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

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

MAY 20 2014

Massachusetts Bay Transit Authority
Attn: Ms. Janis Kearney
Department of Environmental Affairs
10 Park Plaza, Room 6720
Boston, Massachusetts 02116

Re: PCB Cleanup and Disposal Approval under §§ 761.61(a) and (c)
Former MBTA Tire Garage – Green Line Extension Project
21 Water Street
Cambridge, Massachusetts

Dear Ms. Kearney:

The U.S. Environmental Protection Agency ("EPA") is in receipt of the Massachusetts Bay Transit Authority ("MBTA") Notification[1] for approval to clean up and dispose of PCB-contaminated building materials on its property located at 21 Water Street ("the Site") in Cambridge, Massachusetts. The Site contains PCB caulk, building substrates, asphalt, and soils that exceed the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20(a), § 761.61(a) and § 761.62.

The Site building will be demolished as part of the Green Line Extension Project. MBTA is proposing to remove PCBs with greater than (">") 1 part per million ("ppm") in accordance with 40 CFR Part 761 as follows:

- Remove interior and exterior caulk, windows, and a minimum 6 inches of adjacent *porous surfaces* (i.e., concrete masonry unit ("CMU")) and dispose as a *PCB bulk product waste* in accordance with 40 CFR § 761.62;

- Remove asphalt with > 1 ppm PCBs but less than ("<") 50 ppm PCBs and dispose as a < 50 ppm *PCB remediation waste* in accordance with 40 CFR § 761.61(a)(5)(i)(B)(*2*)(*ii*); and,

[1] Information was submitted by Kleinfelder on behalf of the MBTA to support a PCB cleanup and disposal approach for *PCB remediation waste* under 40 CFR §§ 761.61(a) and (c) and disposal of *PCB bulk product waste* under 40 CFR § 761.62. Attachment 2 is the Administrative Record which provides a list of supporting information for the PCB cleanup and disposal request. The Administrative Record will be referred to as the "Notification".

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- Conduct verification sampling of asphalt (following removal of the existing non-PCB soil stockpile) and building wall 3 to confirm that the PCB cleanup standard of less than or equal to ("≤") 1 ppm has been met.

MBTA has determined that the interior floor caulk which has a PCB concentration at < 50 ppm, meets the criteria for an *Excluded PCB Product* under § 761.3. Under the PCB regulations, *Excluded PCB Products* are unregulated for cleanup and disposal. Accordingly, MBTA will be managing this caulk in accordance with the Massachusetts Department of Environmental Protection ("MassDEP") requirements.

With exception of the verification sampling requirements, the information provided in the Notification meets the requirements under 40 CFR §§ 761.61 and 761.62 for removal and disposal of *PCB bulk product waste* and for removal and/or decontamination of *PCB remediation waste*. Given the extent of the characterization sampling and the proposed removal, these data are adequate to confirm the limits for removal of > 1 ppm PCBs without additional verification sampling with exception of the asphalt located beneath the existing soil stockpile and building wall 3. For the asphalt and building wall 3, verification sampling will be conducted. EPA has determined that the deviation from the sampling requirements for the remaining *porous surfaces* will not result in an unreasonable risk of injury to human health or the environment, and EPA may approve the deviation under 40 CFR § 761.61(c).

MBTA may proceed with its PCB cleanup and disposal plan in accordance with 40 CFR §§ 761.61(a) and (c); § 761.62; its Notification; and this Approval, subject to the conditions of Attachment 1.

This Approval does not provide for cleanup and disposal of PCB-contaminated soils since additional sampling is necessary to define the nature and extent of the PCB contamination at the Site. Upon completion of the soil investigation at the Site, MBTA may propose a modification to this Approval to incorporate cleanup of PCB-contaminated soils or shall submit a separate cleanup and disposal notification under 40 CFR § 761.61 (see Attachment 1, Condition 1).

Questions and submittals required under this Approval should be directed 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
Email: tisa.kimberly@epa.gov

The Approval does not release MBTA from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCBs or other contaminants under the MassDEP regulations.

Please note that among other requirements that may be necessary to complete this project, EPA will not consider this project complete until it has received documentation, as outlined in Attachment 1, evidencing completion of the work. Please be aware that upon EPA receipt and review of required submittals, EPA may request any additional information necessary to establish that the work has been fully completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

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

cc: Richard Quateman, Kleinfelder
MassDEP, Boston
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Attachment 1: Cleanup and Disposal Approval Conditions
Attachment 2: Administrative Record

ATTACHMENT 1

PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
MASSACHUSETTS BAY TRANSIT AUTHORITY ("MBTA") TIRE GARAGE
GREEN LINE EXTENSION PROJECT
21 WATER STREET
CAMBRIDGE, 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].

   a. This Approval does not address the cleanup of PCB-contaminated soils as additional investigation is being conducted. Upon completion of the investigation, MBTA shall submit a separate plan to address the PCB contamination or may propose to modify the Notification to incorporate cleanup of the PCB-contaminated soils under this Approval (see Condition 16).

   b. In the event that the MBTA identifies other PCB-contaminated wastes subject to cleanup and disposal under the PCB regulations, the MBTA will be required to notify EPA and clean up the PCB-contaminated wastes in accordance with 40 CFR Part 761.

2. MBTA 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. MBTA shall 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, MBTA shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.

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[2] Information was submitted by Kleinfelder on behalf of the MBTA to support a PCB cleanup and disposal approach for *PCB remediation waste* under 40 CFR §§ 761.61(a) and (c) and disposal of *PCB bulk product waste* under 40 CFR § 761.62. Attachment 2 is the Administrative Record which provides a list of supporting information for the PCB cleanup and disposal request. The Administrative Record will be referred to as the "Notification".

