

Waste Site Cleanup Advisory Committee

September 21, 2023

Agenda (times are approximate)

- 9:00 am Program updates
- 9:25 Brownfields
- 9:40 MCP Amendments
 - Overview
 - Implementation
- 11:00 Adjourn

**** This meeting is being recorded.***



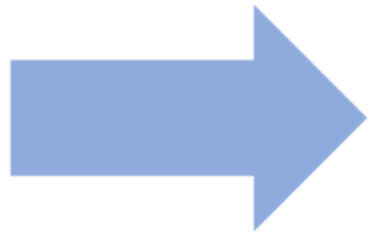
Program Updates

- MassDEP welcomes Deputy Commissioner John Beling!
- Hiring
- Schedule for office hours and WSCAC meetings
- IT transition
- Legislation - PFAS Omnibus legislation
- Environmental Justice Strategy
- Grants (TAG & MOSPRA)



Hiring

- MassDEP BWSC is hiring!
- Currently posted and approved to be posted BWSC positions

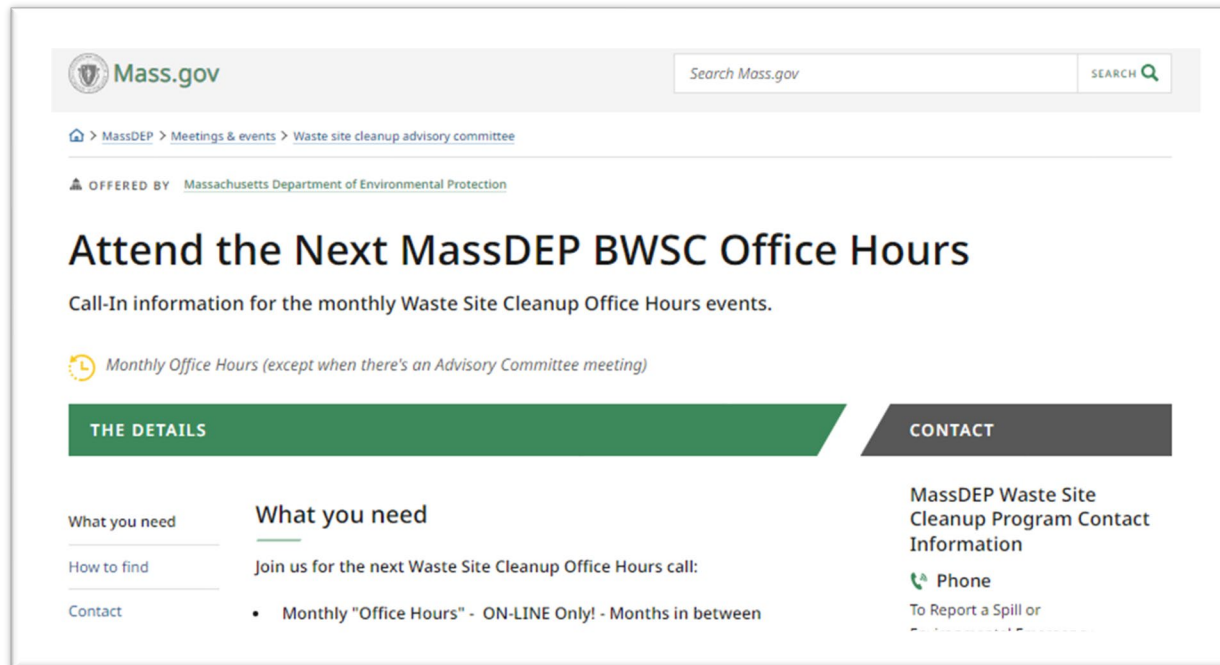


Find listings at **MassCareers** <https://www.mass.gov/find-your-career-at-the-commonwealth>



Stay up-to date on program developments

- Add name to email list BWSC.Information@mass.gov
- Monthly Office Hours and Waste Site Cleanup Advisory Committee meetings
 - 3rd Thursday of the Month, 9:00 am via Zoom



