

July 19, 2019

Elizabeth J. Callahan, Acting Division Director, Policy and Program Planning Bureau of Waste Site Cleanup, MassDEP 1 Winter Street Boston, MA 02108

SUBJECT: 2019 Proposed MCP Revisions

Dear Ms. Callahan:

The LSP Association (LSPA) is pleased to offer MassDEP our comments on the 2019 Proposed Amendments to the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). We solicited and developed these comments from our membership in response to the proposed revisions and changes, and our Regulations Committee and the LSPA Board vetted them.

The LSPA's comments are presented in the attached table and organized by subpart. In addition to these specific comments, we offer the following general positions on three of the more broad-based proposals to amend the MCP:

PFAS. With regard to per- and poly-fluorinated compounds (PFAS), we note that there is significant uncertainty regarding the toxicity of these compounds, and that toxicity information is continuously evolving. The MCP will establish a *de facto* maximum contaminant level (MCL) by promulgation of a GW-1 standard, without incorporating the technical feasibility and/or cost considerations of the MCL process. We also note that PFAS is seemingly ubiquitous in groundwater, and that "background" levels of these compounds will need to be established. A better understanding of background conditions for PFAS would also inform a reasonable lower limit for development of Method 1 standards. As the science of these compounds continues to evolve, we expect that MassDEP policy will reflect sound technical and scientific principles, and that the standards will continue to evolve with the science.

Risk Characterization. MassDEP has proposed to amend its risk characterization requirements related to deriving exposure point concentrations (EPCs), addressing hot spots, and characterizing waste deposits. While well-intentioned, these changes appear to run counter to certain established elements of the risk assessment process. In particular, the "Historic Fill" guidance and the definition of "Anthropogenic Background" allow for the presence of certain waste materials commingled with soil, as would the Non-Aqueous Phase Liquid (NAPL) revisions passed in 2014. The proposed revisions would seem to require discrete testing and evaluation of those materials, rather than a risk characterization based on the overall



properties of a disposal site.

The explicit references to manufactured gas waste ignore other types of waste materials with diverse fate and transport properties, and seemingly eliminate elements of LSP judgment typically employed in these types of evaluations. The work of LSPs will address these topics, as always, by documenting the nature and extents of these affected media and their potential exposure and migration pathways.

There appears to be significant discrepancy in the proposed approaches for EPC development for various media, and the technical justification for the media-specific approaches is not always apparent. In some cases, the proposed approach contradicts existing MassDEP guidance. For example, the proposed changes for indoor air EPC development require either the derivation of an upper confidence limit (UCL) or maximum concentrations, but the recently finalized 2016 MassDEP Vapor Intrusion guidance (#WSC-16-435: "Vapor Intrusion Guidance") allows arithmetic averaging.

Furthermore, the explicit requirement to employ UCL statistical methods will in many instances require additional data to achieve similar risk outcomes. MassDEP has referred to the statistical evaluation as being appropriate for "complex" sites, but that term raises additional questions as to what constitutes a "simple" or "complex" site in MassDEP's review and judgment. Simply setting an area threshold of 2,000 square feet undermines the LSP's ability to investigate a site in consideration of previous investigations and historical site information, prevents the LSP from applying many of the nature-and-extent investigation techniques that have been applied and proven effective at sites since the inception of the MCP, and could potentially result in "sterile" Conceptual Site Models for the sake of a systematic sampling approach. Updated guidance and continuing education, rather than regulatory reform, may be a more effective means of addressing perceived deficiencies in the existing state of the practice.

Transition Provisions. The transition provisions provide for only a limited time to achieve compliance on a wide variety of topics. For sites nearing completion under the existing regulations, significant changes to risk assessment requirements could require a substantial amount of otherwise appropriate (under the current regulations) work to be redone, at a significant cost in terms of both time and money to achieve site closure. We ask that MassDEP re-evaluate the proposed timelines and consider allowing certain transitional provisions to phase in for sites currently past Phase I in the cleanup program.

As you are aware, the LSPA represents a majority of the approximately 500 Licensed Site Professionals practicing in the Commonwealth, as well as a range of affiliated professionals including attorneys, remediation and laboratory contractors, and a broad range of non-LSP engineers and scientists. Our members rely on good regulation as a basis for sound, protective cleanups which provide significant benefits to the Commonwealth. We look forward to working with MassDEP to continue to clean up the



Commonwealth and manage environmental and public health risks in a proactive manner. Please feel free to contact us with any questions or comments.

Thank you for your consideration.

Sincerely, THE LSP ASSOCIATION

Michele Paul, LSP President

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Wendy Rundle Executive Director



LSPA Comments on

2019 Proposed MCP Revisions – Proposed Amendments to the Massachusetts Contingency Plan, 310 CMR 40.0000

Provided below are the LSP Association's detailed comments on the 2019 "Proposed MCP Revisions for Public Comment."

"Page No." refers to the pages in the 2019 Proposed MCP Revisions made available electronically in redline/strikeout format published in PDF.

"MCP Reference" refers to the new citations in the 2019 Proposed Revisions draft, unless otherwise noted.

The LSPA has made every effort to state the issue of concern, provide a specific example wherever possible, and propose suggested language changes where appropriate.

	MCP Subpart A: General Provisions		
Page No.	MCP Reference	LSPA Comment	
11	40.0005	Effective Dates: The LSPA proposes that MassDEP wait at least 90 days after publication for amendments (other than Reportable Concentrations) to take effect. Although previous amendments have become effective after 60 days, the changes to Subpart I in particular are likely to have substantial impacts on sites that are already approaching MCP closure. The extra 30 days would allow some of these sites to achieve a Permanent Solution prior to the effective date. In particular, if these sites require an AUL with 30-day notice to record interest holders, then 60 days would not be sufficient.	
15	40.0006	Definition of Active Exposure Pathway Mitigation Measures (AEPMMs): The new definition limits AEPMMs intended to deal with vapor intrusion issues as systems which create or maintain a negative pressure field to prevent or mitigate vapor intrusion. As a general comment, we disagree with the approach of including a design standard in the definition of what is essentially a performance standard. In particular, this definition excludes the Active Pressurization Techniques which are listed as options for Active Mitigation Systems in Section 3.4 of MassDEP's Vapor Intrusion Guidance (Policy #WSC-16-435). The definition of AEPMMs should be revised to include active pressurization,	

