



August 14, 2014

Update from the Superintendent

ANGEL SHARK BUILDING (BUILDING 500) TO REOPEN FOLLOWING ENVIRONMENTAL TESTING

The first phase of our environmental inspection, sampling and cleaning has been completed in Building G (500), better known as the Angel Shark Building. Attached you will find a summary of pre- and post-cleaning results for this area. This report provides the preliminary results and initial conclusions. These data show that PCB concentrations in **all** air and post-BMP wipe samples are below USEPA health standards criteria. However, the wood shop (room 506) has a post-cleaning wipe sample just above the USEPA threshold, so additional cleaning will occur in this room following repair of the door caulking. Therefore, BMP cleaning was successful and no additional BMP cleaning in the high-occupancy rooms of Building G is needed, other than Room 506. Based on this information, the District will reopen this area for school and community activities beginning August 15, 2014. Room 506 (the wood shop) will remain closed until re-cleaning and additional surface wipe investigation has been completed. A building-specific report summarizing inspection observations, sampling locations and results, and conclusions is pending receipt of validated data and will be posted online when completed.

August 14, 2014

MEMORANDUM

To: Sandra Lyon, SMMUSD Superintendent

From: ENVIRON International Corporation

Re: **Summary of Pre- and Post-Cleaning Polychlorinated Biphenyls (PCBs) Results for MHS Building G (Building 500, Angel Shark Building)**

This report is submitted to the Santa Monica-Malibu Unified School District (SMMUSD or District) to summarize the preliminary¹ results from pre- and post-cleaning sampling in Building G (Building 500, Angel Shark Building) at Malibu High School (MHS). This report also provides initial conclusions from the data pending a building-specific report summarizing inspection observations, sampling locations and results, and conclusions after receiving all validated data, as discussed in our [August 8, 2014 update](#) to the District.

Executive Summary

The results show that polychlorinated biphenyl (PCB) concentrations in **all** post-BMP air and post-BMP wipe samples are below the United States Environmental Protection Agency (USEPA) health-based benchmarks, therefore the BMP cleaning was successful and no additional BMP cleaning in the regularly occupied rooms of Building G is needed, except Room 506, as further discussed below:

- Based on review of all preliminary¹ air sample results, the results for MHS Building G show that **all** (10 samples) airborne levels of PCBs in the sampled rooms are either not detected or below USEPA's recommended health-based benchmark of 200 ng/m³ both before and after the BMP cleaning of these areas.
- Based on review of all preliminary¹ post-BMP surface wipe samples results, cleaning in the regularly occupied rooms of Building G demonstrated that PCB concentrations in **all** (26 samples) surface wipe samples are below USEPA's recommend threshold of 1 microgram per 100 µg/100 cm² both before and after BMP cleaning, except for one pre-cleaning and one post-cleaning wipe sample from Room 506 (woodshop).² ENVIRON understands that the District will clean remaining low-occupancy rooms in Building G before these areas are routinely accessed.³

Further information on the above-presented results is provided in the remainder of this memorandum.

¹ Data is undergoing Level III/IV third party data validation, as described in the USEPA Contract Laboratory Program National Functional Guidelines (USEPA 2008).

² One pre-cleaning and one post-cleaning wipe sample collected on door caulking in Room 506 (woodshop) were above the USEPA threshold. The door caulking has been repaired and re-tested, and laboratory results are pending. In the meantime, routine access of this room is not recommended.

³ The low occupancy rooms that will be cleaned by the District include a restroom (Room 507), a janitorial room (Room 508), and a heater room (Room 509).

Additional Information on Preliminary Findings

BMPs – Annual Cleaning for Building G (Building 500, Angel Shark Building)

- Annual HVAC cleaning has been completed by the District’s contractor.
- Annual BMP cleaning of all regularly occupied rooms has been completed by District staff. ENVIRON also understands that the District will clean remaining low-occupancy rooms³ in Building G before this area is routinely accessed.

