipes or pipe segments and other material in the conduit that may be affected by an abatement project is an ACM is steering owners and operators into noncompliance with DLS’s regulation at 453 CMR 6.07(1)(a), which authorizes people performing the asbestos consulting functions listed in 453 CMR 6.07(1)(a)-(d) to review building records. (Jonathan Ellis)

Response: DLS’s regulation (453 CMR 6.07(1)(a) authorizes DLS-certified Asbestos Inspectors to undertake a number of forms of investigation to determine and document the presence of known or suspect ACM in facilities, including performing “visual inspections.” As noted, DLS does not require that certified inspectors conduct the pre-demolition or renovation surveys of underground cement pipes.

MassDEP clarified in the final regulation 310 CMR 7.15(12A) only applies to asbestos-cement pipe and if the survey identifies that the pipe is not AC-pipe, the owner/operator shall comply with 310 CMR 7.15(4).

MassDEP believes that, where up-to-date as-built plans contain information about whether a particular pipe segment is made of transite or otherwise contains asbestos, these plans are an acceptable source of information to confirm that the pipe contains asbestos. 310 CMR 7.15(12A)(b)2 requires that the person conducting the survey, which may include review of as-built plans, complete a training course that has been approved in writing by DLS.

Comment 43: The provision of 310 CMR 7.15(12A)(b)(1)c. that allows an owner or operator to presume that cement pipe or a cement pipe segment is ACM is problematic for several reasons:

- The word should be “assumption” rather than “presumption.” Under AHERA an inspector must assume that some or all of the homogeneous areas are ACM, and, for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under §§763.86 and 763.87. Thus the act of choosing whether to assume or sample is a task for an inspector.
- Certification as an Asbestos Inspector authorizes the consultant to ... collect samples ...conduct other forms of investigation necessary to determine and document the presence and condition of known or suspect ACM in facilities.

- OSHA uses the word “Presumed”, and defines *Presumed Asbestos Containing Material* means thermal system insulation and surfacing material found in buildings constructed no later than 1980 [29 CFR 1926.1101(b)]. OSHA “presumes” (on the basis of probability), not the building owner or employer. OSHA allows the designation of a material as “PACM” to be rebutted pursuant to paragraph (k)(5) of 1926.1101, and has established criteria to rebut the designation of installed material as PACM:
 - Having a completed inspection conducted pursuant to the requirements of AHERA (40 CFR Part 763, Subpart E) which demonstrates that the material is not ACM; or
 - Performing tests of the material containing PACM which demonstrate that no ACM is present in the material.

MassDEP could presume that the asbestos-cement pipe was asbestos and have owner/agents rebut that presumption. However this would likely confuse stakeholders and ultimately is not needed because of the requirement for an inspection already established in 310 CMR 7.15(4). (Jonathan Ellis)

Response: MassDEP did not change the proposed terminology in the final regulation. Presuming that a material is asbestos-containing material and treating it as such is allowable under 310 CMR 7.15(4)(c), in lieu of sampling and laboratory analysis. In adding section 310 CMR 7.15(12A) to the Massachusetts Asbestos Regulation, MassDEP has clarified that this option is available for owners/operators of underground asbestos-cement pipe, if they do not want to have the pipe sampled. We do not believe this has to be a rebuttable presumption.

MassDEP has delegation from EPA to implement the federal Asbestos NESHAP (not OSHA), and does not implement AHERA. In any case, OSHA’s definition of Presumed Asbestos Containing Material (PACM) in 29 CFR 1926.1101(b) addresses thermal system insulation and surfacing material found in buildings constructed before 1980. This term bears no relevance for underground asbestos-cement pipe. Under the federal Asbestos NESHAP, the owner or operator of a facility where a demolition or renovation is scheduled to occur is required to conduct a “thorough inspection” prior to the commencement of the demolition or renovation. See 40 CFR 61.145(a).

