UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OCT 31 2014

OFFICE OF THE
REGIONAL ADMINISTRATOR

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 your polychlorinated biphenyl (PCB) cleanup plan to the U.S. Environmental Protection Agency, Region 9 (EPA) which addresses the removal of PCB-containing caulk, cleanup of the substrate in contact with this caulk, verification sampling, and implementation of best management practices at Malibu High School and Juan Cabrillo Elementary School.

As you know, the federal Toxic Substances Control Act (TSCA) and implementing regulations prohibit the use of caulk containing PCBs at or above 50 ppm. When such caulk is found, it must be removed and disposed of in accordance with TSCA. To date, the District's contractor has found window caulking in four samples above 50 ppm at the high school. Under the District's plan, the District proposes to (1) remove PCB-containing caulk currently known and verified at Malibu High School no later than June 30, 2015; and (2) remove from Malibu High School and Juan Cabrillo Elementary School any newly discovered PCB-containing caulk within one year after the District verifies that the caulk contains PCBs at or above 50 ppm. This activity, as proposed by the District, is not required to be part of the enclosed approval. EPA's enclosed approval addresses the PCBs remaining in the substrate (known as PCB remediation waste) after PCB-containing caulk is removed at both schools.

An approval under TSCA regulations in 40 CFR 761.61(c) requires EPA to make a finding that PCB remediation wastes remaining in place at the two schools will not pose an unreasonable risk of injury to health or the environment. EPA is hereby making a finding that the District meets this TSCA standard for Malibu High School and Juan Cabrillo Elementary School as discussed in the enclosure. The District will continue to take air and surface wipe sample data to monitor conditions at the schools and this data will be provided to the public.

We appreciate the District's efforts in addressing PCBs at schools within the District. Please call Steve Armann at (415) 972-3352 if you have questions regarding this letter or the enclosed approval.

Sincerely,

Jared Blumenfeld

Enclosure: TSCA PCB Cleanup and Disposal Approval

cc: Miriam Ingenito, Acting Director, DTSC

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U.S. Environmental Protection Agency Region 9
TSCA PCB Cleanup and Disposal Approval under 40 C.F.R. § 761.61(c) for
Malibu High School and Juan Cabrillo Elementary School
October 31, 2014

Pursuant to 40 C.F.R. § 761.61(c), the U.S. Environmental Protection Agency, Region 9 (EPA) is approving certain provisions, as described below, from the "Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School" dated July 2014 as subsequently amended[1] ("the Application"), which is an attachment to this approval. The Application was submitted to EPA by the Santa Monica-Malibu Unified School District (the "District").

Specifically, EPA is approving the following provisions as the risk-based management and cleanup plan from the District's Application to address the substrate in contact with the PCB-containing caulk (known as PCB remediation waste) following removal of the caulk at Malibu High School (MHS) and Juan Cabrillo Elementary School (JCES):[2]

- Porous substrates (e.g., concrete) shall receive the following treatment after PCB-containing caulk is removed: surface preparation and application of a double coat of a non-VOC epoxy-based sealant[3] over the area underlying all the removed caulk and up to one foot from the caulk/substrate contact area followed by application of new caulk. Surface wipe verification testing shall be performed at a minimum at each location where substrate was encapsulated. The approved provisions are contained in the Application in sections F.1.6, F.1.10 and the supplement.

- Non-porous substrates (e.g., metal) shall be decontaminated with a solvent to achieve a surface wipe concentration of less than 1 ug/100 cm^2 based on verification wipe tests. The procedures will be repeated until the 1 ug/100 cm^2 goal is met. The approved provisions are contained in the Application in sections F.1.5, F.1.9 and the supplement.

- Best Management Practices (BMPs), including proper maintenance of the ventilation system at the schools, increased cleaning of the classrooms to reduce dust and residue buildup, and use of cleaning equipment that does not cause dust to become airborne, shall be implemented consistent with the schedules set forth in the Application. These schedules include weekly, monthly and annual procedures as specified in sections 1.2.2.1 and 1.2.2.2, which shall continue to be implemented unless EPA approves different procedures. The approved provisions are contained in the Application in sections 1.2, C.1.2, and the supplement.

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[1] The District's application was amended by an email message from Jan Maez to Tom Huetteman on August 14, 2014 and the "Supplemental Removal Information for the Library, Building E – Rooms 1, 5, and 8 and Building G – Room 506 at Malibu High School" dated September 26, 2014.

[2] These provisions equally apply to substrate in contact with presently identified PCB-contaminated caulk as well as such areas identified in the future.

[3] The District shall use the non-VOC epoxy-based sealant evaluated by U.S. EPA's Office of Research and Development in the report "Laboratory Study of Polychlorinated Biphenyl (PCB) Contamination and Mitigation in Buildings" (EPA/600/R-11/156B April 2012).

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- Periodic air and surface wipe samples shall be collected to monitor the efficacy of the above remediation and BMP measures until major renovation or demolition occurs that results in removal of PCB-contaminated material. The District shall undertake monitoring, as identified in the Application, through July 1, 2015. Based upon data collected during this initial monitoring period, the District will propose for EPA approval a supplement to the Application to include a new monitoring plan for the period after July 1, 2015. The plan shall include an evaluation of monitoring data collected to date and a description of how the monitoring plan will continue to ensure the effectiveness of the remediation and BMP measures as evaluated against the levels identified in the following bullet. EPA will approve the plan as submitted or as modified by EPA. The approved provisions are contained in the Application in section 1.2.3, Appendix D, and the supplement.

