

**Seattle Public Schools  
Drinking Water Quality Program**

**Results of Water Quality Testing  
for  
MADRONA K-8 SCHOOL**

Updated March 4, 2020

**General Information:**

Plumbing piping materials: mainly copper

**Remediation plan:**

*This remediation plan is based on a Water Quality policy approved by the School Board. The policy includes standards for the presence of lead, cadmium, copper, iron and other substances in drinking water.*

**Sinks (S in the report) are not considered drinking water sources.** We recognize that there is the potential for students to want to drink from classroom hand-washing sinks, so we test all of those. Where a student's choice to drink from a sink could be a problem, we post a reminder sign, as we do at all restroom sinks.

Status:

Policy Criteria:

All sources meet the policy criteria.

Follow-up monitoring: Will be performed in school year 2022-2023.

Service: The school will be flushed after any breaks longer than five days.

**Water Quality Testing Results:**

**Legend**

Symbol	Definition
SE	service entry (main)
B	bubbler
S	sink (faucet)
B/S	sink/bubbler combination
S/B	sink/bubbler combination
ppb	parts per billion
ppm	parts per million
NA	not applicable
None	no action required
Unk	unknown status or action
Sample	sample needs to be taken
Re-test	fixture needs to be resampled
Conf	resample to confirm measurement
No flush	not flushed before sampling
Sink	sampled faucet of S/B combo
Used	recently used; no 1st draw sample possible
PS	post sign
Disable(d)	fixture disabled in response to water quality testing
BDSS	Bubbler disabled, sign on sink
IF	install filter
RB	replace bubbler
RB/IF	replace bubbler and/or install filter
RF	replace faucet
RF/IF	replace faucet and/or install filter
BW	disable fixture and provide bottled water until remediated
Leaks	leaking fixture
NW	not working properly (sample S when B or S/B NW)
OS	out of service - disabled until fixed
RS	return to service - now passes testing
Rem	Removed from system - no longer exists

Table 1. Summary of Results

FIXTURE INFORMATION			LEAD		CADMIUM		COPPER		IRON		OK?
Fixture ID	Type	Location	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Yes/No/Status
03	B	1st floor hallway	P	None	P	None	P	None	P	None	Yes
04	S	health room	P	None	P	None	P	None	P	None	Yes
05	S/B	OT/PT, P.A.S.S. room	P	None	P	None	P	None	P	None	Yes
06	S/B	pre-k room 146	P	None	P	None	P	None	P	None	Yes
07	S/B	kindergarden, room 148	P	None	P	None	P	None	P	None	Yes
08	S/B	room 149	P	None	P	None	P	None	P	None	Yes
09	S/B	resource room, room 147	P	None	P	None	P	None	P	None	Yes
10	B	outside cafeteria, left	P	None	P	None	P	None	P	None	Yes
11	B	outside cafeteria, right	P	None	P	None	P	None	P	None	Yes
12	S	music / stage	P	None	P	None	P	None			Yes
13	S	kitchen	P	None	P	None	P	None	P	None	Yes
14	B	south end - 1st floor,	P	None	P	None	P	None	P	None	Yes
16	B	south end - 2nd floor, N I hand	P	None	P	None	P	None	P	None	Yes
17	B	south end - 2nd floor, S right hand	P	None	P	None	P	None	P	None	Yes
18	S	teachers lounge	P	None	P	None	P	None	P	None	Yes
19	S/B	room 221	P	None	P	None	P	None	P	None	Yes
20	S/B	room 220	P	None	P	None	P	None	P	None	Yes
21	S/B	room 218	P	None	P	None	P	None	P	None	Yes
22	S/B	room 210	P	None	P	None	P	None	P	None	Yes
23	S/B	room 206	P	None	P	None	P	None	P	None	Yes
24	S/B	room 204	P	None	P	None	P	None	P	None	Yes
25	S/B	room 202	P	None	P	None	P	None	P	None	Yes
26	S/B	room 203	P	None	P	None	P	None	P	None	Yes
27	S/B	room 205	P	None	P	None	P	None	P	None	Yes
28	S/B	room 207	P	None	P	None	P	None	P	None	Yes
29	S/B	room 209	P	None	P	None	P	None	P	None	Yes
30	S	East kitchen sink - left	P	None	P	None	P	None	P	None	Yes
31	S	East kitchen sink - right	P	None	P	None	P	None	P	None	Yes
34	S	library work room	P	None	P	None	P	None			Yes
35	S	office work room	P	None	P	None	P	None			Yes
36	S	2nd floor workroom	P	None	P	None	P	None			Yes
37	S	daycare kitchen	P	None	P	None	P	None			Yes
38	S	daycare,A138, left	P	None	P	None	P	None			Yes
39	S	daycare,A138, right	P	None	P	None	P	None			Yes
40	S	daycare,A141, left	P	None	P	None	P	None			Yes
41	S	daycare,A141, right	P	None	P	None	P	None			Yes
42	S	daycare kitchen	P	None	P	None	P	None			Yes
50	BF	first floor hallway, bottle filler	P	None	P	None	P	None			Yes