The screenshot shows a web page from Mass.gov. At the top, there's a search bar and a navigation breadcrumb: "MassDEP > Meetings & events > Waste site cleanup advisory committee". Below this, it says "OFFERED BY Massachusetts Department of Environmental Protection". The main heading is "Attend the Next MassDEP BWSC Office Hours", followed by the subtext "Call-In information for the monthly Waste Site Cleanup Office Hours events." A clock icon indicates "Monthly Office Hours (except when there's an Advisory Committee meeting)". The page is divided into two main sections: "THE DETAILS" (highlighted in green) and "CONTACT" (highlighted in grey). Under "THE DETAILS", there are two columns. The left column has links for "What you need", "How to find", and "Contact". The right column has a heading "What you need" and text: "Join us for the next Waste Site Cleanup Office Hours call:" followed by a bullet point: "Monthly 'Office Hours' - ON-LINE Only! - Months in between". The "CONTACT" section has a heading "MassDEP Waste Site Cleanup Program Contact Information" and a link for "Phone" with the subtext "To Report a Spill or".



Operations – IT application upgrade

- Major upgrade, begun June 2022, will affect how BWSC staff submit information to eDEP
 - streamline BWSC data storage and enhance reporting capabilities
- BWSC staff are currently testing the system ahead of launch
- What it means to LSPs/external users?
 - No longer see MassDEP staff submitted eDEP forms; will see docs with same information but different appearance
 - Improved data quality; the new application allow BWSC more flex. to update
 - BWSC staff will record latitude/longitude at time of notification by dropping pin on map



PFAS

PFAS Omnibus Bill, ***An Act to protect Massachusetts public health from PFAS*** <https://malegislature.gov/Bills/193/H2197>

- Establishes PFAS Remediation Trust Fund – municipalities, PWS, grants to private well users
- Directs MassDEP to amend sw and gw discharge permits & propose wastewater effluent limits & pre-treatment standards for PFAS
- Public Education Materials & Environmental Justice
- Food Packing & Consumer Products
- Public Education & Firefighter Turn Out Gear Notification
- Firefighter Turnout Gear PFAS Ban
- AFFF and Occupational Exposures
- Deadlines



EOEEA EJ strategy & public involvement

- The EJ Strategy a requirement of EJ Executive Order #552
- EOEEA Secretariat's workplan seeks to proactively promote environmental justice in all neighborhoods in implementing agency's mission
- MassDEP's EJ Strategy components consist of:
 - Hiring & Recruitment
 - Communication
 - Community Engagement and Public Outreach
 - Social Media/Information Technology
 - Limited English Proficiency
 - Training
 - Grants and Funding Opportunities
 - Enforcement
 - Incorporating EJ Considerations in Permit Proceedings
 - Cumulative Impact Analysis
 - Metrics
 - Planning for Additional Projects/Activities



October 2022

Executive Office of Energy and
Environmental Affairs

Environmental Justice Strategy

Secretariat and agency strategies for proactively promoting
environmental justice in the Commonwealth of Massachusetts.



Technical Assistance Grants

Supporting local involvement in
contaminated site cleanups



- Grant Applications Due **October 13, 2023**
- Responses are posted to questions received.
- <https://www.mass.gov/info-details/technical-assistance-grants-waste-site-cleanup>



Marine Oil Spill Prevention & Response Act Program

- **MOSPRA Grant Program Grant:**

- **Fund projects** that enhance the protection of coastal/marine waters by preventing or responding to an oil spill.
 - E.g, spill preparedness training, risk identification and mitigation, research & development, wildlife rehabilitation training, and climate change resiliency in oil & hazardous materials marine transportation and/or storage.
- **Eligible applicants:** public entities, state authorities, individuals, partnerships, and cooperations
- **Grant opportunity** is expected to be posted in late October 2023.

