

Seattle Public Schools
Drinking Water Quality Program

Results of Water Quality Testing
for
EC Hughes Elementary

Updated August 22, 2018

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.

Status:

Policy Criteria: All sources meet the policy criteria.

The following locations will be tested when ready: P107 (#03), P101, Special Ed. (#04), 108A (#15).

Follow-up monitoring: Will be performed in school year 2021-2022.

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
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 of 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			CURRENT STATUS								OK?
			LEAD		CADMIUM		COPPER		IRON		
Fixture ID	Type	Location	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Pass/Fail	Status	Yes/No/Status
01	S	306, KINDERGARTEN	P	None	P	None	P	None	P	None	Yes
02	S	305, KINDERGARTEN	P	None	P	None	P	None	P	None	Yes
03	S	P107		sample		sample		sample		Sample	sample
04	S	P101, SPECIAL ED		sample		sample		sample		Sample	sample
05	S	308, HEAD START	P	None	P	None	P	None	P	None	Yes
06	S	309, FLEX CLASSROOM	P	None	P	None	P	None	P	None	Yes
07	S	310, HEAD START	P	None	P	None	P	None	P	None	Yes
08	S	311, HEAD START	P	None	P	None	P	None	P	None	Yes
09	B	DRINKING FOUNTAIN, GYM, LEFT	P	None	P	None	P	None	P	None	Yes
10	B	DRINKING FOUNTAIN, GYM, RIGHT	P	None	P	None	P	None	P	None	Yes
11	B	DRINKING FOUNTAIN, GYM, BOTTLE FILLER	P	None	P	None	P	None	P	None	Yes
12	S/B	ART, 126	P	None	P	None	P	None	P	None	Yes
13	S/B	124, MUSIC	P	None	P	None	P	None	P	None	Yes
14	S	102, FAMILY ROOM	P	None	P	None	P	None	P	None	Yes
15	S	108A, NURSE		sample		sample		sample		Sample	sample
16	B	1ST FLOOR BY MAIN OFFICE, LEFT	P	None	P	None	P	None	P	None	Yes
17	B	1ST FLOOR BY MAIN OFFICE, RIGHT	P	None	P	None	P	None	P	None	Yes
18	B	1ST FLOOR BY MAIN OFFICE, BOTTLE FILLER	P	None	P	None	P	None	P	None	Yes
19	S	KITCHEN	P	None	P	None	P	None	P	None	Yes
20	S	KITCHEN	P	None	P	None	P	None	P	None	Yes
21	S	KITCHEN	P	None	P	None	P	None	P	None	Yes
22	S	129, RESOURCE ROOM	P	None	P	None	P	None	P	None	Yes
23	S/B	133, FLEX	P	None	P	None	P	None	P	None	Yes
24	S/B	134, 1ST GRADE	P	None	P	None	P	None	P	None	Yes
25	S/B	135, 1ST GRADE	P	None	P	None	P	None	P	None	Yes
26	S/B	219, 2ND GRADE	P	None	P	None	P	None	P	None	Yes
27	S/B	218, 2ND GRADE	P	None	P	None	P	None	P	None	Yes
28	S/B	217, 2ND GRADE	P	None	P	None	P	None	P	None	Yes
29	B	2ND FLOOR BY RESTROOM, LEFT	P	None	P	None	P	None	P	None	Yes
30	B	2ND FLOOR BY RESTROOM, RIGHT	P	None	P	None	P	None	P	None	Yes
31	S/B	209, FLEX	P	None	P	None	P	None	P	None	Yes
32	S/B	208, 3RD GRADE	P	None	P	None	P	None	P	None	Yes
33	S/B	205, 5TH GARDE	P	None	P	None	P	None	P	None	Yes
34	S/B	206, 3RD GRADE	P	None	P	None	P	None	P	None	Yes
35	S/B	203, 5TH GRADE	P	None	P	None	P	None	P	None	Yes
36	S/B	204, 4TH GRADE	P	None	P	None	P	None	P	None	Yes
37	S/B	202, 4TH GRADE	P	None	P	None	P	None	P	None	Yes