Table 2. Lead Test Results

FIXTURE INFORMATION			7/23/2009			10/5/2012			2/8/2016			2/20/2020			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
03	B	1st floor hallway	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
04	S	health room	1	1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
05	S/B	OT/PT, P.A.S.S. room	1	2	P	2	<1	P	2	<1	P	1	<1	P	P	None
06	S/B	pre-k room 146	1	1	P	2	1	P	3	1	P	2	1	P	P	None
07	S/B	kindergarden, room 148	2	2	P	1	<1	P	1	<1	P	2	1	P	P	None
08	S/B	room 149	1	1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
09	S/B	resource room, room 147	2	1	P	1	<1	P	<1	<1	P	<1	<1	P	P	None
10	B	outside cafeteria, left	1	1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
11	B	outside cafeteria, right	2	1	P				<1	<1	P	<1	<1	P	P	None
12	S	music / stage	6	1	P	2	<1	P	2	<1	P	2	<1	P	P	None
13	S	kitchen	5	1	P	6	<1	P	2	<1	P	<1	<1	P	P	None
14	B	south end - 1st floor,	1	2	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
16	B	south end - 2nd floor, N I hand	1	1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
17	B	south end - 2nd floor, S right hand	1	1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
18	S	teachers lounge	1	<1	P	1	<1	P	<1	<1	P	<1	<1	P	P	None
19	S/B	room 221	3	1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
20	S/B	room 220	2	1	P	1	<1	P	1	<1	P	<1	<1	P	P	None
21	S/B	room 218	2	1	P	2	<1	P	<1	<1	P	1	<1	P	P	None
22	S/B	room 210	1	<1	P	<1	<1	P	1	<1	P	<1	1	P	P	None
23	S/B	room 206	1	<1	P	1	<1	P	<1	<1	P	<1	<1	P	P	None
24	S/B	room 204	2	1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
25	S/B	room 202	2	2	P	2	<1	P	1	<1	P	2	<1	P	P	None
26	S/B	room 203	1	1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
27	S/B	room 205	3	<1	P	2	<1	P	<1	<1	P	<1	<1	P	P	None
28	S/B	room 207	2	1	P	2	2	P	1	<1	P	<1	2	P	P	None
29	S/B	room 209	1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
30	S	East kitchen sink - left	14	1		8	<1	P	3	<1	P	<1	<1	P	P	None
31	S	East kitchen sink - right	6	1	P	6	<1	P	4	<1	P	4	<1	P	P	None
34	S	library work room	1	<1	P	1	<1	P	<1	<1	P	<1	2	P	P	None
35	S	office work room	1	<1	P	1	1	P	<1	<1	P	<1	<1	P	P	None
36	S	2nd floor workroom	1	2	P	4	<1	P				<1	<1	P	P	None
37	S	daycare kitchen										1	1	P	P	None
38	S	daycare,A138, left										2	1	P	P	None
39	S	daycare,A138, right										<1	1	P	P	None
40	S	daycare,A141, left										<1	1	P	P	None
41	S	daycare,A141, right										1	1	P	P	None
42	S	daycare kitchen										1	1	P	P	None
50	BF	first floor hallway, bottle filler										<1	<1	P	P	None

