UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Certified Mail - Return Receipt Requested

September 5, 2017

Mr. Craig Ziady
Cummings Properties, LLC
200 West Cummings Park
Woburn, MA 01801

Dear Mr. Ziady:

This correspondence contains EPA New England - Region 1's Technical Review Comments on the August 2017, submittals from Cummings Properties, LLC, in accordance with the U.S. EPA Region 1 Administrative Order on Consent (AOC) Dated April 13, 2017 (Docket No. RCRA-01-2017-0023). The submittals include:

(1) Written Proposal/Sampling and Analysis Plan (WP/SAP), dated April 27, 2017 and submitted on April 28, 2017;

(2) Health and Safety Plan (HASP) dated April 4, 2017, submitted by email on April 24, 2017;

(3) Quality Management Plan (QMP) dated April 4, 2017, submitted by email on April 24, 2017;

(4) Sampling and Analysis Plan (SAP), dated April 4, 2017 (previous versions dated January 2017 and December 2016), submitted by email on April 24, 2017;

(5) Quality Assurance Project Plan (QAPP) dated April 4, 2017 (previous version dated April 2012), submitted by email on April 24, 2017.

Additional comments are contained in Attachment 1 to this correspondence. Please do not hesitate to call with any questions. I can be reached at 617-918-1368 or casey.carolyn@epa.gov.

Sincerely,

Carolyn Casey
RCRA Corrective Action Facility Manager

CC: A. Zucker, D. Wainberg, US EPA
R. Knox, J. Miano, MassDEP
B. Hoskins, FSL
G. Flaherty, Cummings Properties

ATTACHMENT 1

EPA New England - Region 1 Technical Review Comments on the April and May 2017 Submittals from Cummings Properties, LLC in Accordance with the U.S. EPA Region 1 Administrative Order on Consent (AOC) Dated April 13, 2017
Docket No. RCRA-01-2017-0023

Sampling and Analysis Plan, April 4, 2017 (previous versions dated January 2017 and December 2016) Elliot Street Landing Beverly MA prepared for Cummings Properties, LLC.

Section 1.3 Statement of Specific Problem, page 2

EPA Comment: This section should be revised as in other areas of the report (page 9, second to last paragraph) to reflect that "Soil gas and groundwater data will be evaluated in accordance with the MCP and the Mass DEP Vapor Intrusion Guidance policy WSC#-16-435."

Response: *The text has been revised consistent with EPA's comment.*

EPA additional comment: Please remove the sentence with "Threshold Criteria."

Page 13 (top of page 14 in revised version)
EPA Comment: At the bottom of page 13 it states that the use of maximum concentrations for EPCs also overestimates risk. Although 5 different sampling events were conducted over 3 years, only two included both soil gas and indoor sampling. Ideally, groundwater samples would also be collected and all 3 media used to determine if the vapor intrusion pathway exists.

Response: *Comment noted. No revision necessary in summary of past activities. Further, it is not always necessary to sample groundwater, soil gas, and indoor air in order to conclude that a vapor intrusion pathway is not significant.*

EPA additional comment: Delete the text that states "The use of maximum concentrations for EPCs also overestimates risk, and in this case is unnecessary due to the number of individual data points and that sampling has occurred in 5 different events over a 3-year period."

It is true that the use of maximum concentrations ***may*** [emphasis added] over estimate risk. In this case, and at this point in the investigation, the use of the maximum concentration is appropriate and in accordance with the MCP (below). Until there is sufficient data to average concentrations, the maximum should be used for a conservative screen. The current lack of multiple lines of evidence, the unknown source(s), and the potential for variability of indoor air concentrations (data points are a snapshot in time) support the need for the use of maximum concentrations in risk assessment.

> 40.0926: Identification of Exposure Point Concentrations and Other Data Criteria
> (1) For each oil and/or hazardous material in each medium at each Exposure Point, an Exposure Point Concentration shall be identified and documented.
> (2) Exposure Point Concentrations shall be determined or estimated in a manner consistent with the type and method of Risk Characterization which is being performed.
> (3) In estimating the Exposure Point Concentration, the objective shall be to identify a conservative estimate of the average concentration contacted by a receptor at the Exposure Point over the period of exposure.
>
> (a) Maximum concentrations shall be used to estimate an Exposure Point Concentration under the following conditions:
>
> 1. evaluations of acute exposures;
> 2. screening assessments that evaluate maximum exposure potential to streamline the assessment process; or
> 3. evaluations of exposures for which the data available to characterize temporal variability or the spatial distribution of site concentration is limited, including when there is insufficient data to adequately characterize the effects of seasonal variation on groundwater contaminant concentrations.

Note, the number of indoor air samples collected for this site is not that significant, particularly for calculation of the 95% UCL of the mean. Further, EPA's comment did not say that it was always necessary to sample all media to conclude that a vapor intrusion pathway is not significant. Again, it would be ideal if groundwater samples were also collected and all 3 media were used to determine if the vapor intrusion pathway exists. If a pathway does exist, then risk assessment is used to quantify that risk.