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		to be consistent with the Vapor Intrusion Guidance. We suggest building in adaptive management and flexibility by adding a third option for the purpose of an AEPMM as "Such other mechanism that is consistent with response action performance standards, proposed by the LSP of record and approved in writing by MassDEP."
22	40.0006	Consultant-of-Record is defined as "each consultant, other than a Licensed Site Professional, who provides professional servicesunless and until such person notifies the Department in writing that he or she is no longer engaged or employed to provide such services" Could MassDEP please provide examples of services a Consultant-of-Record might provide, and list the specific circumstances when it is appropriate to have a Consultant-of-Record instead of an LSP? There is a BWSC form to resign as LSP; how does one resign as Consultant- of-Record? What are the potential consequences if a Consultant-of-Record does not notify MassDEP in writing that he or she is no longer engaged?
		It is the LSPA's understanding that this definition and the definition of Audit Follow-up Plan were added to the MCP in 2014 and are intended to only apply in those circumstances in which a PRP may receive an NOAF that identifies concerns whose resolution does not require that the PRP hire an LSP. We are not sure that MassDEP achieved this goal because 40.1160(2)(c) requires that an Audit Follow-up Plan include the seal of an LSP and 40.0015(3) identifies an Audit Follow-up Plan as an LSP Opinion. If not tethered to this concept, the definition of "Consultant-of-Record" is overbroad and untenable– it could include every member of the LSP's team.
		"Manufactured Gas Plant Waste and MGP Waste means tars, oil, coke, and other by-products formed in the coal gasification process"
34	40.0006	Singling out a specific type of waste (MGP waste) for the addition of a specific definition would not appear to be necessary. These materials do not have unique toxicity or mobility issues and can be appropriately addressed under the existing regulations. For example, "oil" is a very well-studied form of OHM, and there are many regulations and guidance documents relating to oil (or non-aqueous phase liquid [NAPL]). While oil and tar from MGP tend to be dense(D) NAPL (vs lighter petroleum LNAPL), MGP DNAPL and petroleum LNAPL are similar in many ways, including some mobility similarities in the subsurface (i.e., mechanics of fluid flow through porous media) and chemical composition (BTEX, PAHs, petroleum hydrocarbon ranges).
		Of more concern is the subsequent revision requiring sampling of MGP Waste and comparing those results to Soil Upper Concentration Limits. This is not currently required for petroleum NAPL sites, nor should it be. The proposed language suggests that "oil" from one source should be treated differently than "oil" from another source, and this is not technically justified from either a fate and transport or toxicological perspective.
30	40.0006	Definition of Hot Spot to include "areas of waste disposal, including but not limited to Manufactured Gas Plant Waste, shall be considered Hot Spots." This will likely lead to UCLs being exceeded since a Hot Spot has to be treated as a separate exposure point and exposure points are compared separately to UCLs. The LSPA expects that this will lead to more engineered barriers or fixation being required for a site to achieve a permanent solution.
		Consider this another way: Is every area where wastes were disposed of going to be treated as a hot spot? Does that include C&D debris, the barn that was buried in place, a knoll in the back 40 where materials accumulated over time? Are these areas no longer "areas of waste disposal" when the waste is removed? Hot spots need to be relatable to measurable concentrations in environmental media, not to a subjectively defined area. It is unclear to the LSPA what MassDEP is trying to accomplish. Aren't areas of waste disposal already adequately addressed as "sources" that must meet the MCP requirements for source elimination and/or control?

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30	40.0006	Modification to "Hot Spot" definition. The term <i>"areas of waste disposal"</i> that has been added to the Hot Spot definition should have some scale or size component and should also be a defined term. Without such perspective, the regulation revisions could compel one to address tiny pockets of waste material (for example, thin layers or small isolated pockets of hardened tar which are commonly associated with former MGPs) as individual little hot spots, with analytical data required for each little pocket or layer. The revisions need to allow for judgment on the part of the LSP regarding a reasonable approach to developing EPCs for such heterogeneous deposits. In addition, if the intent, as suggested by MassDEP during an LSPA presentation, is to address areas where waste is present as a discrete layer/zone separate from soil, then the LSPA suggests the following language: <i>in all cases, areas or zones of discrete waste, including but not limited to MGP waste, shall be considered hot spots.</i> Otherwise, as written, it suggests that the intent is to refer to waste disposal locations, such as those referenced in the historic fill definition <i>"municipal solid waste dump, burning dump, landfill, waste lagoon or other waste disposal location."</i>
30	40.0006	At a minimum, a definition of "waste," as used in this definition, needs to be added to the definitions section. In addition to the MGP Wastes cited and defined, are waste sludges associated with plating operations to be included? How about waste oil released to the environment as NAPL? How about released NAPL petroleum products? Released NAPL petroleum products, from tanks and other sources, are no longer suitable for their intended use and could be considered "waste." Is it MassDEP's intention to include petroleum NAPLs in this definition such that NAPL is a Hot Spot requiring sampling and analysis? MassDEP has yet to address risks associated with direct exposure to petroleum NAPLs, but the proposed revision is not an appropriate way. Including petroleum NAPLs as "waste," and implementing this approach, would also move the way petroleum NAPLs are regulated back to the pre-2014 regulation changes.
35	40.0006	As MassDEP rolls out requiring GPS coordinates for monitoring wells, please consider allowing .CSV files (or some other electronic format) to be uploaded and automatically checked. Requiring hand entering of GPS coordinates into an RMR-like form would be cumbersome and prone to errors.
35	40.0006	The LSPA suggests that MassDEP keep the current definition of Monitoring Well and instead add a provision requiring that all Monitoring Wells used to support LSP Opinions have documented GPS coordinates. The thing itself is not different whether or not it has GPS coordinates. Some discussion of phasing in this provision for new wells and managing of existing wells that are not already GPS located should be considered.

MCP Subpart B: Organization and Responsibilities			
Page No.	MCP Reference	LSPA Comment	
103	40.0115	The LSPA supports this proposed revision related to sites with radioactive materials. The proposed language clarifies that MCP risk assessment methods will not be used to evaluate risk to radionuclides at MCP sites; rather, MassDPH dose-based methods will be used. This clarification removes the confusion that previously existed, as dose-based assessments yield different outcomes at these sites than an MCP risk assessment would.	

