Remedial Additives Near Sensitive Receptors

1. Q: The provision at 310 CMR 40.0046(3)(b) states that a written plan for the application of Remedial Additives near a sensitive receptor shall be submitted to the Department using "a form provided by the Department for such purpose prior to implementation." What form do I use to submit a written plan to apply Remedial Additives near a sensitive receptor?

A: Each of the eDEP transmittal forms used to submit plans for remedial actions has a box that must be checked to indicate the submission of a "Plan for the Application of Remedial Additives" near a sensitive receptor pursuant to 310 CMR 40.0046(3). By checking this box, you are using the form provided by the Department for submitting the written plan to apply additives near a sensitive receptor. Below is a list of where this check box appears on those forms that cover remedial action submittals:

BWSC105, Immediate Response Action Transmittal Form - Section B. Question 10. BWSC106, Release Abatement Measure Transmittal Form - Section B. Question 9. BWSC108, Comprehensive Response Action Transmittal Form – Section B. Question 24.

2. Q: 310 CMR 40.0420(9) states that written IRA Plans are presumed approved 21 days after of the date the Plan was received by MassDEP. Under 310 CMR 40.0046(3), approval to apply Remedial Additives in locations near sensitive receptors (near water supplies, surface waters, or schools, daycares and residences) is presumed after a period of 30 days. If I am submitting an IRA Plan to remove oily soil that includes a proposal to apply additives to chemically oxidize VOCs in soil & groundwater as part of the project, do I have to wait 21 or 30 days to implement the Plan? Can I do those portions of the work that do not involve additives after 21 days (assuming there is no letter from MassDEP denying the work)?

A: If you are submitting a single IRA Plan that includes the application of Remedial Additives as part of the scope of the work covered by the Plan, then you must wait 30 days from the date of submittal before assuming that the Plan is presumptively approved.

3. Q: What information should be in the written plan described at 310 CMR 40.0046(3)(b) for the application of Remedial Additives near sensitive receptors?

A: A written plan proposing the use of Remedial Additives, whether as an Immediate Response Action, Release Abatement Measure or Comprehensive Response Action, must be submitted to the Department prior to the application of Remedial Additives. Such plan should contain appropriate information to demonstrate that Remedial Additives can be safely used in proximity to the sensitive receptors, including the following:

- a description and location of the sensitive receptor(s);
- the results of soil and/or groundwater analyses for samples collected prior to the application of Remedial Additives;

- the concentration, volume, and dosage calculation (chemical/soil oxidant demand) of Remedial Additives proposed;
- the frequency, duration, rate, depth and method of proposed remedial additive application(s);
- groundwater depth and calculated groundwater flow velocities;
- types of soil/bedrock present and depth to bedrock;
- mounding calculations given the proposed volumes of Remedial Additives and hydraulic characteristics of the aquifer;
- information on how hydraulic control will be maintained, if applicable;
- a discussion of the expected byproducts of the proposed Remedial Additives;
- a schematic depicting groundwater flow direction and any anticipated changes in groundwater flow direction during the application of Remedial Additives, the proposed location(s) of Remedial Additive application, pre- and post-application soil and/or groundwater monitoring locations, and locations of buildings and subsurface utilities/preferential pathways; and
- a proposed post-application soil and/or groundwater monitoring plan.

Conceptual Site Model

4. Q: The 2014 MCP Revisions include a new definition of the term "Conceptual Site Model" or "CSM." What is MassDEP's reason for adding this term to the MCP and what specific requirements are related to CSM?

A: For more than a decade, Conceptual Site Model development as a tool for organizing and analyzing information about disposal site conditions and designing and implementing sampling and remedial plans has been emphasized as standard practice by environmental professionals and regulators on the state and national level. The LSP Association and MassDEP have provided numerous training sessions which highlighted the importance of the CSM as a dynamic model for integrating disposal site information, identifying potential data gaps, and addressing uncertainties related to site conditions and related risks. By adding a CSM definition and related provisions to the 2014 MCP, the regulations are catching up with best practice. Use of the CSM is particularly important for understanding and successfully managing more complex sites, such as sites with potential vapor intrusion or NAPL.

