



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

Via U.S. Postal Service and Electronic Mail

JUN 04 2014

Ms. Sandra Lyon, Superintendent  
Santa Monica Malibu Unified School District  
1651 Sixteenth Street  
Santa Monica, California 90404  
slyon@smmusd.org

Dear Superintendent Lyon:

Thank you for submitting the draft "Comprehensive PCB-Related Building Materials Inspection, Management, and Removal Plan for the Santa Monica-Malibu Unified School District" (District) dated April 2014 (General Plan). The U.S. Environmental Protection Agency, Region 9 (EPA) has reviewed the General Plan and our comments are enclosed.

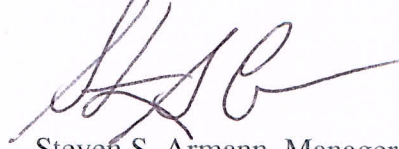
Overall, the document needs significant restructuring to better clarify the activities that require EPA approval at Malibu High School. We request that the District submit two separate plans within 30 days after the date of this letter covering (1) Malibu High School (MHS) and (2) District-wide schools.

We will review and approve the MHS plan to address PCB contamination resulting from caulk known to have PCB concentrations greater than 50 ppm. We intend to approve the MHS plan under the most applicable sections of the Toxic Substances Control Act (TSCA) regulations for PCBs. The approval may be issued under a combination of the EPA's regulatory authorities in 40 CFR 761.61(a), 761.61(c), and 761.62(c). We do not intend to approve the General Plan (District-wide). We will review and comment on the General Plan for consistency with national approaches to PCBs in schools.

The "Building Material Inspection Plan" and the "PCB Best Management Practices" contained in the General Plan do not require EPA approval, and we recommend that the District move forward with these activities at MHS before the MHS plan is finalized. The enclosure includes comments on these tasks for your consideration. We would also like to observe the inspection process at MHS. Please provide us at least one week advance notice before initiating the inspections.

At your earliest convenience, please contact Carmen D. Santos at 415-972-3360 to set up a call to discuss our comments. Thank you for your cooperation and prompt attention to the matters in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Armann', written over a horizontal line.

Steven S. Armann, Manager  
Corrective Action Section  
Land Division

Enclosure

Cc: Thomas Cota, DTSC

**U.S. Environmental Protection Agency (EPA) Comments On**  
***“Comprehensive PCB-Related Building Materials Inspection, Management, and Removal Plan for Santa Monica-Malibu Unified School District” (General Plan), dated April 2014***

**June 4, 2014**

## **Introduction**

In our January 27, 2014 letter (EPA Letter), we requested that Santa Monica-Malibu Unified School District (the District) submit a plan for the Malibu High School (MHS) that at a minimum would address removal of all caulk known to contain PCB levels at 50 milligrams/kilogram (mg/kg or ppm) or higher, mitigation or removal of any deteriorating caulk in pre-1979 structures at MHS, and development of an air sampling plan for EPA approval. In response, on April 25, 2014 ENVIRON International Corporation (ENVIRON) transmitted the draft *“Comprehensive PCB-Related Building Materials Inspection, Management, and Removal Plan for Santa Monica-Malibu Unified School District”* (General Plan) on behalf of the Santa Monica-Malibu Unified School District.

Instead of developing a specific PCB Cleanup Plan for MHS, ENVIRON used the General Plan transmittal letter to address our specific guidance and cross referenced Sections 2 (PCB-Related Building Materials Inspection Plan), 3 (Best Management Practices), and 4 (PCB-Related Building Materials Characterization, Removal and Cleanup Plan) of the General Plan. Those two documents combined are not the specific plan that we requested for the MHS, and that specific plan still needs to be submitted for approval.

Sections A through C, below, provide general comments and recommendations on Sections 2 through 4 of the General Plan. As noted in the cover letter, we recommend that the District implement Sections 2 and 3 of the General Plan after considering the comments below.

As currently proposed by the District, there is little difference in the approach outline in the General Plan and what is proposed for Malibu High School. The proposed approach to all schools in the District is to assume that structures built or renovated between 1950 and 1980 contain certain materials with some concentration of PCBs and to manage these materials in place until demolition or renovation. The only discernable difference for Malibu High School is a commitment to submit an air sampling plan covering certain rooms not previously sampled.

