



September 26, 2014

Via email

Mr. Steve Armann  
Manager, RCRA Corrective Action Office  
Waste Management Division  
U.S. Environmental Protection Agency, Region IX  
75 Hawthorne Street  
San Francisco, California 94105-3901

Re: Supplemental Removal Information for the Library, Building E - Rooms 1, 5, and 8 and Building G - Room 506 at Malibu High School

Dear Mr. Armann:

On behalf of the Santa Monica – Malibu Unified School District (SMMUSD or the District), ENVIRON International Corporation (ENVIRON) has prepared this Supplemental Removal Information ("Supplement") for Malibu High School (MHS), located at 30215 Morning View Drive, Malibu, California pursuant to U.S. Environmental Protection Agency (USEPA) Region IX's jurisdiction under the Toxic Substances Control Act (TSCA), 40 CFR 761. This document is intended to further supplement and modify as appropriate the MHS-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan (the "MHS-Specific Plan", see Attachment A) that the District submitted to USEPA Region IX, dated July 3, 2014. This Supplement provides information on the removal of building materials in which polychlorinated biphenyls (PCBs) have been identified and verified at concentrations above 50 parts per million (ppm) in accordance with guidance from USEPA Region IX and TSCA.

The MHS-Specific Plan described the identification of  $\geq 50$  ppm of PCBs in caulking of window units tested in the MHS Library and Building E - Rooms 1, 5, and 8 in exceedance of USEPA standards. The MHS-Specific Plan called for building materials identified with  $\geq 50$  ppm PCBs to be removed during planned and funded building renovations within 15 years.<sup>1</sup> However, on August 15, 2014, the SMMUSD agreed to "remedy the TSCA violations identified at four window areas at Malibu High School within the next 10 months, no later than June 30, 2015".<sup>2,3</sup> The four window areas correspond to tested window units located in the MHS Library and Building E (also called the Blue Building) - Rooms 1, 5, and 8. In addition, based on recent sampling and analytical results in which  $> 10$  micrograms per 100 square centimeters ( $\mu\text{g}/100\text{cm}^2$ ) total PCBs were reported for surface wipe samples taken on caulking around interior doorframes in Building G Room 506 (woodshop)<sup>4</sup> at MHS

<sup>1</sup> Provided management in place Best Management Practices (BMPs) are implemented.

<sup>2</sup> Email from Janece Maez, Associate Superintendent Business and Fiscal Services, SMMUSD, to Tom Huetteman, USEPA, dated August 14, 2014.

<sup>3</sup> In addition to the four window areas discussed in this document, the District shall also change the light fixtures at Malibu High School and Juan Cabrillo Elementary School in the next 12 months in accordance with the July 3<sup>rd</sup> MHS Specific Plan, as indicated in Janece Maez's August 14, 2014 email to USEPA.

<sup>4</sup> 2014. ENVIRON. Fourth Update on Recent Building Inspections Activities Related to Polychlorinated Biphenyls (PCBs). September 5. See Attachment B.

even after repairs and additional cleaning, the SMMUSD shall implement a similar remedy for interior door caulking in this room.

A summary of prior sampling and analytical results of window caulking tested from the four window areas identified above were provided in Appendix B to the MHS-Specific Plan and a summary of the woodshop interior door caulking surface wipe results were provided in ENVIRON's September 5<sup>th</sup> update memo included here as Attachment B. Although window caulk samples in the MHS Library and Building E - Rooms 1, 5, and 8 were > 50 ppm PCBs, all air samples and surface wipe samples collected from these rooms this summer during BMP implementation have been below USEPA health-based thresholds of 200 ng/m<sup>3</sup> and 1 µg/100cm<sup>2</sup>, respectively, (see Attachment B for summary information on the Library and Building E); accordingly this removal is for compliance with TSCA since these materials do not present a risk to occupants given the air and wipe testing results are below USEPA's health-based levels.

### Objective

The objective of the work proposed in this Supplement is to physically remove the identified and verified caulking with ≥ 50 ppm PCBs from previously sampled window units located in the MHS Library (see Figure 1) and Building E (also called the Blue Building) - Rooms 1, 5, and 8 (see Figure 2);<sup>5</sup> as well as interior door caulking in Building G - Room 506 (woodshop – see Figure 3) where surface wipe samples were > 10 µg/100 cm<sup>2</sup> PCBs even after repairs and additional cleaning. If non-porous substrate is adjacent to the caulking to be removed in these areas, it will be decontaminated using the decontamination steps described in the MHS-Specific Plan (Appendix F.1.5 and F.1.9). Porous substrate in contact with caulking that has been identified with ≥ 50 ppm PCBs will have its surface prepared and encapsulated per the encapsulation steps described in the MHS Specific Plan (Appendix F.1.6).

The information below further supplements and modifies the MHS-Specific Plan as appropriate. References to applicable sections of the MHS-Specific Plan are also provided and should be referenced for additional information.

### Pre-Remedial Activities

A remedial contractor for conducting the work described herein will be selected according to the District's procurement procedures and a "Means and Methods Plan" will be developed by the contractor. ENVIRON will provide oversight of the remedial contractor during remedy implementation.