Page 17
EPA Comment: The depth to groundwater and other factors used in modeling (J&E) and assumptions made about deleting compounds (e.g., detected in one media and not in another), also need to be discussed in uncertainty section.

Response: *The text has been revised consistent with EPA's comment.*

EPA additional comment: This text revision cannot be located.

NEW COMMENTS
Please note that these new comments relate to PCB investigations as significant revisions/additions to the QAPP were made with respect to the investigation in building 100 for PCBs.

Form C Problem Definition
In the first paragraph on page 7, please also include an objective for the PCB evaluations.

PCB DQO
On page 16, please clarify what this means in terms of numerical PCB concentration.

PCB Investigation
Please delete "or" for consistency throughout the plans. We agree, the groundwater sampling alone will not definitively support locating the "disposal areas".

Form F-1 Method and SOP reference Table
The **STANDARD OPERATING PROCEDURES SAMPLING POROUS SURFACES FOR POLYCHLORINATED BIPHENYLS (PCBs)** Adapted from *STANDARD OPERATING PROCEDURE FOR SAMPLING POROUS SURFACES FOR POLYCHLORINATED BIPHENYLS (PCBs)*, The Office of Environmental Measurement and Evaluation EPA New England -Region 1, May 2011, are not being reviewed.

The actual, and not adapted, procedures should be used. If there are necessary deviations from the EPA SOPs, they should be documented in the filed notes, etc., as appropriate. If the SOPs provided in the QAPP are not adapted but actual EPA procedures, FSL should not modify the procedures by adding their name to them.

Form F-2 Sampling and Analytical Methods Requirements
Please clarify in this table if soil or concrete samples will be collected.

In the table, please verify that the "bulk" matrix indicates concrete samples.

Form L: Analytical Precision and Accuracy
There is inconsistency here with Form M which lists 70-130% for the LCS/LCSD and 25% for the RPD. Please revise as appropriate and verify consistency throughout the documents.

Form M: Field Quality Control Requirements
Filed duplicates (for all analytes, not just PCBs) should be collected at a rate of one per matrix per sampling event or at a rate of 10%, whichever is greater.

Please refer to comment regarding decontamination for the SAP (below).

4.1.3 Indoor Air Sampling

Please note that the heating season, as defined in the Mass DEP Vapor Intrusion Guidance, is December through March.

4.3.1 Historic Background

Please clarify the accuracy of the following information from the Phase IV "Soils from the chip storage shed and chip grind shed with elevated petroleum hydrocarbons and PCBs greater than 10 ppm in concentration were returned to these areas after stabilization."

4.5 PCB Evaluation in the Former North Shore Vocational School Space

Please provide a copy of the original map, with no modifications, that was located for this space.

Regarding the SOP mentioned at the end of the first paragraph on page 24, please refer to the comment on the QAPP, Form F-1 Method and SOP reference Table (above).

In the second paragraph on page 24, the discussion of the SOP for concrete needs to be re-visited. The 0-0.05 inch-depth interval does not make sense. Further, it is unclear if only 1 sample would be collected at each depth interval per sample location. If so, this would likely not be a sufficient volume for the laboratory to achieve required detection limits.

4.6.2 Screening Level Ecological Risk Assessment

Regarding the second full paragraph on page 29, please confirm if the surface water was analyzed for PCB Aroclors only. If so, this may not have been sufficient to confirm PCBs were non-detect based on the partitioning coefficient for PCBs into water.

It would be acceptable and appropriate to move straight to a BERA at this point in the process for this site, provided that the following requirements are met:

> Include the COC selection process in the BERA which is an important function of the SLERA. The maximum concentration of any constituent that is detected in site samples and/or any suspected chemical possibly associated with the facility operation should be compared to approved media specific no effect ecological screening values. It must be transparently documented that the COCs included in the BERA were identified through an agreed upon process and to reasonably ensure that no contaminants were overlooked.
>
> EPA comments that were provided on the SLERA, particularly the need for food chain modelling or those that are directed toward the evaluation of ecological risk potential, must be address as part of the BERA and the overall ERA.

5.1 Laboratory Analyses

Section 4.5 discusses concrete floor sampling. This sampling should be included in this section as well.

5.4 Decontamination Procedures
Regarding the use of disposable sampling equipment and thus no decontamination would be performed in field, it may be that some equipment would need to be decontaminated in the field, especially drill bits (see EPA's 2011 SOP for porous surface sampling). Please update the QAPP/SAP as needed for consistency.

6.1 Equipment Blanks
Refer to the above comment regarding field decontamination and previous comments regarding collection of equipment blanks (one per piece of equipment decontaminated in the field per event).

6.3 Field Duplicates
Is soil being collected? Please clarify and/or modify this text as appropriate.