<https://www.mass.gov/info-details/marine-oil-spill-prevention-response-grant-program>





Brownfields Update

September 21, 2023

David Foss
Statewide Brownfields Coordinator



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Inter Agency Coordination - 2023



ASTSWMO

Wilmington DE April 2023

- 50 States
- District of Columbia
- 5 Territories: Guam, American Samoa, Puerto Rico, US VI, Northern Marinas

NEWMOA

NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION

NEWMOA

Boston June 2023

- 6 New England States
- EPA Updates & Priorities
- BIL Funding
- Environmental Justice

EPA – Brownfields & LUST Programs

Boston March 2023

Brownfields National Training Conference

Detroit August 2023



BCONE

BROWNFIELD COALITION OF THE NORTHEAST

Northeast Sustainable Communities Workshop

Worcester September 2023

Outreach & Brownfields Roundtables 2023

WERO

**Berkshire Regional
Planning Commission**
Pittsfield
September 2023

LSPA

Training Symposium
Marlboro - April 2023



MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection

NERO

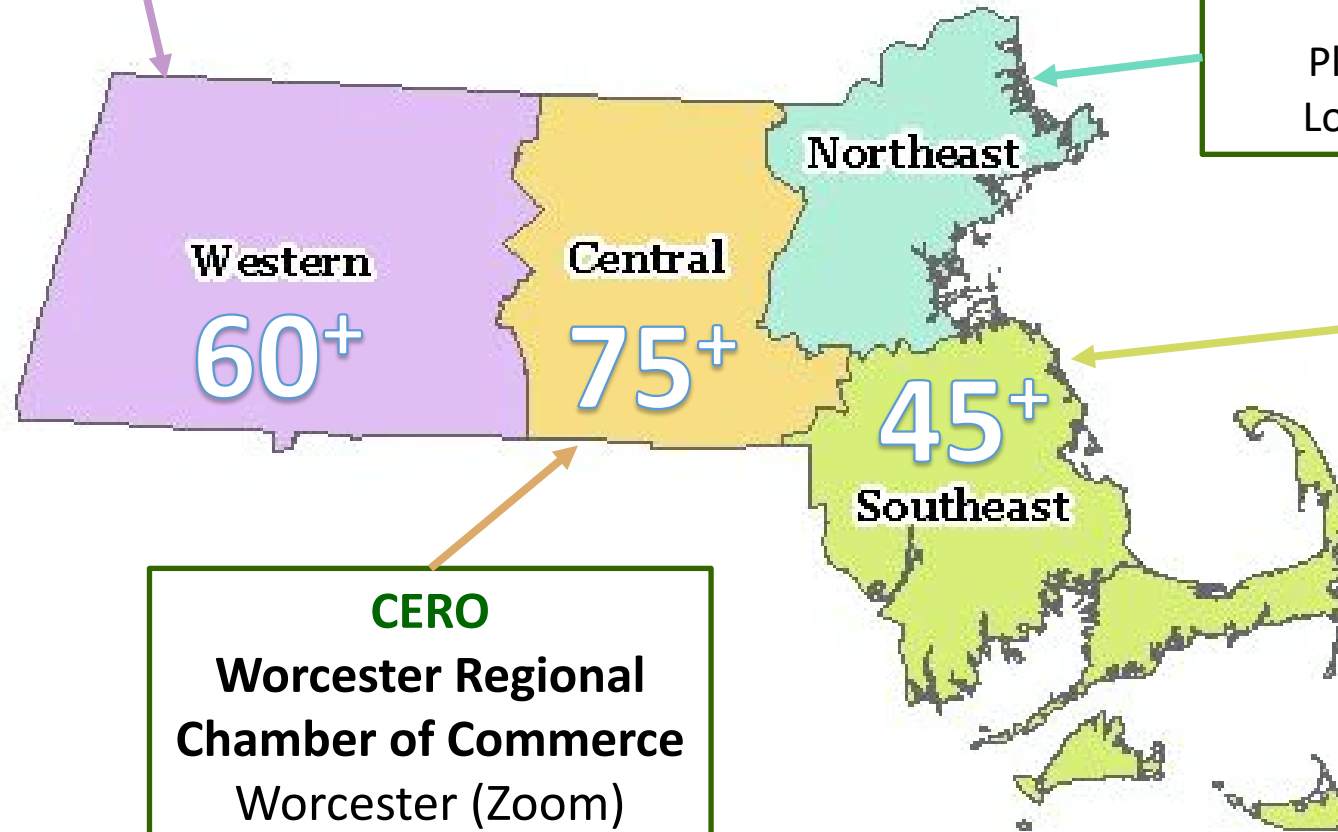
Plan Fall 2023
Location: TBD

SERO

**Old Colony
Planning Council**
Brockton
May 2023

CERO

**Worcester Regional
Chamber of Commerce**
Worcester (Zoom)
March 2023



MassDEP BWSC Brownfields Team

- SERO Angela Gallagher & Kathryn Carvalho
- CERO Kevin Daoust & Amy Sullivan
- WERO Caprice Shaw
- NERO Joanne Fagan

+ Project Staff!



David Foss, CPG, LSP
Massachusetts Statewide Brownfields Coordinator
MassDEP | Bureau of Waste Site Cleanup
Mobile: 774-991-5996
David.Foss@Mass.Gov

MassDEP Brownfields Program - 128a BIL

- **\$880,000** - January 2023 + **\$840,000** - October 2023
Anticipate similar funding in years 3-5 (\$4.5M over 5 years)
Implemented by SARSS & IRASS Contractors
- BIL Sites prioritized by Regional Brownfields Coordinators:
Contractor Selected: **Bridgewater***, **Brimfield***, **Fitchburg***, **Wareham***
Contract Pending: **Framingham**, **Southbridge**, **Peabody**
***QAPP:** Site-Specific Quality Assurance Project Plan Addendum



What's Next?