310 CMR 7.15(12A)(c) Specific Work Practice Requirements for Underground Asbestos-Cement Pipe

Comment 44: In the performance standard established by 310 CMR 7.15(12A)(c)1., MassDEP should replace “will minimize the risk of making [the asbestos-cement pipe] friable” with “will not result in the production of asbestos dust or the material becoming friable.” Where such work does result in the production of asbestos dust or the material becoming friable, the work would become subject to either 453 CMR 6.13 or 453 CMR 6.14. (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation because the provisions of this section are designed to prevent asbestos-cement pipe from becoming friable as it is repaired or replaced. One performance standard established by this section focuses on minimizing the risk of making asbestos-cement pipe friable by recognizing the typical methods used to cut and repair pipe in trenches.

The second performance standard focuses on preventing releases of asbestos dust into the environment, by establishing that any debris that may be produced through the repair or replacement work needs to be collected on the plastic sheeting used underneath the pipe that is being worked on and managed as waste, rather than being released into the environment.

Comment 45: 310 CMR 7.15(12A)(c)2. The proposal to require that mechanical excavation not be used within six inches of an underground asbestos-cement pipe, and that the soil within six inches of the pipe

be uncovered by hand or a shovel should be deleted because the precise depth of the pipe is often not known, making it difficult to determine when one is within six inches of the material. Alternatively, insert “approximately” in the phrase “mechanical excavation shall not be used within six inches of the asbestos-cement pipe.” (Jonathan Ellis)

Response: MassDEP did not make this change in the final regulation. It is important to limit mechanical excavation as one approaches the pipe and convert to hand digging in close proximity to the pipe. Inserting the word “approximately” would make this standard unenforceable.

Comment 46: 310 CMR 7.15(12A)(c)(3)a. requires placing polyethylene sheeting under the asbestos-cement pipe to be worked on “to prevent soil contamination.” Is this to prevent contamination of the soil that has been resting against the asbestos cement pipe? Why is MassDEP protecting soil in an Air Pollution Standard? Using plastic does not protect the atmosphere. The soil will later be visually inspected for debris. (Jonathan Ellis)

Response: MassDEP did not change this requirement in the final regulation. Placing polyethylene sheeting under the asbestos-cement pipe being worked on is a best management practice (BMP) when working with non-friable ACM (similar to 310 CMR 7.15(12) Requirements for Exterior Asbestos-containing Cementitious Shingles, Siding and Panels) and ultimately prevents asbestos fibers from becoming airborne. Placing polyethylene under the asbestos-cement pipe makes it easier to contain any debris that is generated during the work. This in turn ensures that such debris can be properly containerized, labeled and disposed. By properly and efficiently managing the debris in such a manner, it makes it less likely that the debris will cause or contribute to a condition of air pollution. Additionally, it will help prevent the contamination of underlying soils and reduce the volume of material that would otherwise need to be disposed of as ACWM. Removing all the ACWM from the work site before the asbestos-cement pipe is covered with soil will also prevent future exposure of ACWM to the ambient air (possible deteriorated) if the pipe is uncovered in the future.

Comment 47: 310 CMR 7.15(12A)(c)(3)d. requires wet asbestos-cement pipe and other debris from the abatement to be containerized in accordance with 310 CMR 7.15(7)(f)(3). This may be done in the trench or adjacent to the trench. Shouldn’t all the waste, save roofing, be containerized in the same manner? Perhaps containerization should be an independent section. Is this a topic for Phase 2? (Jonathan Ellis)

Response: With the exception of the materials eligible for exemption of the Special Waste management requirements (310 CMR 19.061) - i.e., intact and unbroken vinyl asbestos tile (VAT), and asphaltic asbestos-containing siding products and asphaltic asbestos-containing roofing materials – all asbestos containing waste material (ACWM) must be containerized in accordance with the requirements of 310 CMR 7.15(7)(f)3., which provides three options for containerization of ACWM. To address an implementation issue specific to asbestos-cement pipe projects, the paragraph at 310 CMR 7.15(12A)(c)(3)d. has been revised to clarify that containerization may be performed either in the trench or adjacent to the trench.

