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May 17, 2013

Via Electronic Mail

Ms. Elizabeth Callahan
MassDEP
BWSC
One Winter Street
Boston, MA 02108

RE: AECOM Comments on Public Hearing Draft – Proposed MCP Amendments (2013)

Dear Ms. Callahan,

AECOM appreciates the opportunity to provide comments on the Public Hearing Draft of the Proposed Amendments to the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. We applaud the effort to move the waste site cleanup program forward and to revise the regulations.

AECOM has the following comments made with reference to the pages (Redline/Strikeout Version) and subsection of the public hearing draft.

Permit/Tier Classification and NRS Amendments

Note to Reviewers, page 4 - The proposed amendments regarding removing the current Tier I Permit process and Numerical Ranking System (NRS) appear to be straightforward and AECOM supports them.

40.0510(2)(g), page 8 and (3)(c), page 9 – Regulations should be written to incorporate electronic submittals and correspondences.

Note to Reviewers, page 9 – AECOM supports the proposed amendments regarding adding the proposed Tier I Criteria; this system will be a faster and clearer process for determining site classification and conveying to the public, PRPs and property owners the status of a site and why. It would probably help to define the IRAs with “remedial actions” that would qualify, differentiating from assessment-only IRAs.

40.0520(4), page 11 and 40.0530 (3), page 12 – Will there be a Transition Period for existing Tier I sites (especially the Tier IB and IC sites) to provide some sort of submittal downgrading classification category?

Note to Reviewers, page 14 and 40.0560(7)(d), page 16 – AECOM agrees with the proposed amendment increasing the time to complete a Phase II Report and increasing the effective time of a Tier Classification Extension (two years).

AUL Amendments

40.1074(2), page 24 – The definition of CERCLA sites in this section should be clarified/cross referenced (i.e., Adequately Regulated Sites?). Also, can the Form 1075 be modified to provide bracketed language for the inclusion of CERCLA and other adequately regulated sites rather than providing reference to a form to be developed?

Note to Reviewers, 40.1074(1)(b) page 23 and 40.1074(2)(e – j) page 25 - AECOM supports the proposal to eliminate the separate AUL Opinion. Hopefully the AUL guidance can be swiftly updated to provide a concise format for the list of information that must be provided in Form 1075 by LSPs, so that LSP opinions contained in the form are adequate without being too lengthy.

Note to Reviewer, page 23, Metes and Bounds (Exhibit A) – Eliminating Exhibit A seems adequate, but we are not sure how the certification of the accuracy of the metes and bounds description in the deed would be completed and by whom, and whether this would therefore add more complexity to the process.

40.1074(2)(c), page 25 - The proposed amendments clarifying the verification that the person(s) signing the Notice of Activity and Use Limitation is authorized to do, is welcomed and will avoid future administrative errors with AULs.

Note to Reviewers, pages 26 and 34, and 40.1074(5), page 27 – AECOM understands the desire for the requirement to submit documentation to MassDEP to confirm the incorporation of an AUL into future deeds and we hope that future owners (subsequent to the PRP who filed the original AUL) see the note to be added to the top of Form 1075 and will comply such that this common AUL violation will be mitigated.

40.0019(1), page 57 - This clause and the proposed amendment language to invalidate a Permanent or Temporary Solution based on the violation of an environmental restriction or other covenant appears to be too broad without an explanation of what constitutes a violation.

Vapor Intrusion and Closure-Related Amendments

40.0313(5)(f)(4), page 65 – This section of the MCP states that a condition of Substantial Release Migration is present if “one or more volatile organic compounds exist in the groundwater beneath or near the structure with an earthen floor, fieldstone or concrete foundation, significant cracks and/or a groundwater sump”. AECOM feels this statement and the word “near” are too subjective and vague. It does not identify a groundwater concentration or specific distance of concern. Although we appreciate the opportunity to use scientific judgment in this regard, AECOM is concerned that the MassDEP may have

a completely different view concerning concentrations and distances of concern that constitute a condition of Substantial Release Migration. We note that specific distances are referenced in (f)(1) to (3) and perhaps it would be prudent to add specific metrics to this item as well from which variations could be implemented by LSPs based on adequate technical justification.

