



February 8, 2021  
J5174-04-01

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

Attn.: Ms. Kristen Tran,  
Environmental Health & Safety Coordinator

RE: PCB BMP Quarterly Status Report, 2020-2021 School Year  
Second Quarter, December 2020  
Burncoat High School

Dear Kristen,

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). This status report represents the second quarter of the 2020-2021 school year. The objective of the BMP program is to reduce potential exposures to polychlorinated biphenyls (PCBs).

Certain materials used in the construction and renovation of buildings between 1950 and 1980 may contain PCBs. Burncoat High School was constructed during this period.

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.

WPS and its staff are responsible for implementing the BMPs at Burncoat High School. OTO personnel are responsible for conducting quarterly independent evaluations to provide WPS management with an assessment of the effectiveness of the BMPs implementation.

### **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 second quarter of the 2020-2021 school year BMP assessment at Burncoat on December 28, 2020 accompanied by representatives from the District and School environmental and facilities department. The Heating, Ventilation, and Air-Conditioning (HVAC) system underwent a significant overhaul approximately 3 years ago and was operating properly at the time of the BMP assessment.

Because window and door caulking in the School may contain PCBs, WPS has previously applied a layer of non-PCB caulk over the previously existing caulking to reduce the potential for exposures. OTO observed twenty-four (24) classrooms or other representative spaces in the school selected at random during the assessment. Our observations focused on the presence of dust on windows, windowsills and window frames as well as the univent systems that provide heating and ventilation to the classrooms.

The school spaces we observed included:

- Library Media Center,
- Hallway Connectors, and
- Selected classrooms.

Our general observations are summarized on Table 1 (attached). Although we observed generally small sections (2" to 3"), there were several rooms with larger sections (12" to 18") and entire seams of missing caulk that we identified at the time to District and School

facilities representatives. Regarding particulate accumulation, caulked areas observed were rated as “Very Good” (minimal dust or debris).

Based on our discussions and observations, it is our conclusion that the implementation of the BMPs at Burncoat is generally effective. The univents were generally free of significant dust and visible oil leakage.

Note that WPS has also authorized OTO to conduct annual indoor air monitoring for PCBs at Burncoat. The full air testing reports are provided separately from the BMP reports, although we note that the air monitoring results have been well below USEPA guidelines for PCB concentrations in school air for each of the 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);
- Consider 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.

In 2012 WPS also encapsulated the suspect PCB containing caulk around 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 February of 2021.

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


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



Christine Arruda, CIEC  
Senior Project Manager



Robert Kirchherr, CSP  
Principal



James Okun, LSP  
Principal

## Attachments Table 1 – Summary of Observations for Burncoat High School

cc Mr. James Bedard,  
Facilities Director

Table 1 - Summary of BMP Observations  
 Burncoat High School  
 179 Burncoat Street  
 Worcester, MA 01602  
 December 28, 2020

Room	Condition of Caulk	Condition of Univents	Dust Accumulation	Comments
A5	VG	VG	VG	---
A7	VG	VG	VG	---
A9	VG	VG	VG	---
A8	VG	VG	VG	4th window from the left, bottom pane, entire top seam missing caulk. 3rd window from left, bottom pane boarded.
A12	VG	VG	VG	3rd window from left, bottom pane, bottom seam, 3" missing caulk and damaged right side of bottom pane (broken glass window).
A Hallway	VG	VG	VG	---
B6	VG	VG	VG	---
B11	VG	VG	VG	---
B5	VG	VG	VG	Book shelf covering two windows
B8	VG	VG	VG	---
B10	VG	VG	VG	---
B16	VG	VG	VG	---
C5	VG	VG	VG	2nd window from left, bottom pane, all seams missing caulk. 3rd from left, middle and bottom pane, all seams missing caulk. 7th window from left, bottom pane, left side, top seam 24" missing caulk. 6th window from left, bottom pane boarded, 8th window from left middle pane boarded.
C3	VG	VG	VG	---
C2	VG	VG	VG	Far left window, bottom pane, top right side, 8" missing caulk
Library	VG	VG	VG	10th window from right, bottom pane, right seam 18" caulk missing
C6	VG	VG	VG	3rd window from right, bottom pane, missing all seams
E1	VG	VG	VG	---
E4	VG	VG	VG	---
E8	VG	VG	VG	4th window from right, bottom pane, missing all seams. 6th window from right, bottom and middle panes, missing all seams. 4th and 7th windows from the right, boards with AC units in middle panes.
D8	VG	VG	VG	4th window from left, bottom of middle pane, middle left, 12" missing caulk. Obstructions in far right window.
D5	VG	VG	VG	---
D14	VG	VG	VG	3rd window from left, bottom pane, bottom seam, 1" missing caulk. Middle pane, missing all seams.
D18	VG	VG	VG	2nd two windows from right, pictures/posters hanging on windows
F2	VG	VG	VG	3rd window from left, bottom pane, missing all seams

#### CATEGORIZATION

Very good = minimal dust or debris

Little = enough dust to leave a residue on a gloved finger