Table 2. Lead Test Results

Test Results (Lead/Pb, ppb)										
FIXTURE INFORMATION			Initial Sampling						Summary Status	
Fixture ID	Type	Location	Sampled	1st Draw	Flush 30s	Flush 2m	Pass/Fail	Status	Pass/Fail	Status
01	S	306, KINDERGARTEN	8/1/2018	<1	<1		P	Sample	P	None
02	S	305, KINDERGARTEN	8/1/2018	<1	<1		P	Sample	P	None
03	S	P107						Sample		sample
04	S	P101, SPECIAL ED						Sample		sample
05	S	308, HEAD START	8/1/2018	2	<1		P	Sample	P	None
06	S	309, FLEX CLASSROOM	8/1/2018	3	<1		P	Sample	P	None
07	S	310, HEAD START	8/1/2018	3	<1		P	Sample	P	None
08	S	311, HEAD START	8/1/2018	<1	<1		P	Sample	P	None
09	B	DRINKING FOUNTAIN, GYM, LEFT	8/1/2018	<1	<1		P	Sample	P	None
10	B	DRINKING FOUNTAIN, GYM, RIGHT	8/1/2018	<1	<1		P	Sample	P	None
11	B	DRINKING FOUNTAIN, GYM, BOTTLE FILLER	8/1/2018	<1	<1		P	Sample	P	None
12	S/B	ART, 126	8/1/2018	<1	<1		P	Sample	P	None
13	S/B	124, MUSIC	8/1/2018	<1	<1		P	Sample	P	None
14	S	102, FAMILY ROOM	8/1/2018	<1	<1		P	Sample	P	None
15	S	108A, NURSE						Sample		sample
16	B	1ST FLOOR BY MAIN OFFICE, LEFT	8/1/2018	<1	<1		P	Sample	P	None
17	B	1ST FLOOR BY MAIN OFFICE, RIGHT	8/1/2018	<1	<1		P	Sample	P	None
18	B	1ST FLOOR BY MAIN OFFICE, BOTTLE FILLER	8/1/2018	<1	<1		P	Sample	P	None
19	S	KITCHEN	8/1/2018	<1	<1		P	Sample	P	None
20	S	KITCHEN	8/1/2018	<1	<1		P	Sample	P	None
21	S	KITCHEN	8/1/2018	<1	<1		P	Sample	P	None
22	S	129, RESOURCE ROOM	8/1/2018	<1	<1		P	Sample	P	None
23	S/B	133, FLEX	8/1/2018	<1	<1		P	Sample	P	None
24	S/B	134, 1ST GRADE	8/1/2018	<1	<1		P	Sample	P	None
25	S/B	135, 1ST GRADE	8/1/2018	<1	<1		P	Sample	P	None
26	S/B	219, 2ND GRADE	8/1/2018	<1	<1		P	Sample	P	None
27	S/B	218, 2ND GRADE	8/1/2018	<1	<1		P	Sample	P	None
28	S/B	217, 2ND GRADE	8/1/2018	<1	<1		P	Sample	P	None
29	B	2ND FLOOR BY RESTROOM, LEFT	8/1/2018	<1	<1		P	Sample	P	None
30	B	2ND FLOOR BY RESTROOM, RIGHT	8/1/2018	<1	<1		P	Sample	P	None
31	S/B	209, FLEX	8/1/2018	<1	<1		P	Sample	P	None
32	S/B	208, 3RD GRADE	8/1/2018	1	<1		P	Sample	P	None
33	S/B	205, 5TH GARDE	8/1/2018	1	<1		P	Sample	P	None
34	S/B	206, 3RD GRADE	8/1/2018	2	<1		P	Sample	P	None
35	S/B	203, 5TH GRADE	8/1/2018	<1	<1		P	Sample	P	None
36	S/B	204, 4TH GRADE	8/1/2018	<1	<1		P	Sample	P	None
37	S/B	202, 4TH GRADE	8/1/2018	<1	<1		P	Sample	P	None

