

August 29, 2019
File No. 5174-01-06

Worcester Public Schools
20 Irving Street
Worcester, MA 01609, MA 02035

Attn.: Mr. James Bedard,
Director of Environmental Management and Capital Projects

RE: August 2019 - PCB BMP Quarterly Status Report
Burncoat High School

Dear Jim,

In accordance with the Worcester Public School's (WPS) authorization, O'Reilly Talbot & Okun Associates, Inc. (OTO) is pleased to present this quarterly status report of the Best Management Practices (BMPs) implemented at the Burncoat High School (Burncoat). The objective of the BMP program is to reduce potential exposures to polychlorinated biphenyls (PCBs). WPS and its staff are responsible for implementing the BMPs, and OTO conducts quarterly independent evaluations to provide WPS management with an assessment of the effectiveness of their implementation.

Certain building materials used in the construction and renovation of buildings between 1950 and 1980 may contain PCBs. The US Environmental Protection Agency (USEPA) has recommended that a BMP program be implemented in schools and other buildings either constructed or renovated during this period. Burncoat High School was constructed during this period.

Best Management Practices (BMPs)

In its July 28, 2015 guidance for school administrators and other building owners and managers titled "Practical Actions for Reducing Exposure to PCBs in Schools and Other Buildings," the USEPA described potentially useful BMPs, including:

1. Ensuring that ventilation systems are operating properly and are regularly inspected and maintained according to system manufacturer instructions and guidelines or ANSI/ASHRAE/ACCA Standard 180-2012—Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems. If system cleaning is needed, follow ANSI/ACCA Standard 6—Restoring the Cleanliness of HVAC Systems (2007);
2. Cleaning inside schools and other buildings frequently to reduce dust and residue;
3. Using a wet or damp cloth or mop to clean surfaces;
4. Using vacuum cleaners with high efficiency particulate air (HEPA) filters;
5. Not sweeping with dry brooms or using dry cloth wipes for dusting;
6. Washing hands with soap and water, particularly before eating; and
7. Washing children's toys.

We understand that WPS has modeled its BMP program for Burncoat High School on EPA's guidelines. OTO's assessment of BMP effectiveness focuses on items 1 through 5 on this list. Regarding item 6, all school lavatories are equipped with soap and water and it is the responsibility of students and staff to maintain personal cleanliness. Item 7 on the list is not relevant to high school environments.

Assessment of BMPs at Burncoat High School

We conducted the Summer 2019 BMP assessment at Doherty on August 12, 2019 with representatives from the School facilities department. We reviewed the operation of the HVAC/air handling equipment with school facilities staff. The system underwent a significant overhaul approximately 2 years ago and was operating properly at the time of the BMP assessment.

OTO observed twenty-two (22) classrooms or other spaces selected at random during the assessment. The lower level D-wing was not accessible during our evaluation. Our observations focused on the presence of dust on windows, window sills and window frames as well as the univent systems that provide heating and ventilation to the classrooms. Pollen residues were observed on several windowsills. Some windowsills were obstructed with book storage, art displays or other materials.

The school spaces we observed included:

- Library,
- Selected classrooms, and
- Hallway areas.

Our general observations are summarized on Table 1 (attached). We conveyed to School facility personnel the areas observed to have small amounts of missing caulk which are to be repaired, and discussed cleaning procedures with facilities personnel emphasizing the importance of consistency with the BMPs. We were assured that the BMP recommendations were routinely followed in the school.

Based on our discussions and observations, it is our conclusion that the implementation of the BMPs at Doherty is effective. The univents were free of significant dust and visible oil leakage. Several rooms exhibited slight accumulation of dust, most commonly where windowsills were obstructed by classroom materials. Because window and door caulking may contain PCBs, WPS has previously applied an additional layer of non-PCB caulk over the previously existing caulking. The exterior over-caulking was observed to be intact.

Note that WPS has also authorized OTO to conduct annual indoor air monitoring for PCBs at Doherty. The reports of this air testing have been provided separately from the BMP reports, although we note that the air monitoring results were well below USEPA guidelines for PCB concentrations in school air for each of the three sampling rounds completed to date.

Other USEPA Recommendations for Suspected PCBs in Schools

Although not technically BMPs, USEPA made three other recommendations in its July 28, 2015 guidance for PCBs in schools:

- Remove all PCB containing fluorescent light ballasts (FLBs);
- Give consideration to encapsulating suspected PCB containing materials (such as caulk) to further reduce the potential for PCB exposure; and
- Removing suspect PCB containing building materials during planned renovations and repairs.

WPS removed all suspect PCB containing FLBs in 2012. There are no suspected PCB FLBs remaining in the Worcester school system.

Also in 2012, WPS encapsulated the suspect PCB containing caulk around all of the windows and doors at Burncoat with an additional thick layer of non-PCB caulk. Exterior suspect caulking was likewise covered with new caulk to a height of eight feet above grade. WPS subsequently over-caulked the remainder of the building's exterior door, window, and expansion joints in September and October 2018. This over-caulking is repaired as-needed to maintain its condition.

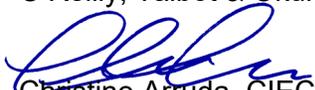
Finally, it is noted that WPS has applied to the state sponsored school building financing program for help with the replacement of the Burncoat High School building. It is estimated that the current building will be replaced in approximately seven years. When Burncoat is replaced, the suspect PCB containing materials will be removed and disposed of in accordance with applicable regulatory requirements.

Conclusions and Recommendations

In conclusion, it is our opinion that the BMPs are being implemented in an effective manner at Burncoat High School. We recommend that the next quarterly on-site visit be conducted in November, 2019, prior to the start of the school year.

Should you have questions or require additional information, please contact the undersigned.

Sincerely,
O'Reilly, Talbot & Okun Associates, Inc.


Christine Arruda, CIEC
Project Manager


James D. Okun, LSP
Principal

Attachments

Table 1 – Summary of Observations for Burncoat High School

Table 1 - Summary of BMP Observations
 Burncoat High School
 299 Highland Street
 Worcester, MA 01602
 August 12, 2019

Room	Condition of Caulk	Condition of Univents	Dust Accumulation	Comments
A14	VG	VG	VG	---
A18	VG	VG	VG	---
B6	VG	VG	VG	---
B11	VG	VG	VG	---
B3	VG	VG	VG	---
B17	VG	VG	VG	---
B14	VG	VG	VG	---
C-wing Upper Hall	VG	VG	VG	Lower left windows, Upper right corner, missing 2" caulk
C17 - Library	VG	VG	VG	Left window bank, lower right corner, missing 1" caulk and some caulk lifting
C6	VG	VG	VG	Far left window, bottom, 1" missing caulk
E4	VG	VG	VG	---
E3	VG	VG	VG	Between 5th and 6th windows, caulk seam between window ledge and window frame is lifting
E8	VG	VG	VG	---
Hall by Cafeteria	VG	VG	VG	---
D8	VG	VG	VG	---
D5	VG	VG	VG	---
D4	VG	VG	VG	---
D3	VG	VG	VG	---
F2	VG	VG	VG	---
F6	VG	VG	VG	---
Gym Lobby	VG	VG	VG	Small areas of caulk lifting, and 1" missing caulk (random areas - Facilities should spot check)

CATEGORIZATION

Very good = minimal dust or debris
 Little = enough dust to leave a residue on a gloved finger
 Moderate = visible accumulations of dust
 Significant = thick layer of dust