	MCP Subpart C: Notification of Releases and Threats of Release of OHM; Identification and Listing of OHM			
Page No.	MCP Reference	LSPA Comment		
119	40.0313(2)	The LSPA supports the intention of clarifying reporting obligations for Underground Storage Tanks. We recommend the following edits: "(2) a release to the environment indicated by the presence of oil and/or hazardous material within ten feet of the exterior wall of an Underground Storage Tank or ancillary piping,"		
Page 126	310 CMR 40 Subpart P; 310 CMR 40.0317(3)	The LSPA appreciates the scope of the issues raised by PFAS contamination and expects to work with MassDEP on the challenges associated with regulating these compounds.		
Page 137	310 CMR 40.0336(2)	 Within 60 days of receipt of a Notice of Responsibility pursuant to 310 CMR 40.0336(1), the recipient shall provide the Department with a written notice and relevant documentation that supports the recipient's belief that any of the following conditions are true: a. the recipient is not a person described at 310 CMR 40.0331(1); (b) a release of oil or hazardous material did not actually occur; (c) conditions posing a threat or release did not actually occur; or (d) a release or threat of release which did occur did not meet one or more sets of notification criteria set forth in 310 CMR 40.0300 The LSPA suggests replacing "belief" with "assertion." 		

	MCP Subpart D: Preliminary Response Actions and Risk Reduction Measures			
Page No.	MCP Reference	LSPA Comment		
153	40.0441(1)(b)	This section implies that a RAM cannot occur on any site where any portion of the site is subject to an IRA. The LSPA recommends changing the language to "a Release Abatement Measure shall not be conducted at the portion of a disposal site where an Immediate Response Action is required or ongoing, unless otherwise approved by the Department" Does a presumptive approval of a plan for application of remedial additives under 40.0046 satisfy the need for the RAM to be otherwise approved by the Department?		
162	40.0442(3)(b)	The LSPA recommends that the language "completed prior to initiation of construction" be followed by "which would impede future response actions".		

	MCP Subpart E: TIER CLASSIFICATION AND RESPONSE ACTION DEADLINES			
Page No.	MCP Reference	LSPA Comment		
186	40.0560(7) (c)2	"(c) Contents of a Tier Classification Extension Submittal. The Tier Classification Extension Submittal shall consist of the following: 2. a description of the status of response actions, including a plan and a proposed schedule for implementing such plan, which details the steps that will be taken in order to achieve, at a minimum, a Temporary Solution, if not already achieved, at the disposal site pursuant to 310 CMR 40.1000 within one year of the effective date of the Tier Classification Extension, and a schedule for achieving a Permanent Solution, if feasible;"		
		The LSPA requests that "one year" be changed to "two years." Per 40.0560(7)(d)(2), "Unless otherwise specified by the Department, the Extension shall be effective for a period of two years beyond the effective date of the Tier Classification Extension;" therefore, for consistency and simplicity the deadline to achieve a Temporary Solution after a Tier Classification Extension should also be two years.		
187	40.0560(7)(h)	"(h) Tier Classification Extension for Remedial Actions after a Permanent Solution Statement has been Submitted. A Tier Classification Extension Submittal submitted to the Department pursuant to 310 CMR 40.1067(4)(c) and 310 CMR 40.1067(5)(c) shall take effect on the date the Tier Classification is received by the Department and unless otherwise specified by the Department, shall be effective for a period of two years. An RP, PRP or Other Person shall notify the Department pursuant to 310 CMR 40.0560(7) if additional extensions are required thereafter."		
187	40.0560(7)	There are currently no provisions for reclassifying a site after Tier Classification has expired. The LSPA believes that some direction should be provided for this situation, even if it requires contacting MassDEP to establish a new site specific timeline. Suggested wording: "Tier Classification Extension for Remedial Actions after the expiration of Tier Classification. A Tier Classification Extension Submittal submitted to the Department pursuant to 310 CMR 40.1067(4)(c) and 310 CMR 40.1067(5)(c) following the expiration of an existing Tier Classification shall take effect on the date the Tier Classification Extension Submittal is received by the Department and, unless otherwise specified by the Department, shall be effective for a period of two years. An RP, PRP or Other Person shall notify the Department pursuant to 310 CMR 40.0560(7) if additional extensions are required thereafter."		
187	40.0560(7)(d)	The LSPA applauds the changes to the Tier Classification (TC) requirements, which generally simplify what had become a complex process after the 2014 amendments. However, the LSPA believes the approach should be to remove Tier Classification Extension requirements under Temporary Solution Status. This would remove confusion, administrative burden, and decrease transition requirements for sites currently under Temporary Solution.		
187	40.0560(7)(h)	Suggested addition in red for clarity: (h) <u>Tier Classification Extension for Remedial Actions after a Permanent Solution Statement has been Submitted if required pursuant to</u> <u>310 CMR 40.1067(4)(c)</u> , <u>310 CMR 40.1067(5)(c)</u> , <u>or 310 CMR 40.1067(6)(a)</u> . A Tier Classification Extension Submittal submitted to the Department pursuant to 310 CMR 40.1067(4)(c), 310 CMR 40.1067(5)(c), and 310 CMR 40.1067(6)(a) shall take effect on the date the Tier Classification Extension is received by the Department and unless otherwise specified by the Department, shall be effective for a period of two years. An RP, PRP or Other Person shall notify the Department pursuant to 310 CMR 40.0560(7) if additional extensions are required thereafter.		