40.0425(5)(b), page 66 – AECOM appreciates the MassDEP reducing the reporting requirements such that at sites with vapor intrusion issues addressed by active remediation, annual IRA Status Reports are required for addressing Critical Exposure Pathways that do not pose an Imminent Hazard.

40.0926(7), page 77 – With respect to developing Exposure Point Concentrations, this section is intended to clarify that modeling can be used in their development only when it is not possible to differentiate between an indoor air source of vapors versus site release conditions. AECOM believes that to be consistent with the MassDEP's Interim Final Vapor Intrusion Guidance document, modeling should be allowed to establish indoor air Exposure Point Concentrations as a line of evidence approach in evaluating the vapor intrusion pathway. Additionally, this restriction seems to preclude the use of fate and transport modeling in a Method 2 risk characterization to evaluate groundwater concentrations (GW-2 and GW-3). AECOM does not believe that this was MassDEP's intent. This should be clarified.

40.0006, page 80 (Historic Fill Definition) – AECOM believes that this definition should not specifically exclude PCBs, because low concentrations of PCBs can be found in historic fill that are below risk levels and did not originate from a Toxic Substance Control Act (TSCA) source. The origin of the PCBs needs to be understood to examine the applicability of TSCA to detected PCBs and they may indeed need to be addressed under that program, but it is too easy to simply exclude PCBs wholesale, presumably because they are subject to other regulation. AECOM suggests further that the proposed definition of Historic Fill should be modified to delete sub clause (c) (*is not connected with operations at the location of emplacement*) as this is not necessary for the definition. Releases related to site activities will be identified in CSM development.

Note to Reviewers, page 80 – AECOM agrees with the proposal to eliminate the reference that equates “background” to “no significant risk.”

40.0712(2), page 87 – With respect to Active Exposure Pathway Elimination, this section states that these measures should ensure a condition of No Significant Risk is maintained. However, it is possible that these measures may have been instituted to obtain a condition of No Substantial Hazard. Please consider revising.

40.1041(2), page 102 (and 40.1012(3)(c), pages 98-99) –

For the circumstances listed for which no AUL is required but may be used at the option of the PRP, the closure should be a Permanent Solution with “Notice” rather than “Conditions” as these sites really are a separate category. The creation of the “Notice” category would also provide clarification that Permanent Solutions with Conditions always need to have an AUL. As it is defined now this is not clear without digging deeper into a site’s documentation. Although the creation of a third category may go against the desire to further simplify the closure terminology, we believe that this is clearer and thus will lead to better interpretation by the regulated community as sites with Conditions will always have an AUL, while sites with Notice will always have one of the circumstances listed at 1012(3)(c) and may or may not be subject to a voluntary AUL. In addition, it seems that, if the MassDEP would like PRPs to optionally go to the effort and expense of utilizing AULs for sites that don’t require them, then the use of an AUL to optionally provide notice of the specific circumstances listed in 40.1012(3)(c) shouldn’t carry the same category of permanent solution as sites where an AUL is required to maintain no significant risk. The MCP process should not impose (nor should MassDEP be responsible for enforcing) conditions where they aren’t required as it creates a disincentive for their use in communicating the presence of these scenarios to future property owners/tenants or other stakeholders. It does seem prudent to provide “Notice” to future property owners/tenants/stakeholders of site conditions in the interest of risk communication of the presence of these scenarios that don’t otherwise require a deed restriction.

When there is a Permanent Solution with Conditions subject to the scenarios listed in 1012(3)(c), will there be a need to get some type of sign-off from the current property owner(s) if not the PRP?

Risk Assessment and MCP Standards

40.0984(2), page 123 – AECOM believes that that the “ADSE, S3 dermal” should be 13 mg/(kg x day), not 12, as per the “MCP Soil.xlsx” worksheet.

40.0984(3), page 124 – AECOM believes that that the “LADSE, S3 dermal” should be 0.0095 mg/(kg x day), not 0.087, as per the “MCP Soil.xlsx” worksheet.

40.0993(5)(b), page 124 – The hierarchy provided for identifying toxicity information for Method 3 risk assessments is confusing and does not seem consistent with how the Method 1 standards were developed. For most OHM, MassDEP seems to rely on IRIS and then PPRTVs, except for a few OHM that have Massachusetts standards or guidelines established under other programs. To help clarify, AECOM suggests that MassDEP include the information in the Notes to Reviewers provided at the bottom of page 126, which provides the following hierarchy:

- “Toxicity values published by Massachusetts DEP (e.g., values used for developing Allowable Ambient Air Limits, Drinking Water Standards and Guidelines and for general risk assessment purposes);
- Values currently published on the U.S. EPA Integrated Risk Information System (IRIS) database; and
- Values published by U.S.EPA as Provisional Peer Reviewed Toxicity Values (PPRTVs).”

