2014 MCP Amendments

April/May 2014



Today's Training

Welcome & Introduction	LSPA	8:00
Overview, Tier Classification, Vapor Intrusion, miscellaneous	Liz Callahan	8:10
Activity and Use Limitations	Peg Shaw	9:15
Break		9:45
NAPL and Source Control	Ken Marra	10:00

Today's Training		
Site Closure	Paul Locke	
Lunch		12:15
Vapor Intrusion Guidance	Gerard Martin Cathy Wanat	1:15
Similar Soils Policy	Paul Locke	2:00
Wrap Up	LSPA	2:55

Overview, Tier Classification, Vapor Intrusion & Miscellaneous

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• Process Improvements:

- Eliminate Tier I Permits
- Simplify Tier Classification
- Streamline AULs, Notices of AULs on NPL Sites

Enhanced Protection:

- Updated Cleanup Standards based on latest science
- Triggers to expedite vapor intrusion assessment
- Clearer performance standards for addressing Sources of OHM





- More Ways to Achieve Closure:
 - Vapor Intrusion
 - Petroleum sites (LNAPL)
 - Closure with conditions but no AUL

More Transparent Closure Terms

- So long RAO...



Public Comment >> Final Amendments

- Public Comment on public hearing draft
 - -4 Public Hearings held to hear/receive testimony
 - 41 sets of written comments (May 17, 2013)
 - Additional forums on proposals and comments held Summer 2013
 - Response to Comment summary (how we addressed close to 600 comments)

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Final Amendments to be published SOON



Implementation

Guidance

Transmittal
 Training
 Forms

- LNAPL/NAPL
- Vapor Intrusion
- AUL
- MCP Q & As
- Gardening BMP links
- Greener Cleanups



Permit & Tier Classification Amendments



Permit Amendments

- No Tier I permit; same process for both Tiers
 - MassDEP has authority to require approval of any response action upon notice to PRP
- Uniform extension timeframe of 2 years
- Retain provisions to restart clock for Eligible Persons/Tenants (40.0570)
- Retain Special Project Permits





Tier Classification Amendments

- Phase I still the basis for Classification; still occurs one year from notification
- NRS scoresheet replaced by "Tier I Criteria"
 >> directed at concerns that MassDEP considers for closer review/potential oversight
- No subclasses of Tier I, except Tier ID (defaults)



Tier Classification (310 CMR 40.0500)

- Tier I Criteria
 - RCGW-1 in a Current Drinking Water source area
 - Imminent Hazard
 - IRA ongoing to address CEP
 - IRA with *remedial actions* ongoing
- Once Tier I criterion addressed, site may reclassify
- Grandfathering current Tier IIs where
 - IRAs to address CEPs or
 - IRAs with remedial actions

are underway prior to effective date of amendments





MassDEP Fee Amendments Public Hearing Draft ...New fees targeted for June 2014

- Elimination of Tier I Permit Fees
- New Tier I fee
- New AUL fee (for initial AUL, not Amendments or Terminations)
- Expanded Reduced Fees for Homeowners (RAM, Permanent Soln (1st Year) Phase V, Post-Temp. Soln, AUL)



Vapor Intrusion-Related Amendments



Vapor Intrusion-Related Amendments

- More specific vapor intrusion assessment in Phase I & II; change in Phase II deadline
- Emphasis on Conceptual Site Model new CSM definition
- SRM triggers

- Limits on modeling –
- Remedial additives plan approval near schools, residences and day cares
- Permanent Soln
 - with SSD systems
 - Future buildings



<u>Conceptual Site Model or CSM</u> means a site-specific description of how contaminants entered the environment, how contaminants have been and may be transported within the environment, and routes of exposure to human and environmental receptors that provides a dynamic framework for assessing site characteristics and risk, identifying and addressing data gaps and managing uncertainty, eliminating or controlling contaminant sources, developing and conducting response action strategies, and evaluating whether those strategies have been effective in achieving desired endpoints. At sites at which NAPL is or may be present, this includes the body of fundamental scientific principles describing the behavior of fluid flow in porous media necessary to assess NAPL in subsurface strata.



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Changes to Phase Submittal Deadlines

From Time of Tier Classification...