In addition to the CSM definition at 310 CMR 40.0006, there are requirements to document the preliminary CSM at the conclusion of a Phase I Initial Site Investigation (310 CMR 40.0483(1)(h)), base the Conceptual Phase II Scope of Work on the preliminary CSM developed in Phase I (310 CMR 40.0834(2)(a)); and provide an updated CSM at the conclusion of the Phase II Comprehensive Site Assessment (310 CMR 40.0835(4)(i)). A succinct summary of the CSM must also be provided in support of a Permanent or Temporary Solution (310 CMR

40.1056(2)(b) and 310 CMR 40.1057(2)(b), respectively). Other MCP references to CSM include the provision at 310 CMR 40.1003(7) related to evaluating the feasibility of removing NAPL with Micro-Scale Mobility and the definition of Historic Fill at 310 CMR 40.0006.

Notification

5. Q: I am confused about the different notifications based on NAPL thickness at 310 CMR 40.0313(1), 310 CMR 40.0313(4)(f)3. and 310 CMR 40.015(4). Can you clarify?

A: Perhaps the best way to clarify the different notification triggers is to present them in a table.

	Distance from Building		
NAPL Thickness	Within 30 feet of a School, Daycare or Child Care Center or Occupied Residence	At a location other than within 30 feet of a School , Daycare or Child Care Center or Occupied Residence	At all locations
≥ 1/8 inch	72 hour notification for NAPL that is vokitile LNAPL		120 day notification for NAPL (that did not require earlier notification)
≥ 1/2 inch		72 hour notification for NAPL	

As shown in the table above, notification within 72 hours is required for NAPL conditions considered more time sensitive (and thus, require an Immediate Response Action). The 72-hour triggers include:

- the presence of ≥1/2 inch NAPL (310 CMR 40.0313(1)) observed in a groundwater monitoring well, excavation or subsurface structure at locations greater than 30 feet from a School, Daycare or Child Care Center or occupied Residential Dwelling; and
- the presence of NAPL that is volatile LNAPL ≥ 1/8 inch (310 CMR 40.0313(4)(f)3.) in a groundwater monitoring well, excavation or subsurface depression within 30 feet of a School, Daycare or Child Care Center or occupied Residential Dwelling (i.e., near sensitive receptors). The ≥ 1/8 inch volatile LNAPL trigger is directed at the potential for LNAPL to serve as a source of vapor migration into the School, Daycare or Child Care Center or occupied Residential Dwelling.

Where a 72-hour notification was not required pursuant to either 310 CMR 40.0313(1) or 40.0313(4)(f)3., the presence of NAPL $\geq 1/8$ inch (310 CMR 40.0315(4)) at all locations triggers a later 120-day notification.

6. Q: Do I have to make a 72-hour notification for conditions listed at 310 CMR 40.0313(4)(f) related to the potential for vapor intrusion to a School, Daycare or Child Care Center or occupied Residential Dwelling for a site that was already being addressed under the MCP before these notification requirements became effective (i.e., before June 20, 2014)?

A: Prior to the achievement of a Permanent Solution, if there is a 72-hour notification condition at the disposal site for which prior notification has not been made, including the new 72-hour Substantial Release Migration (SRM) conditions related to vapor intrusion at 310 CMR 40.0313(4)(f), then notification of that condition is required.

If, at the time of notification, no response actions have been taken to evaluate the potential for vapor intrusion related to the condition, then an Immediate Response Action that at a minimum includes assessment of whether the pathway is complete would be required.

If response actions taken prior to the June 20, 2014 effective date have determined that the pathway is not complete, or have already appropriately mitigated the pathway, then a 72-hour notification must still be made for conditions listed at 310 CMR 40.0313(4)(f) that remain a the site *unless* prior notification of an SRM condition for a potential vapor intrusion into a school or residence was made (pursuant to the former MCP provision at 310 CMR 40.0313(5)), and response actions in compliance with the MCP to address the pathway are underway or completed. Where such prior notification was made and the criteria of the notification exemption at 310 CMR 40.0317(16)(a) through (c) are met, then no new notification of this condition is required (i.e., the prior SRM notification was related to the same vapor intrusion exposure potential).

During the process of providing verbal notification to MassDEP of the existence of a 72-hour SRM conditions specified at 310 CMR 40.0313(4)(f), MassDEP will ascertain in its discussion with the LSP the status of work to date to address the potential vapor intrusion pathway. As part of transitioning existing sites under the 2014 MCP, initiation of an Immediate Response Action (IRA) will not be required where response actions to address the potential vapor intrusion pathway are already completed or underway (i.e., any ongoing response actions can continue to be addressed as part of the assessment and remedial work that is already underway as a pre-existing/open IRA, Comprehensive Response Action or Release Abatement Measure). MassDEP will record that the notification has been made in such cases, and that an IRA is not required.

