



CAREY UPTON
CHIEF OPERATIONS OFFICER

310-399-5865 x79383
cupton@smmusd.org

July 28, 2017

TO: Board of Education
FROM: Carey Upton
RE: LEAD IN WATER SAMPLING

Working with our two water districts, we completed water sampling at every school this spring and early summer. All samples came in well below the 15 parts per billion (ppb) action level that would require additional sampling and some remediation. All samples other than one came in below the reportable level of 8 ppb. The sink in that one location has been replaced and we are retesting the water. 85% of the samples were below the state's aspirational level of under 2 ppb.

No further testing is needed and water at all schools is suitable for consumption.

SANTA MONICA SCHOOLS – SANTA MONICA WATER DISTRICT

INITIAL SAMPLING

On April 25th, 2017 SMMUSD started Initial sampling, which is used to determine if a drinking water outlet has a lead level that is above or below the Action Level of 15 ppb. Drinking water outlets with a test result of equal to or less than 15 ppb do not need additional testing and a water system is not required to collect additional samples when the initial sample results is less than or equal to 15 ppb. Drinking water outlets with an initial sampling test result of greater than 15 ppb exceed the Action Level and should undergo repeat sampling, which is not the case in our Santa Monica Schools.

1. After completing the preparation steps, the trained sampler collects initial samples using the Initial Sampling Instructions as guidance.
2. Upon delivery of the samples to the laboratory, the standard laboratory turn-around-time for receiving results is acceptable.
3. All initial sample locations with a test result of less than or equal to 15 ppb have lead levels less than the Action Level, the location is suitable for consumption, and no further testing is needed.

LABORATORY CONCENTRATIONS

The testing laboratory may report the results of the initial and repeat samples in several different formats or units. If the report includes the units of ppb (parts per billion) or ug/L (micrograms per liter) these two are essentially the same and the values in the report can be directly compared to the lead Action Level. If the report includes the units of ppm (parts per million) or mg/L (milligrams per liter) the values in the report must be converted to ppb or ug/L before comparison to the lead Action Level. To convert between units, use the following conversion factors:

Convert from ppm to ppb: 1 ppm = 1,000 ppb

Convert from mg/L to ug/L: 1 mg/L = 1,000 ug/L

For example, if the laboratory reports an initial sample result of 0.007 ppm, the conversion would be $0.007 \text{ ppm} \times 1,000 = 7 \text{ ppb}$. The drinking water outlet has a lead concentration below the Action Level of 15 ppb and no further testing is needed. If the laboratory reports an initial sample result of 0.021 mg/L, the conversion would be $0.021 \text{ mg/L} \times 1,000 = 21 \text{ ug/L}$. Since the units of ug/L and ppb are essentially the same, the drinking water outlet has a lead concentration above the Action Level of 15 ppb and needs testing again using the Repeat Sampling Instructions.

GRANT ELEMENTARY SCHOOL

April 25th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen. All samples were taken on “first draw” meaning that at the time of sampling the drinking water locations were not used during the previous six hours of sampling. On the “second draw” meaning flushing the system for 30 seconds then take the initial sample.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
East Wall	Food prep sink	0.3	0.1	0.2
South wall west side by girls/boys restroom(Bldg C)	Drinking fountain	0.1	0	0.1
South wall east side by girls/boys restroom(Bldg C)	Drinking fountain	0.1	0	0.1
West side of bldg near restrooms (Bldg H)	Drinking fountain	0.1	0	0.1

All samples are under the Action Level of 15 ppb. No further testing is needed at Grant Elementary School and water is suitable for consumption.

WILL ROGERS ELEMENTARY SCHOOL

April 25th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
South Wall	Food prep sink	8.7	4.6	4.1
South wall west side by auditorium (Bldg A)	Drinking fountain	0.1	0.1	0
East wall by playground (Bldg K)	Drinking fountain	0.1	0.1	0
East wall by restrooms (Bldg F)	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at Will Rogers Elementary School and water is suitable for consumption. We replaced the food prep sink and are retesting.

MCKINLEY ELEMENTARY SCHOOL

April 26th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
North Wall	Food prep sink	0.1	0	0.1
West wall (Childcare)	Drinking fountain	1.1	1.6	-0.5
North wall (Admin Office)	Drinking fountain	0.1	0.1	0
North wall (By room 208)	Drinking fountain	0.1	0.1	0
West wall (Library)	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at McKinley Elementary School and water is suitable for consumption.