- All air samples gathered by the District shall be evaluated against the applicable EPA public health levels for PCBs in air, as set forth at http://www.epa.gov/pcbsincaulk/maxconcentrations.htm (those levels range from 70 to 600 ng/m3 based on the age of the children and the duration of exposure), and all surface wipe samples shall be evaluated against the District's proposed goal of 1 ug/100 cm^2. These air and surface wipe concentrations are health-based screening levels that, pursuant to this approval, will be used to evaluate the effectiveness of the remediation and BMP measures at ensuring that PCBs remain at levels protective of human health. If any samples exceed these levels, within thirty (30) days of receipt of the laboratory results, the District shall conduct an evaluation of the exceedances, including an assessment of the causes and identifying any possible failure in the stringency or implementation of the remediation or BMP measures resulting in the exceedances. For surface wipe data, the evaluation should consider all the surface wipe data in the room to estimate an exposure concentration. The findings of the evaluation shall be submitted to EPA along with a supplement to the Application, as needed, to address any noted deficiencies to the BMPs. The application may include proposals for the collection of additional data to evaluate room-specific exposure risks and/or include additional remediation or BMP measures. The approved provisions are contained in the Application in section 1.2.3 and the supplement.

- Removal or decontamination of porous substrates to 1 mg/kg PCBs in substrate material shall occur at the time of major renovation or demolition, and all PCB waste shall be disposed of consistent with 40 C.F.R. Part 761. Consistent with section 1.4 in the Application, the District will submit a detailed site-specific remediation plan to EPA at least 60 days prior to the planned renovation/demolition, which EPA will evaluate and approve through a separate approval action.

An approval under 40 C.F.R. § 761.61(c) requires EPA to make a finding that PCB remediation wastes remaining in place at MHS and JCES will not pose an unreasonable risk of injury to health or the environment. EPA is hereby making a finding that the remediation wastes meet this TSCA standard for MHS and JCES.

First, the District has demonstrated that conditions at the school presently meet EPA national guidelines to protect public health from PCBs in schools.[4] Following EPA guidance, the District implemented a plan

[4] EPA's national guidance and policy on PCBs in caulk is found in the document "PCBs in Caulk - Q&A" at http://www.epa.gov/pcbsincaulk/pdf/caulk_faq.pdf. EPA incorporates that document into today's approval.

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of BMPs that included improved cleaning procedures, identification and removal of PCB-containing fluorescent light ballasts, and inspection and repair of deteriorating caulk. To evaluate exposures to PCBs and the effectiveness of BMPs, the District voluntarily collected 163 air and 503 surface wipe samples.

The air and surface wipe testing results were compared to the health-based screening levels identified in the fifth bullet, above, before and after the implementation of BMPs. Only two pre-BMP and none of the post-BMP air samples were above those levels for air. Of the 503 pre-BMP surface wipe samples, 482 were below the health-based screening level of 1 ug/100 cm^2 and 84% of all samples were non-detect. After BMPs, only two locations exceeded the screening level for surface wipes. In one location, the wipe sample was collected directly from a caulk surface and none of the other eight wipe sample locations in that room were above the screening level. That caulk will be removed within one year. The other room with one location above the screening level post-BMP was only slightly above that level (at 2.6 ug/100 cm^2), while nine other post-BMP surface wipe locations from throughout the same room were non-detect. When evaluating PCB exposures to dust concentrations in a room, EPA considers all the data in the room to estimate an exposure concentration. In this case, the exposure concentration calculated at a 95% upper confidence limit of the mean is below the screening level for surface wipes and therefore considered acceptable.

EPA research studies show that primary health concerns from PCBs in building materials derive from inhalation of contaminated air; and secondarily from contact with PCBs in dust and subsequent incidental ingestion[5]. Overall, the sampling data from the two schools demonstrate that these PCB exposure pathways are currently being addressed by the District's BMPs in a manner that protects public health. Thus, the District's undertaking of the BMPs, as verified by pre- and post-BMP sampling data, demonstrates that the TSCA standard for no unreasonable risk is currently being met at MHS and JCES.

Second, based on the continuous implementation of the BMP program in conjunction with the District's planned removal of PCB-containing caulk and the measures in this approval. EPA has determined that conditions at the school will continue to protect public health and meet the TSCA standard until the building components covered by this approval are removed during school renovation or demolition. Among others, the BMP program includes continuous cleaning of the schools. Moreover, the ongoing efficacy of the BMPs and other approved measures will be verified through the periodic air and surface wipe sampling required by this approval. If at any point such monitoring demonstrates that the approved BMPs and other measures are not working as intended, the District must identify any failures of these measures and revise those procedures as necessary to be protective by submitting a revised TSCA application to EPA.

This approval does not relieve the District and its consultants from complying with other applicable TSCA PCB and Federal regulations, or state and local regulations and permits. Departure from this approval without prior written permission from EPA may result in revocation of this approval. If additional information demonstrates that EPA can no longer make a no unreasonable risk determination, EPA will modify or revoke the approval.

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[5] See "PCBs in School Buildings: Sources, Environmental Levels, and Exposures" EPA/600/R-12/051, Sept. 30, 2012.