Table 3. Cadmium Test Results

FIXTURE INFORMATION			7/23/2009			10/5/2012			2/8/2016			2/20/2020			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
03	B	1st floor hallway	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
04	S	health room	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
05	S/B	OT/PT, P.A.S.S. room	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
06	S/B	pre-k room 146	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
07	S/B	kindergarden, room 148	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
08	S/B	room 149	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
09	S/B	resource room, room 147	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
10	B	outside cafeteria, left	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
11	B	outside cafeteria, right	<1	<1	P				<1	<1	P	<1	<1	P	P	None
12	S	music / stage	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
13	S	kitchen	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
14	B	south end - 1st floor,	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
16	B	south end - 2nd floor, N I hand	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
17	B	south end - 2nd floor, S right hand	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
18	S	teachers lounge	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
19	S/B	room 221	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
20	S/B	room 220	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
21	S/B	room 218	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
22	S/B	room 210	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
23	S/B	room 206	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
24	S/B	room 204	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
25	S/B	room 202	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
26	S/B	room 203	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
27	S/B	room 205	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
28	S/B	room 207	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
29	S/B	room 209	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
30	S	East kitchen sink - left	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
31	S	East kitchen sink - right	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
34	S	library work room	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
35	S	office work room	<1	<1	P	<1	<1	P	<1	<1	P	<1	<1	P	P	None
36	S	2nd floor workroom	<1	<1	P	<1	<1	P				<1	<1	P	P	None
37	S	daycare kitchen										<1	<1	P	P	None
38	S	daycare,A138, left										<1	<1	P	P	None
39	S	daycare,A138, right										<1	<1	P	P	None
40	S	daycare,A141, left										<1	<1	P	P	None
41	S	daycare,A141, right										<1	<1	P	P	None
42	S	daycare kitchen										<1	<1	P	P	None
50	BF	first floor hallway, bottle filler										<1	<1	P	P	None

Table 4. Copper Test Results

Test Results (Copper/Cu, ppm)																
FIXTURE INFORMATION			7/23/2009			10/5/2012			2/8/2016			2/20/2020			Summary Status	
Fixture ID	Type	Location	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	1st Draw	Flush 30s	Pass/Fail	Pass/Fail	Status
03	B	1st floor hallway	0.189	0.216	P	0.077	0.119	P	0.09	0.104	P	0.169	0.172	P	P	None
04	S	health room	0.308	0.22	P	0.231	0.199	P	0.331	0.285	P	0.222	0.167	P	P	None
05	S/B	OT/PT, P.A.S.S. room	0.312	0.168	P	0.165	0.165	P	0.265	0.249	P	0.268	0.215	P	P	None
06	S/B	pre-k room 146	0.259	0.215	P	0.218	0.231	P	0.186	0.177	P	0.238	0.303	P	P	None
07	S/B	kindergarden, room 148	0.335	0.353	P	0.206	0.199	P	0.234	0.139	P	0.318	0.295	P	P	None
08	S/B	room 149	0.273	0.262	P	0.207	0.213	P	0.174	0.054	P	0.281	0.282	P	P	None
09	S/B	resource room, room 147	0.336	0.309	P	0.214	0.168	P	0.216	0.13	P	0.215	0.188	P	P	None
10	B	outside cafeteria, left	0.396	0.33	P	0.215	0.194	P	0.18	0.147	P	0.284	0.241	P	P	None
11	B	outside cafeteria, right	0.355	0.25	P				0.159	0.133	P	0.253	0.183	P	P	None
12	S	music / stage	0.268	0.167	P	0.251	0.13	P	0.258	0.144	P	0.248	0.123	P	P	None
13	S	kitchen	0.395	0.237	P	0.449	0.212	P	0.241	0.182	P	0.274	0.247	P	P	None
14	B	south end - 1st floor,	0.392	0.289	P	0.266	0.226	P	0.051	0.052	P	0.356	0.237	P	P	None
16	B	south end - 2nd floor, N l hand	0.391	0.244	P	0.239	0.122	P	0.17	0.138	P	0.371	0.147	P	P	None
17	B	south end - 2nd floor, S right hand	0.249	0.236	P	0.148	0.122	P	0.135	0.119	P	0.146	0.14	P	P	None
18	S	teachers lounge	0.212	0.199	P	0.272	0.196	P	0.179	0.184	P	0.31	0.13	P	P	None
19	S/B	room 221	0.322	0.357	P	0.262	0.266	P	0.198	0.184	P	0.304	0.309	P	P	None
20	S/B	room 220	0.348	0.314	P	0.269	0.267	P	0.306	0.211	P	0.362	0.403	P	P	None
21	S/B	room 218	0.342	0.234	P	0.268	0.179	P	0.072	0.07	P	0.402	0.307	P	P	None
22	S/B	room 210	0.337	0.278	P	0.21	0.197	P	0.2	0.192	P	0.279	0.143	P	P	None
23	S/B	room 206	0.315	0.228	P	0.217	0.219	P	0.202	0.202	P	0.317	0.307	P	P	None
24	S/B	room 204	0.302	0.304	P	0.261	0.249	P	0.187	0.189	P	0.232	0.259	P	P	None
25	S/B	room 202	0.223	0.128	P	0.193	0.201	P	0.174	0.163	P	0.202	0.103	P	P	None
26	S/B	room 203	0.304	0.255	P	0.324	0.323	P	0.186	0.212	P	0.345	0.356	P	P	None
27	S/B	room 205	0.29	0.249	P	0.246	0.169	P	0.181	0.16	P	0.288	0.234	P	P	None
28	S/B	room 207	0.317	0.162	P	0.184	0.15	P	0.138	0.144	P	0.243	0.143	P	P	None
29	S/B	room 209	0.297	0.164	P	0.196	0.2	P	0.156	0.169	P	0.273	0.275	P	P	None
30	S	East kitchen sink - left	0.316	0.318	P	0.253	0.258	P	0.199	0.244	P	0.135	0.131	P	P	None
31	S	East kitchen sink - right	0.334	0.324	P	0.218	0.212	P	0.239	0.146	P	0.256	0.171	P	P	None
34	S	library work room	0.244	0.272	P	0.218	0.293	P	0.161	0.192	P	0.256	0.635	P	P	None
35	S	office work room	0.362	0.164	P	0.217	0.173	P	0.172	0.181	P	0.235	0.154	P	P	None
36	S	2nd floor workroom	0.33	0.293	P	0.219	0.288	P				0.272	0.183	P	P	None
37	S	daycare kitchen										0.356	0.359	P	P	None
38	S	daycare,A138, left										0.142	0.359	P	P	None
39	S	daycare,A138, right										0.249	0.353	P	P	None
40	S	daycare,A141, left										0.304	0.323	P	P	None
41	S	daycare,A141, right										0.329	0.346	P	P	None
42	S	daycare kitchen										0.347	0.359	P	P	None
50	BF	first floor hallway, bottle filler										0.105	0.16	P	P	None

