

16 May 2013

Ms. Elizabeth Callahan – via email  
Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup, 6<sup>th</sup> Floor  
1 Winter Street  
Boston, Massachusetts 02108

**Subject: Proposed Amendments to the Massachusetts Contingency Plan  
310 CMR 40.0000  
Comments on Public Hearing Draft**

Dear Liz:

Geosyntec Consultants, Inc. (Geosyntec) is pleased to provide these comments on the proposed amendments to the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). Like the public hearing draft, our comments are organized into sections based on the following topics:

- Permit/Tier Classification and Numerical Ranking System
- Activity and Use Limitations
- Vapor Intrusion and Closure
- Risk Assessment and MCP Standards
- Non-Aqueous Phase Liquid and Source Control

We have no comments on the Miscellaneous and Cross-Referencing section of the proposed amendments.

**PERMIT/TIER CLASSIFICATION AND NUMERICAL RANKING SYSTEM**

Overall, the proposed changes to the Tier Classification process are helpful in terms of simplifying the process and eliminating time consuming paperwork that did not provide much usable information to the regulated community or the public. Comments on specific sections of the proposed amendments are provided below:

1. There appears to be a numbering/lettering error at 310 CMR 40.0520(2). The paragraphs at 310 CMR 40.0520(2)(b) 1, 2, and 3 seem like they should be included as subparagraphs to 310 CMR 40.0520(2)(a). Currently, the language does not seem to state clearly that the sites described by 310 CMR 40.0520(2) should be classified as Tier I.

2. The proposed revisions to 310 CMR 40.0530(2) state that:

*(2) An RP, PRP or Other Person performing response actions at a Tier II disposal site that meets the Tier I Criteria upon re-evaluating the disposal site shall submit to the Department a Tier Classification Submittal within 60 days of the re-evaluation.*

It is unclear whether a new Immediate Response Action (IRA) at a Site currently classified as Tier II would require re-classification from Tier II to Tier I if the IRA is being conducted under a separate, newly assigned RTN. This section should be modified to address this issue.

## **ACTIVITY AND USE LIMITATIONS**

In the preamble to this section, MassDEP asked for comments on the possibility of requiring a certification as to the accuracy of the metes and bounds description included in deeds prior to recording of an AUL. Although the majority of the metes and bounds descriptions likely provide an accurate representation of a parcel in Massachusetts, we understand that complexities of a land recording system that was established beginning in 1643<sup>1</sup> may occasionally result in inaccurate or disputed property boundaries and descriptions. As Licensed Site Professionals (LSP), we are not experts on land registration law and we are not qualified to “certify” the accuracy of the metes and bounds. As such, we are opposed to a requirement for an LSP to certify the accuracy of the metes and bounds description contained in a deed that is recognized as a legal instrument by the Commonwealth of Massachusetts.

## **VAPOR INTRUSION AND CLOSURE**

1. The inclusion of the specific conditions listed in the proposed amendments at 310 CMR 40.0313(5)(f) 1 through 6 has the potential to increase significantly the generation of new IRAs. Because some of the conditions are based on the presence of *any* detectable concentration of VOCs in soil or groundwater, many of these IRAs will ultimately conclude that complete vapor intrusion pathways are not present at the buildings in question. Increasing the number of required IRAs creates an additional reporting burden on the regulated community, in the form of IRA Plans and Status Reports, that would not be required if vapor intrusion investigations were conducted as part of Phase I or II investigations at a Site. MassDEP’s Interim Final Vapor Intrusion Guidance already identifies these conditions as warranting further investigation, and other notification requirements (specifically 310 CMR 40.0312(2), 40.0313(4), and the first sentence of the proposed revision to 310 CMR 40.0313(5)(f)) are sufficient to assure that IRAs will be initiated at buildings where complete vapor intrusion pathways are most likely to exist.
2. Additionally, the language at 310 CMR 40.0313(5)(f)6 is vague and, therefore, subject to potential misinterpretation. MassDEP’s Interim Final Vapor Intrusion Guidance clearly

---

<sup>1</sup> [http://www.mass-doc.com/land\\_registry\\_dir.htm](http://www.mass-doc.com/land_registry_dir.htm)

identifies the need to investigate the potential for vapor migration along preferential pathways.