7. Q: The 72-hour notification conditions listed at 310 CMR 40.0313(4)(f)1.and 2. apply to the presence of volatile organic compounds near a School, Daycare or Child Care Center, or occupied Residential Dwelling. Are volatile petroleum fractions considered volatile organic compounds?

A: The new definition of Volatile Organic Compounds at 310 CMR 40.0006 includes "organic compounds with boiling points equal to or less than 218°C that are targeted analytes in EPA Method 8260B and other purgeable organic methods specified in the Department's Compendium of Analytical Methods." This would include the Volatile Petroleum Hydrocarbon fractions C_5 through C_8 Aliphatic Hydrocarbons, C_9 through C_{10} Aromatic Hydrocarbons.

8. Q: Subslab soil gas sampling beneath an occupied residence detected the presence of VOCs. What concentration of VOCs in the soil gas would trigger a 72-hour notification to MassDEP as a Condition of Substantial Release Migration pursuant to 310 CMR 40.0313(4)(f)1.?

A: The provision at 310 CMR 40.0313(4)(f)1. requires that notification be made where VOCs are detected within 6 feet horizontally from the wall of a School, Daycare or Child Care Center or occupied Residential Dwelling, and within ten feet vertically from such structure's basement floor or foundation in soil or soil gas "at concentrations that are likely to discharge vapors into the structure." There are no specific regulatory references that define soil or soil gas concentrations that are likely to discharge into a structure. MassDEP recommends consideration of soil gas levels above the relevant subslab soil gas screening levels in Appendix 2 of the Vapor Intrusion Guidance when evaluating soil gas results within these distances from the structure. LSPs should exercise professional judgment in determining whether the concentrations have the potential to discharge into the structure and err on the side of caution to expedite the assessment of this potential.

Phase Deadlines

9. Q: Do the 2014 MCP amendments that extended the deadlines for Phase II and Phase III submittals at 310 CMR 40.0560 (2) apply to existing sites? That is, if prior to the effective date of the 2014 MCP Amendments, the deadline for the Phase II submittal in July 2014, is the deadline now July 2015?

A: Yes. The deadlines run from the time of the initial Tier Classification. The amended MCP extended the deadline for the Phase II submittal from 2 to 3 years from initial Tier Classification and that would apply to an existing tier classified site.

Tier Classification

10. Q: How do I extend the Tier Classification for a Tier I disposal site that had a Tier I Permit prior to June 20, 2014 (the fully effective date of the MCP amendments that eliminated Tier I Permits)?

A: Tier Classification Extensions replace Tier I Permit Extensions for disposal sites that had Tier I Permits in effect prior to June 20, 2014. Under the amendments, the process for extending the Tier Classification for both Tier I and Tier II disposal sites is the same and the extension time period for both tiers is two years. As of June 20, 2014, all Tier Classification Extensions must be filed using a BWSC107 Form, checking Box B5 on the BWSC107 Form and attaching a Tier Classification Extension Submittal.

11. Q: Do BWSC Transmittal Forms require geographic location coordinates for the release/disposal site location?

A: Three transmittal forms - BWSC103 Release Notification Form, BWSC107 Tier Classification Form and BWSC104 Permanent or Temporary Solution Statement Form - require that the release/disposal location be reported using latitude/longitude coordinates. Note that prior to the June 20, 2014 amendments, the MCP required that release/disposal site location be provided using Universal Transverse Mercator coordinates. The change to latitude/longitude was made to make the location coordinates reported under the MCP consistent with other MassDEP programs.

Latitude/longitude coordinates can either be manually entered onto the forms or located using the GIS Location Finder. The GIS Location Finder uses the street address and an aerial map to establish the latitude/longitude coordinates for the site. To access the GIS Location Finder on the form, select the "Identify Location of Release" button in Section A of the transmittal forms.

12. Q: I will be submitting a Tier Classification for a Tier I site after June 20, 2014. Is there a Tier I application fee required (similar to the Tier I Permit fee that was previously required before the MCP was amended)?

A: No. The Tier Classification submittal does not require a submittal fee. For both Tier I and Tier II sites, you must submit a Tier Classification Submittal using the Tier Classification Transmittal Forms BWSC107 and BWSC107B.