	MCP Subpart H: Comprehensive Response Actions				
Page	MCP Beference	LSPA Comment			
No.	Reference 40.0859	Quantitative remedial goals are necessary to evaluate the feasibility of remedial action alternatives to reduce exposure to OHM by human and/or ecological receptors and impacts to drinking water source areas at a portion or portions of the disposal site to achieve or approach a Permanent Solution at such portion(s) of a disposal site. The outcomes listed in 40.0860 (1) all have quantitative goals that are used to undertake the feasibility evaluation, except 40.1003(7)(a)2., which has proven to be an issue for compliance based on recent NOAFs where MassDEP considered the evaluation of the feasibility of removing NAPL with micro-scale mobility to be inadequate. This concern can be traced to the fact that there are no established endpoints upon which to determine if the required goal is met.			
		How are quantitative criteria for the subject evaluation to be determined for these materials? Is MassDEP suggesting that an arbitrary reduction in risk be used, such as a percentage reduction from current risk? That could be quantified. Maybe some sort of barrier that limits exposure is evaluated or some arbitrary percent reduction in mass is assumed to allow one to undertake the evaluation? This "remediation for remediation sake" needs to be rethought or more direction is needed as to how the endpoint criteria are to be determined, if this feasibility study is to be undertaken and comply with 40.0860.			
200	40.0859(5)	The LSPA is concerned about the unintended consequences of this proposed added regulation. For example, there is risk assessment guidance on how a risk characterization to support a Partial Permanent Solution must not overlook cumulative site risk. Without more clarity on MassDEP's intent here, it feels like a similar slippery slope could arise where more focused, limited risk reduction measures are implemented at a "portion of the disposal site," but the cumulative site risk or comprehensive site closure approach becomes muddled or lost. The LSPA thinks the regulations for addressing Substantial Hazards or Imminent Hazards are sufficient to require a more focused remedy for the more pressing exposure issues, and this proposed regulation is unnecessary.			
218	40.0898(b)	 "(b) except as provided at 310 CMR 40.0898(1)(c), for a disposal site with a Temporary Solution where Active Operation and Maintenance is not being conducted, a Post-temporary Solution Status Report shall be submitted to the Department within one year of receipt by the Department of the Temporary Solution Statement and annually thereafter until a Permanent Solution is achieved and where applicable, an annual Status Report may be combined with the Periodic Review of the Temporary Solution Opinion required pursuant to 310 CMR 40.1050(4)(b);" Clarification is needed on how this will be handled at existing sites. When will the first annual Status Report be due if the Temporary Solution was submitted over a year before? Will RPs of current Temporary Solution Sites be notified that they are now required to submit annual status reports in addition to the five year Periodic Review? If a site is in Temporary Solution and a status report is now required, what is the transition provision applicable to these sites? 			
218	40.0898(c) & 40.0898(e)	"(c) for a disposal site with a Temporary Solution where Active Operation and Maintenance is not being conducted, persons conducting response actions may seek to <u>reduce the frequency of Post-temporary Solution Status Reports to less than an annual frequency</u> upon approval by the Department of a proposal that provides a reduced frequency in number of years not to exceed five and the justification for such frequency based on considerations including but not limited to the stability of disposal site conditions, and current and foreseeable disposal site risk, provided that:" "(e) the submittal of Post-temporary Solution Status Reports at the frequency specified at 310 CMR 40.0898(a) through (c) shall have the effect of maintaining a Tier Classification Extension obtained pursuant to 310 CMR 40.0560(7) for the duration that such Status Reports are submitted to the Department." Per 40.0560(7)(d)2. "Unless otherwise specified by the Department, the Extension shall be effective for a period of two years beyond the effective date of the Tier Classification Extension;"			

Clarification is needed on how Tier Classification Extensions would now work for Temporary Solution sites where Post-Temporary Solution Status Reports are reduced to a frequency of less than every two years. Would the Tier Extension be valid for more than two years? If so, to aid with tracking, the LSPA suggests that MassDEP could add the Tier Classification expiration date to the Searchable Sites Page.
The LSPA prefers that the added process of Tier Classification Extensions not be added to Temporary Solution sites that are compliant with required status report submittals. However, if the Tier Classification Extension is retained, MassDEP needs to ensure that such Tier Extensions will extend beyond 2 years. A suggestion is to make the Tier Extension schedule the same as the Post -Temporary Solution Status Reports, and these status reports at no less than 2 years or more than 5 years.

	MCP Subpart I: Risk Characterization				
Page No.	MCP Reference	LSPA Comment			
225	40.0924 (6)(c)6.a	"6. It has been demonstrated through adequate characterization of horizontal migration that groundwater petroleum hydrocarbon concentrations are: a. not detected at or above analytical limits appropriate for a GW-1 area at the downgradient edge of the plume, at least 1,000 feet from the Public Water Supply well(s); and" Please clarify what is meant by "analytical limits appropriate for a GW-1 area." The LSPA suggests a revision to "not detected at or above analytical limits and/or drinking water standards"			
225	40.0924 (6)(c)8)	Groundwater exposure points – with respect to GW-1 areas, it is possible that one could have a potential EPC that is less than GW-1 standards and/or does not pose a risk in excess of MCP risk management criteria; this is covered elsewhere in the MCP. Therefore, the LSPA recommends that this clause be deleted.			
226	40.0924 (10)(b)	"(b) Exposure Points shall be identified considering the life history of potential ecological receptors, potential human activities and uses,, the timing of the exposure and the potential for short-term effects from the contaminants of concern." There are two commas after "uses."			
227	40.0926- general	Every medium seems to have a different EPC specified – this is an inconsistent approach that does not make sense statistically or from an exposure perspective. The goal of EPC development should be to have a statistically defensible, adequate and representative EPC that is appropriate for exposure point and receptor. There is no basis for the EPC for wildlife differing from that used for a human, or why the average is adequate for a sediment EPC but not for a soil EPC. The proposed regulations mandate the use of a maximum, upper confidence limit and average; this approach will be confusing to practitioners and may not necessarily result in a conservative estimate of the EPC as required by the regulations.			
228	40.0926 (2)	The discussion regarding adequate site characterization, sampling design and size belongs in section 40.0830, "Phase II - Comprehensive Site Assessment." These types of issues/information should be contemplated well in advance of the performance of the Risk Characterization, and the performance standards for defining the N&E of OHM, Site boundaries, and performing an analysis of the available data are also required as part of the Phase II. This highlights the need to have the risk assessor involved in designing the sampling program to ensure adequacy for EPCs.			
228	40.0926 (2)	Please clarify what type of statistical (or otherwise) "justifications" for sample size adequacy, considering variability and distribution, should be provided?			
229	40.0926 (8)(a)2(a)(ii)	Please clarify that the 95 th percentile parametric upper confidence limit on the mean can also be used for normal distributions, not just lognormal or gamma.			
229	40.0926(8) (a)(2)	The term Upper Confidence Limit (UCL) has statistical precedent. By requiring UCLs be considered as EPCs, there will be confusion with the acronym since it is identical to the MCP Upper Concentration Limit (UCL). The LSPA urges MassDEP to consider revising the MCP UCL to			