Table 3. Cadmium Test Results

Test Results (Cadmium/Cd, ppb)										
FIXTURE INFORMATION			Initial Sampling						Summary Status	
Fixture ID	Type	Location	Sampled	1st Draw	Flush 30s	Flush 2m	Pass/Fail	Status	Pass/Fail	Status
01	S	306, KINDERGARTEN	8/1/2018	<1	<1		P		P	None
02	S	305, KINDERGARTEN	8/1/2018	<1	<1		P		P	None
03	S	P107						Sample		sample
04	S	P101, SPECIAL ED						Sample		sample
05	S	308, HEAD START	8/1/2018	<1	<1		P		P	None
06	S	309, FLEX CLASSROOM	8/1/2018	<1	<1		P		P	None
07	S	310, HEAD START	8/1/2018	<1	<1		P		P	None
08	S	311, HEAD START	8/1/2018	<1	<1		P		P	None
09	B	DRINKING FOUNTAIN, GYM, LEFT	8/1/2018	<1	<1		P		P	None
10	B	DRINKING FOUNTAIN, GYM, RIGHT	8/1/2018	<1	<1		P		P	None
11	B	DRINKING FOUNTAIN, GYM, BOTTLE FILLER	8/1/2018	<1	<1		P		P	None
12	S/B	ART, 126	8/1/2018	<1	<1		P		P	None
13	S/B	124, MUSIC	8/1/2018	<1	<1		P		P	None
14	S	102, FAMILY ROOM	8/1/2018	<1	<1		P		P	None
15	S	108A, NURSE						Sample		sample
16	B	1ST FLOOR BY MAIN OFFICE, LEFT	8/1/2018	<1	<1		P		P	None
17	B	1ST FLOOR BY MAIN OFFICE, RIGHT	8/1/2018	<1	<1		P		P	None
18	B	1ST FLOOR BY MAIN OFFICE, BOTTLE FILLER	8/1/2018	<1	<1		P		P	None
19	S	KITCHEN	8/1/2018	<1	<1		P		P	None
20	S	KITCHEN	8/1/2018	<1	<1		P		P	None
21	S	KITCHEN	8/1/2018	<1	<1		P		P	None
22	S	129, RESOURCE ROOM	8/1/2018	<1	<1		P		P	None
23	S/B	133, FLEX	8/1/2018	<1	<1		P		P	None
24	S/B	134, 1ST GRADE	8/1/2018	<1	<1		P		P	None
25	S/B	135, 1ST GRADE	8/1/2018	<1	<1		P		P	None
26	S/B	219, 2ND GRADE	8/1/2018	<1	<1		P		P	None
27	S/B	218, 2ND GRADE	8/1/2018	<1	<1		P		P	None
28	S/B	217, 2ND GRADE	8/1/2018	<1	<1		P		P	None
29	B	2ND FLOOR BY RESTROOM, LEFT	8/1/2018	<1	<1		P		P	None
30	B	2ND FLOOR BY RESTROOM, RIGHT	8/1/2018	<1	<1		P		P	None
31	S/B	209, FLEX	8/1/2018	<1	<1		P		P	None
32	S/B	208, 3RD GRADE	8/1/2018	<1	<1		P		P	None
33	S/B	205, 5TH GARDE	8/1/2018	<1	<1		P		P	None
34	S/B	206, 3RD GRADE	8/1/2018	<1	<1		P		P	None
35	S/B	203, 5TH GRADE	8/1/2018	<1	<1		P		P	None
36	S/B	204, 4TH GRADE	8/1/2018	<1	<1		P		P	None
37	S/B	202, 4TH GRADE	8/1/2018	<1	<1		P		P	None