MassDEP Application for EPA Brownfields Grant

- CWAG-ST: \$2M Community-Wide Assessment Grant for States & Tribes Due **November 2023**

*Support other Massachusetts applicants

Implementation of 128a BIL Brownfields Assessments & Clean-ups

Coordination with:

DEP EJ - Environmental Justice

DEP CERP – Clean Energy Results Program

DOER – SMART Program

Plan 2024 Brownfields Roundtables

Teaming with Regional Planning Agencies & nonprofits across the Commonwealth



NEWMOA

NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION



REVITALIZING NEW ENGLAND:
BROWNFIELDS SUMMIT 2024



MAY 29 & 30, 2024

Holiday Inn By The Bay | Portland, ME

Call for Presentations & Sessions
Deadline: **Friday October 27, 2023**

Overview - MCP 2024 Final Amendments



MCP Amendments

This page contains information on final 2024 revisions to the Massachusetts Contingency Plan.

2024 Revisions to the Massachusetts Contingency Plan (310 CMR 40.0000)

REGULATORY DOCUMENTS PUBLISHED SEPTEMBER 1, 2023; EFFECTIVE MARCH 1, 2024

MassDEP has filed final 2024 revisions to the Massachusetts Contingency Plan (MCP) with the Secretary of State for final promulgation and publication in the *Massachusetts Register*.

On September 1, 2023, a notice was published in the *Massachusetts Register* with a link to this page. The 2024 revisions will take effect on **March 1, 2024**, on which date the revised MCP will be published in full in the *Massachusetts Register*.

Included below are: a "clean" version of the 2024 revised MCP; a redline version of the 2024 revised MCP showing changes from the current (2019) regulations; and a redline version of the 2024 revised MCP showing changes that were made from the 2019 public hearing draft. These documents are unofficial versions of the amendments made available until the official version of the 2024 MCP is published in the *Massachusetts Register*.

In anticipation of the March 1, 2024 effective date, MassDEP staff will be conducting outreach and training to our staff, LSPs, and the regulated community and posting guidance and supporting materials as they become available.