FRANKLIN ELEMENTARY SCHOOL

April 26th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
South Wall	Food prep sink	2.6	1.5	1.1
South wall west side by cafeteria (Bldg A)	Drinking fountain	3.8	3.1	0.7
North wall by playground (P.E Office)	Drinking fountain	0.1	0.1	0
West wall south side by restrooms (Bldg F)	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at Franklin Elementary School and water is suitable for consumption.

ROOSEVELT ELEMENTARY SCHOOL

April 27th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
North Wall	Food prep sink	5.9	0.1	5.8
West wall south side by restrooms (Bldg G)	Drinking fountain	0.1	0.1	0
West wall north side y restrooms (Near Bldg B)	Drinking fountain	0.1	0.1	0
East wall north side by restrooms (Near Bldg B)	Drinking fountain	0.1	0.1	0
South side kinder playground	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at Roosevelt Elementary School and water is suitable for consumption.

LINCOLN MIDDLE SCHOOL

May 5th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
North Wall	Food prep sink	3.3	0.1	3.2
North wall by cafeteria	Drinking fountain	0.1	0.1	0
West wall by gym	Drinking fountain	0.1	0.1	0
South wall by restrooms (Near Field)	Drinking fountain	3.2	3.8	-0.6

All samples are under the Action Level of 15 ppb. No further testing is needed at Lincoln Middle School and water is suitable for consumption.

JOHN ADAMS MIDDLE SCHOOL

May 5th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
East Wall	Food prep sink	1.4	0.1	1.3
East wall by room 12	Drinking fountain	0.1	0.1	0
West wall by gym	Drinking fountain	0.1	0.1	0
South wall by tennis courts	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at John Adams Middle School and water is suitable for consumption.

SANTA MONICA HIGH SCHOOL

May 9th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
North Wall	Food prep sink	0.1	0	0.1
East wall north side in history building	Drinking fountain	0.1	0	0.1
East wall south side in history building	Drinking fountain	0.1	0	0.1
East wall by Humanities center	Drinking fountain	5.6	5.6	0
North wall by basketball courts	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at Santa Monica High School and water is suitable for consumption.

SANTA MONICA ALTERNATIVE / JOHN MUIR SCHOOL

May 10th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
North Wall John Muir	Drinking fountain	0.1	0.1	0
East wall by lunch benches	Drinking fountain	0.1	0.1	0
East wall by cafeteria	Drinking fountain	2.1	2.4	-0.3
On playground	Drinking fountain	0.1	0.1	0

All samples are under the Action Level of 15 ppb. No further testing is needed at Santa Monica Alternative/John Muir School and water is suitable for consumption.

OLYMPIC HIGH SCHOOL / PINE STREET

May 10th 2017 - Three locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
West wall pine street school	Drinking fountain	0.1	0.1	0
West wall by room 7	Drinking fountain	0.1	0.1	0
North wall by room 4	Drinking fountain	0.1	0	0.1

All samples are under the Action Level of 15 ppb. No further testing is needed at Olympic High School/Pine Street and water is suitable for consumption.

MALIBU SCHOOLS – LOS ANGELES COUNTY WATER DISTRICT**INITIAL SAMPLING**

On June 6th, 2017 SMMUSD started Initial sampling, which is used to determine if a drinking water outlet has a lead level that is above or below the Action Level of 15 ppb. Drinking water outlets with a test result of equal to or less than 15 ppb do not need additional testing and a water system is not required to collect additional samples when the initial sample results is less than or equal to 15 ppb. Drinking water outlets with an initial sampling test result of greater than 15 ppb exceed the Action Level and should undergo repeat sampling, which is not the case in our Malibu Schools.

1. After completing the preparation steps, the trained sampler collects initial samples using the Initial Sampling Instructions as guidance.
2. Upon delivery of the samples to the laboratory, the standard laboratory turn-around-time for receiving results is acceptable.
3. All initial sample locations with a test result of less than or equal to 15 ppb have lead levels less than the Action Level, the location is suitable for consumption, and no further testing is needed.