13. Q: I have submitted a new Tier I Classification. What is the new Annual Compliance Assurance Fee for a Tier I site?

A: Effective June 20, 2014, the Annual Compliance Assurance Fee for a site with a Tier I status will be \$4,320 for a non-Homeowner and \$1,225 for a Homeowner. There is still no Annual Compliance Assurance fee for the first year as long as a Tier Classification submittal is made by the one year deadline (one year after the earliest notification date). MassDEP will bill the party conducting the cleanup the Annual Compliance Assurance Fee for the second year and each year thereafter, until and including the year in which a Permanent Solution is filed. Information about the updated fee rates may be found at http://www.mass.gov/eea/docs/dep/cleanup/timelin.pdf

14. Q: The Tier IA, Tier IB and Tier IC subclasses of Tier I disposal sites were eliminated by the 2014 MCP amendments. What is the new regulatory status of these sites?

A: Effective June 20, 2014, pursuant to the Tier Classification Transition Provisions at 310 CMR 40.0520(5), disposal sites previously classified as Tier IA, IB or IC will be classified as Tier I. Disposal sites classified as Tier II will remain Tier II. Disposal sites classified as Tier ID ("default" sites) remain Tier ID.

15. Q: If I am working on a disposal site that pursuant to the Transition Provisions at 310 CMR 40.0520(5) is a Tier II site as of June 20, 2014, but I have an open/ongoing IRA at the disposal site that involves remedial actions, do I have to reclassify the site as a Tier I site because it meets the Tier I criterion at 310 CMR 40.0520(2)(c)?

A: Pursuant to 310 CMR 40.0530(5), for a site that is already Tier Classified prior to June 20, 2014, the presence of conditions that meet either or both of the Tier I Criteria at 310 CMR 40.0520(c) and (d) – one or more remedial actions required as an IRA or one or more response actions (either assessment or remediation) are required to eliminate or mitigate a Critical Exposure Pathway – would not trigger reclassification of the site as Tier I "where the RP, PRP, or Other Person had knowledge of and was conducting response actions to address such conditions prior to June 20, 2014." In such cases, these sites are effectively grandfathered as Tier II sites for these conditions.

For a site that has not been classified as either Tier I or Tier II by June 20, 2014, the existence of an open IRA that involves remedial action at the time of tier classification (one year from notification) would result in a Tier I site classification.

16. Q: Did the Annual Compliance Assurance Fee rate for a Tier II site change with the 2014 MCP amendments?

A: The Tier II fee rate is \$2,455 for a non-Homeowner and \$1,225 for a Homeowner. These rates did not change in 2014.

17. Q: A Tier IC Permit was issued prior to the 2014 MCP revisions and has an expiration date 90 days after June 20, 2014. The site is currently in Phase IV and additional sampling is needed so a Tier I Classification Extension will be necessary. What form should I file for an Extension and when does it need to be filed? Is there a submittal fee for the Extension?

A: The existing Tier IC Classification was automatically transitioned to a Tier I Classification effective June 20, 2014. Pursuant to 310 CMR 40.0560(7)(d), the Tier Classification Extension submittal should be made at least 45 days prior to the expiration of the existing Tier Classification using a BWSC107 and BWSC107B form. There is no "submittal" fee necessary with the Tier Classification Extension submittal; the party undertaking response actions will continue to be invoiced a regular Annual Compliance Assurance Fee by MassDEP. Unless otherwise specified by MassDEP, the Tier Classification Extension will be effective 45 days after

receipt and will be valid for a period of two years from the effective date (310 CMR 40.0560(7)(d)).

18. Q: I am working on a site that had a Tier IB permit that was transitioned to a Tier I Classification on June 20, 2014. The site will be reclassified from Tier I to Tier II because I have determined it does not trigger any of the Tier I Criteria at 310 CMR 40.0520. What transmittal form should be used and what information do I provide to support a reclassification from Tier I to Tier II?

A: The current BWSC107 transmittal form should be used to reclassify the site. Box B.7.b. on the BWSC107 form should be checked off to show the revised Tier Classification category. Pursuant to 310 CMR 40.0530(3), the information to support the reclassification must include the information specified in 310 CMR 40.0510(2)(a) through (c). This would include information that addresses the four Tier I Criteria. Note that it is not necessary to resubmit a Phase I Report as part of the reclassification if the Phase I Report has not changed.