		some other term; perhaps Upper Bound Concentration (UBC) or Upper Contaminant Concentration (UCC)? The MCP "UCL" is not in the statute, so this could be addressed with the current round of MCP changes.
		 "3. demonstration that contaminant concentrations are not detected at or above analytical limits appropriate for a GW-1 area at the downgradient edge of the plume, at least 1,000 feet from the Public Water Supply well;"
229	40.0926(7)	Please clarify what is meant by "analytical limits appropriate for a GW-1 area.
		Perhaps revise to "not detected at or above analytical limits that are able to detect Method 1 GW-1 standards and/or drinking water standards"
		(a) "Groundwater Exposure Point Concentrations shall be determined for each wellhead (including each monitoring well) and the nearest tap of a supply well screened within the horizontal and vertical distribution of the oil and/or hazardous material in groundwater (see (40.0924)"
229	40.0926(7) (a)	The LSPA observes that there appears to be a "blending" of groundwater EPC development for Method 1/2 and Method 3 risk characterizations, and we request more clarity/specificity. For example, the MCP is explicit [40.0924(2)(a)(1)] that for Method 1/2 risk characterizations, the groundwater exposure point shall be the resource itself, as measured at each wellhead. The 1995 Risk Guidance (WSC/ORS-95-141, Section 5.8.1) is also explicit that for Method 1, each well is considered an exposure point, and that averaging across wells is not acceptable for Method 1. In practice under Method 3, each wellhead is compared to drinking water standards in GW-1 areas, if applicable. Under Method 3 in non-drinking water areas, it is common to average across wells to develop a representative EPC for certain exposure scenarios, for example a construction worker where an excavation can encompass a broader area.
		The LSPA proposes the following revised language: 40.0926(7)(a): "For Method 1 or Method 2 risk characterization, groundwater Exposure Point Concentrations shall be determined for each wellheadFor Method 3 risk characterization, groundwater Exposure Point Concentrations shall be determined based on site-specific conditions, and potential current and future exposures." Then 40.0926(7)(b) [[which is currently shown as another "(a)"]], can further provide detail on deriving a conservative groundwater
000	40,0000(7)	EPC under Method 3.
229	40.0926(7) (c)	Groundwater EPCs: If residual soil contamination can cause higher future groundwater concentrations than those present, then it is a source, and needs to be controlled/mitigated etc. regardless of EPC considerations
229	40.0926(8) (a)	Soil EPCs: See previous comments regarding requirements for justification of sampling approach as a part of RC versus as part of earlier sections or points in the process, such as defining nature and extent/investigation considerations.
		Also, the LSPA requests that further clarification be provided regarding what type of justification/documentation is necessary.
229	40.0926(8) (a)(1)	The LSPA believes that exposure point calculations should follow site assessment, and should be grounded in CSM principals (what was released, how, and what pathways are potentially affected) rather than an arbitrary cutoff for release size (i.e., 2,000 square feet). Fate and transport characteristics should govern the risk assessment, rather than a cut-and-dried standard.
229	40.0926(8) (a)2	Is the "systematic" approach now being considered the default (which will be interpreted as required) at all "complex" sites the same approach required for TSCA Sites? The nature of the sampling plan should be selected based on site-specific considerations, using defensible technical judgment.
	40.0926(8)	1. "At disposal sites where the contamination originated from a discrete source and remains localized within an area less than 2,000 square feet, judgmental sampling of locations where OHM contamination most likely to be present shall be acceptable"

		This section is defining the derivation of soil EPCs. There can be cases where a localized release to soil results in localized soil contamination, but a larger area of low-level groundwater impacts. This proposed addition is to clarify that the area of groundwater impacts should not be used to screen against the 2,000 sq ft requirement for averaging of soil EPCs.
229	40.0926(8) (a)2	The maximum should be considered in cases where the 95%UCL is higher than the maximum
229	40.0926(8) (a)2(a)(ii)	The LSPA recommends that if both the 90 th percentile Chebyshev and the 95 th percentile parametric upper confidence limit exceed the maximum detected value, the maximum detected value should be used as the Exposure Point Concentration.
230	40.0926(9) (a)2	This section contradicts the Vapor Intrusion Guidance: "EPCs that represent a long-term exposure should be based upon multiple rounds of indoor air sampling. Consistent with 310 CMR 40.0926 and MassDEP's Guidance for Disposal Site Risk Characterization, indoor air sample results from a given exposure point may be averaged (over time and location within the Exposure Point) provided there is sufficient data such that the average value is a "conservative estimate of the average concentration contacted by a receptor over the period of exposure." Multiple rounds of consistent and representative data are necessary to support the use of averaging for EPCs. When data is variable or limited, a maximum or 95th upper confidence limit on the mean should be used to develop an EPC as specified in 310 CMR 40.0926(3)(c)."
	40.0926(9)	2. "When sufficient data are available to characterize the spatial and temporal variability at the Exposure Point, a maximum concentration value or 95 percent upper confidence limit on the mean shall be used to develop Exposure Point Concentration"
230	(a)(2)	The LSPA recommends that this section be vetted against the 2016 Vapor Intrusion Guidance (#WSC-16-435), where averaging for indoor air EPCs is explicitly permitted (Sec. 2.3.3.1). Also, there will be many cases where sufficient data will not be generated (i.e., sufficient # of samples to run UCLs) in a timely manner to derive 95 percent UCLs on the mean, considering the need to sample over multiple seasons to fully characterize seasonal temporality. So this proposed regulation is essentially requiring maximum concentrations for the majority of sites.
230	40.0926(9) (b)	(b) "A robust sub-slab soil vapor dataset and/or conditions may be used to" The LSPA recommends removing the word "robust", since it is subjective and a bit nebulous. MassDEP VI guidance (#WSC-16-435, Section 2.2.2, Page 20) already specifies MassDEP recommendations for sub-slab soil vapor data set.
230	40.0926(9)	Suggested text: "(b) A robust sub-slab soil vapor dataset and/or conditions may be used to: 1. estimate or aid in the estimation of Exposure Point Concentrations 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 interior building materials contaminated by past commercial or industrial operations;"
230	(b)	There may be situations where indoor air in residences is impacted by building materials or other interior sources that are not disposal site- related or by past operations such as former mill buildings which have been converted to residences. In these situations sub-slab soil vapor data may be more representative for EPC calculation; therefore, this provision should not be limited to commercial and industrial buildings.
230	40.0926 (12)	The LSPA requests clarification as there are some "wastes" that will not be treated as a solid when analyzed, and therefore will not be quantified for comparison to the concentration units appropriate for soil. Is MassDEP suggesting that all concentrations be quantified on a mass per unit mass basis for this determination? Clarify please. The wastes of concern could include MGP waste tar in the form of LNAPLs and DNAPLs, waste oils, possibly some forms of plating waste sludges and, depending on the definition of "waste," released petroleum LNAPLs. All of these have a specific gravity different from 1.0 g/cc. It is also very likely that if the quantification is done for a waste that could be appropriately quantified as a soil, one component of that waste will have a conservative average concentration exceeding a UCL for soil, for example naphthalene.
230	40.0926 (12)(b)	(b) "Where a Hot Spot is comprised in whole or in part of waste material, including Manufactured Gas Plant Waste, the concentrations of oil and/or hazardous material within the waste shall be considered the concentration of the OHM in soil"