3. The proposed amendments to 310 CMR 40.0926(6) eliminate the option of using fate and transport models to calculate Exposure Point Concentrations (EPCs) with one exception for indoor air modeling as described in the proposed amendments to 310 CMR 40.0926(7). Simple fate and transport modeling may still be needed to develop EPCs for ecological risk characterizations, for example to evaluate groundwater discharge to surface water. The language at 310 CMR 40.0926(6) should be modified to allow for modeling in these cases.
4. The proposed amendments at 310 CMR 40.0711 seem out of place in Subpart G because the stated purpose of this Subpart is to contain the requirements and procedures for the operation of Active Exposure Pathway Elimination Measures (AEPeM) as a component of a Permanent or Temporary Solution. The proposed amendments at 310 CMR 40.0711(1) through (4) relate to activities prior to achieving a Permanent or Temporary Solution.
5. As written, the proposed amendments at 310 CMR 40.0711(5) seem to require remote monitoring of all AEPeM. Was the intention to require remote monitoring of all AEPeM or only those operated after a Permanent or Temporary Solution has been achieved? While some RPs/PRPs may elect to install remote monitoring prior to achieving a Permanent or Temporary Solution, requiring remote monitoring prior to filing a Permanent or Temporary Solution seems unnecessarily burdensome as RPs/PRPs will be submitting regular Status Reports and Remedial Monitoring Reports (RMR).
6. The proposed amendments at 310 CMR 40.0712(1) indicates that the operating regimen for an AEPeM shall be specified in either an IRA Plan or RIP. It would also be helpful to document these requirements in the Permanent or Temporary Solution directly.

## **RISK ASSESSMENT AND MCP STANDARDS**

1. The language at 310 CMR 40.0993(5)(b)1 is potentially problematic because MassDEP does not maintain a current database or list of “toxicity values identified by the Department for risk assessment.” A website that lists these values and is updated frequently could solve this potential problem.
2. Offering two Method 1 S-1 Standards for lead (200 mg/kg without conditions and 300 mg/kg with conditions) may be confusing and may potentially be misinterpreted. This sort of exception is not made for any other contaminant. LSPs also have the option of using a Method 3 approach to support a Permanent Solution with conditions in cases where a lead EPC is higher than 200 mg/kg.
3. Although MassDEP is still reviewing toxicity values for tetrachloroethene (PCE), leaving the GW-2 standard for this chemical unchanged is potentially misleading to the regulated community, especially considering that the current GW-2 standard for PCE is based on a

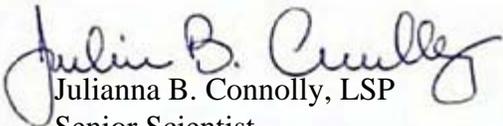
background indoor air concentration that MassDEP no longer considers valid. An additional footnote in the table at 310 CMR 40.0974(2) explaining that the PCE toxicity values are under review may help clarify this issue.

#### **NON-AQUEOUS PHASE LIQUID AND SOURCE CONTROL**

1. Many of the proposed amendments related to NAPL reduce the importance of the measured thickness of NAPL in a well; however, the proposed amendments to 310 CMR 40.0313 increase the significance of small NAPL thicknesses by requiring notification to the Department within 72 hours of the presence of NAPL greater than 1/8 inch. Since the Department no longer regards NAPL thickness as an important metric with respect to NAPL mobility, the 1/8 inch NAPL trigger would be more appropriate as a 120 day notification. Additionally, it seems that the 72-hour SRM notification requirement would capture many of the “high risk” NAPL Sites that really do require that response actions be taken quickly under an IRA.
2. The proposed amendment at 310 CMR 40.1003(5)(c)4, which references “the absence of any DNAPL constituent concentration greater than 1% of its solubility limit” as a requirement for demonstrating source control when filing a Permanent Solution, is not an appropriate way to demonstrate the “stability” of DNAPL. This language effectively creates a numeric standard that is not specified and could be subject to different interpretations by different LSPs. Additionally, for many compounds, this language would create numeric standards that are well below both MCP Upper Concentration Limits (UCL) and Method 1 Standards. The proposed amendment at 310 CMR 40.1003(5)(c)5 is sufficient to demonstrate the “stability” of contaminant concentrations in groundwater.

Liz, I appreciate the opportunity to comment on the proposed amendments to the MCP. Should you require additional information or clarification, please do not hesitate to call me at (617) 992-9064 or email me at [jconnolly@geosyntec.com](mailto:jconnolly@geosyntec.com).

Sincerely,



Julianna B. Connolly, LSP  
Senior Scientist