19. Q: A RAM Plan will be filed to address a release of oil at an owner-occupied four-family residence. The site is not Tier Classified and the intent is for the homeowner to complete the cleanup and achieve a Permanent Solution with No Conditions by the end of the first year. Is the homeowner required to pay any fees to MassDEP?

A: Yes. The RAM Plan would require a RAM Plan Fee if filed prior to Tier Classification. If the homeowner has filed a Homeowner Certification Form (BWSC120), the Homeowner RAM Plan Fee would be \$490. The Homeowner Certification Form should be filed before or concurrently with the RAM Plan to qualify for the \$490 alternative homeowner fee rate. Likewise for a homeowner, if a Permanent Solution is filed more than 120 days after notification and prior to Tier Classification, a one-time \$735 Homeowner Permanent Solution Fee is applicable. The alternative fees for RAM Plans and Permanent Solution submittals are applicable to submittals made by a Homeowner on or after June 20, 2014.

20. Q: My client's site is currently classified as Tier II. The last Tier II Extension went into effect in November 2013. When will I need to file the next Tier II Extension?

A: A Tier II Extension based on a submittal filed prior to June 20, 2014 is valid for a period of one year. Thus the next extension should be submitted 45 days prior to the November 2014 expiration date. Under the 2014 MCP amendment, new Tier Classification Extension submittals made on or after June 20, 2014 will be valid for a period of two years from the expiration date of the prior Tier Classification.

21. Q: A developer who is an Eligible Person intends to begin performing response actions on an existing site. What should they submit to get a new MCP timeline? What fees should they expect?

A: An Eligible Person, Eligible Tenant or Other Person who intends to commence work on an existing site (i.e. a disposal site where a release notification has been made and response actions have been conducted by another party to date) may file a new or revised Tier Classification using transmittal forms BWSC107 and BWSC107D. These forms should be filed within 120 days of becoming an owner or operator or Other Person. This submittal will allow the Eligible Person, Eligible Tenant or Other Person to set new MCP timelines for response actions as outlined at 310 CMR 40.0570 and new Status Date for fees. The new Status Date will be one year from the date of the BWSC107 submittal. Additionally, the new party will not be assessed an Annual Compliance Assurance Fee for the first year using the new timeline. [Note to readers, 310 CMR 40.0570(3) & (5) have been flagged for technical correction; these provisions still have Tier I Permit references.]

Historic Fill

22. Q: One of the criteria in the definition of Historic Fill is: "(c) was contaminated with metals, hydrocarbons, and/or polycyclic aromatic hydrocarbons prior to emplacement, at concentrations consistent with the pervasive use and release of such materials prior to 1983." How do you determine what was "consistent with the pervasive use"?

A: The MassDEP Technical Update, "Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil" (May, 2002, http://www.mass.gov/eea/docs/dep/cleanup/laws/backtu.pdf) lists concentrations of OHM that are commonly found in soil containing coal ash or wood ash. While not specific to the new definition of "Historic Fill" in the 2014 MCP, the values presented in Table 1 of that document can be considered a first approximation of levels "consistent with pervasive use" until the Department develops additional guidance. (The data sets used to create Table 1 are referenced and quantitatively detailed in Appendix A). Concentrations greater than the Table 1 values may also meet the definition of "Historic Fill," but in such cases should not simply be presumed to be "Historic Fill." The guidance presented on page 3 of the Technical Update (in the section entitled "Background Concentrations Different Than The MADEP-Published Values" continues to be relevant to this evaluation. A general rule of thumb is that the level of effort and documentation appropriate to make and support a Historic Fill determination will increase as the concentrations of concern increase.

Performance Standards for Permanent and Temporary Solutions related to Sources Elimination and Control, Migration Control and NAPL

23. Q: Prior to the June 20, 2014 amendments, the former provision at 310 CMR 40.1003(5) was generally referred to as the "source elimination and control" requirement applicable to all Permanent or Temporary Solutions (formerly Class A, B or C Response Action Outcomes). How have the requirements related to addressing sources changed in the amended MCP?

