



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
REGION I  
5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912

February 10, 2012

John Lebeaux, Town Administrator  
Town Hall  
Town of Princeton  
6 Town Hall Drive  
Princeton, Massachusetts 01541

Re: PCB Risk-Based Cleanup and Disposal Plan  
Thomas Prince School  
Princeton, Massachusetts

Dear Mr. Lebeaux:

The US Environmental Protection Agency - New England (EPA) has received a Notification dated January 18, 2012 to address PCB contamination at the Thomas Prince School in Princeton, Massachusetts (the Site). Specifically, the Notification indicates that *PCB bulk product wastes* (i.e., caulk) and *PCB remediation waste* (e.g., concrete and brick) are present at the Site, which require removal and/or cleanup under the federal PCB regulations at 40 CFR Part 761. The Notification was submitted on your behalf by Environmental Compliance Services, Inc. (ECS).

EPA has reviewed your Notification and **has determined that it is incomplete and does not meet the notification requirements at 40 CFR § 761.61(a)(3)**. Specific comments follow:

1. Page i. Executive Summary. There appears to be inconsistencies within the Notification as to the scope of the proposed project. The first paragraph indicates that the window removal/replacement project includes classroom 201-209, the cafeteria and the kitchen.
  - a. For clarification, the six rooms are classrooms 201, 203, 205, 207, and 209. The reference to "classrooms 201-209" infers consecutively numbered rooms.
  - b. Footnote 2 indicates that the classrooms 201-211, the kitchen and the cafeteria windows are to be removed/replaced under this project.
  - c. There is reference to the "six classrooms" that will be part of the window replacement project. 201-209 would address only five rooms, not six.

Please revise as necessary for clarity and consistency.

2. Page i, footnote 3. This footnote reference EPA Method 3350 for PCB sample extraction. There is no such method. Please revise for accuracy.
3. Page ii, footnote 15. Please be aware that the Triumvirate facility in Lowell is not a disposal facility for PCB ballasts. Please revise for accuracy and clarification on waste disposal.
4. Page 2 and 3. The events list makes reference to Indoor Air Samples collected on August 1 and November 8, 2011. The table for these results is identified as Table 2. It is actually Table 1. Please correct for accuracy.
5. Page 8, Section 2.3.4. Surface wipe sampling is not an appropriate method for determining PCB concentrations in *porous surfaces*. While wipe sampling has been used to ascertain the effectiveness of sealants on *porous surfaces*, this paragraph indicates that the wipe samples were collected prior to application of the epoxy sealant. Thus, please clarify the objective of the wipe sampling on the un-encapsulated *porous surfaces*.
6. Page 9, Section 2.3.5.
  - a. This paragraph indicates that only the common area rooms were thoroughly cleaned. Please clarify what this means. How were the common areas cleaned versus the classrooms?
  - b. As part of the cleaning discussed in this section, please clarify how the unit ventilators were cleaned. Were only the exterior surfaces cleaned or did the cleaning also include the interior surfaces?
7. Page 11, Section 2.4.2. Please clarify if the 1991 caulk was asbestos containing.
8. Page 11. Section 2.4.3.
  - a. There is reference to cleaning of the interior portions of the unit ventilators as part of the pilot testing. It is unclear how this differs from cleaning that may have been conducted initially. See previous comment 5.b.
  - b. There is reference to sealing of masonry that was described "above". However, the preceding paragraphs and sections contained no discussion or reference to sealing of the masonry.

9. Page 12, Footnote 38.

- a. There is reference to glazing compound that could not be removed from the windows. This requires clarification. There is no discussion in the Notification that any effort was undertaken to remove window glazing, only caulk. Thus, please clarify.

10. Page 13, Section 2.7.

- a. Bullet 2. It is indicated that encapsulation of exposed substrate was conducted following window removal. Please clarify what additional sealing was conducted as it was previously indicated that sealing was conducted in Section 2.4.5 (page 12).
- b. Bullet 4. It is indicated that sealing of other interior caulk joints was conducted as part of the pilot test for Room 209. EPA notes that sealing of "other interior caulk joints" is not proposed as part of the plan. A discussion as to why this is not proposed as part of the abatement plan should be incorporated into the Notification.

11. Page 17, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> to last sentence. Please clarify what decontamination methods were used for hand tool, machinery, and associated gear. Reference should be made to the decontamination requirements under § 761.79 as part of this clarification.

12. Page 18, Section 3.0, 1<sup>st</sup> bullet. This bullet indicates that fluorescent light ballasts were manifested as a non-regulated material to TEI's facility in Lowell. Why were these ballasts considered "exempt PCB ballasts"? Please clarify where these ballasts were disposed of.

13. Page 22, Section 4.4. EPA understands that the scope of this current project is limited to Rooms 201, 203, 205, 207, 209, 211, the cafeteria and the kitchen. It is indicated that the 100-wing classrooms will be addressed in a subsequent plan, anticipated to be submitted in March 2012.

a. 1<sup>st</sup> bullet.

- i. It was previously indicated on page 9, section 2.3.5, that a thorough cleaning of rooms 100, 102, 104, 106, 108, 110, and the common areas (cafeteria, kitchen, library, computer lab, bathroom, hallways, and room 113) were thoroughly cleaned. Please clarify, what rooms in the 1962 construction, if any, will not have been "thoroughly cleaned" following completion of the work proposed under this project.
- ii. For the interior masonry block encapsulation is proposed to a distance of 6 inches from the corner of the concrete block, as accessible.