### Remedy Implementation

Refer to Section 1.4 and Appendix F.1.4 of the MHS-Specific Plan for an overview of remedy implementation procedures. The following provides supplemental and modification information related to the District's ≥ 50 ppm PCB caulking removal action described in USEPA's August 14<sup>th</sup> letter.<sup>6</sup>

#### Removal Goals

The caulking identified with ≥ 50 ppm PCBs from the tested window units located in the MHS Library and Building E (also called the Blue Building) - Rooms 1, 5, and 8; as well as from interior door caulking in Building G - Room 506 (woodshop), where surface wipe

<sup>5</sup> Representative photos of the windows subject to caulk removal are included as Figure 4.

<sup>6</sup> Letter from Jared Blumenfeld, USEPA Region IX Regional Administrator to Sandra Lyon Superintendent Santa Monica-Malibu Unified School District dated August 14, 2014.

samples results were  $> 10 \mu\text{g}/100 \text{ cm}^2$  even after repairs and additional cleaning, will be physically removed.

Decontamination of non-porous surface materials adjacent to  $\geq 50$  ppm PCB-impacted caulking will be performed and then post-decontamination confirmation wipe sampling will be performed with a cleanup goal of  $< 1 \mu\text{g}/100 \text{ cm}^2$ .

Porous substrate in contact with  $\geq 50$  ppm PCB-impacted caulking will have its surface prepared and encapsulated up to 1 foot away from the caulking/substrate contact.

Threshold levels for post-removal confirmatory air and wipe samples will be  $200 \text{ ng}/\text{m}^3$  and  $1 \mu\text{g}/100 \text{ cm}^2$ , respectively, as per Appendix F.1.11 of the MHS-Specific Plan.

#### Caulking Removal and Replacement

Refer to Appendix F.1.4.1 of the MHS-Specific Plan. The caulking in which  $> 50$  ppm PCBs was identified and verified in window units in the Library and Building E - Rooms 1, 5, and 8 will be physically removed without removing the window units where possible. If necessary to achieve remedial goals defined herein, the window units will be removed. A similar procedure will be completed for the interior door caulking of Building G - Room 506 (woodshop). Following remedial activities, the existing windows and/or door will be re-installed (if they were removed). In all cases, the removed caulking will be replaced with new, non-PCB containing caulking.

#### Decontamination of Non-Porous Surfaces

Refer to Appendices F.1.5 and F.1.9 of the MHS-Specific Plan for the decontamination steps for non-porous surfaces adjacent to  $\geq 50$  ppm PCB-impacted caulking.

#### Encapsulation of Adjacent Porous Substrate

If porous substrate adjacent to  $\geq 50$  ppm PCB-impacted caulking is identified, that substrate will have its surface prepared and encapsulated up to 1 foot away from the caulking/substrate contact using the general encapsulation procedures described in the MHS Specific Plan (Appendix F.1.6). Per discussions with USEPA Region IX, a non-VOC epoxy-based encapsulant will be used.<sup>7</sup> The District will employ a clear encapsulant if available, and/or paint over the encapsulant to match existing paint.

Sampling being conducted as part of the on-going pilot study described in the MHS-Specific Plan will be used to assess the effectiveness of the encapsulant and any future monitoring needs of any encapsulated areas. During future renovations or demolition of encapsulated porous substrates, further characterization testing of the porous substrate would be done to determine the extent of substrate to be removed and appropriate waste handling requirements for this material per Appendix F.4 of the MHS-Specific Plan.

Other remedial activities, including engineering controls and air monitoring during removal, contingency planning, data validation, waste management and disposal, reporting, and recordkeeping and documentation are described in the MHS-Specific Plan. The written certification for the work proposed herein was previously signed by the District, as required under 40 CFR 761.61(a)(3)(i)(E), and was included in Appendix A of the MHS-Specific Plan.

<sup>7</sup> 2012. USEPA. Laboratory Study of Polychlorinated Biphenyl (PCB) Contamination and Mitigation in Buildings. Part 3, Evaluation of the Encapsulation Method. April. EPA/600/R-11/156B

## Managing Potential Future Identifications of $\geq 50$ ppm PCBs in Building Materials

The process and procedures described in this Supplement are also intended to be used for other buildings in the District if  $\geq 50$  ppm PCBs are identified and verified in building materials within other District buildings. The schedule for implementing this Supplement at additional locations would be developed in consultation with USEPA, and would not exceed one year following identification and verification.<sup>8</sup> Thus, with submittal of this Supplement, the SMMUSD is seeking approval by USEPA to implement the procedures contained in this Supplement as needed at additional locations.

### Schedule

The removal described in this Supplement, following USEPA approval, is anticipated to be completed no later than June 30, 2015. Prior to commencement of removal activities, the District will notify USEPA on the dates these activities will take place.

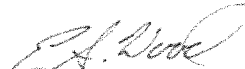
### Closing

We would be pleased to answer any questions that you may have about this letter. If you have any questions or would like to discuss this further, please contact either one of us.

Sincerely,



Douglas Daugherty, PhD, PE, CIH  
Managing Principal



Eric S. Wood, PG, PHg, LSP  
Principal Consultant

### Attachments:

- A: MHS-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan submitted to USEPA Region IX, dated July 3, 2014
- B: Fourth Update on Recent Building Inspections Activities Related to Polychlorinated Biphenyls (PCBs)

<sup>8</sup> In the event that the procedures described in this Supplement cannot be implemented within one year following identification and verification, SMMUSD will submit a request for an extension of time to USEPA.