A: The amended MCP provides greater clarity regarding what is defined as a source and performance standards for adequately addressing them. A new definition of Source of OHM has been added to 310 CMR 40.0006 and three separate performance standards related to the required control of sources needed to achieve a Permanent or Temporary Solution are provided. These performance standards are:

- Source Elimination or Control (310 CMR 40.1003(5);
- Migration Control (310 CMR 40.1003(6); and
- Nonaqueous Phase Liquid or NAPL (310 CMR 40.1003(7).

Active Exposure Pathway Mitigation Measures (AEPMMs)

24. Q: Air purifying units mitigate exposure from indoor air contamination. Pump and treat systems can be used to provide hydraulic plume control to prevent contamination of a water supply well. Can either of these be considered Active Exposure Pathway Mitigation Measures (AEPMMs) for the purpose of achieving a Permanent Solution with Conditions?

A: No. An Active Exposure Pathway Mitigation Measure (AEPMM) is intended to include long term mitigation systems that operate at the point of exposure to maintain a level of No Significant Risk with a high degree of confidence and minimal maintenance. Active subslab depressurization systems to prevent or mitigate vapor intrusion and point-of-entry water treatment systems for the treatment of private water supplies are considered AEPMMs.

Air purifying units are not considered AEPMMs because their operation cannot be relied upon to maintain a level of No Significant Risk over a prolonged period of time. Remedial systems treating disposal site source areas and pump and treat systems designed to control the migration of and treat a groundwater contaminant plume are not considered AEPMMs because they are not directed at and maintained at the point of exposure.

25. Q: If I have a subslab depressurization system (SSDS) that is part of remedial actions at a site with Remedy Operation Status (ROD) or a Temporary Solution, do I have to retrofit that system with remote monitoring technology (a.k.a. remote telemetry) under the regulations at 310 CMR 40.1026 that became effective June 20, 2014?

A: Yes. If the SSDS is required to meet the conditions for ROS or Temporary Solution, which in both cases require the maintenance of a condition of No Significant Risk for current site use and activities, and is being operated as an Active Exposure Pathway Mitigation Measure, persons doing the work would be expected to retrofit the SSDS with telemetry consistent with the requirements at 310 CMR 40.1026. These requirements include providing notice to affected individuals if the system shuts down. MassDEP recognizes that retrofitting the system may not happen immediately (i.e., by June 20, 2014), but we would expect parties to make those changes within six months of the effective date.

26. Q: What steps do I need to take to set up the remote telemetry communication between an Active Exposure Pathway Mitigation Measure and MassDEP? What exactly must the remote telemetry be monitoring to meet the requirement at 310 CMR 40.1025(3)(d) and 310 CMR 40.1026(3)(d)? Does the telemetry need to send information about drops in differential pressure or just shutdowns and restarts?

A: Active Exposure Pathway Mitigation Measures (AEPMM) that are part of a Permanent Solution, Temporary Solution or Remedy Operation Status require the use of remote monitoring technology to provide immediate notification to both MassDEP and the owner and operator of the building protected by the AEPMM upon failure of the AEPMM, as the result of loss of power, mechanical failure or other significant disruption of the effectiveness of the system (pursuant to 310 CMR 40.1025(3)(d) and 40.1026(3)(d), respectively).

MassDEP has posted information at http://www.mass.gov/eea/agencies/massdep/deanup/regulations/remote-telemetry-information.html regarding: 1. how to set up communications between each AEPMM and MassDEP; and 2. what must be communicated in the event of a system shutdown or restart. At the point when you intend to operate an AEPMM system as part of a Permanent Solution, Temporary Solution or Remedy Operation Status, you must contact MassDEP at https://www.mass.gov/eea/agencies/massdep/deanup/regulations/remote-telemetry-information.html regarding: 1. how to set up communications between each AEPMM and MassDEP; and 2. what must be communicated in the event of a system shutdown or restart. At the point when you intend to operate an AEPMM system as part of a Permanent Solution, Temporary Solution or Remedy Operation Status, you must contact MassDEP at https://www.mass.gov/eea/agencies/massdep/deanup/regulations/remote-telemetry-information.html regarding: 1. how to set up communications between each AEPMM and MassDEP; and 2. what is a supplied to the point when you intend to operate an AEPMM system as part of a Permanent Solution, Temporary Solution or Remedy Operation Status, you must contact MassDEP at https://www.mass.gov/eea/agencies/massdep/deanup/regulations/remote-telemetry-informations/ representations and the supplied to the property of the property of the supplied to the supplie

Notifications to MassDEP of AEPMM shutdowns and restarts are to be made automatically either by email, text message or telephone message. Systems may also be designed to send notifications for other triggers, such as a loss of pressure, reduction in air flow, or scheduled maintenance. MassDEP will accept notifications that exceed the minimum requirements of 310 CMR 40.1025(3)(d).

