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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

APR 1 1 2012

James Jolicoeur, Superintendent of Schools
Leominster City Hall
Room 15
25 West Street
Leominster, Massachusetts 01453

Re: PCB Risk-Based Approval under 40 CFR § 761.61(c) and § 761.79(h)
Leominster High School
Leominster, Massachusetts

Dear Superintendent Jolicoeur:

This is in response to the City of Leominster (the City) Notification[1] for approval to clean up and dispose of PCB-contaminated building materials in the Leominster High School (LHS) located at 122 Granite Street in Leominster, Massachusetts (the Site). The Site contains caulk and other building materials that exceeds the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20(a), § 761.61, and § 761.62.

In its Notification the City has proposed the following PCB cleanup and disposal plan:

- Remove all caulk with greater than or equal to (≥) 50 parts per million (ppm) PCBs (PCB caulk), and associated building substrates, as applicable (e.g., metal vent covers) and dispose of as a *PCB bulk product waste* in a TSCA-approved disposal facility or RCRA hazardous waste landfill;

- Encapsulate PCB-contaminated *porous surfaces* in direct contact with PCB caulk (e.g., caulk joints) located in the 1961 building with three coats of an epoxy-based encapsulant;

[1] Information was submitted on behalf of the City by Smith & Wessel Associates, Inc. to satisfy the notification requirements under 40 CFR §§ 761.61(a) and (c) and § 761.79(h). Information was submitted dated March 17, 2011 (Work Plan for Removal of PCBs in Caulking (Work Plan); November 7, 2011 (Work Plan, revised); November 23, 2011(Response to EPA Comments); February 10, 2012 (Work Plan, revised and Response to EPA Comments); February 16, 2012 (email window removal locations); February 26, 2012 (Work Plan, revised); February 28, 2012 (Response to EPA Comments); March 27, 2012 (Contractor Work Plan, March 21, 2012 Rev. 2); April 3, 2012 (email Response to EPA Comments and Contractor Work Plan dated March 21, 2012 Rev. 3); April 5, 2012 (e-mail Work Plan, (Rev. 8); April 8, 2012 (e-mail Contractor Work Plan dated March 21, 2012 Rev4); and, April 10, 2012 (email clarification on disposal of < 50 ppm PCB caulk). These submittals shall be referred to as the "Notification".

- Encapsulate PCB-contaminated *porous surfaces* (i.e., concrete, concrete masonry units (CMU), decorative façade stone) located in the 1961 building with two coats of an epoxy-based encapsulant to a minimum of 36 inches from the PCB caulk joint; or alternatively, if removed, dispose of as a *PCB remediation waste* in accordance with § 761.61(a)(5);

- Encapsulate PCB-contaminated *porous surfaces* (i.e., brick) located in the 1961 building with two coats of an epoxy-based encapsulant to a minimum of 8 inches from the PCB caulk joint;

- Decontaminate certain PCB-contaminated *non-porous surfaces* (e.g., metal structural columns, slate sills, glazed tile, etc) to achieve a PCB cleanup standard of less than or equal to ($\leq$) 1 $\mu g/100\ cm^2$ for reuse or $\leq$ 10 $\mu g/100\ cm^2$ for unrestricted disposal; and,

- Remove soils with greater than (>) 1 ppm but less than (<) 50 ppm PCBs and dispose of as a *PCB remediation waste* in a state permitted landfill in accordance with § 761.61(a)(5)(i)(B)(*2*)(*ii*).

As indicated in the Notification, all window caulk with < 50 ppm PCBs also contains asbestos. As such, this caulk and associated windows will be removed and disposed of as a < 50 ppm PCB/asbestos waste in a state-permitted disposal facility.

Based on the EPA's review, and with exception of the proposed verification sampling for soils, the information provided in the Notification meets the requirements under § 761.61 and § 761.62 for the management of *PCB remediation waste* and *bulk product waste*, respectively. EPA finds that the proposed encapsulation of PCB-contaminated *porous surfaces* should effectively prevent direct exposure of these PCB-contaminated *porous surfaces* to LHS users provided the encapsulated surfaces are maintained. As such, EPA may approve the encapsulation under § 761.61(c).

Given the data collected to-date and the proposed cleanup plan, EPA finds that the proposed verification sampling for soils is adequate to determine if the PCB cleanup standard of $\leq$ 1 ppm has been met. EPA may approve the soil alternative sampling frequency under § 761.61(c).

The City may proceed with its project in accordance with 40 CFR § 761.61(c); § 761.62; § 761.79(h); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its right to require additional investigation or mitigation measures should the results of the long-term monitoring sampling indicate an unreasonable risk to LHS users.

Please note the following Attachment 1 conditions:

- **Condition 11**: This condition requires the City to conduct outreach activities for the school community concerning the PCB cleanup and disposal work. Documentation of the outreach effort must be submitted to EPA.

- **Condition 16.c**: As the PCB abatement work will be conducted in phases, this condition requires submittal of a plan detailing the post-abatement surface wipe and indoor air sampling for each phase of work.

- **Condition 18**: As PCBs with > 1 ppm will remain in the school building, the City is required to record a notation on the deed to document this fact.

This Approval does not release the City from any applicable requirements of federal, state or local law, including the Massachusetts Department of Environmental Protection (MassDEP) regulations.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

for Mary Vanderen

James T. Owens III, Director
Office of Site Remediation & Restoration

cc W. Wessel, Smith & Wessel Associates
MassDEP CERO
Leominster Health Department
File

Attachment 1: PCB Approval Conditions

ATTACHMENT 1:

PCB RISK-BASED APPROVAL CONDITIONS
LEOMINSTER HIGH SCHOOL (LHS or "the Site")
122 GRANITE STREET
LEOMINSTER, MASSACHUSETTS

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification.

