



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

November 18, 2018

Information and Frequently Asked Questions: Malibu Schools Interior and Exterior Air Testing and Health Protective Measures

Dear parents and staff,

Now that we are thankfully back to school some of you have expressed concerns about the air quality in and around the Malibu campuses. We share your concern about how demolition and reconstruction of the burned areas will impact air quality at the schools. SMMUSD has set up an exterior and interior air quality monitoring system at all Malibu campuses that will work with the agency data to help us determine the correct response. This data will allow us to respond appropriately to the conditions at the site and guide health protective student activities.

This memo details our efforts to monitor air quality and provides answers to frequently asked questions. This memo also addresses the reopening of the Malibu High School pool and the mudflow on the upper Malibu High School campus. We will continue to provide you with information and data as we receive it.

An Air Quality button has been added to each school website for daily updates of our local school site air monitors:



All four Malibu schools have been professional cleaned and tested, with testing results posted on each school website. Click on the green Environmental Reports button, then the Woolsey fire tab. Staff and students are back at school following the favorable results of all tests.



The district has compiled information and a FAQ in response to parents, staff and community members.

How has the district previously monitored air quality at its schools?

We rely on the South Coast Air Quality Management District to monitor our air quality. The challenge is that SCAQMD does not have many sensors in the Malibu areas and none in the areas near Malibu HS/Cabrillo ES or Point Dume MSS. Since the area lacks major industry and significant traffic, the Malibu area has not previously been a concern for this agency. There are no SCAQMD sensors in the Malibu burn areas.



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

Has the district deployed air quality monitors to ensure more site-specific results than from SCAQMD?

We have deployed 14 air quality monitors around the Malibu schools: 5 exterior/2 interior at MHS/JCES, 3 exterior/1 interior at Point Dume and 2 exterior/1 interior at Webster.

Why were those particular locations selected?

Mostly, the placement has to do with wind direction. This is why MHS/Cabrillo get five sensors and Webster only needs two, as the wind blows up and down Winter Canyon.

The locations are:

SITE	INT/EXT	LOCATION
Cabrillo	INT	Classroom
Cabrillo	EXT	Parking lot
MHS	INT	Classroom
MHS	EXT	Pool Locker Roof
MHS	EXT	Track
MHS	EXT	Tennis Court
MHS	EXT	Theater Restroom
Point Dume	EXT	Library Roof
Point Dume	EXT	Room 18 Roof
Point Dume	EXT	Park Area
Point Dume	INT	Classroom
Webster	INT	Classroom
Webster	EXT	Kinder Bldg Roof
Webster	EXT	Boys & Girls Club

What are we testing for?

These devices are real time tests that update every minute. We are testing for the same pollutants as the SCAQMD. These are representative of other toxins. If the levels of these are high, then other toxins would be high.

1. Carbon Monoxide (CO)
2. Nitrogen Dioxide (NO²)



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

- 3. Ozone (O³)
- 4. Particulate Matter less than 10 microns (PM10)
- 5. Particulate Matter less than 2.5 microns (PM2.5)

To what extent will we be relying on SCAQMD monitoring from this point forward?

SCAQMD will remain the official source of information. We will use the site monitors as an adjunct to determine specific site conditions. For agency information you may visit the SCAQMD site: <http://yourstory.aqmd.gov/home> and the EPA’s AirNow site: <https://airnow.gov/>. The AirNow site offers an information guideline for your review: [Air Now Air Quality Index \(AQI\) guide to air quality and your health.](#)

The devices have been calibrated for accuracy, and were tested over the Dec. 15th weekend.

How often will SCAQMD ratings and site-specific monitors be checked?

The monitoring is being overseen by third-party environmental company, Forensic Analytical Consulting Services (FACS). A Certified Industrial Hygienist (CIH) aided us in selections, placement, number and data from the monitors. The CIH along with District staff will communicate the important AQI data. Updates will be posted each morning and any changes will be reflected during the day. We also receive alerts via email if the levels at a sensor pass a threshold on the way to being unhealthy for sensitive groups (USG AQI 100-150). If you don’t hear from us, the air conditions are between Good and Moderate.