27. Q: When an Active Exposure Pathway Mitigation Measure is part of a Permanent Solution with Conditions, there is a requirement at 310 CMR 40.1025(6) to notify MassDEP and any occupants of the building if the mitigation system is not working for 30 consecutive days. Is this notification made orally or in writing, or both? If in writing, is there a transmittal form required?

A: The notification must be made no later than the 30th day and should be made in writing to the occupants of the building. A copy of this notice sent to the building occupants may be used to provide notice concurrently to MassDEP. There is no transmittal form currently available for providing this notice to MassDEP, so it should be sent by mail to the appropriate MassDEP regional office to the attention of the Bureau of Waste Site Cleanup. Note that you should not provide this notice using the BWSC126 Miscellaneous Document Transmittal Form as BWSC126 is not intended for transmitting time-sensitive documents.

28. Q: When an Active Exposure Pathway Mitigation Measure is part of a Permanent Solution with Conditions, there is a requirement at 310 CMR 40.1025(5) to certify that financial resources are available for the immediate repair or replacement of the system components in

the event the Measure experiences failure. What should be included with this certification of financial resources? Is there a specific transmittal form required?

A: A statement that adequate financial resources will be available for such repairs or replacement must be included with the Permanent Solution Statement report submittal. There is no specific transmittal form for this certification other than the Permanent Solution Statement Transmittal Form, BWSC104.

Class A, B or C Response Action Outcome Status under the Amended MCP

29. Q: If my client has a property where a Class A-1 Response Action Outcome was achieved. What is the closure status of her property under the amended 2014 MCP?

A: The amended MCP defines a Class A-1 Response Action Outcome achieved prior to June 20, 2014 as a Permanent Solution with No Conditions. 310 CMR 40.1055 specifies Transition Provisions that translate the Response Action Outcome categories applicable prior to the 2014 MCP amendments into types of Permanent and Temporary Solutions. Note, the amended MCP retains a definition of Response Action Outcome at 310 CMR 40.0006 that indicates that the terminology applied to closure statuses prior to June 20, 2014.

Temporary Solutions

30. Q: Under the 2014 revisions to the Massachusetts Contingency Plan is there still a requirement to conduct a 5-year Periodic Review of a Temporary Solution? Does it matter if a Permanent Solution was feasible?

A: A Periodic Review is still required every 5 years pursuant to 310 CMR 40.1050(4) for a Temporary Solution where achievement of a Permanent Solution is not currently feasible (formerly a Class C-1 Response Action Outcome). Pursuant to 310 CMR 40.1050(4)(b)(6), this Periodic Review must include a description of the type and frequency of monitoring to be conducted during the upcoming 5-year period (i.e., prior to the next Periodic Review). A 5-year Periodic Review is not required for a Temporary Solution where a Permanent Solution is Feasible (formerly a Class C-2 Response Action Outcome) since response actions towards a Permanent Solution are ongoing. In such case where response actions are continuing toward a Permanent Solution, a valid Tier Classification must be in effect at the time the Temporary Solution Statement is submitted to the Department (310 CMR 40.1050(5)).

Permanent Solution with Conditions but No AUL Required

31. Q: 310 CMR 40.1013 specifies limitations, assumptions and conditions on site activities and uses that result in a Permanent Solution with Conditions, but do not require an AUL. These include: a recommendation for use of Best Management Practices for non-commercial gardening; the presence of OHM concentrations consistent with Anthropogenic Background;

residual contamination within a public way or rail right-of-way; and OHM in groundwater above the GW-2 standards in an area without an occupied building. How is information about these conditions conveyed to the public or a potential user or developer of the property where the conditions apply?

A: Information about these conditions is conveyed first in identifying these closures as "Permanent Solutions with Conditions" in MassDEP's records and online file viewer. In addition, Section E of BWSC104, the Permanent and Temporary Solution Statement Transmittal Form which is viewable online, specifically indicates the condition or conditions that apply to the Permanent Solution. Finally, the Permanent Solution Statement pursuant to 310 CMR 40.1056(2)(j) requires documentation related to these conditions, including the description of Best Management Practices for Gardening, the location of Anthropogenic Background and residual contamination in public ways/rail rights-of-way, and obligations to ensure that any future construction at the disposal site does not result in OHM impacts to indoor air).