BMPs – Air and Wipe Sampling MHS Pilot Study on BMPs for Building G (Building 500, Angel Shark Building)

- Preliminary review and analysis of all air sample results¹ collected prior to and after BMP cleaning indicates that airborne levels of PCBs in the sampled rooms are either not detected or are below USEPA’s recommended health-based benchmark of 200 ng/m³.
- Some of the light fixtures (mostly in the ballast compartment of the fixture) inspected in Building G exhibited visual evidence of past leakage. Some of these fixtures are in rooms (i.e., Rooms 505 and 506) where ENVIRON collected pre- and post-BMP cleaning air samples, but as noted below, all PCB concentrations in air samples were below USEPA’s recommended health benchmark of 200 ng/m³, which suggests that past leak residues are not causing unsafe levels of PCBs in air. As discussed in our [July 11th update](#), at a minimum, SMMUSD will remove light fixtures with evidence of past ballast leaks within 360 days in accordance with the [July 3rd MHS Specific Plan](#).

Preliminary¹ Air Sampling Results To Date					
Building	BMP Cleaning	Number of Indoor Samples	Not Detected⁴	Detected and Below 200 ng/m³	Above 200 ng/m³
Building G (Angel Shark)	Pre-BMP	5 (includes 1 duplicate) ⁵	3	2 (maximum: 170 ng/m ³)	None
	Post-BMP	4	2	2 (maximum: 150 ng/m ³)	None

- Preliminary review and analysis of all BMP surface wipe sample results¹ in Building G indicates that PCBs were not detected in approximately 46 percent (%) of pre-BMP and approximately 77% of post-BMP samples.
- One pre-cleaning and one post-cleaning surface wipe sample collected on door caulking in Room 506 had total PCB concentrations above USEPA’s recommended threshold of 1 µg/100 cm². All other wipe samples collected from Room 506 as well as Rooms 500A, 502, and 505 had PCB concentrations below the USEPA’s recommended threshold both before and after the BMP cleaning of these rooms.

⁴ The method reporting limit for air samples in Building G ranged from 65 ng/m³ to 71 ng/m³.

⁵ Duplicate samples are collected adjacent to the original sample. Replicate samples are collected in the same location as the original sample, after the original sample is collected, and are applicable to wipe samples only.

- As noted above, one pre-cleaning and one post-cleaning wipe sample collected on door caulking in Room 506 (woodshop) were above the USEPA threshold of $1 \mu\text{g}/100 \text{ cm}^2$, thus indicating the need for additional re-cleaning and re-testing of the woodshop in accordance with Appendix D of the July 3rd MHS Specific Plan. The door caulking has been repaired and re-tested, and laboratory results are pending. In the meantime, routine access of this room is not recommended.

Preliminary¹ Surface Wipe Sampling Results To Date					
Building	BMP Cleaning	Number of Samples	Not Detected⁶	Detected and Below $1 \mu\text{g}/100 \text{ cm}^2$	Above $1 \mu\text{g}/100 \text{ cm}^2$
Building G (Angel Shark)	Pre-BMP	13 (includes 2 duplicates and 1 replicate) ⁵	6	6 (maximum: $0.67 \mu\text{g}/100 \text{ cm}^2$)	1 (Room 506: $71 \mu\text{g}/100 \text{ cm}^2$)
	Post-BMP	13 (includes 2 duplicates) ⁵	10	2 (maximum: $0.84 \mu\text{g}/100 \text{ cm}^2$)	1 (Room 506: $62 \mu\text{g}/100 \text{ cm}^2$)

⁶ The method reporting limit for all but two surface wipe samples in Building G is $0.10 \mu\text{g}/100 \text{ cm}^2$. The other two surface wipe samples, which were collected on door caulking in Room 506, had method reporting limits of $1.0 \mu\text{g}/100 \text{ cm}^2$ and $10 \mu\text{g}/100 \text{ cm}^2$ due to sample dilutions.