- Phase II submittal from 2 to 3 years
- Phase III submittal from 2 to 4 years
- Phase IV submittal from 3 to 4 years



Substantial Release Migration (SRM) for Vapor Intrusion (310 CMR 40.0313(4)(f))

- More specific SRM triggers that reflect VI guidance on when to look for vapor intrusion
- Applies to conditions with a likelihood of vapor intrusion at schools and day care facilities and occupied residences
- Results in 72 hour notification and performance of Immediate Response Actions

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 soil or soil gas with VOCs within 6' (horiz.) and 10' (vert.) at concentrations likely to discharge vapors into structure



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- 3. GW > GW-2 within 30' of structure, and the volatile LNAPL in well, excavation, or subsurface depression within 30' of structure at thickness ≥ 1/8"

MassDE

- soil or soil gas with VOCs within 6' (horiz.) and 10' (vert.) at concentrations likely to discharge vapors into structure;
- 2. VOCs in GW > GW-2 within 30' of structure, and the average annual GW depth is 15' or less;
- 3. volatile LNAPL in well, excavation, or subsurface depression within 30' of structure at thickness $\ge 1/8$ "
- 4. evidence of vapor migration along preferential pathways at a location likely to result in the discharge of vapors into the structure.



Other CEP-Related VI Amendments

- New definitions of <u>Residential Dwelling</u>, <u>Daycare or Child Care Center</u> & <u>Living or</u> <u>Working Space</u> (exclude incidental use one hr or less)
- Revised definition of <u>School</u>
- Reduced IRA Status Report frequency for non-IH CEPs
- Clearer provisions for completing IRAs to address CEPs



Reduced IRA Status Report Frequency for Non-IH CEPs after:

- Sampling demonstrates AEPMM maintains NSR
- System conditions, operating parameters, and/or maintenance are listed
- Monitoring program described and
- LSP Opinion supports reduced reporting schedule



Clearer Provision for IRA Completion addressing CEPs when:

- CEP eliminated using passive measures
- IRA feasibility study concludes addressing CEP not feasible
- Phase III feasibility study concludes addressing
 CEP not feasible
- Mitigation of CEP is continuing by incorporation into Phase IV RIP



VI-Related Amendments, cont.

- Permanent Solution with Conditions for
 - Active SSD Systems (operated under AUL)
 - -future buildings in locations with VI potential (no AUL)



(7) Fate and transport models... may be used in cases... where direct sampling of a media of concern is not possible or appropriate.

(a) For indoor air, sub-slab soil vapor data and/or conditions may be used to:

1. Estimate EPCs in the event that it is not possible to distinguish disposal site-related contamination at the Exposure Point from interior sources at ongoing commercial and/or industrial operations; or

2. where appropriate, to rule out an indoor air Exposure Pathway.

(b) For indoor air, fate and transport models shall not be used to estimate future Exposure Point Concentrations in the indoor air of buildings that have not been constructed ...

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Remedial Additives 310 CMR 40.0046(3)

Remedial Additives Near Sensitive Receptors

- Added requirement for prior approval for additives with 100' of school, daycare or residence
- In final amendments, changed from prior written approval to 30 day presumptive approval with option to request oral approval

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Active Exposure Pathway Mitigation Measure as part of a Permanent Soln with Conditions 310 CMR 40.1025

- Would apply to both SSD systems (vapor intrusion) and point of entry/point of use systems on private drinking water supplies
- Can't be used as part of a Permanent Soln if IH condition would result within 60 days of system shutdown
- Implemented with AUL with standardized conditions





• Remote telemetry required





- Remote telemetry required
- Affected parties in buildings and MassDEP must be notified if shutdown lasts 30 consecutive days



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- Repairs required in the event of shutdown; certification that \$\$ available for repairs



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- Affected parties in buildings and MassDEP must be notified if shutdown lasts 30 consecutive days
- Repairs required in the event of shutdown; certification that \$\$ available for repairs
- Annual certification (in response to MassDEP mailing) that system is operating/building owner aware of requirement to maintain system

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AEPMM use as part of other response actions

- AEPMMs also may be used as part of IRAs, RAMs, Phase IV, Phase V, ROS and Temporary Solutions
- AEPMMs used as part of ROS and Temporary Solution (310 CMR 40.1026)
 - -Require remote telemetry
 - Require notice to affected parties for shutdowns that lasts 30 consecutive days
 - —Do not require AUL



Miscellaneous Amendments



Effective Date 310 CMR 40.0005

- Provisions effective **on publication date**
 - Reportable Concentrations for 120 day notification
 - -Elimination of Tier I Permit
 - -May use new Tier Classification
- Remaining provisions effective some date after effective date (TBD)



Miscellaneous Amendments

- Propane notification exemption (310 CMR 40.0317(23))
- Greener cleanups (Response Action Performance Standard (310 CMR 40.0191(3)(e) and Phase III)



Greener Cleanups

310 CMR 40.0191(3)(e) (e) eliminating or reducing, to the extent practicable and consistent with response action requirements and

and consistent with response action requirements and objectives, total energy use, air pollutant emissions, greenhouse gases, water use, materials consumption, and ecosystem and water resources impacts, resulting from the performance of response actions through energy efficiency, renewable energy use, materials management, waste reduction, land management, and ecosystem protection.