What are the relative values of SCAQMD ratings and our site specific test results?

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	<p>Air quality is considered satisfactory, and air pollution poses little or no risk.</p> <p>Great day to be active outside!</p>
Moderate	51 to 100	<p>Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.</p> <p>Good day to be active outside! Students/Staff who are unusually sensitive to air pollution could have symptoms.</p>



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

<p>Unhealthy for Sensitive Groups</p>	<p>101 to 150</p>	<p>Members of sensitive groups may experience health effects. The general public is not likely to be affected. Students with asthma and other medical conditions should follow their health care plan.</p> <p>It's OK to be active outside, especially for short activities such as recess and physical education (PE). For longer activities, such as athletic practices, schedule more breaks and do less intense activities. Watch for symptoms and take action as needed.</p> <p>Begin to close windows and doors to shift to internal air filtered by HVAC systems.</p> <p>Students/staff with asthma and other respiratory conditions should follow their health care plans and keep their quick relief medicine handy.</p>
<p>Unhealthy</p>	<p>151 to 200</p>	<p>Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.</p> <p>Reduce all outdoor activities. Consider moving activities indoors or rescheduling them to other days. For activities, such as athletic practices, reduce activities, take more breaks and do less intensive workouts. Watch for symptoms and take action as needed.</p> <p>All windows and doors should remain closed, limiting outside air. Rely on internal air filtered by HVAC system.</p> <p>Students/staff with asthma and other respiratory conditions should follow their health care plans and keep their quick relief medicine handy.</p>
<p>Very Unhealthy</p>	<p>201 to 300</p>	<p>Health alert: everyone may experience more serious health effects.</p> <p>Move all activities indoors or reschedule them to another day. Consider not having school or closing school early.</p>
<p>Hazardous</p>	<p>301 to 500</p>	<p>Health warnings of emergency conditions. The entire population is more likely to be affected.</p> <p>Cancel school as soon as possible.</p>



How can parents and staff view outside air testing results?

Click the green Daily Air Quality Rating button on each school's website. This will be updated with any changes in rating.



How is indoor air at our schools being tested?

We tested indoor air in the post-fire clean up protocols. We have placed one air sensor in a classroom at each school as a control measurement to the outside sensors, on the recommendation of our CIH. The locations are listed above.

What is the status of air filtering equipment in classrooms and other indoor spaces?

The air filters in all systems with forced air have been upgraded to MERV-8 filters (Minimum Efficiency Reporting Value). MERV-8 filters are the highest level of filters that can be put in our HVAC systems due to its ability to draw air through the dense filter. MERV-8 filters remove 75-80 percent of particulates between 3.0 - 10 microns.

These systems can be operated without heat or air conditioning. All classrooms and most buildings have some form of forced air as part of the heating, ventilation and/or air conditioning systems. The only building that does not have forced air is the Cabrillo administration building and one office at Cabrillo.

In the spaces at Cabrillo where we don't have forced air with MERV-8 filters, we have placed standalone air filters that will filter the air to the same standards of the MERV-8 filtration.

The recommendation is to keep the HVAC units with MERV-8 filters operating 24 hours a day, seven days a week until further notice. We will inspect the MERV-8 filters every month and replace as needed.

How long will regular testing of indoor and outdoor air continue?

We will continue the indoor and outdoor air monitoring until we see that it levels off back to pre-fire measurements. At this time, the indoor and outdoor measurements are only slightly elevated from what they were before the fire.

What have the new air monitors reported so far while in the testing phase?

Showing thus far, the air quality at the four schools have aligned to the SCAQMD ratings for the area with slight elevations in the PM 2.5 and PM 10 ratings. Since we started getting data from the localized air monitors last week, the air quality has stayed in the Good to Moderate range consistent with SCAQMD measurements.