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		The end of this regulation should be changed from <i>"in soil"</i> to "in waste material." The perceived intent of this proposed language is to make sure OHM within waste material is being characterized via analytical sampling, separate from soil sampling, because the waste material exists as a discrete deposit from the soil matrix. Characterizing OHM in soil has a well-established process, and characterizing OHM in soil should be based on soil sampling, just as characterizing OHM in waste material should be based on waste material sampling. Also see proposed language in 40.0996(2), where it is clearer that concentrations in waste material are meant to characterize waste material, not soil.
		Proposed language: (b) "Where a Hot Spot is comprised in whole or in part of waste material, including Manufactured Gas Plant Waste, the concentrations of oil and/or hazardous material within the waste shall be considered the concentration of the OHM in waste material."
230	40.0926 (12)(c)	We support allowing averaging within a Hot Spot if less than 2,000 square feet, since often Hot Spots are more localized and may not warrant enough data to generate Upper Confidence Limit.
251	40.0974 (general)	Regarding the Reference Dose used to evaluate PFAS compounds, the LSPA believes there are insufficient data currently available that support the assumption of simple equipotency among all PFAS, particularly for compounds where ample toxicity data exist (as for PFOA) or little to no data exist (PFDA). Data suggest varying toxicity/potency among the PFAS compounds, which supports the use of separate RfDs. In lieu of applying one RfD to all 6 PFAS, we recommend that individual RfDs be derived based on compound-specific information. This approach would also be consistent with that used in other states (NJ, NH, MN etc.) and agencies (e.g., ATSDR).
251	40.0974 (general)	Regarding the Relative Source Contribution (RSC) factor: We suggest increasing the RSC from 20% to 50%. The levels of PFOA/S in consumer products and in population blood levels have demonstrated decreasing concentrations since phase-out of PFOS and PFOA, and it is anticipated that these levels will further reduce with time. Note that other states have adopted or propose to adopt higher RSCs. Minnesota uses an RSC of 50% (https://www.health.state.mn.us/communities/environment/risk/docs/guidance/gw/pfoa.pdf; August 2018), and NHDES uses a 40-50% RSC (https://www.des.nh.gov/organization/commissioner/pip/publications/documents/r-wd-19-01.pdf).
251	Note 65	This references EPA's Exposure Factors Handbook 2011 as being the most up-to-date. We recommend that MassDEP recognize that LSPs may choose to use EPA's chapter updates that allow risk assessors to have the latest information as new data becomes available. For example, Chapter 3: Ingestion of Water and Other Select Liquids was updated in February 2019. Chapter 5: Soil and Dust Ingestion was updated in October 2017. Chapter 9: Intake of Fruits and Vegetables was updated in August 2018.
251	Note to review referenc e 65	In this note, MassDEP recognizes that there is a dearth of toxicity, epidemiological, and pharmacokinetic data on two of these six compounds (PFHpA and PFDA) and asks if they should be included or excluded from the proposed standard. Since there is uncertainty concerning these two compounds, the LSPA proposes to exclude them until there is sufficient scientific data to develop a separate standard. Concerning the remaining four compounds, the LSPA believes it makes more sense to promulgate chemical-specific standards, using MassDEP's example of: <i>"the individual chemicals would have to be below 20 ppt and the sum would have to be below 35 ppt"</i> or another appropriate higher number.
251	Note to review referenc e 65	Further study needs to be performed to establish some type of background concentration for each of these compounds and to develop a method (not unlike petroleum fingerprinting) to be able to better identify the source of the particular suite of PFAS compounds (for example, being able to differentiate the dissolved PFAS compounds in groundwater of AFFF fire-fighting foam vs. Gore-Tex vs. Teflon vs. fire-fighting turnout gear, etc.) A better understanding of background conditions for PFAS would also inform a reasonable lower limit for development of Method 1 standards.
255	40.0975 (general)	The LSPA is very concerned with the proposed GW-1-based soil standards for total PFAS for the following reasons: •The proposed value (0.0002 mg/kg) is a leaching-based value. In the derivation of leaching-based standards (provided on Excel spreadsheet 'MCP Leach') a default DAF of one for PFAS is used, citing EPA Regional Screening Levels for PFOA/S as the source. However, there are no RSLs for either of those compounds at this time. – The LSPA requests that MassDEP provide documentation to support the use of this default value. When reviewing a simple comparison of leaching-based values for other very soluble constituents (such as MBTE, 1,4-dioxane etc.), the ratio of the leaching-based soil standard to the GW-1 level is significantly higher

		 for PFAS than for other compounds. Furthermore, the proposed level is within "background" levels for PFAS in soil; we are not aware of empirical data suggesting that these low background levels in soil are resulting in drinking water level exceedances in groundwater. The proposed value is likely within typical "background" values for PFAS due to the widespread use of these compounds in a variety of products/applications and airborne dispersal/transport mechanisms. Recently, the University of Vermont produced a whitepaper discussing the results of a background study of PFAS in soil in non-source areas of VT and found PFOA concentrations ranging from 52-4,400 ng/kg (median of 390 ng/kg) and PFOS concentrations ranging from 110-4,400 ng/kg (median of 680 ng/kg). The proposed GW-1 based soil standard for total PFAS is within these ranges of observed background values. There currently is no EPA-approved standard method to analyze PFAS in soil. While laboratories may be able to achieve the proposed soil standards, we are concerned with the reproducibility, consistency and accuracy of such results when trying to achieve part per trillion levels in soil, in light of the lack of a published method.
279 279	40.0993(6) 40.0993(6)	Is this section necessary? In 40.0993(7), it is clearly stated that the hierarchy begins with MassDEP toxicity values. Also, considering the state of flux with PFAS toxicity, it may be better to rely on the MassDEP shortform tox sheet to identify PFAS toxicity; that way it can be more fluid and updated more frequently as needed, as opposed to infrequent MCP revisions. The LSPA strongly urges MassDEP to remove this section and instead publish toxicity values outside of the MCP regulations; otherwise, it will
279	40.0993(6)	be cumbersome and perhaps untimely to update them as needed. What about lead? The RfD and RfC are toxicity values developed by MassDEP. Lead is missing from the list of compounds for which MassDEP developed toxicity values.
279	40.0993 (6)(f)	40.0993 (6)(f) – The RfD of 5E-06 can also be applied to each individual PFAS when calculating hazard index – not just the sum, since Method 3 is calculating cumulative hazard.
279	40.0993 (6) (f)	In light of previous comments, PFHpA and PFDA should be eliminated from this list until such a time when there is more reliable toxicity, epidemiology and pharmacokinetic data available.
280	40.0996(2)	Is petroleum released to the environment considered "waste material deposited at a disposal site, including Manufactured Gas Plant Wastes"? If these petroleum releases need to be compared to UCLs separately, concentrations will likely exceed the UCL.
285	40.0996	It is very likely that the average concentration for some component of the waste will exceed a listed UCL, if the proposed approach is used. Based on the solutions employed for response actions at MGP waste sites to date, it is very unlikely that a technology, other than complete removal of all wastes or in-situ stabilization, will result in removal of UCL exceedances, and thus eliminate the future risk to Public Welfare and the Environment. Often it is not economically or logistically possible to implement these solutions. Given the very difficult and costly requirements to employ an Engineered Barrier for a Permanent Solution where UCLs are exceeded, this solution is also generally not feasible. This means that the proposed approach could result in very complex sites being forced into Temporary Solutions - not an ideal outcome.
285	40.0996(2)	Suggest the following edits for clarity: Characterization of risk of harm to public welfare and the environment shall in all cases include, but not necessarily be limited to, comparison of concentrations of oil and/or hazardous material in soil and groundwater at the disposal site with Upper Concentration Limits, which are listed in 310 CMR 40.0996(8) or identified pursuant to 310 CMR 40.0996(9). Concentrations oil and/or hazardous material listed as Soil Upper Concentration Limits at 310 CMR 40.0996(8) shall be considered applicable Upper Concentration Limits for concentrations of oil and/or hazardous material detected within waste material, including Manufactured Gas Plant Waste, itself.
287	40.0996(7) (d)	References are missing 0's: Pursuant to 310 CMR 40.0414(7), 310 CMR 40.0442(4), and 310 CMR 40.02859(4)