Comment 48: 310 CMR 7.15(12A)(c)(3)d. This sentence should include a citation to the labeling requirements of 310 CMR 7.15(15). (Jonathan Ellis)

Response: This addition is unnecessary since 310 CMR 7.15(12A) states that owners/operators shall comply with all other requirements of 310 CMR 7.15, which includes the section on packaging waste for off-site shipment and labeling requirements(310 CMR 7.15(15). 310 CMR 7.15(12A)(a)4. requires

owners and operators of underground asbestos-cement pipe to comply with all other sections of the asbestos regulation.

Comment 49: 310 CMR 7.15(12A)(c)(4)c. Add the word “using” to the sentence: “Saw cutting of asbestos-cement pipe shall only be conducted with a HEPA-shrouded vacuum attachment or [using] wet cutting equipment, unless it is conducted within a small enclosure that isolates the area in which the saw cutting is being conducted to prevent the release of asbestos fibers to ambient air.” The regulation should note that this work must be conducted in accordance with OSHA requirements (29 CMR 1926.1101(g)(3), Prohibitions, which specifies that “The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM or PACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments” and 29 CFR 1926.1101(g)(3)(i), which specifies that high-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air). (Jonathan Ellis)

Response: MassDEP did not insert “using” into the final regulation as suggested, as it is not necessary. The regulation contains the following: “shall only be conducted with...” introduces both the HEPA-shrouded vacuum attachment and wet cutting equipment. While MassDEP does not implement OSHA standards, 310 CMR 7.15(2) nevertheless reminds the regulated community that nothing in 310 CMR 7.15 relieves any person from complying with all applicable federal, state and local laws and includes a specific reference to OSHA compliance in 310 CMR 7.15(2), Applicability. A separate reference is not necessary in this section.

MassDEP has modified the introductory paragraph to section (c)(4) to clarify that mechanical breakage is only allowed with saws, snap or blade cutting, and/or tapping (In the draft proposed for public comment, these actions were listed as examples of mechanical breakage, not as a definitive list).

MassDEP has added language to the new Asbestos-Cement Pipe section of the regulation that was inadvertently left out, and that appears in all the other work practice sections stating that: “For activities that disturb friable ACM, no visible emissions shall be discharged to the outside air during the collection, processing, packaging or transporting of any ACM or ACWM.” This will appear as an additional Specific Work Practice Requirement 310 CMR 7.15(12A)(c)5.

310 CMR 7.15(12A)(d) Visual Inspections

Comment 50: The changes made to the Guidance Document in May of 2015 allowed for conditional enforcement discretion by MassDEP on the requirement to have a DLS-certified asbestos project monitor perform post-abatement visual inspections. The requirement for a post-abatement visual inspection never should have been put into the regulations for AC Pipe work. It was good that MassDEP provided conditional enforcement discretion, but the requirement should be completely eliminated. (MWWA, 18 other member organizations)

Response: MassDEP does not agree that post-abatement visual inspections should be eliminated from the regulation. Neither air clearance, nor the use of a DLS-certified asbestos project monitor are required for the post-abatement visual inspection, but as with other asbestos abatement activities, a visual inspection is needed to ensure that the work area is free from visible debris before the trench is back-filled.

Comment 51: Is DLS accepting the 8 hour class II work training as an alternative to Class III work? (Jonathan Ellis)

Response: The question about whether DLS is accepting the 8 hour Class II worker training as an alternative to Class III work would be more appropriately directed to DLS.

Comment 52: If the work practices outlined here are determined to result in the production of asbestos dust, then would DLS require a visual inspection to be conducted by an Asbestos Project Monitor? (Jonathan Ellis)

Response: The question about whether DLS would require a visual inspection by an Asbestos Project Monitor if asbestos dust is produced would be more appropriately directed to DLS.