TABLE OF CONTENTS

- ✓ Final 2024 MCP Revisions - Clean Version
- ✓ Redline/Strikeout Comparisons
- ✓ Summary of Changes Adopted in the Final 2024 MCP Revisions

Final 2024 MCP Amendments have been Posted

<https://www.mass.gov/lists/mcp-amendments>



Context for these amendments

- Waste Site Cleanup Program has routinely amended MCP to keep standards up-to-date with current toxicity information, reflect current standards of practice, and achieve process efficiencies
- Includes changes:
 - proposed by the regulated community
 - related to compliance concerns identified by MassDEP
 - clarifications/modifications related to the last round of amendments (2014)



Overview – Public Hearing Draft

<https://www.mass.gov/lists/2019-proposed-mcp-revisions>

- Broad set of proposed amendments across MCP; mix of substantive proposals and clarifications
- 97 “Notes to Reviewers”

4. NOTE TO REVIEWERS: *The proposed amendment to the Anthropogenic Background would specifically include OHM that is attributable to coal, coal ash and wood ash that is not associated with an ash landfill or the combustion of chemically-treated/preserved wood under the definition. Coal and wood ash is also already included in clause (b) of the Historic Fill definition (and therefore, by extension falls under the Anthropogenic Background definition). The definition of Historic Fill, however, is applicable to Fill that is primarily soil. Coal, coal ash and wood ash from historic disposal are frequently encountered in the environment as layers that are primarily ash. The proposed language at (c) is similar to the existing notification exemption at 310 CMR 40.0317(9), but it also specifically excludes ash landfills.*

Anthropogenic Background means those levels of oil and hazardous material that would exist in the absence of the disposal site of concern and which are:

- (a) attributable to atmospheric deposition of industrial process or engine emissions and are ubiquitous and consistently present in the environment at and in the vicinity of the disposal site of concern;
- (b) attributable to Historic Fill;
- (c) attributable to coal, coal ash, or wood ash, excluding ash landfills or wood ash resulting from the combustion of lumber or wood products that have been treated with chemical preservatives;
- ~~(ed)~~ associated with sources specifically exempt from the definitions of disposal site or release as those terms are defined in MGL c. 21E and 310 CMR 40.0006;
- ~~(de)~~ releases to groundwater from a public water supply system; or
- ~~(ef)~~ petroleum residues that are incidental to the normal operation of motor vehicles.



Timeline & Process

- Amendments were part of the same package of proposed Per- and Polyfluoroalkyl Substances (PFAS) standards and Reportable Concentrations
- Held 4 hearings
- Decision made to split Non-PFAS provisions from that package to expedite promulgation of PFAS standards/RCs in coordination with drinking water program; MCP PFAS changes were finalized in December 2019



Public Comment

- 20 Comment sets/298 comments addressing Non-PFAS proposals
- Proposals receiving most comments
 - Risk Characterization
 - Tier Classification, Temporary Solution & Status Reports, Active Exposure Pathway Mitigation Measures
- Summary memo and detailed comment by comment response posted