	MCP Subpart J: Permanent and Temporary Solutions		
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No. 294	Reference 40.1005(1)	The LSPA agrees that the impacts of climate change will increasingly need to be taken into account, especially regarding remedial alternatives. Site impacts as a result of climate change will vary depending on a variety of factors. The proposed language is sufficiently general to be interpreted in a variety of ways. The LSPA encourages MassDEP to engage in workgroup discussions with stakeholders to develop guidance on this topic. This might include which MA state studies and websites to rely on, how differences in characteristics of compounds might be taken into account, and approaches for demonstrating that appropriate levels of consideration have been achieved.	
298	40.1013(1)	See comments in Subpart H, regarding the addition of another condition category to address the treatment of NAPL with micro-scale mobility anticipated to be present at less than 0.5 in thickness. The LSPA requests that 40.1013 include additional language indicating that there should be a section in the Permanent Solution Statement that provides the reader/user the details as to what the condition requirements are that need to be followed. These management requirements are often not provided in the PSwC Statements.	
300	40.1025(3) (d)(1)	"Point of soil gas extraction" could be interpreted as the location coming out of the slab or for horizontal pipes the entire length of the slotted pipe. These are very unlikely to be accessible especially to connection to a telemetry system. Suggest the following wording change: "establish the acceptable vacuum range to maintain an appropriate negative pressure field beneath a building for each soil gas extraction system or individual suction fan"	
301, 304	40.1025(4), 40.1026(4)	"(4) Upon written approval by the Department, a remote monitoring system which continuously transmits key operational data of the Active Exposure Pathway Mitigation Measure installed to eliminate or mitigate the migration of OHM vapors into a building to a website hosted by the Department would satisfy the requirement of 310 CMR 40.1025(3)(d) and (9)." The LSPA suggests that MassDEP consider a presumptive approval period in this situation.	
301	40.1025(4)	"(4) Upon written approval by the Department, a remote monitoring system which continuously transmits key operational data of the Active Exposure Pathway Mitigation Measure installed to eliminate or mitigate the migration of OHM vapors into a building to a website hosted by the Department would satisfy the requirement of 310 CMR 40.1025(3)(d) and (9)." Why is 310 CMR 40.1025(3)(d) included here, as it specifies the operating regimen for an AEPMM? Wouldn't an operating regimen still be required whether or not the remote monitoring system transmits continuously? Wouldn't one still need to register the system and still have it notify MassDEP when the vacuum is outside of the acceptable range?	
304	40.1026(4)	"(4) Upon written approval by the Department, a remote monitoring system which continuously transmits key operational data of the Active Exposure Pathway Mitigation Measure installed to eliminate or mitigate the migration of OHM vapors into a building to a website hosted by the Department would satisfy the requirement of 310 CMR 40.1025(3)(d)." Should this reference 310 CMR 40.102 <u>6</u> (3)(d)? 310 CMR 40.102 <u>5</u> (3)(d) is for Permanent Solutions, while 310 CMR 40.1026 is for Temporary Solutions and Remedy Operation Status. If this should be 310 CMR 40.102 <u>6</u> (3)(d), 310 CMR 40.1026(3)(d) specifies the operating regimen for an AEPMM. Wouldn't an operating regimen still be required whether or not the remote monitoring system transmits continuously? Wouldn't one still need to register the system and still have it notify MassDEP when the vacuum is outside of the acceptable range?	