Activity and Use Limitations (AULs)

32. Q: The MCP requires that a narrative description of the basis for implementing an AUL be included as Exhibit C to Form 1075. What information should be included in this description?

A: Exhibit C must contain the elements described at 310 CMR 40.1074(2)(e) through(g) and listed in the fifth "Whereas" paragraph of Form 1075. This Exhibit includes descriptions of: why the AUL is appropriate to maintain a Permanent or Temporary Solution; release events or site history that resulted in the contamination subject to the AUL; response actions taken to address the release; the contaminated media types(s) and approximate vertical and horizontal extent of the contamination subject to the AUL.

Keep in mind that the descriptions in Exhibit C should provide sufficient detail so that a reader who is unfamiliar with MCP requirements and terminology can understand the conditions that warrant the implementation of an AUL. Exhibit C does not require a separate LSP signature and seal.

33. Q: I am planning to sell my property which has an AUL. Are there any MCP requirements related to the property transfer?

A: Pursuant to 310 CMR 40.1074(5), all future instruments of transfer (e.g., deeds, easements, mortgages, and leases) must include a reference to the AUL. This reference, which should include the date, county and registry book/page numbers associated with the AUL, ensures that the AUL stays in the chain of title so that all future recorded interests will be informed that the AUL exists on the property. In addition, 310 CMR 40.1074(5) also requires that a copy of the new deed containing the reference to the AUL be submitted to MassDEP when the property is sold. This requirement applies to both the seller and the buyer of the property; it will be satisfied for both parties when either submits the copy of the new deed to MassDEP. Upon

receiving a copy of the new deed, MassDEP is able to confirm that the reference to the AUL in the deed was made as required, and update its records to reflect the current property owner.

34. Q: What form do I use to provide MassDEP with a copy of the new deed upon the sale of a property with an AUL pursuant to the requirement at 310 CMR 40.1074(5)?

A: BWSC113, the AUL Transmittal Form, should be used to submit the copy of the new deed. To indicate that you a submitting a copy of the deed, check Section B. Box 11 ("Submit a Registry copy of a Deed, referencing a Notice of Activity and Use Limitation..."). Note that an LSP signature and stamp (i.e., completion of Section D, the LSP signature and stamp) are <u>not</u> required when BWSC113 is used for this purpose.

35. Q: I am implementing a new Notice of Activity and Use Limitation (AUL). Do I need to pay a fee related to the AUL?

A: Yes, as of June 20, 2014, a Notice of AUL that is implemented as part of a Permanent Solution requires that a one-time Notice of AUL Fee be paid. The Notice of AUL fee for a non-Homeowner is \$2,000 (\$1,000 for a Homeowner that files a Homeowner Certification Form). The payment of the fee should be sent to MassDEP, PO Box 4062, Boston MA 02211-4062 along with page one of the BWSC113 AUL Transmittal form. Box G5 of BWSC113 should be checked to indicate that the AUL fee has been sent. Note: the AUL fee is applicable to the initial AUL, and does not apply to confirmatory AULs, AUL amendments or AUL terminations.

36. Q: A Notice of AUL will be filed along with a Permanent Solution Statement with Conditions at the end of the first year. What fees will be applicable?

A: Both the one-time Notice of AUL fee (\$2,000 non-Homeowner, or \$1,000 for a Homeowner) and the one-time Permanent Solution fee (\$1,470 non-Homeowner, or \$735 for a Homeowner) are applicable. These fees can be paid with one check or separately with two checks. Page one of the related BWSC transmittal forms (BWSC113 Notice of AUL, and BWSC104 Permanent Solution) should be included with the payment to ensure it is credited to the correct disposal site. Also, please include the Release Tracking Number on the face of the check.

Greener Cleanups

37. Q: MassDEP recommends ASTM's Standard Guide for Greener Cleanups (E2893) as appropriate for considering and evaluating greener cleanup considerations under the MCP. How do I obtain a copy of the ASTM Standard Guide for Greener Cleanups?

A: The standard guide can be purchased directly from ASTM International online at http://www.astm.org/Standards/E2893.htm. Purchasers have the option to (1) immediately download an electronic file of an Adobe PDF, or (2) request shipping of a hard copy.