However, it does not appear that sufficient data exists on the interior concrete block to support this encapsulation. Specifically, PCBs were > 1 ppm at a distance of 3 inches. Thus, the 6-inch encapsulation distance has not been established based on current data. Additional sampling should be conducted to support the proposed encapsulation for these interior surfaces.

- b. 2<sup>nd</sup> bullet. It is indicated that the vertical joint caulk along the building facing side of the precast concrete columns and adjacent brick will not be removed under this project, but will be encapsulated until water proofing upgrades occur. Based on the information provided, PCB caulk with > 50 ppm is located in the joints between pre-cast concrete columns (PCBs at 22,800 ppm) and in the pre-cast concrete column to brick joint (PCBs at 29,800 ppm). As the Town is aware, use of PCBs in caulk is unauthorized at  $\geq 50$  ppm and when found this caulk must be removed.
  - i. Given that encapsulation of the building facing sides and window facing sides of the exterior precast concrete columns as well as adjacent brick will be encapsulated with epoxy, justification has not been provided to support why the caulk could not be removed as part of this effort.
  - ii. Please clarify if the portion of concrete located between the windows will also be encapsulated.
  - iii. No information is provided on the concrete pebble window sills. PCBs were identified at > 1 ppm in these materials.
  - iv. It appears that the concrete pebble also is located above the window. Is this correct? If so, is this material in contact with caulk?
  - v. No mention is made about the air intake louver itself and the brick adjacent to the louver. Please clarify if the caulk around the louver contains  $\geq 50$  ppm PCBs. If so, the louver and the brick need to be discussed in the plan.
- c. Following cleaning of interior surfaces, including unit ventilators, sampling would be required to document that the cleaning was effective and that PCB concentrations are  $< 1 \mu\text{g}/100\text{cm}^2$ . This should be incorporated into the plan.

14. Page 23. Please be aware that communications with the school community and a worker training component will be a requirement of the Long Term Monitoring and Maintenance Plan (MMIP) that will be required as part of the Approval Conditions.

15. Page 26. Section 5.3. Bullet 6.

- a. It appears that only one sample was collected from the kitchen window sill at a distance of 4.5 inches from the caulk. Although the PCB concentration was < 1 ppm at this location and the sills are being encapsulated, the PCB concentration at the caulk joint is unknown. Therefore, sampling of the encapsulated kitchen sills should be incorporated into the MMIP.
- b. The bullet states "... as a conservative measure due to their location (i.e. food preparation and **injection**) the sills..." Is "injection" the correct term? If so, please clarify what this means.

16. Table 4. The analytical results for the caulk samples collected by Woodard and Curran that are indicated in the table are not consistent with the data contained in Table 1 of the July 12, 2011 Woodard and Curran Summary of Characterization Sampling Results and Potential Remedial Options letter. Please review and amend as required for accuracy and consistency.

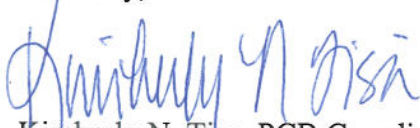
17. Appendix M. Contractor Work Plan.

- a. The pages should be numbered for ease of reference.
- b. If known, please provide a diagram showing the PCB waste storage location(s).
- c. Please clarify how tools and equipment will be decontaminated.
- d. If mechanical means are used to remove visible caulk, please clarify if any air monitoring will be conducted during the removal activities.
- e. Item 2.B. According to the work plan, the encapsulation will include surfaces that were not in direct contact with the PCB caulk.
- f. Item 2.D. Please clarify the cleaning solution for surfaces.
- g. Items 3A and 4. It would be helpful if a sketch of the proposed containment design could be provided.
- h. Item 4. It is indicated that negative air will be used for the removal of the 200 wing windows. Please clarify why this is limited to the 200 wing windows and not the cafeteria and kitchen windows.
- i. Item 5. A. b. Is there any plan to conduct dust monitoring during cutting/grinding operations to ensure the integrity of the containment? If so, please provide information. Please see Comment 17.h., below.

- j. Item 5.A. e.i. The Notification calls for using Sikagard 62 epoxy coating or equivalent to encapsulate the masonry. The contractor work plan references Sikagard 670W epoxy, or equivalent. Sikagard 670W is a clear acrylic coating (per the Technical Specification Sheet), not an epoxy. Please clarify which coating will be used for encapsulation. Sikagard 670W may not have the same properties as Sikagard 62 that would be required to meet the objectives for this project.
  
- k. Item 5.C.d.
  - i. It is unclear if the unit ventilator cleaning described herein is consistent with the cleaning that was conducted for the unit ventilator in Room 209. Please confirm. Please also provide any information the Town has on the capacitor (i.e. type and PCB concentration) in the unit ventilators.
  
  - ii. Will containment be placed around the unit ventilator during cleaning? If so, please provide details. Will the unit ventilators be cleaned prior to or after the interior room cleaning?
  
  - iii. The Notification calls for inspecting univent capacitors to determine if they require replacement. However, the contractor work plan indicates that the "capacitor of the fan motor" will be replaced. Thus, please clarify how the capacitor in the univent will be addressed.

Should you have any questions regarding the above or questions on the PCB regulations at 40 CFR Part 761, please feel free to call me at (617) 918-1527.

Sincerely,



Kimberly N. Tisa, PCB Coordinator (OSRR07-2)  
Remediation & Restoration II Branch

cc: C. Klingler, ECS  
MassDEP – Central Region  
B. Dale Magee, Commissioner DPH  
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