40.1026(6)	"4. notifies the appropriate persons in accordance with 310 CMR 40.1026(4), if the shutdown lasts 30 or more consecutive days."
	310 CMR 40.1026(4) should be changed to 310 CMR 40.1026(5).
40.1040(2) (d)	"(2) Permanent Solutions shall not apply to: (d) any disposal site or portion of a disposal site where Hazardous Waste or Remediation Waste requires management or disposal pursuant to 310 CMR 40.0030."
	This language implies that a Permanent Solution would have to be terminated if any additional excavation of soil above applicable RCs is required after the Permanent Solution has been filed. This conflicts with 40.1067, which specifically allows post-Permanent Solution activities.
310 CMR 40.1040(2) (d)	MassDEP has indicated that the intention of this addition is to prevent site closures with soil stockpiles remaining on site. As written, this would prevent sites with AEPMMs that generate hazardous waste (i.e., GAC with detectable F-listed solvents) from achieving a Permanent Solution, would delay sites in achieving a Permanent Solution where decommissioning of remedial systems would generate hazardous waste (decommissioning is typically disruptive and can be scheduled months after the Permanent Solution is filed), and would cause confusion/contradict the provisions in 310 CMR 40.1067 (Remedial Actions after a Permanent Solution Statement has been Submitted to the Department). The LSPA suggests removing this addition; however, if necessary see suggested wording change below:
	any disposal site or portion of a disposal site where excavated and stockpiled Contaminated Soil requiring management or disposal pursuant to 310 CMR 40.0030 remains, unless the Contaminated Soil is being managed pursuant to 310 CMR 40.1067.
40.1050(4) (b)4.	"4. the feasibility of implementing one or more Permanent Solutions for the disposal site or portion(s) of the pursuant to 310 CMR 40.0860 at the time of the Periodic Review, and if a Permanent Solution is feasible, the projected schedule; "
	Add "disposal site" after "or portion(s) of the"
40.1050(4) & 40.1050(5)	"(4) For all Temporary Solutions where achievement of a Permanent Solution is not currently feasible as described at 310 CMR 40.1050(1)(e)1., except those achieved after a Downgradient Property Status Submittal has been provided to the Department in accordance with 310 CMR 40.0180:" "(5) For all Temporary Solutions where achievement of a Permanent Solution is feasible and response actions toward a Permanent Solution are continuing as described in 310 CMR 40.1050(1)(e)2.:"
	What is the intent of excluding sites for which DPS has been achieved from 40.1050(4) but not from 40.1050(5)? A DPS site would not have a valid Tier Extension, which would conflict with 40.1050(5)(b).
40.1050 (5)(b)	The LSPA suggests the following cross reference in red: (b) a valid Tier Classification or Extension thereof shall be in effect at the time the Temporary Solution Statement is submitted to the
	Department and until the time a Permanent Solution Statement is submitted to the Department. The submittal of Post-temporary Solution
	Status Reports shall have the effect of maintaining a Tier Classification Extension pursuant to 310 CMR 40.0898(1)(e). Further response
	actions shall be conducted in accordance with 310 CMR 40.0800.
310 CMR 40.1056 (1)(l)	MassDEP has indicated that the intention of this addition is to prevent site closures with soil stockpiles remaining on site. As written, this would prevent sites with AEPMMs that generate hazardous waste (i.e., GAC with detectable F-listed solvents) from achieving a Permanent Solution, would delay sites in achieving a Permanent Solution where decommissioning of remedial systems would generate hazardous waste (decommissioning is typically disruptive and can be scheduled months after the Permanent Solution is filed), and would cause confusion/contradict the provisions in 310 CMR 40.1067 (Remedial Actions after a Permanent Solution Statement as been Submitted to the Department). The LSPA suggests removing this addition; however, if necessary see wording change below: Confirmation that no excavated and stockpiled Contaminated Soil requiring management or disposal remains at the site, disposal site or portion of a disposal site for which the Permanent Solution Statement applies.
	40.1040(2) (d) 310 CMR 40.1040(2) (d) 40.1050(4) (b)4. 40.1050(4) & 40.1050(5) 40.1050(5) 40.1050(5) 310 CMR 40.1056

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317	40.1067(3)or 40.1067(5)	(3) For remedial actions conducted after the submittal of a Permanent Solution with No Conditions the following requirements shall apply:"
		"(5) For remedial actions conducted after a Permanent Solution with Conditions Statement has been submitted to the Department where an Activity and Use Limitation is not required pursuant to 310 CMR 40.1013, the following requirements shall apply:"
		Please consider rewording one of these to include remedial actions outside of the area subject to an AUL on a site with an AUL. 310 CMR 40.1067(4) is for remedial actions conducted within an area subject to an AUL; areas outside of the AUL portion of a Site are currently not included within 310 CMR 40.1067.
	40.1067(6) (b)	"(6) At disposal sites where an Engineered Barrier has been implemented as part of a Permanent Solution with Conditions, remedial actions conducted after a Permanent Solution with Conditions Statement has been submitted to the Department (b) where such remedial actions are outside of and do not affect the integrity of the Engineered Barrier or the area where an Engineered Barrier is located, shall be conducted pursuant to the procedures at 310 CMR 40.1067(4)."
319		310 CMR 40.1067(4) applies to remedial actions conducted within an area subject to an Activity and Use Limitation; however, one could also have remedial actions outside of and not affecting the integrity of the Engineered Barrier or the area where an Engineered Barrier is located which are not within an area subject to an AUL. (The AUL could be limited to the area of the Engineered Barrier.) Therefore, we propose that 40.1067(6)(b) read "shall be conducted pursuant to the procedures at 310 CMR 40.1067(4) or 310 CMR 40.1067(5), whichever is applicable."
328	40.1074(2) (a)5	Recommend changing the language to "the location of Active Exposure Pathway Mitigation Measures or other systems". The LSPA assumes the intent is to allow a MassDEP staff to accurately evaluate the AUL conditions in the field to ensure that any exposure mitigation elements are in place and effective. Details on sketch plans such as exact location of piping or other elements that don't materially impact the effectiveness of the AEPMM, and might be modified during system maintenance, should not be scrutinized on a sketch plan.
348	40.1099 Form 1075	Under the Obligations and Conditions in AULs for AEPMMs for a Permanent Solution, please make the language consistent with the revised language in 40.1025(3)(d).

	MCP Subpart N: Public Involvement and Technical Assistance Grants		
Page No.	MCP Reference	LSPA Comment	
		"3. upon written agreement given to the RP, PRP or Other Person conducting response actions by the intended recipient of a written notice required pursuant to 310 CMR 40.1400, such written notice may be provided by electronic mail and the date of receipt shall be the date that such electronic mail message was sent and successfully delivered;"	
385	40.1403(2) (a)3.	The LSPA thinks it is unnecessarily burdensome to allow for email notice only when the RP, PRP or OP have received a written agreement from each individual potential recipient. It is more appropriate for the municipality or other stakeholder group as a whole, including all appropriate departments, individuals, and entities, to grant written permission to allow email notices. It will then be the responsibility of the RP, PRP, or OPs (or LSPs) to ensure the email addresses they use are up to date. Tracking down written notices from each individual is unwieldy. Ideally, MassDEP or another entity might create a master list of those municipalities willing to accept electronic notices under 310 CMR 40.1400. Such a master list would minimize duplicative efforts by consultants and streamline the notification process.	
388	40.1403(6) (b)(2)	"1. a copy of the public notice; 2. a copy of the disposal site map included in the Phase I report pursuant to 310 CMR 40.083(1)(b);" The LSPA suggests adding: "or, in the case of reclassification, an updated copy of the disposal site map."	
		As written, the requirement is for a copy of the Phase I site map to be included with a Tier Classification or Reclassification. The suggested edit is intended to allow for use of an updated map that reflects site conditions at the time of reclassification.	

392	1403(11)(f)	[*] (f) A copy of all the written notices <u>required by</u> : 2. <u>required by</u> 310 CMR 40.1403(11)(e) shall be submitted to the Department with the Immediate Response Action Completion Statement."
		Please delete "required by" following "2."
392	(1)	Typo correction in red (replace "the" with "that"). "1. 310 CMR 40.1403(11)(c) shall be submitted to the Department with the Immediate Response Action Status Report that follows the commencement of the Immediate Response Action, unless an Immediate Response Action Completion Statement is submitted prior to the date that such Status Report is due, in which case, the notice shall be submitted with the Immediate Response Action Completion Statement;"
393	40.1404(2) (d)	Please replace "Consultant of Record No Further Action Statement" with "Consultant-of-Record" (with hyphens)