LABORATORY CONCENTRATIONS

The testing laboratory may report the results of the initial and repeat samples in several different formats or units. If the report includes the units of ppb (parts per billion) or ug/L (micrograms per liter) these two are essentially the same and the values in the report can be directly compared to the lead Action Level. If the report includes the units of ppm (parts per million) or mg/L (milligrams per liter) the values in the report must be converted to ppb or ug/L before comparison to the lead Action Level. To convert between units, use the following conversion factors:

Convert from ppm to ppb: 1 ppm = 1,000 ppb

Convert from mg/L to ug/L: 1 mg/L = 1,000 ug/L

For example, if the laboratory reports an initial sample result of 0.007 ppm, the conversion would be $0.007 \text{ ppm} \times 1,000 = 7 \text{ ppb}$. The drinking water outlet has a lead concentration below the Action Level of 15 ppb and no further testing is needed. If the laboratory reports an initial sample result of 0.021 mg/L, the conversion would be $0.021 \text{ mg/L} \times 1,000 = 21 \text{ ug/L}$. Since the units of ug/L and ppb are essentially the same, the drinking water outlet has a lead concentration above the Action Level of 15 ppb and needs testing again using the Repeat Sampling Instructions.

MALIBU HIGH/MIDDLE SCHOOL

June 6th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen. All samples were taken on “first draw” meaning that at the time of sampling the drinking water locations were not used during the previous six hours of sampling. On the “second draw” meaning flushing the system for 30 seconds then take the initial sample.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
Cafeteria kitchen (Bldg H)	Food prep sink	2.3	1.1	1.2
Auditorium restrooms (Bldg H)	Drinking fountain	1.2	0.64	0.56
Base of stairs in southwest corner of "Mako Bldg" (Bldg D)	Drinking fountain	0.44	0.39	0.05
Hallway between Rooms 502 & 505 in "Angel Bldg" (Bldg G)	Drinking fountain	2.2	2.5	-0.3
Near locker rooms facing swimming pool (Athletic Bldg)	Drinking fountain	1.4	1.1	0.3

All samples are under the Action Level of 15 ppb. No further testing is needed at Malibu Middle/High School and water is suitable for consumption.

JUAN CABRILLO ELEMENTARY SCHOOL

June 6th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
South side of Bldg B near Room 4	Drinking fountain	0.25	0.78	-0.53
South side of Bldg B near Room 2	Drinking fountain	ND	ND	N/A
East side of Bldg C near restrooms	Drinking fountain	0.35	0.3	0.05
East side of Bldg D near restrooms	Drinking fountain	ND	ND	N/A
Cafeteria kitchen	Food prep sink	1.3	0.21	1.09

All samples are under the Action Level of 15 ppb. No further testing is needed at Juan Cabrillo Elementary School and water is suitable for consumption.

POINT DUME MARINE SCIENCE ELEMENTARY SCHOOL

June 7th 2017 - Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
Near Principal's Office (Main Office Bldg)	Drinking fountain	0.31	ND	0.31
Near lunch patio (Auditorium/Kitchen Bldg)	Drinking fountain	2.2	0.82	1.38
Food prep sink: Kitchen (Auditorium/Kitchen Bldg)	Food Prep Sink	1.8	1.3	0.5
Lower level near restrooms north of pre-school yard (Pre-School Bldg)	Drinking fountain	ND	ND	N/A
Lower level near restrooms south of pre-school yard (Pre-School Bldg)	Drinking fountain	1.1	0.86	0.24

All samples are under the Action Level of 15 ppb. No further testing is needed at Point Dume Marine Science Elementary School and water is suitable for consumption.

WEBSTER ELEMENTARY SCHOOL

June 7th 2017 Four locations were tested in high use areas including the food prep sink in the Kitchen.

Sample Location	Type of Outlet	Initial Draw Results	Flush Results	Difference between two results
Cafeteria kitchen (Bldg G)	Food prep sink	0.64	0.36	0.28
Playground entrance	Drinking fountain	0.57	0.37	0.2
West side of bldg near restrooms (Bldg H)	Drinking fountain	0.24	0.25	-0.01
West side of bldg near restrooms (Bldg F)	Drinking fountain	1.2	0.57	0.63
West side of bldg near restrooms (Bldg C)	Drinking fountain	1.1	0.57	0.53

All samples are under the Action Level of 15 ppb. No further testing is needed at Point Dume Marine Science Elementary School and water is suitable for consumption.