

Notes from MassDEP BWSC Advisory Committee Meeting September 27, 2018

By LSPA Regulations Committee

For additional information, please visit the MassDEP website at: <https://www.mass.gov/service-details/september-27-2018-bwscac-massdep>

Ann Lowery – Integrated Hazard Mitigation and Climate Adaptation Plan for the Commonwealth

-Began w/ Executive Order 569

-Statewide Hazard Mitigation and Climate Adaptation Plan

-Municipal Vulnerability Planning (MVP)

Goals: to mitigate and adapt

-Lead nation in reducing greenhouse gases and safeguard commonwealth from impacts of climate change through citizen engagement, science and cost-effective policy

Graphic: intersection of several mitigation and adaptation initiatives

Executive Order 569 called for integration of the many initiatives, “An integrated climate change strategy for the commonwealth”. Signed September 16, 2016

-Requires all agencies to appoint “climate coordinators”

-Overall climate adaptation should be incorporated into agencies where applicable

Climate Change Clearinghouse for MA: <http://resilientma.org>

Good website for resources

-First in nation climate adaptation and hazard mitigation plan

Plan includes:

-Hazard mitigation plan elements for FEMA funding

-Climate change projections for MA

-Agency vulnerability assessments (80 agencies)

-Current adaptive capacity

-Municipal Vulnerability Assessment

-Mainstreaming climate change (using existing staff, resources, etc, incorporate climate change into planning)

State Website: Provides climate data, geospatial data at town level, runs vulnerability assessment, connects opportunities and grants (Massachusetts Climate Change Clearinghouse [MCCC])

-Nearly ½ MA municipalities participating in MVP, apprx. \$7MM expended for this program

Comment: MVP is great but maybe does not do enough to account for contaminated site vulnerability, and maybe this should not be municipality responsibility but instead picked up by MassDEP

Tom Potter: State Vulnerability for Contaminated Sites

-Waste Site Concerns

-MA State Plans

-4 major MassDEP considerations:

- 1) Increased precipitation: mobilization of contaminants / damage to capping
- 2) Sea level rise: site damage / contaminant mixing
- 3) Heating / temp increases up to 5 degrees in western part of state: increase/decrease in toxicity – chemical changes
- 4) Hurricanes / storm surges

-Effects of these and remedial considerations

Boston University performed independent student study (GIS based)

Some results from this analysis was confirmed during March 2018 storms

2018 MassDEP Vulnerability Report generated

2018 Waste Site Vulnerability Assessment partners: Sustainable Remediation Forum (SURF), EcoAdapt, Mystic River Watershed Association

BWSC Climate initiatives:

1. Greener Cleanups
2. ER Capabilities
3. Vulnerability Assessment and Adaptation of Waste Sites
4. NRD Restoration
5. Holt Rd Landfill
6. Regs and Policies

MA leader in this work, and has been selected for pilot project under SURF

Universe of waste sites include: open sites, active systems, engineered barriers, AULs, then prioritize 2-3 sites for limited scope vulnerability assessments and adaptation planning. Deliverable may ultimately be guidance document with BMPs.

Also plan to prioritize based on analysis (ie, drinking water resource areas, sensitive receptors, priority pathways [IA], and options for resiliency [physical barrier, backup power])

Focus on new data from Climate Change Clearing House

Tasks: prioritize 2 or 3 sites for case studies – hope within the Mystic River Watershed

What are other states doing?

-Washington State: 2017 guidance “Adaptation Strategies for Resilient Remedies” focused on landslides and fires

-New Jersey: targeted to PRPs, sites should be assessed after storms

-California: just starting guidance focusing on waste treatment, storage and disposal facilities

ASTMS guidance exists: E3032-15e1, ASTM WK 55606

Useful for MVP municipalities – general guidance: addresses extreme weather

Question: Who will actually implement remedy/responses at sites where needed?

Paul Locke: MCP does include evaluating “current and foreseeable future conditions”, so precedent for PRPs to consider climate issues. Paul asks “Are LSPs accounting for climate change in their analyses?” “can rely on LSP, or develop guidance, or enhance the regulations”

One participant recommends: Add “climate change” as example for future condition in regulations, but develop guidance on how to take it further

Another participant cautions about relying on models to inform current remedial design

<https://www.mass.gov/climate-clean-energy>

Paul Locke: Updates

Budget is good, above maintenance level, can hire new staff and add capacity (call for junior staff candidates). For BWSC, primary focus is on emergency response and auditing.