Highlighted Proposals/Changes Made in Response to Comments

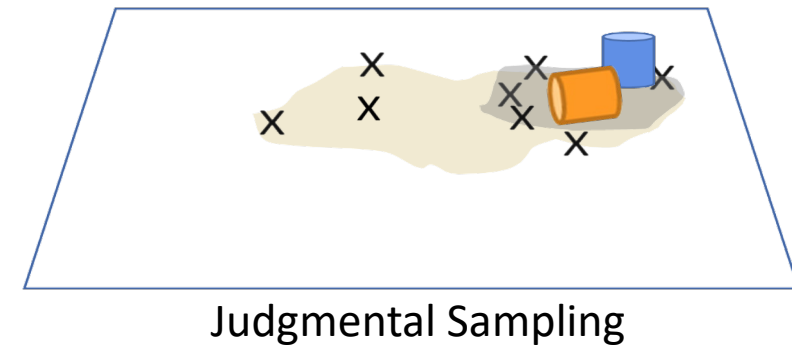
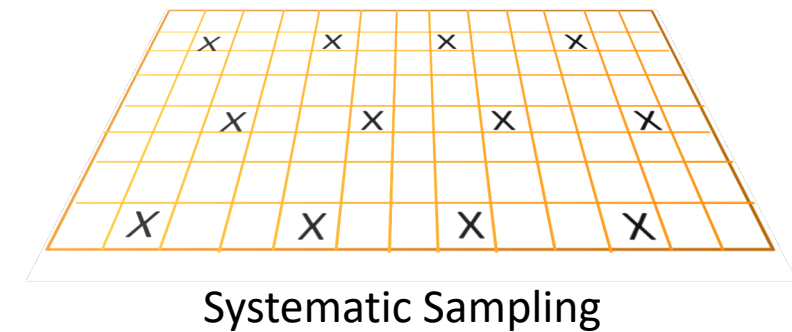


Determining Exposure Point Concentrations in Soil

Proposed update of methodologies for sampling and estimating soil Exposure Point Concentrations to account for contaminant distribution and variability at sites with no clear pattern of contamination related to sources.

Changes in response to comments:

- added consideration of appropriate sampling approach, systematic or judgmental, earlier in the process
- made choice between systematic or judgmental sampling less prescriptive
- where systematic sampling is done, allow use of:
 - discrete sampling using 90th percentile Chebyshev non-parametric upper confidence limit on the mean;
 - incremental sampling;
 - alternative approaches with technical justification.



Method 3 Ceiling Limits (M3CL)

- New term for Upper Concentration Limits – to avoid confusion with “upper confidence limit” on the mean



Characterizing Risk from Coal Tar Waste Deposits

Issue: Appropriately accounting for risk from coal tar waste – layers of waste with high concentrations & complex mixture of polynuclear aromatic hydrocarbons found at former Manufactured Gas Plant locations.

Changes made in response to comments:

- Moved away from specifying as “Hot Spot”
- Focused requirement on “visible coal tar waste deposits” in response to comments “MGP waste” too broad/vague
- Allow for qualitative assessment which addresses issue of concentrated tar wastes fouling analytical equipment
- Address in new section (310 CMR 40.0997) that defines conditions related to risk to public welfare and environment and what is needed to achieve a Permanent Solution (No Significant Risk for both *current and future* conditions) or a Temporary Solution (No Significant Risk for *current* conditions) where coal tar remains on site.



Adequately Regulated Provisions

Radioactive Material – new provisions (40.0115)

- make clear Radioactive Material managed by DPH at “Licensed Facilities” are considered adequately regulated;
- Radioactive Material at “Non-Licensed Sites” not overseen by DPH are subject to MCP;
- Assessment & cleanup of Radioactive Material in both cases follow the DPH protocols and standards
- Other (non-radioactive) OHM is subject to MCP and risk assessment/management provisions



Adequately Regulated – Federal Sites

Over the last decade, MassDEP and USEPA have developed approaches to closure of Superfund sites that take advantage of some aspects of the MCP, most notably Notice of Activity & Use Limitations. These changes facilitate this hybrid approach.