To safely manage suspected PCB-containing materials, the District is proposing to visually inspect each school and implement applicable Best Management Practices (BMPs) based on inspection findings. BMPs include thorough cleaning of surface areas; cleaning and maintenance of HVAC systems; and repairing and replacing deteriorating caulk. With the exception of PCB-containing light ballasts and deteriorating caulk, the District proposes to leave in place any suspected PCB-containing material until renovation or demolition.

We believe the General Plan should be augmented with periodic air and surface wipe sampling to ensure that children and teachers are not exposed to harmful levels of PCBs during the time prior to renovation and demolition. Furthermore, we recommend that the general approach be expanded to include inspection of all pre-1980 light fixtures that may have PCB ballasts; wipe sampling of some surfaces post-BMP cleaning; and pilot studies to determine the frequency of BMPs and effectiveness of proposed encapsulates.

Our specific comments are provided below.

### **Roles and Responsibilities**

The General Plan includes a formal role for EPA throughout the plan. The role of the EPA will be limited to (1) approving school-specific PCB cleanup plans where PCB regulated sources have been identified; (2) overseeing the implementation of EPA approved cleanup plans; and (3) providing technical assistance. As stated in the cover letter, EPA will not be approving the District-wide Plan. Please revise the General Plan accordingly.

#### **A. PCB-Related Building Materials Inspection Plan, Section 2, General Plan**

1. The term "PCB-containing" used throughout Section 2 and other sections of the General Plan needs to be defined. In general, the EPA uses the term "PCB-containing" when referring to caulk or other building materials containing total PCBs at levels equal to or above 50 milligram/kilogram (mg/kg or ppm).
2. The Inspection Plan is qualitative in nature and sampling of materials or environmental media are not part of the inspection. We understand the results of the visual inspection will be used to prioritize or consider where and which rooms will be sampled. The specific criteria that will be used to make those decisions should be described in detail and justified in the plan for the MHS.
3. In addition to visual inspection of building materials to create an "Inventory of Potentially Impacted PCB-Materials," BMPs should be conducted in all rooms. In addition, representative sampling and analysis of air, bulk dust (if available), and surface wipe samples be conducted for PCBs to ensure that PCB levels do not pose a risk of injury to health or the environment.
4. We recommend the "Inventory of Potentially Impacted PCB-Materials" be an inventory of potential PCB primary sources and "assumed" potentially-impacted building materials (secondary sources).
5. The Inspection Plan states that buildings constructed before 1980 and with available renovation records may be "eliminated from the building inspection process." Despite the availability of renovation records, buildings at MHS or rooms constructed before 1980 should be thoroughly inspected. Renovation may not have addressed primary sources of PCBs, and if primary sources were present, building or room renovation may not have addressed secondary PCB sources. A preliminary recommendation to conduct representative air sampling in those buildings or rooms with available renovation records should be considered to verify that PCBs are not an issue in those structures.
6. The inspection is proposed to also address electrical equipment that may be present at the MHS. All fluorescent light fixtures should be inspected, including both ballasts and the light fixtures. It is possible that ballasts were replaced but not the fixture. Legacy PCB releases may reside on the fixtures if only the ballasts were replaced.

7. Inspection of one FLB within one FLB group may not be representative of true conditions regarding physical integrity of the FLBs and integrity of the ballasts inside the FLBs within a group of FLBs. We understand that certain non-fluorescent lighting manufactured prior to 1979 may also have PCB ballasts (e.g., metal halide lamps). Please inspect all lights.
8. We recommend the HVAC system (as that system is defined in the General Plan) inspection include checking for presence of dust to determine if, in addition to surface wipe samples, some bulk dust samples could be collected.
9. The inspector is expected to evaluate potential for human exposure after completing the inspection and to make this determination at the exit conference or some time shortly after. It seems that task should be done by a risk assessor or someone trained in risk evaluation. How will evaluation for human exposure be done without sampling and analysis data? Would the evaluation be qualitative, and quantitative data to be collected at a later time to verify the findings and conclusions of the inspection in reference to human risks?