2. The City of Leominster (the City) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.

3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.

4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.

5. The City must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the City shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.

6. The City is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the City has or receives information indicating that the City or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the City are authorized to conduct the activities set forth in the Notification. The City is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the City from compliance with any applicable requirements of federal, state or local law; or 3) release the City from liability for, or otherwise resolve any violations of federal, state or local law.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from the City of its acceptance of the conditions of this Approval within 10 business days of receipt.

10. The City shall submit the following information for EPA review and/or approval:

    a. a certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval; and,

    b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

DECONTAMINATION AND DISPOSAL CONDITIONS

11. The City shall conduct outreach activities for the Leominster High School (LHS) community on the PCB remediation work. The City shall submit information on its outreach activities within 10 days of receipt of this Approval.

12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

13. All visible residues of PCB caulk (i.e., *PCB bulk product waste*) shall be removed, and *porous surfaces* (i.e., concrete/stone, brick, etc) shall be encapsulated as described in the Notification.

    a. Post-encapsulation surface wipe sampling shall be conducted to confirm the effectiveness of the encapsulant and the application process. Samples shall be collected on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., $\mu g/100\ cm^2$). Samples shall be collected at the frequency described in the Notification.

b. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

c. In the event that PCB concentrations in the wipe samples are greater than (>) 1 $\mu g/100\ cm^2$, additional coating(s) of encapsulant shall be applied until surface wipe sample results are less than or equal to (≤) 1 $\mu g/100\ cm^2$.

14. The cleanup standard for bulk *PCB remediation waste* (i.e., soil) shall be ≤ 1 part per million (ppm).

a. Verification samples shall be collected on a bulk basis (e.g., mg/kg) and reported on a dry-weight basis. Verification sampling shall comply with the procedures specified in Subpart O and the frequency described in the Notification (i.e., 1 sample per every 20 linear feet and biased toward PCB caulk locations).

b. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.

15. The decontamination standard for *non-porous surfaces* (e.g., structural metal frames, window sills, glazed tile, etc.) shall be less than or equal to (≤) 1 $\mu g/100\ cm^2$ PCBs for reuse.

a. Sampling of *non-porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., $\mu g/100\ cm^2$). Samples shall be collected at the frequency described in the Notification.

b. Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

16. Initial post-abatement indoor air sampling and indoor surface wipe sampling for PCBs shall be conducted to determine the impact of the abatement activities.

a. Initial post-abatement sampling

i) Indoor air sampling shall be conducted in accordance with EPA Method TO-4A or TO-10A. Sufficient sample volumes shall be collected to provide a minimum laboratory reporting limit of less than (<) 0.05 $\mu g/m^3$. At a minimum, PCB analysis shall include PCB homologues and/or PCB congeners.

ii) Wipe sampling of indoor surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. $\mu g/100\ cm^2$). Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

b. In the event that PCB concentrations in the wipe samples are > 1 $\mu g/100\ cm^2$ or air sample results are > 0.450 $\mu g/m^3$, the City shall contact EPA for further discussion and direction on alternatives, which may include additional indoor cleaning and/or development of a site-specific risk exposure assessment.

c. Prior to initiating each phase of work, the City shall submit a plan identifying the number and locations of the post-abatement air and surface wipe samples for each work area.

d. The City shall submit a monitoring and maintenance implementation plan (MMIP) to monitor the long-term effectiveness of the encapsulants (see Condition 19).

17. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with CFR 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.

a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).

b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).

c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

DEED RESTRICTION AND USE CONDITIONS

18. Within thirty (45) days of completing the activities described in the Notification and in the Approval, the City shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the extent and levels of contamination remaining at the Site following abatement; a description of the actions taken at the Site; a description of the use restrictions for the Site, if any; and the long-term monitoring and maintenance requirements on the Site (see Condition 19.f). Within

seven (7) days of receipt of EPA's approval of the draft deed restriction, the City shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

19. Within 60 days of completion of the work authorized under this Approval, the City shall submit for EPA's review and approval, a detailed monitoring and maintenance implementation plan (MMIP) for the encapsulated surfaces and for indoor air. The City shall incorporate any changes to the MMIP required by EPA.

    a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and, reporting requirements, as applicable.

    b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the LHS users, including teachers, parents, students, other on-site workers, and interested stakeholders.

    c. The MMIP also shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the barriers encapsulating the PCB-contaminated surfaces.

    d. The City shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the barriers.

    e. Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.

    f. A copy of the MMIP may be included as an attachment to the deed restriction to satisfy the long-term monitoring and maintenance requirements (see Condition 18).

20. The City shall allow any authorized representative of the Administrator of the EPA to inspect the Sites and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the City to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

21. Any modification(s) in the plan, specifications, or information submitted by the City, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. The City shall inform the EPA of any modification, in writing, at least ten (10) days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.

22. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from the City to make a determination regarding potential risk.

23. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

RECORDKEEPING AND REPORTING CONDITIONS

24. The City shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by the City in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.

25. As required under Condition 19 of this Approval, the City shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.

26. The City shall submit a final report, in both hard copy and electronic version, to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities including photo documentation; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of and the size of the PCB cleanup area(s); copies of manifests and/or bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The Report shall also include a copy of the recorded deed restriction and a certification signed by a City official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.

27. Required submittals shall be mailed to:

    Kimberly N. Tisa, PCB Coordinator
    United States Environmental Protection Agency
    5 Post Office Square, Suite 100 – (OSRR07-2)
    Boston, Massachusetts 02109-3912
    Telephone: (617) 918-1527
    Facsimile: (617) 918-0527

28. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

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END OF ATTACHMENT 1