40.0974(2) Table 1 and 40.0975(6)(a) Table 2, MCP Standards –

AECOM generally agrees with the approach used by MassDEP in establishing the Method 1 standards. For most OHM, MassDEP has relied upon the toxicity values in IRIS or PPRTVs since these are sources consider recent toxicity information and are used in most risk assessments. As discussed above certain toxicity values published by MassDEP were used in certain instances. Although this hierarchy approach may have resulted in lower Method 1 standards for certain OHM, these standards are scientifically justifiable.

AECOM appreciates MassDEP removing the produce ingestion pathway from the derivation of the Method 1 S-1 standards due to the uncertainty in quantifying this exposure pathway. We agree that direct contact with soil is the primary human exposure pathway and that the produce ingestion pathway is better dealt with in a qualitative manner.

With respect to the Method 1 soil standards for lead, AECOM does not necessarily agree with MassDEP’s approach to establishing these standards. In risk assessments, it is generally felt within the scientific community that risks due to exposure to lead in the environment should be based on blood lead levels, rather than a Reference Dose (RfD)-type of approach. Therefore, MassDEP should consider the use of the EPA’s blood lead models (e.g., the IEUBK model). Using the IEUBK model, the EPA has established a residential soil criterion of 400 mg/kg for use at Superfund sites. This value is higher than the 200/300 mg/kg Method 1 S-1 soil standard established by MassDEP based on background levels.

With respect to the Method 1 soil standards for vanadium, MassDEP relied upon the PPRTV RfD of 7.0E-05 mg/kg-day, which was established by the EPA in 2009. This resulted in a Method 1 S-1 soil standard for vanadium of 30 mg/kg based on natural background soil concentrations. However, MassDEP should be aware that the EPA did not use this PPRTV RfD in establishing the November 2012 residential soil Regional Screening Level (RSL) for “vanadium and compounds” of 390 mg/kg. The MassDEP should consider this when setting the Method 1 soil standards for vanadium.

NAPL and Source Control Amendments

40.1003 (5)(c)(4), page 169 – The requirement to eliminate or, where infeasible, control sources of OHM, defines control as including “the absence of any DNAPL constituent concentration greater than 1 percent of its solubility limit.” This definition seems overly conservative, and disregards entirely the possibility for developing an appropriate Conceptual Site Model (CSM) for DNAPL that considers the site-specific conditions and evaluates risk via existing concentration-based approaches. The 1 % of the solubility limit is based on a rule of thumb used to infer the possible presence of DNAPL, but is not generally considered solid evidence of DNAPL. Such a finding would be more appropriate as a condition that requires further assessment (e.g., development of a DNAPL CSM), rather than establishing it as an arbitrary, non-risk-based remediation goal. This provision seems to be too restrictive, in light of other changes in the regulation and has the potential to become a similar impediment to the closure of solvent sites that the ½-inch UCL has been for petroleum sites. AECOM recommends eliminating this provision or revising the use of this threshold to require development of a DNAPL CSM analogous to the LNAPL CSM requirements of the proposed revisions, which will serve to raise the level of effort needed for the LSP to evaluate the risks posed by the potential for DNAPL to be present.

Miscellaneous and Cross-Referencing Amendments

40.0191(3)(e), page 187 – Although a laudable goal, the one concern with this requirement is how one documents how they completed their consideration and to what degree based upon the scope or level of the response action.

40.0861(2)(e) and (f), page 194 (and in other locations of the MCP) – AECOM is concerned that providing a “projected timeframe” could be construed as an expected end date that could be used against a LSP or PRP. It is information that PRPs and clients also want, and consultants are used to providing schedules; however, it needs to be understood that qualifiers may be attached to the projected timeframes and / or adjustments may be made to the estimate in subsequent MCP submittals.

Thank you for the opportunity to submit these comments, and if you wish to discuss any in further detail, please feel free to contact the undersigned.

Respectfully,

AECOM



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