

Via Certified US Mail
Receipt No. 7002 0860 0000 6593 3290

April 19, 2005

Scott Alfonse, Director of Environmental Stewardship
City of New Bedford
City Hall
133 William Street
New Bedford, Massachusetts 02740

Re: Review of Risk-Based Cleanup Request
School Site at McCoy Field
New Bedford, Massachusetts

Dear Mr. Alfonse:

This is written in response to your March 21, 2005 Risk-Based Cleanup Request (Application) for the McCoy Field School site located in New Bedford, Massachusetts (the Site). This Application was prepared and submitted by BETA Group, Inc. to support a risk-based cleanup and disposal plan for PCB-contaminated materials on the Site under 40 CFR §761.61(c).

EPA has conducted a review of the Application, including the Human Health Risk Assessment which was submitted in support of the Application. Specific comments on the information provided in the Application are provided in Attachment A; comments on the Human Health Risk Assessment are provided in Attachment B; comments on the proposed engineered cap design are provided in Attachment C. Please note that EPA also provided these cap design comments to the City via e-mail on April 5, 2005.

Should you have any questions on these comments, please feel free to contact me at (617) 918-1527.

Sincerely,

Kimberly N. Tisa, PCB Coordinator
Office of Ecosystem Protection

cc: File

attachments

Additionally, current on-Site workers and off-Site residents are identified as potentially exposed receptors due to inhalation of PCBs in suspended soil particulates from excavation/construction activities at the Site. PCB risk-based air concentrations (RBACs) were calculated for current on-Site workers and off-Site residents

by ESS Group, Inc. (ESS) and are documented in a letter dated May 17, 2004. The RBAC calculation also incorporates inhaled particulates that are expelled by the lungs and then ingested. Generally, EPA guidance (such as the “Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites”- 2002) suggests that construction workers potentially may be exposed to contaminants in soil by ingestion, dermal contact, and inhalation. According to the risk assessment in the Risk-based Cleanup Request, soil management and dust monitoring procedures are discussed in the EPA Work Plan. Are the dermal contact and direct ingestion of soil pathways for the construction worker eliminated by these controls? Could additional information be provided regarding these pathways and on-Site workers?

2.

Are there areas where data gaps exist and where additional information is required? Versar shall identify any data deficiencies, and if found, provide possible resolutions such as (but not limited to) the collection of additional samples or requesting additional information.

Response:

As mentioned above, I would like to know whether the soil ingestion and dermal pathway were considered to be incomplete, or has justification been provided for not assessing the pathways? Although an indirect soil ingestion calculation is performed, I would like to know why direct soil ingestion is not addressed.

2. Are the formulas provided in the Risk Assessment appropriate and are the calculations correct? If not, please provide comments and/or recommendations using appropriate EPA procedures and guidance.

Response:

- a. The RBACs calculations assume that half of the inhaled PM₁₀ is absorbed by the lungs and twice that amount of PCBs are expelled by the lungs and ingested. These assumptions are consistent with Massachusetts Department of Environmental Protection (MDEP), but not EPA guidance. EPA guidance assumes that all inhaled contaminants are absorbed by the lungs and also recommends assessing soil ingestion for construction workers, assuming a soil ingestion rate of 330 mg/day.
- b. EPA guidance does not recommend the use of relative absorption factors (RAFs) for ingestion and inhalation pathways. The risk assessment assumed an inhalation

RAF of 1.0, so the inclusion of RAF does not affect the answer. The use of an RAF of 0.85 for ingestion would slightly change the results.

- a. The Henry's Law Constant (HLC) for Aroclor 1254 shown in Table 2 of the Risk Assessment, 3.79E-03, is not the dimensionless Henry's Law Constant (H'), as the column heading indicates. According to the reference cited, EPA's "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities" (EPA, 1998), the HLC for Aroclor 1254 is 3.79E-03 atm-m³/mol. H' for Aroclor 1254 is 1.55E-01 (calculated by multiplying HLC by a conversion factor of 41). Because H' for Aroclor 1254 is of the same order of magnitude as constituents that were evaluated for indoor air intrusion (Table 6, page 3 of 3, in the Risk Assessment), I would like to know why PCBs (i.e, Aroclor 1254) were not evaluated for indoor air intrusion.
4. Is there any additional information that has not been provided that should have been provided to support the proposed cleanup and reuse of this Site? For example, have there been similar requests for this type of cleanup and/or reuse where it was determined that the reuse as a school was inappropriate? If so, was this determination based on a technical and/or scientific finding or some other determination?

Response:

While no additional information has been provided with the submitted risk assessment regarding similar sites, I did identify, via an internet search, a couple of other sites with PCB soil contamination cleanup at an existing school or where a school was built post-remediation. Their locations are:

Allendale School, Pittsfield, Massachusetts

Elevated levels of PCBs were found in soils used as fill material at the school site, originating from the General Electric (GE) factory. A soil removal action was performed in 1999 and clean soil was used as backfill for excavated areas. Information on the Allendale School can be found on EPA's website for the GE/Housatonic River Site: <http://www.epa.gov/boston/ge/thesite/allendale.html>

New Beard Elementary School, Detroit, Michigan

A new elementary school was built on a former industrial site where PCBs, among other contaminants, had been detected in subsurface soil samples. Several soil removal actions were undertaken, including soil removal from areas with PCB concentrations exceeding Michigan Department of Environmental Quality residential cleanup levels, even though the soils were beneath a property cap. The cap was replaced once confirmation samples showed that the contaminated soils had been removed.

The Agency for Toxic Substances and Disease Registry (ATSDR) Health Consultation for the New Beard Elementary School can be found at:

http://www.atsdr.cdc.gov/HAC/PHA/newbeard/nbe_toc.html

Please feel free to contact me at (703) 750-3000 ext. 737 if you have any comments or questions.