**B. PCB Best Management Practices, Section 3, General Plan**

1. The MHS plan should include a schedule to remove caulk tested and containing total PCBs at levels equal to or above 50 mg/kg. We acknowledge that ENVIRON proposes to remove the caulk within a 9 to 12 months after the Coastal Commission Permit is issued to the District. However, it is not clear how long it will take for that permit to be issued. Therefore, in addition to the requested schedule, if issuance of the Coastal Commission Permit takes longer than one year after the date of these comments, include a sampling and analysis plan to monitor PCB concentrations in air and on surfaces in the four rooms known to have PCB-containing caulk to ensure that PCB levels remain below health guidelines.
2. The MHS plan should propose a schedule for routine implementation of Best Management Practices (BMPs). Such schedule should describe the type of BMPs to be implemented and propose a BMP implementation frequency with justification.
3. Flow diagrams and decision trees for BMPs should be included in the MHS plan similarly to those included in ENVIRON's presentation to the District's Board.
4. We understand that BMPs are being implemented under the premise that, if caulk is present, it contains PCBs and that waste will be generated during implementation of BMPs. A waste determination should be made in order to determine the appropriate management and disposal options under the TSCA PCB regulations.
5. The District should consider the analysis results that may be available for waste generated during the initial cleanup of the school in the winter of 2014. That information may be used to determine applicable disposal options for waste that may be generated in subsequent school cleanings. If data to determine waste disposal options is not available for the MHS, we recommend a pilot study be conducted to identify the applicable waste disposal requirements under the TSCA PCB regulations.

6. We recommend that an "initial" thorough cleanup of the HVAC system be conducted. We recommend the District propose a pilot study in the MHS plan to help establish an optimum frequency for cleanup of that system. The General Plan proposes an annual frequency for cleanup of the HVAC system without justification. In reference to the HVAC cleaning approach in the BMP Plan, we recommend that window openings be blocked to prevent dust from leaving the work area.
7. The BMP Plan states that "[w]hen the damaged materials is suspected to contain asbestos (>1%), asbestos remediation procedures should be followed and the repair or patch can only be conducted by asbestos certified workers." How would an inspector and parties responsible for implementation of the BMP Plan know asbestos might be or might not be present in the material being removed?
8. The EPA ORD April 2012 report, "Evaluation of the Encapsulation Method" (referenced in Footnote 7 of the BMP Plan) discusses limitations associated with encapsulation of materials containing or surfaces contaminated with PCBs. These limitations support the need for routine surface wipe or air sampling to verify the encapsulate effectiveness. Before final decisions are made on encapsulates that may be used at the MHS, we recommend the District confer with the EPA on this matter.
9. In addition to the "white glove" test, we recommend that wipe samples of cleaned surfaces be collected to verify if risk-based goals for PCBs in surfaces are being met via the BMPs. Please provide a proposed concentration goal for wipe samples.

**C. PCB-Related Building Materials Characterization, Removal and Cleanup Plan,  
Section 4, General Plan**

1. For MHS, the notification to the EPA under the TSCA PCB regulations must include the written certification required in 40 CFR 761.61(c)/761.61(a)(3)(i)(e) and the cleanup plan supported by a characterization plan and other relevant information.
2. For a school scenario, the EPA will approve cleanup of soils under 40 CFR 761.61(c). As such, the terms high occupancy and low occupancy in 40 CFR 761.61(a) are not applicable. The EPA intends to apply health-based cleanup levels for soils (e.g., Regional Screening Levels or RSLs) that are more stringent than those prescribed in 40 CFR 761.61(a).
3. With regard to Section 4.3.1.1, in certain situations and based on laboratory analysis, a building material may contain PCBs below 50 mg/kg. That material may meet the definition of an excluded PCB product. However, the District should confer with the EPA when proposing such a determination.
4. The cleanup plan in Section 4 proposes to use encapsulates if cleanup of the substrate does not result in PCB concentrations at or below 1 mg/kg. We recommend use of encapsulates proven to be most effective for PCB applications based on the April 2012 EPA ORD report. The use of encapsulation will require continued implementation of BMPs, collection of surface wipe

samples, and air samples to verify encapsulate effectiveness. The District and EPA should further discuss this matter.

5. If caulk with PCBs equal to or above 50 ppm is proposed to be encapsulated, such approach, if approved by the EPA, would be a short-term alternative to minimize exposure to PCBs. Such alternative would be subject to approval by the EPA and contingent upon a schedule for ultimate removal of the PCB-containing caulk. The use of encapsulation will require continued implementation of BMPs, collection of surface wipe samples, and air samples to verify encapsulate effectiveness. The District and EPA should further discuss this matter.