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

What about the demolition / clean up of buildings destroyed by the fire near schools?

The district has requested and has been in communication with the City of Malibu seeking to provide input in to the scheduling of removal of hazardous waste and clearing of the burned buildings. Prior to “raking” the property, the Department of Public Health must inspect the property and permit the removal of hazardous materials. The removal of hazardous materials is to follow strict guidelines intending to reduce making the materials airborne. These notifications will provide the information necessary to adjustments in outdoor activity if indicated.

Why is there an area of containment at Malibu High School, Building D (100s and 200s)?

Recent rains / debris flow caused flooding in the teachers’ lounge, workroom and rooms 101A and 101B in MHS Building D (100s and 200s). Due to the storm water being contaminated by the fires, it was recommended by the Certified Industrial Hygienist and the restoration company to remove the porous sections of walls up to 2’ and replace the flooring in these spaces. The flooring in these areas had asbestos tile and mastic with PCBs. As of Dec. 10th, prior to school reopening, all flooring and hazardous materials had been removed. We received asbestos clearances on the same day. The area remains under containment while we encapsulate the concrete and receive PCB clearances.

Is Best Management Practices cleaning is taking place?

Yes. The district implemented BMP cleaning practices in 2014 and continues at all schools. This includes specific tasks daily, weekly, monthly, quarterly and annually. BMP cleaning is focused on improving indoor air quality. District custodians have their work inspected regularly.

Has the Malibu High School pool been thoroughly cleaned and tested?

Yes. After the fire we shut off the pool pumps so we could clean the debris from the pool without it going through the system. Ten days of reverse osmosis treatment for the purpose of purifying the water began after Thanksgiving. Water samples were taken on Dec. 14. We have received clearance to resume normal use of the MHS pool by a toxicologist and certified industrial hygienist. The report states: Based upon the information provided in laboratory reports, the levels of chemicals were consistently below those allowed in drinking water. In short, analysis of the pool water indicated that it was as clean, or cleaner than, drinking water. The following recommendation was offered on Dec. 16: The swimming pool is ready to be placed back into regular operation. Standard monitoring, filtration, and chemical treatment will ensure adequate chlorination and bacterial control. Chemical testing for PCBs, VOCs, Petroleum Hydrocarbons, and Metals did not indicate an increased risk of exposure when compared to national drinking water standards.

[Read the full MHS pool toxicological report.](#)

It has been decided to put the pool back in service beginning Tuesday, Dec. 18.



SANTA MONICA - MALIBU UNIFIED SCHOOL DISTRICT

What is the district doing regarding mud flow on to the Malibu High School fields?

In both of the two large storms that followed the fire there was mud flow on the upper fields of Malibu High School. This occurred, in part, due to the culvert at the end of Clover Heights becoming blocked with fire debris.

The LA County Fire Department has tested the mud flow from the streets above the MHS fields and did not find any toxic metals at any levels other than what is found in regular dirt. The district has hired a geologist and certified industrial hygienist to survey and sample. We will post results when available.

Areas not impacted by mud, including the football field and baseball outfield, are back in use. Areas that were impacted by mud including the tennis courts, softball field and baseball infield, are not currently in use. The two inches of rain experienced following the fire effectively diluted any ash or soot on the fields into the ground. We are in the process of testing it.

We have extracted samples of the fields where there was mudflow and a geologist will inspect and sample on Dec. 19 and develop a plan to return these fields back to use. We will share this plan when received.

SMMUSD continues to focus a tremendous amount of attention and resources to our Malibu schools following this disaster. The health and safety of our staff and students are our top priorities. We are thrilled to have our students and staff back on our campuses. Our teachers are happy to be back to educating our students and providing them with any needed supports.

If you have an questions, please contact Carey Upton, Chief Operations Officer, at cupton@smmusd.org or x79383.