Final 2024 Amendments to the Massachusetts Contingency Plan, 310 CMR 40.0000: Summary of Public Comment Process and Changes Made from the Public Hearing Draft

The Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, regulates the notification, assessment, and remediation of disposal sites resulting from the release of oil and/or hazardous materials to the environment. This document summarizes amendments to the MCP that will become effective on March 1, 2024 ("2024 Amendments"), as well as the public comment process that resulted in the 2024 Amendments.

2019 Public Hearing Draft

Since the MCP was first promulgated, MassDEP has periodically proposed amendments to keep it current with updated science and current practice. In April 2019, MassDEP issued a public hearing draft of proposed MCP amendments with a broad range of proposals. Among the more significant proposals were:

- the addition of new Method 1 cleanup standards and Reportable Concentrations for six per- and polyfluoroalkyl substances (PFAS);
- amendments to existing MCP Method 1 cleanup standards and Reportable Concentrations to reflect more recent scientific information on chemical exposure and toxicity;
- amendments to methodologies for determining soil Exposure Point Concentrations;
- amendments related to coal tar risk characterization;
- provisions for disposal sites with radioactive materials intended to minimize duplicative oversight by MassDEP and Massachusetts Department of Public Health;
- the addition of consideration of foreseeable climate change impacts at disposal sites;
 and
- clarification and modification of response action requirements related to Remedial Additives, Tier Classification and Extensions, Status Reports, Remedial Monitoring Reports, Temporary Solutions, Active Exposure Pathway Mitigation Measures, and Activity and Use Limitations.

Public Hearings and Comment Process

MassDEP held four public hearings and one public meeting on the proposed MCP amendments in May 2019 and received 51 sets of public comments. Most of the oral testimony and written public comment focused on the PFAS proposals.

Finalizing PFAS-related MCP Amendments

In the interest of coordinating the implementation of the PFAS-related MCP provisions with the establishment of PFAS Maximum Contaminant Levels for public water supplies under the Massachusetts Drinking Water Regulations, 310 CMR 22.00, MassDEP finalized the PFAS-related MCP amendments on December 27, 2019.

Summary of Comments on the Other ("Non-PFAS related") MCP Amendments

A detailed summary of public comments received on the non-PFAS related MCP proposals is provided in the document entitled "MassDEP's Response to Public Comments on the Public Hearing Draft of Proposed Amendments to the Massachusetts Contingency Plan, 310 CMR 40.0000," referred to herein as "Response to Comments." The summary below highlights proposals that received the most substantive and numerous comments, as well as changes made in the 2024 Amendments to reflect such comments.

Risk characterization requirements for determining Exposure Point Concentrations in Soil
The proposals related to determining Exposure Point Concentrations (EPCs) received the greatest number and most detailed comments. Comments were received regarding the EPCs (310 CMR 40.0926) for all environmental media—soil, sediment, groundwater, indoor air, and "Hot Spots". In the 2024 Amendments, MassDEP made modifications to these provisions, as well as the corresponding section related to identifying Exposure Points (310 CMR 40.0924), to address specific comments and to ensure consistency in terminology.

The most significant comments focused on the requirements for soil EPCs. MassDEP had proposed new provisions to provide for up-to-date sampling methodologies and strategies for calculating soil EPCs, having determined that the existing provisions did not fully account for contaminant concentration distribution and variability at some sites.

MassDEP met with interested stakeholders to discuss the soil EPC issues both prior to issuing the public hearing draft and after written comments were received to facilitate MassDEP's understanding of the comments. In the 2024 Amendments, MassDEP made modifications to address recommendations made and issues raised by commenters. These include the addition of text in the risk characterization section (at 310 CMR 40.0903 and 310 CMR 40.0904) to lay out the judgmental versus systematic soil sampling approach considerations. The provisions were also modified to provide for the application of professional judgment regarding when the upper confidence limit on the mean must be used as an estimate of Exposure Point Concentration.

Risk characterization of coal tar waste deposits

In the public hearing draft, MassDEP proposed amendments to address inadequate characterization of risks posed by residual coal tar waste deposits. Coal tar waste deposits are found as distinct, separate phase, semi-solid layers in the subsurface environment at locations formerly used as manufactured gas plants.

In the public hearing draft, MassDEP proposed that "Manufactured Gas Plant" waste deposits and other such waste materials that are found at a disposal site separate from other environmental media be included within the existing MCP Hot Spot definition. The intention of this proposal was to ensure that such wastes are evaluated as distinct exposure points and that an Exposure Point Concentration be determined for the waste. Additionally, it was proposed that such wastes would be subject to the Method 3 Upper Concentration Limits.

Commenters sought clarification of what waste materials were covered by the proposed provisions; as written the provisions appeared to apply to a broad range of wastes. Commenters suggested that the inclusion of wastes as Hot Spots was not appropriate. They recommended that rather than incorporating the assessment of waste material into the existing Upper Concentration Limit provisions, they should be addressed under separate provisions. Commenters recognized that, as proposed and consistent with MassDEP's intent, most locations with these waste deposits would require an Engineered Barrier to achieve a Permanent Solution because of the high concentrations and large number of toxic compounds found in these deposits.