PFAS: MassDEP spending a lot of time on this lately

-ORS issued 70 ppt Drinking Water guideline in June 2018, PFAS realm is developing quickly, weeks after ORSG was issued then ATSDR issued draft toxicity indicating DW guideline should be lower (circa 20 ppt)

Various guidances out there, combinations of how many compounds included for comparison to guideline. For example: VT – 20ppt for 2 PFAS compounds based on ATSDR. EPA health advisory is still 70 ppt. No standards / no MCL for DW from federal level

MassDEP plans to revisit ORSG, but waiting to get a feel that no more toxicity changes are imminent, guidance will go down. Will also incorporate into M1 standards, and also considering MCL

MassDEP focus is on water supplies/GW1 areas. Carbon is leading treatment, but can be expensive for larger scale treatment. If providing bottled water, question of “what is in bottled water” has come up.

MassDEP either asks for data from bottler, or MassDEP will analyze the bottled water used at a specific site from vendor for any contaminants of concern at site, e.g. PFAS and 1, 4-dioxane, that are not on the MCL to reassure residents that replacement water is of sufficient quality.

MassDEP has also asked MA bottlers to sample their water for PFAS, and MassDEP will post the results on MassDEP website. MassDEP is not requiring PRPs to sample bottled water if they are providing to residents.

Truck roll over response can be source of PFAS and MassDEP is struggling quantifying (often first measure is to cover spill with foam, regardless of fire present)

Large military bases as sources

Potential source = firefighting training academy e.g. in Barnstable, which has PFAS plume from their site into GW; some training facilities don't use AFFF foam for training (due to expense)

Other potential sources – compost / treated paper

MassDEP has initiated take-back program for stockpiles of AFFF foam reserves, ultimately sent to incinerators to be burned

TCE: Working on final “closed” TCE site review, expect to be completed this fall

Ongoing work:

WERO: former Besley/Bendix site

CERO: Worcester High School (TCE discovered during NAPL investigation, 2 – 17 ug/m³, school had a subslab system already installed so question of effectiveness of the system, HVAC system issues / SSDS optimization); Cleaners in Oxford (nearby residence 955 ug/L TCE in private well; bottled water; treatment system; water at tap 64 ug/L. Indoor Air ok, Home has PVC piping which is likely re-contaminating the water; residents voluntarily vacated house. Still in progress. Question of whether the water has lead from PVC cement too).

NERO: 51 sites identified – 8 closed. Former Chelsea Clock site (fugitive vapors from redevelopment in HVAC of high school across the street as well as radium from clock faces); Former Amesbury Metals site (MassDEP installing SSDS systems in residences)

SERO: no update but they are working on sites

Liz Callahan – MCP updates

Only one more SAC meeting before end of calendar year, will be Wednesday, Nov. 14, 2018. Draft agenda: PIP site presentation, Case Study by John Fitzgerald and Blayne Hartman on Chelsea Clock site, Reclamation Soil by Jennifer Wharff)

MCP Amendments schedule:

- Approval from EEA/A&F, notices to agencies, interested parties, MA Register (approx. 5 weeks)

- 4 hearings about 1-2 weeks (then public comment period of 3 months)

- Revise and publish final amendments (3 months)

AUL guidance meeting at MassDEP next week, may be done before MCP changes, no timeline for Historic Fill / Anthropogenic background guidance

MassDEP open to revisiting other guidance if MCP changes suggest it is necessary, or issuing technical update if only focused revision is necessary

Karen Pelto – NRD Assessment and Restoration: Releases to Groundwater and Surface Water

Review of natural resources in the Commonwealth and the value they provide

Over \$76M in Resource Damages settlement in MA

Summary of input received on proposed NRD process from many stakeholders

Preparing response to various comments received

Clarification: how this interacts with 21J process: 51 out of 265 RTNs evaluated for oil and oil/hazardous materials releases to GW, and 1 out of 517 RTNs evaluated for releases to surface water.

MassDEP will continue site specific assessment of NRD eval. for releases to GW

Comments received on establishing baseline conditions before release occurred, rely on MassGIS and develop other online tools to generate baseline value

Next Steps: completing response to comments (within 1-2 weeks), conducting cost-benefit analysis with Industrial Economics, develop public hearing draft and supporting materials to be released following (after) MCP revisions