40.0020 & 40.0111(8):	Clarify rules around use of MCP AULs (and violations of such AULs) at Adequately Regulated CERCLA sites
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40.0111(10) & 40.0111(11):	Define the conditions/endpoints under CERCLA which would be equivalent to a Permanent Solution (10) or Remedy Operation Status (11) for the purposes of M.G.L c.21E and the MCP
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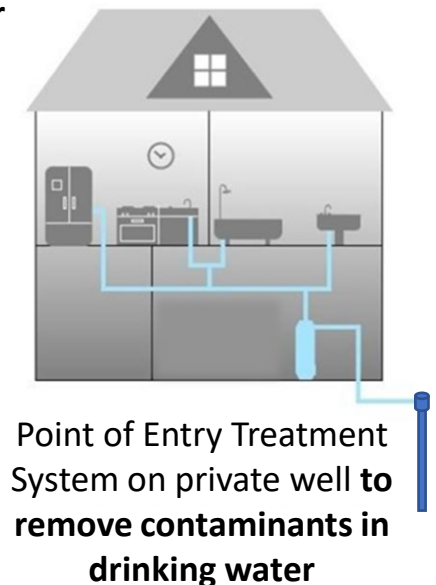
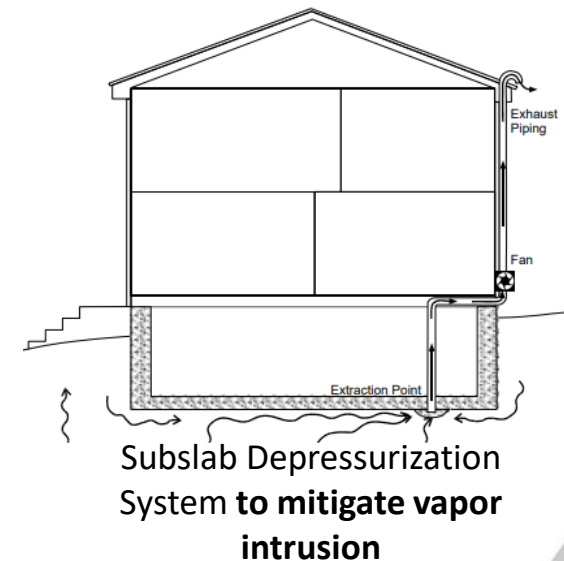
Active Exposure Pathway Mitigation Measures

Requirements for systems that treat vapor intrusion and private water supply wells as part of Permanent or Temporary Solution or Remedy Operation Status

Based on program experience since 2014, clarifications and improvements were proposed to:

- AEPMM definition
- Telemetry registration for vapor intrusion systems
- monitoring pressure rather than shutdown and restart
- Added provisions for operation & maintenance of private water supply well treatment systems (telemetry not an option).

Final Amendments: Incorporated many of the suggestions from public comments (e.g., expanded definition to include positive pressure systems)



Foreseeable Climate Change Impacts

Climate change projections based on Executive Office of Energy and Environmental Affairs models indicate likely impacts to some disposal site locations. Of particular concern are threats to long-term treatment operations, and contaminated materials that remain on-site (e.g., under caps).

Added consideration of foreseeable climate change impacts to the response action performance standard, Conceptual Site Model definition, and foreseeable site conditions provisions to promote more resilient cleanups.

Comments: Most comments recognize issue as important. Some expressed concern about uncertainty and avoiding site-specific research projects. Also received comment asking for more specifics and broader applicability.



Temporary Solutions, Status Reports, Tier Classification Extension

Issue: Confusion about requirements for providing Status Reports and submitting Tier Classification Extensions

Final amendment:

- Clarified Status Reports and RMRs required for sites with a Temporary Solution where Active Operation and Maintenance is occurring
- Status reports not required for Temporary Solutions without Active O&M, unless Department requires in writing; 5 year periodic evaluation applies
- Tier Classification Extension assumed in effect if submittals are being made
- Transition Provisions added



Standard changes – more significant

Tetrachloroethylene: GW-2 Standard: 50 µg/L → 20 µg/L (as proposed)
Based on changes to toxicity values

PAHs: Higher Soil Standards for most PAHs, roughly by a factor of 3 to 10
depending on soil category.
Based on changes to toxicity values

- **40.0321:** “Could Pose” Imminent Hazard levels in surface soil

Arsenic	40 → 50 mg/kg
Cadmium (total)	60 → 1,000 mg/kg
Mercury (total)	300 → 400 mg/kg
PCB (total)	No change (10 mg/kg; proposal contained rounding error)

