



August 3, 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
Fourth Quarter, June 2021
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 fourth 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 fourth quarter, 2020-2021 school year BMP assessment at Burncoat on June 23, 2021, 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-five (25) 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:

- Main Office,
- Media Center,
- Stairways
- Hallways, and
- Other Selected classrooms.

Our general observations are summarized on Table 1 (attached). During the assessment we observed two rooms (Gym Transit Hallway and B-14) with 18" and 24" inches sections,

respectively, of missing caulk along windowpane seams. In six other areas (A-16, B-19, C-9, C-15, E-6, Gym Hallway, JROTC Hallway) entire seams of missing caulk was observed along windowpanes. Areas and Rooms with missing caulk were identified at the time to District and School facilities representatives. Regarding particulate accumulation, the majority of caulked areas observed were rated as "Very Good" (minimal dust or debris), and some areas rated as "Little" (enough to leave residue on gloved finger).

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);
- 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.

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 generally being implemented in an effective manner at Burncoat High School. We recommend that Facilities personnel visit the areas where sections of and/or entire seams of caulk appeared missing, and install caulking as needed in those areas. We also recommend that the next quarterly (Quarter 1 of the 2021-2022 School year) on-site visit be conducted August of 2021.

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

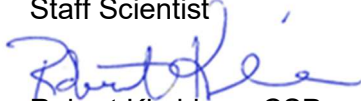
Sincerely,
O'Reilly, Talbot & Okun Associates, Inc.



Alec Robinson,
Staff Scientist



Christine Arruda, CIEC
Senior Project Manager



Robert Kirchherr, CSP
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
 June 23, 2021

Room	Condition of Caulk	Condition of Univents	Dust Accumulation	Comments
A-1(Main Office)	VG	VG	VG	---
A-6	VG	VG	L	AC units in middle panes of 3rd window from left and 3rd window from right
A-12	VG	VG	VG	---
A-16	VG	VG	VG	3rd window from left, bottom pane, all caulk seams missing
B-11	VG	VG	VG	---
B-9	VG	VG	L	---
B-3	VG	VG	VG	---
B-1	VG	VG	VG	---
B-10	VG	VG	VG	---
B-19	VG	VG	VG	Closed office - far right window, bottom pane, all caulk seams missing. AC unit in 2nd window from right, middle pane Open office - AC unit in far right window, middle pane
B-14	VG	VG	VG	Far right window, bottom pane, top right corner seam, 24" caulk missing
C-5	VG	VG	L	board blocking 6th and 8th windows from left, bottom panes
C-9	VG	VG	VG	2nd window from right, bottom pane, all caulk seams missing Far left window, bottom pane, right seam, 1" caulk missing
C-15 (Media Center)	VG	VG	VG	10th window from right, bottom pane, right caulk seam entirely missing Obstructions in front of multiple windows (computers)
C-12	VG	VG	VG	Posters covering middle windows, all panes
E-4	VG	VG	L	---
E-6	VG	VG	VG	Bathroom window, bottom pane, top/bottom/right caulk seams missing
E-8	VG	VG	VG	AC units in 4th and 7th windows from left, middle panes
D-8	VG	VG	VG	---
D-4	VG	VG	VG	---
D-18	VG	VG	L	Posters covering 2nd and 3rd windows from right, middle panes
F-2	VG	VG	VG	---
Gym Transit Hallway	VG	VG	VG	1st window outside locker rooms, bottom pane, bottom seam, 18" caulk missing
Gym Hallway	VG	VG	VG	Far right window, bottom pane, top caulk seam entirely missing
JROTC Hallway	VG	VG	VG	Top of stairs window, middle pane, bottom seam, 9" caulk missing Middle landing window, bottom pane, top caulk seam entirely missing

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