



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

SMMUSD General PCB Window and Door Caulking Plan Overview October 6, 2016

Facility Improvement Projects proposes to adopt the following procedures for managing the potential existence of PCBs in building materials at Santa Monica-Malibu Unified School District (SMMUSD) facilities during window and door modernization projects. These procedures are consistent with EPA's most recent guidance on addressing PCBs in building materials.¹ This should help us to maintain a standard response to reducing potential exposure to PCBs in our schools.

Prior to planned renovation/removal of building materials at all sites:

- Confirm that all magnetic lighting ballasts have been removed. Pre-1980 light fixtures with staining or residues indicative of past ballast leaks will be handled per EPA's guidance and either be
 - a) assumed to contain PCBs and disposed of as Bulk Product Waste in accordance with 40 CFR part 761, subpart D and with California hazardous waste regulations (22 CCR 67429.1);
 - b) tested after removal and before disposal to determine the appropriate method of disposal; or
 - c) tested in place for PCBs to determine if cleaning or removal and disposal is needed.
- Continue Best Management Practices (BMP) cleaning.
- Maintain ventilation systems, if present, in accordance with manufacturer recommendations.
- Develop a regular inspection plan for repairing and covering damaged caulk.

When window frame and/or door frame demolition or replacement is planned for a specific building, we will follow the following procedures:

- Survey the windows and/or doors and associated caulking to determine whether they are pre-1980
 - If the windows and/or doors are determined to be 1980 or later in construction, these building materials do not contain PCBs given they were banned from commercial use in 1979 and no further PCB-related actions are needed.
 - If the windows and/or doors are determined to be 1979 or earlier in construction then determine by survey the method of construction, the adjacent construction materials, and the potential that any caulking or glazing materials might be in contact with adjacent porous substrates. The primary potential PCB source material (i.e., caulking or glazing) will be assumed to contain some level of PCBs per EPA's guidance and the primary material will be handled as such and disposed of as Bulk Product Waste in accordance

¹ USEPA, 2015. PCBs in Building Materials—Questions & Answers. July 28. Available online: https://www.epa.gov/sites/production/files/2016-03/documents/pcbs_in_building_materials_questions_and_answers.pdf

with 40 CFR part 761, subpart D and with California hazardous waste regulations (22 CCR 66262).

- This survey will be part of the Architect's scope for the construction planning/design.
- Based on the survey, environmental specialists will perform delineation sampling of representative areas where porous substrate is observed to be in direct contact with glazing or caulking materials to determine appropriate margins for surrounding building material removal. These samples will be collected in accordance with EPA protocols.²
- The delineation sampling will be scheduled over one year in advance to allow for necessary time to plan/design the exact scope of the work, receive approval from DSA, and procure the contractor/supplies. The District's intent is to implement the scope of work within two years from when initial delineation sampling occurs to remove any PCB impacted building materials that exceed the limits as described below.

If the delineation samples of porous substrate, in contact with primary source materials (i.e., caulking or window glazing) being disposed of as Bulk Product Waste per the assumption above, contain a total PCB concentration ≤ 1 mg/kg (ppm) we will:

- Proceed to plan the construction activities assuming that no porous substrate will require removal/disposal as regulated PCB waste. In addition, replacement of window/door frames and other modernization activities will not trigger removal of porous substrate materials unless needed to achieve the construction goals.
- During renovations/demolition, all building materials that were assumed to contain PCBs (i.e., caulk and window glazing) per EPA's guidance will be handled as such and either be
 - a) assumed to contain PCBs and disposed of as Bulk Product Waste in accordance with 40 CFR part 761, subpart D and with California hazardous waste regulations (22 CCR 66262); or
 - b) tested after removal and before disposal to determine the appropriate method of disposal.

If the delineation samples return levels of the porous substrate containing a total PCB concentration of >1 mg/kg (ppm), we will:

- Conduct additional delineation sampling further from the assumed PCB source material, to determine the extent of the renovation/demolition scope of porous substrate removal work needed to achieve EPA's remediation goal of <1 mg/kg (ppm) for porous substrate left in place. The extent of the porous substrate removal will be to the furthest distance that results in delineation sample results <1 mg/kg (ppm) PCBs.
- If delineation sample results are greater than or equal to 50 ppm PCBs in regularly occupied areas, air and wipe samples will be collected to ensure that exposure is at safe levels (thresholds) as set by the EPA.³
 - If the air and wipe samples return levels below the thresholds established by the EPA, we will keep using the facilities until we can schedule construction work within two years of initial testing.

² USEPA, 2011. *Standard Operating Procedures for Sampling Porous Surfaces for Polychlorinated Biphenyls*. May 5, 2011

³ Established in November 2, 2015 letter from EPA to SMMUSD:

<http://www.smmusd.org/publicnotices/MalibuSupplementalApproval.pdf>

- If the air and wipe samples return levels over the thresholds established by the EPA, we will follow our existing protocol to apply additional BMP cleaning or take additional management actions such as conducting repairs or use temporary barriers (e.g., metal tape or encapsulant) to reduce potential exposures and retest. If the air and wipe samples consistently return levels over the thresholds established by the EPA after the application of additional management actions, we plan to remove students and staff from the affected facilities until further additional actions can be taken and subsequent air and wipe samples are below established thresholds or until after the construction project is successfully completed.
- Plan the project to remove the PCB source material and any affected porous substrate identified as requiring removal by the delineation sampling. Both the PCB source material and affected porous substrate will be disposed as PCB Bulk Product Waste in accordance with EPA's current interpretation of PCB Bulk Product Waste for building materials.⁴ Where removal of porous substrate would compromise the structure of the building and PCB concentrations in porous substrate are >1 mg/kg (ppm) but <50 mg/kg (ppm), the porous substrate will be properly encapsulated using methods consistent with EPA approvals of SMMUSD's current PCB plans.^{3,5} The construction project would be expanded to include porous structural elements if sample results indicate PCB concentrations are greater than or equal to 50 mg/kg (ppm).
- During renovation/demolition, all building materials that potentially contain PCBs will either be
 - a) assumed to contain PCBs and disposed of as Bulk Product Waste in accordance with 40 CFR part 761, subpart D and with California hazardous waste regulations (22 CCR 66262); or
 - b) tested after removal and before disposal to determine the appropriate method of disposal.
- Confirmatory air and wipe samples will be performed post-removal to ensure that the post-removal conditions are below EPA's exposure thresholds for PCBs.

⁴ USEPA, 2012. PCB Bulk Waste Reinterpretation. October 24. Available online:

<https://www.epa.gov/pcbs/polychlorinated-biphenyl-pcb-guidance-reinterpretation>

⁵ Details of the specific situation and the particular procedure to encapsulate (the procedure set forth in our existing Malibu approvals) will first be discussed with EPA Region IX and then the District will seek a 40 CFR 761.61(c) approval from them for each situation if determined necessary by EPA Region IX.