As MassDEP's original focus was on the inadequate risk characterization and management of coal tar, in the 2024 Amendments the relevant provisions apply only to "visible" coal tar waste deposits--material that is clearly different from the surrounding soil. Reference to areas of waste disposal was removed from the Hot Spot definition. To ensure that exposures to visible coal tar are assessed, coal tar deposits are designated as Exposure Points that may be assessed qualitatively. Additionally, consistent with the comments that such wastes should not be included under the Upper Concentration Limit provisions, the 2024 Amendments include new provisions focused solely on coal tar as a risk of harm to public welfare and to the environment. (The term "Upper Concentration Limit" is also replaced with "Method 3 Ceiling Limit" to avoid confusion with the UCL acronym used elsewhere in the risk characterization provisions to refer to "upper confidence limit".)

Requirements for Active Exposure Pathway Mitigation Measures

In 2014 amendments to the MCP, provisions were added to allow for Permanent Solutions at disposal sites where Active Exposure Pathway Mitigation Measures (AEPMMs) ensure a level of No Significant Risk. AEPMMs include subslab depressurization systems (used to prevent the infiltration of volatile organic compounds from the subsurface environment into indoor air) and treatment systems installed to remove contaminants from a private water supply system.

The 2019 public hearing draft contained clarifications to the AEPMM provisions based on MassDEP's experience since 2014. These clarifications included:

- revisions to the AEPMM definition to make it more specific; the concern being that
 persons conducting response actions were seeking to apply the AEPMM provisions to
 more complex Active Remedial Systems;
- new requirement to monitor pressure ranges in addition to system shutdowns in AEPMMs that prevent vapor intrusion;

- new provisions that formalize an existing process for registering remote telemetry systems that monitor AEPMMs which prevent vapor intrusion; and
- new provisions for documenting the performance of systems installed to treat private drinking water supply wells.

Comments on the AEPMM definition suggested that it be revised to include vapor intrusion systems that use positive pressure in addition to the subslab depressurization systems. MassDEP made this change. With respect to the requirement to monitor pressure ranges in addition to system shutdowns, some commenters believed this requirement added too much complexity to the monitoring. Other commenters supported this change and recognized that it was appropriate for effectively monitoring the system performance and flagging potential system failure. In the 2024 Amendments, MassDEP maintained the requirement to monitor pressure; it does not apply retroactively to those systems that are already in operation as Permanent Solutions.

Consideration of foreseeable climate change impacts

In the public hearing draft, MassDEP proposed amendments requiring consideration of foreseeable climate change impacts that may affect the permanency of a disposal site cleanup. The majority of comments received on these provisions recognized the importance of considering climate change impacts at disposal sites. Some commenters questioned the practicality of the provisions in light of the uncertainty surrounding climate change projections. Other commenters sought confirmation that these evaluations would be based on climate projections made available by the Executive Office of Energy and Environmental Affairs (EOEEA) and suggested that MassDEP provide more specifics in the regulation to define a timeframe for identifying future impacts and to extend the requirements to Temporary Solutions.

In its Response to Comments, MassDEP confirmed that the evaluation should be based on EOEEA information. In the 2024 Amendments, the provisions were finalized as proposed. Changes were not made to expand the provisions to Temporary Solutions or add specifics such as timeframe.

<u>Tier Classification and Extensions, Temporary Solutions, Status & Remedial Monitoring Reports</u> In the public hearing draft, MassDEP proposed a number of amendments related to Tier Classification Extensions, disposal sites with Temporary Solutions and related Status and Remedial Monitoring Reports. These proposals included:

- clarifying the requirement to maintaining Tier Classification for disposal sites where a Temporary Solution has been achieved;
- removing the requirement that the Tier Classification Extension be submitted prior to the expiration of the existing Tier Classification;
- adding an exception to the requirement to seek additional Tier Classification Extensions for sites with a Temporary Solution if Status Reports are being provided to the Department at the required frequency;

- clarifying that Status Reports are required every six months for Temporary Solution sites with Active Operation and Maintenance (O&M) of a remedial system, mitigation measure or remedial monitoring program is occurring; and
- adding a requirement for an annual Status Report for sites with a Temporary Solution where Active O&M is not occurring, except where an alternative schedule is approved by the Department.

Public comment on the proposed amendments included support for clarifying these various provisions. Commenters questioned the need for annual Status Reports for Temporary Solution sites where no Active O&M is occurring given the lack of activity at many of these sites and that a Periodic Review report is required every five years. Commenters generally supported the exception to the requirement to seek additional Tier Classification Extensions if Status Reports are otherwise being provided at the required frequency, but requested transition provisions for existing Temporary Solution sites with expired Tier Classifications to establish whether and when an Extension must be filed.

In the 2024 Amendments, MassDEP revised the requirement related to Status Reports for Temporary Solution sites where no Active O&M is occurring. The requirement now applies only upon written notice by the Department where the Department determines, based on disposal site risk considerations, that more frequent Status Reports are warranted. With regard to the Tier Classification Extension provisions, MassDEP included transition provisions at 310 CMR 40.0560(7)(i), as suggested by commenters.

Effective Date and Implementation

The 2024 Amendments will be made available on MassDEP's website on September 1, 2023, and will take effect on March 1, 2024, on which date they will also be published in the <u>Massachusetts Register</u>. Ahead of the effective date, MassDEP will prepare for the implementation of the 2024 changes by conducting outreach, providing training to Licensed Site Professionals and agency staff, and posting related guidance.