Comment 53: (d) Under DLS regulations there are two visual inspection categories - one for asbestos associated work, and one for asbestos response actions. While an asbestos project monitor can perform visual inspections for both requirements, an asbestos associated project worker can only perform visual inspections for asbestos associated project work (work less than 3 feet). In (d)1., MassDEP should not be stating the training requirements of the persons who perform the work as this is subject to DLS authority. There is no more reason for MassDEP to state that asbestos cement workers need a specific training than Class II roofers or dealing with asbestos cement shingles and panels. (Jonathan Ellis)

Response: This section of the asbestos regulation notes that the training for persons who can conduct surveys under 310 CMR 7.15(12A)(b) has to be approved by DLS. DLS has reviewed and approved such training.

Comment 54: In (d)2.b., MassDEP should provide the regulatory citation for management of Asbestos-Containing Waste Material. (Jonathan Ellis)

Response: 310 CMR 7.15(12A)(a)4. states that owners/operators shall comply with all other requirements of 310 CMR 7.15, which includes the storage and disposal section.

Comment 55: 310 CMR 7.15(12A)(d)3. requires documentation of a visual inspection by the member of the work crew who performed the inspection. However, this is not required when project monitors perform a visual inspection for asbestos abatement activities or asbestos that disturbs window glazing or caulking. Why does this subset of work require this administrative burden? Recommend deletion. (Jonathan Ellis)

Response: Since MassDEP is allowing post-abatement visual inspections of AC pipe work to be performed by someone other than a DLS-certified Asbestos Project Monitor, specific documentation is required for each visual inspection. A form for this record has been included in the Guidance for Asbestos-Cement Pipe published in 2015 (Template B: Post Abatement Visual Inspection Documentation). The template is formatted as a check list with specific criteria to satisfy the no visible debris requirement. Additionally, it requires the person conducting the visual inspection ascertains that they were physically present, confirms that they are qualified to perform the visual inspection, and signs and dates the document. This checklist is intended to ensure that the person conducting the inspection (who is probably a member of the crew working on the pipe) does not overlook anything.

Note: MassDEP has included one revision in the final regulation that was not addressed in specific comments submitted during the public comment period:

- MassDEP has moved the new sentence proposed to be added to 310 CMR 7.15(13)(b)1., Work Practice Standards for Asbestos Incidental Maintenance or Work, as a new sub-paragraph (d) clarifying that intact and unbroken vinyl asbestos tile that is not coated with asbestos-containing

mastic may be disposed of in any landfill permitted by the Department to accept solid waste pursuant to 310 CMR 19.000. In the final rule, this sentence has been added to 310 CMR 7.15(17), Asbestos-Containing Waste Material Storage and Disposal Requirements, as a new sub-paragraph (d).

Comments submitted on issues that are outside the scope of the Phase 1 amendments

Some of these comments may be considered in the resolution of issues raised in Phase 2 stakeholder discussions.

Comment A: Vermiculite attic insulation should be regulated as ACM. (J. Daniel Erwin, Industrial Hygienist)

Comment B, Asbestos in Soils: Licensed Site Professionals lack important qualifications to manage asbestos in soils, and should not be allowed to manage cleanups involving asbestos that has already been released into the environment. In addition, the commenter believes that the application of MCP risk based cleanup standards would violate Air Quality regulation removal requirements, and in effect, create inactive waste disposal sites. (Terracon: Vincent L. Giambrocco, Manager of Field Services)

Comment C, FRIABLE ASBESTOS CONTAINING MATERIAL: The current definition of “Friable Asbestos Containing Material” is too broad. Asphalt-containing material such as roofing and coal tar products should be exempt from this definition. “Friable” commonly only refers to that which can be broken by hand, and does not include roofing and coal tar products. Classifying these materials as “friable” in this definition causes confusion. (Eversource: Ruthanne Calabrese, Environmental Affairs Manager)