6. MBTA 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 MBTA has or receives information indicating that MBTA or any other person has failed, or may have failed, to comply with any provision of this Approval, it shall 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 MBTA are authorized to conduct the activities set forth in the Notification. MBTA 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 MBTA from compliance with any applicable requirements of federal, state or local law; or 3) release MBTA from liability for, or otherwise resolve, any violations of federal, state or local law.

9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

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

11. MBTA shall submit the following information for EPA review and/or approval:

    a. a certification signed by its selected 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 methods and quality assurance requirements specified in the Notification and in this Approval.

CLEANUP AND DISPOSAL CONDITIONS

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. PCB-contaminated materials with greater than (">") 1 part per million ("ppm") located at the Site shall be removed and disposed of as described below:

    a. All visible residues of PCB caulk, associated windows and frames, and building substrates (i.e., minimum 6-inch adjacent concrete masonry unit ("CMU")) shall be removed and disposed of as a *PCB bulk product waste* in accordance with 40 CFR § 761.62 as described in the Notification.

    b. PCB-contaminated asphalt with > 1 ppm but less than ("<") 50 ppm PCBs shall be removed and disposed of as a *PCB remediation waste* in accordance with 40 CFR § 761.61(a)(5)(i)(B)(*2*)(*ii*) as described in the Notification.

    c. Verification sampling shall be conducted on the asphalt following removal of the existing non-PCB soil stockpile and on wall 3 CMU following removal of the PCB caulk and CMU to confirm that the less than or equal to ("≤") 1 ppm PCB cleanup standard has been achieved.

        i) Verification sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Verification sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches and in accordance with the Subpart O sampling frequency.

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

14. All PCB waste (regardless of concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner prescribed in 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61(a)(5) or § 761.62, unless otherwise specified below:

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

    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.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

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

16. Any modification(s) to the plan, specifications, or information submitted by MBTA and contained in the Notification, must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).

17. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the 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.

18. 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.

19. This Approval for these activities may be revoked, modified or otherwise altered if EPA finds: (1) a violation of the conditions of this Approval, 40 CFR Part 761, or other applicable rules and regulations; (2) that these activities present an unreasonable risk to public health or the environment; or, (3) that there is migration of PCBs from the Site.

RECORDKEEPING AND REPORTING CONDITIONS

20. MBTA 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 decontamination and the analytical sampling shall be established and maintained by MBTA 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.

21. MBTA shall submit a final completion report in both hard and electronic (CD-ROM) formats, to the EPA within 60 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 with photo-documentation; characterization and verification 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; copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer.

22. Required submittals shall be mailed 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

23. 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

ATTACHMENT 2

ADMINISTRATIVE RECORD
MASSACHUSETTS BAY TRANSIT AUTHORITY ("MBTA") TIRE GARAGE
21 WATER STREET
CAMBRIDGE, MASSACHUSETTS

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Confirmation on wall verification sampling. Email May 15, 2014.*
- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), Clarification on wall verification sampling. Email May 15, 2014.*
- *Janis Kearney (MBTA) to Kimberly Tisa (EPA). Clarification on asphalt removal. Email May 14, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Clarification on asphalt removal. Email May 14, 2014.*
- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), Sequence of asphalt removal and soil sampling. Email May 14, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), sub-asphalt soil sampling locations and air monitoring plan. Emails May 12, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Revised Figure 2, PCB Concentrations In Asphalt. Email May 2, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Amended Contractor Work Plan, December 30, 2013 (Rev. 1, March 6, 2014). Email March 31, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Asphalt sample result. Email March 20, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Response to EPA Comments on December 6, 2013 Notification and November 15, 2013 Contractor Work Plan. Email March 10, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Notification of TSCA Self-Implementing Clean-Up of PCBs, March 13, 2014, Revision #02.*
- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), EPA Response to February 19, 2014 email. Email February 24, 2014.*
- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Questions on EPA Comments on December 3, 2013 Notification and November 15, 2013 Contractor Work Plan. Email February 19, 2014.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Transmittal of Lechmere Station Busway Drawing. Email February 10, 2014.*

- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), EPA Comments on December 6, 2013 Notification of TSCA Self-Implementing Clean-Up of PCBs. Email January 25, 2014.*

- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), EPA Comments on December 6, 2013 Notification of TSCA Self-Implementing Clean-Up of PCBs. Email January 20, 2014.*

- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), EPA Comments on November 15, 2013 Vinagro Contractor Work Plan. Email January 18, 2014.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), PCB Contaminated Building Materials Plan, J.R. Vinagro Corporation (Contractor Work Plan), Nov. 15, 2013. Email January 7, 2014.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Notification of TSCA Self-Implementing Clean-Up of PCBs, December 6, 2013, Revision #01.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Transmittal of mortar re-sampling results. Email July 10, 2013.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Response to June 26, 2013 EPA Comments and Summary of Building Materials table. Email June 26, 2013.*

- *Kimberly Tisa (EPA) to Richard Quateman (Kleinfelder), Summary of outstanding information to be submitted by MBTA. Email June 26, 2013.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Clarification on soil management during building demolition. Email June 21, 2013.*

- *Janis Kearney (MBTA) to Kimberly Tisa (EPA). Response to May 17, 2013 EPA Comments. Email June 5, 2013.*

- *Kimberly Tisa (EPA) to Janis Kearney (MBTA), EPA Comments on September 14, 2012 Notification of Self-Implementing Clean Up of PCBs. Email May 17, 2013.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Confirmation that October 24, 2012 PCB Bulk Product Waste Reinterpretation would apply to project. Email April 23, 2013.*

- *Richard Quateman (Kleinfelder) to Kimberly Tisa (EPA), Notification of TSCA Self-Implementing Clean Up of PCBs, September 14, 2012.*