- **Imminent Hazard Comparison to Risk Limits (40.0955(2)):** “equal to or greater than”
comparison eliminates rounding ambiguity for Imminent Hazard decisions



GW-1 Definitions

40.0006 - Current Drinking Water Source Area

Exclude “*emergency sources approved by the Department*” from Zone A

40.0006 – Non-potential Drinking Water Source Area

Add landfills to the list of land uses that make the underlying groundwater a NPDWSA (if meet acreage, existed as of 1/1/96) . *Specifically:*

- active or closed solid waste landfills permitted pursuant to 310 CMR 19.00
- landfills receiving only wastewater residuals and/or septage (wastewater residuals "monofills") approved by the Department pursuant to M.G.L. c. 21, § 26 through 53; M.G.L. c. 111, § 17; M.G.L. c. 83, §§ 6 and 7, and any regulations promulgated thereunder



Petroleum in Certain GW-1 Areas

310 CMR 40.0924(6)(c) & 40.0926(7)(e)

Existing provisions which take into account processes for biodegradation of petroleum hydrocarbons in groundwater and identify criteria to allow for a Permanent Solution when petroleum hydrocarbon concentrations exceed standards/guidelines in certain GW-1 areas.

2024 MCP revisions:

- “Oil” has been changed to “petroleum hydrocarbons”;
- Clarified that “petroleum hydrocarbons” does NOT include additives, such as MTBE or tetraethyl lead;
- Clarified that the presence of other contaminants does NOT eliminate use of this provision for petroleum. The other contaminants would simply be evaluated as separate Exposure Points using the usual rules.



Public involvement & Written Notices

- Notice of Immediate Response Action to address an Imminent Hazard or Critical Exposure Pathway (40.1403(11))
 - must be provided to owners/operators and Affected Individuals within 3 business days of confirming that the condition exists.
 - This is a change from existing provision that requires notice of a *remedial action* to address the condition
- Written notices (to local officials) may now be sent by email



URAMS through AUL areas (Post Permanent Solution)

- 40.1067(9) - Provides for work initiated as a URAM that includes an area with an AUL to proceed as a URAM (i.e., a separate Release Abatement Measure is not required) provided it complies with the requirements of the AUL and the Post Permanent Solution provisions.

Remedial Additives Near Sensitive Receptors (40.0046)

- 40.0046(3) lists criteria for situations requiring additional approval by the Department for plan to apply additives
 - Amendment narrows the provision for remedial additives used near schools, daycares and residences to remedial additives that to treat VOCs or have the potential to volatilize VOCs
 - Presumptive approval timeframe for plan is shortened to 21 days from Department's receipt (from 30 days)
 - Allows for plan to be incorporated into an IRA, RAM or Phase IV Plan, provided it is clearly identified.



Activity and Use Limitations

- Sketch plan (AUL exhibit)
 - Shows location of area subject to AUL relative to boundaries of disposal site
 - Amendment adds that sketch plan also indicate property boundaries, location of any Engineered Barriers, permanent caps, Active Exposure Pathway Mitigation Measures or other barriers or systems subject to Obligations and Conditions and other provisions of the AUL (revised to require less detail)
- Reference to “Remedy Operation Status and maintaining a Condition of No Substantial Hazard” added to AUL forms



Activity and Use Limitations, cont.

- Signatory authority
 - bracketed clause added to AUL forms to be included if documentation of signatory authority is attached as an Exhibit
- Form 1075 Standardized Obligations and Conditions added
 - where an AUL is required as part of a Permanent Solution at a sites with an Active Exposure Pathway Mitigation Measure (i.e., POET system) on a private water supply
- 40.1012
 - Require AUL for Permanent Solution or Temporary Solution at Non-licensed Sites with Radiation above background
 - Required AUL for Permanent Solution is achieved and the thickness of visible NAPL in an excavation, boring or monitoring well remaining at such disposal sites is or is anticipated to be greater than ½ inch