Comment D: Comments were submitted on specific sections not included as part of the Technical Corrections or new A-C Pipe Section that encompass the Proposed Phase I Regulatory Amendments. The additional specific comments pertained to the following paragraphs of the regulation (310 CMR 7.15):

- (1) Definitions: ASBESTOS ABATEMENT ACTIVITY
 - (1) Definitions: ASBESTOS-CONTAINING MATERIAL
 - (1) Definitions: ASBESTOS-CONTAINING WASTE MATERIAL
 - (5) Removal Requirements
 - (6)(f) Notification Exemptions
 - (7)(a) No Visible Emissions
 - (7)(b) Required Use of Asbestos Contractors
 - (7)(c)(4) Isolation of the Work Area
 - (7)(c)5.c. Exception to Wall Surface Covering Requirement Where Glovebags are Used
 - (7)(d) Equipment Decontamination Requirements
 - (8) Visual Inspection Requirements
 - (10)(a) Disposal of asbestos-containing asphaltic roofing and siding materials
 - (13) Work Practice Standards for Asbestos Incidental Maintenance Projects or Work
 - (13)(a) General Work Practice Standards for Asbestos Incidental Maintenance Projects or Work
 - (13)(b) Requirements for the Removal of Asbestos Floor Tile as Incidental Maintenance Projects or Work
- (Jonathan A Ellis)

Comment E, (6)(g): For those systems who do not choose to apply for Blanket Notification, we believe it is inappropriate for them to have to refile and wait another 10-days if there is a delay in the project. So long as the original notice was filed, the owner/operator should be allowed to notify MassDEP of the change in schedule, but proceed immediately and not wait an additional 10 days. Commenter recommends revising (6) Notification Requirements (g) Notification Revision Procedures (1) and eliminating “*at least 10 working days prior to the new start date.*” (Comments from MWWA and 19 member organizations)

Comment F: (12A) Transite/concrete cement and orangeburg risers, both of which are encountered on utility poles, should be included in future regulatory revision. Inclusion of these materials is consistent with the addition of specific provisions for the repair and replacement of asbestos-cement pipe, which is currently a proposed change. (Eversource: Ruthanne Calabrese, Environmental Affairs Manager)

Comment G, (17): Storage and Disposal: There are several additional reasons that we believe it is inappropriate for MassDEP to regulate AC Pipe in the manner it is. First, it is well established that the agreed upon work practices reduce the risk that the pipe will become friable. Air monitoring was performed on the equipment to be used and it was determined that particulate matter was below the permissible exposure limit. Second, if MassDEP reverts to NESHA then the removed pipe (less than 3ft. sections) could be disposed of in a construction waste landfill rather than having to dispose of it as special waste. It is very expensive for municipalities to dispose of it in the current manner. Third, the current storage times in (17) Asbestos Containing Waste Material Storage and Disposal Requirements present a problem, as even small quantities can only be held for 30 days, requiring more frequent disposal than necessary. The pipe sections are wrapped and do not present a danger of becoming friable as they are stored. MassDEP must change the 30-day limitation on storage of removed AC pipe. (Comment from MWWA and 19 member organizations)

Comment H, (17): p. 34, Para (17) (b) 2. Change 30 days to 60 days. Increasing the allowed on-site storage time is reasonable and it will provide more efficiency in disposal costs by decreasing the number of “short” loads being hauled away. (UCANE: Michael F. Lenihan)

Comment I: The new section of 7.15 addressing asbestos-cement pipe should be re-numbered as “12B”, with section 12A being asbestos cement shingles, etc. and the main title being “asbestos cement products”. (Jonathan Ellis)

Comment J: The word “mil” appears approximately nineteen times. Rather than add (0.006 inch) after the word mil in this selected location, the word “Mil” should be added to the definition section of 310 CMR 7.15. (Jonathan Ellis)