Table 5. Iron Test Results

FIXTURE INFORMATION			7/23/2009		10/5/2012		2/8/2016		2/20/2020		Summary Status	
Fixture ID	Type	Location	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Flush 2m	Pass/Fail	Pass/Fail	Status
03	B	1st floor hallway									P	None
04	S	health room									P	None
05	S/B	OT/PT, P.A.S.S. room									P	None
06	S/B	pre-k room 146									P	None
07	S/B	kindergarden, room 148									P	None
08	S/B	room 149									P	None
09	S/B	resource room, room 147					<0.05	P			P	None
10	B	outside cafeteria, left							<0.05	P	P	None
11	B	outside cafeteria, right									P	None
12	S	music / stage										
13	S	kitchen									P	None
14	B	south end - 1st floor,	<0.05	P							P	None
16	B	south end - 2nd floor, N I hand			<0.05	P					P	None
17	B	south end - 2nd floor, S right hand					<0.05	P			P	None
18	S	teachers lounge							<0.05	P	P	None
19	S/B	room 221	<0.05	P							P	None
20	S/B	room 220			<0.05	P					P	None
21	S/B	room 218					<0.05	P			P	None
22	S/B	room 210							0.065	P	P	None
23	S/B	room 206									P	None
24	S/B	room 204									P	None
25	S/B	room 202	0.117	P							P	None
26	S/B	room 203			<0.05	P					P	None
27	S/B	room 205					<0.05	P			P	None
28	S/B	room 207							0.056	P	P	None
29	S/B	room 209									P	None
30	S	East kitchen sink - left									P	None
31	S	East kitchen sink - right									P	None
34	S	library work room										
35	S	office work room										
36	S	2nd floor workroom										
37	S	daycare kitchen										
38	S	daycare,A138, left										
39	S	daycare,A138, right										
40	S	daycare,A141, left										
41	S	daycare,A141, right										
42	S	daycare kitchen										
50	BF	first floor hallway, bottle filler										

Table 6. Service Entry Test Results

Test Results (Service Entry/SE, Units as Shown)						
SOURCE INFORMATION			Most Recent Sampling			
Fixture ID	Type	Location	Item	Sampled	Max Value	Pass/Fail
00	SE	custodian office	Arsenic	20-Feb-20	2 ppb	P
00	SE	custodian office	Cadmium	20-Feb-20	1 ppb	P
00	SE	custodian office	Chlorine	20-May-04	0.4 ppm	P
00	SE	custodian office	Copper	20-Feb-20	0.039 ppm	P
00	SE	custodian office	E coli	20-May-04	<1 Colonies	P
00	SE	custodian office	Iron	20-Feb-20	0.053 ppm	P
00	SE	custodian office	Lead	20-Feb-20	1 ppb	P
00	SE	custodian office	Total Coliforms	20-May-04	<1 Colonies	P

"<" means: less than the value shown (below analytical detection limits).

"n/a" means: not applicable.

Table 7. Bacteriological Test Results

**Bacteriological Characteristics**

Bacteriological testing of selected samples indicated no (zero) coliform bacteria.