Table 4. Copper Test Results

Test Results (Copper/Cu, ppm)										
FIXTURE INFORMATION			Initial Sampling					Summary Status		
Fixture ID	Type	Location	Sampled	1st Draw	Flush 30s	Flush 2m	Pass/Fail	Status	Pass/Fail	Status
01	S	306, KINDERGARTEN	8/1/2018	0.038	0.075		P		P	None
02	S	305, KINDERGARTEN	8/1/2018	0.085	0.208		P		P	None
03	S	P107						Sample		sample
04	S	P101, SPECIAL ED						Sample		sample
05	S	308, HEAD START	8/1/2018	0.067	0.083		P		P	None
06	S	309, FLEX CLASSROOM	8/1/2018	0.049	0.109		P		P	None
07	S	310, HEAD START	8/1/2018	0.113	0.064		P		P	None
08	S	311, HEAD START	8/1/2018	0.156	0.127		P		P	None
09	B	DRINKING FOUNTAIN, GYM, LEFT	8/1/2018	0.06	0.05		P		P	None
10	B	DRINKING FOUNTAIN, GYM, RIGHT	8/1/2018	0.079	0.027		P		P	None
11	B	DRINKING FOUNTAIN, GYM, BOTTLE FILLER	8/1/2018	0.032	0.019		P		P	None
12	S/B	ART, 126	8/1/2018	0.18	0.141		P		P	None
13	S/B	124, MUSIC	8/1/2018	0.167	0.155		P		P	None
14	S	102, FAMILY ROOM	8/1/2018	0.091	0.226		P		P	None
15	S	108A, NURSE						Sample		sample
16	B	1ST FLOOR BY MAIN OFFICE, LEFT	8/1/2018	0.193	0.017		P		P	None
17	B	1ST FLOOR BY MAIN OFFICE, RIGHT	8/1/2018	0.013	0.011		P		P	None
18	B	1ST FLOOR BY MAIN OFFICE, BOTTLE FILLER	8/1/2018	0.014	0.013		P		P	None
19	S	KITCHEN	8/1/2018	0.158	0.193		P		P	None
20	S	KITCHEN	8/1/2018	0.186	0.214		P		P	None
21	S	KITCHEN	8/1/2018	0.17	0.203		P		P	None
22	S	129, RESOURCE ROOM	8/1/2018	0.178	0.188		P		P	None
23	S/B	133, FLEX	8/1/2018	0.214	0.206		P		P	None
24	S/B	134, 1ST GRADE	8/1/2018	0.251	0.215		P		P	None
25	S/B	135, 1ST GRADE	8/1/2018	0.177	0.214		P		P	None
26	S/B	219, 2ND GRADE	8/1/2018	0.203	0.238		P		P	None
27	S/B	218, 2ND GRADE	8/1/2018	0.284	0.236		P		P	None
28	S/B	217, 2ND GRADE	8/1/2018	0.243	0.206		P		P	None
29	B	2ND FLOOR BY RESTROOM, LEFT	8/1/2018	0.282	0.2		P		P	None
30	B	2ND FLOOR BY RESTROOM, RIGHT	8/1/2018	0.341	0.2		P		P	None
31	S/B	209, FLEX	8/1/2018	0.215	0.193		P		P	None
32	S/B	208, 3RD GRADE	8/1/2018	0.216	0.169		P		P	None
33	S/B	205, 5TH GARDE	8/1/2018	0.214	0.219		P		P	None
34	S/B	206, 3RD GRADE	8/1/2018	0.296	0.192		P		P	None
35	S/B	203, 5TH GRADE	8/1/2018	0.29	0.247		P		P	None
36	S/B	204, 4TH GRADE	8/1/2018	0.238	0.197		P		P	None
37	S/B	202, 4TH GRADE	8/1/2018	0.235	0.249		P		P	None

Table 5. Iron Test Results

Test Results (Iron/Fe, ppm)										
FIXTURE INFORMATION			Initial Sampling						Summary Status	
Fixture ID	Type	Location	Sampled	1st Draw	Flush 30s	Flush 2m	Pass/Fail	Status	Pass/Fail	Status
01	S	306, KINDERGARTEN	8/1/2018			<0.05	P		P	None
02	S	305, KINDERGARTEN	8/1/2018			<0.05	P		P	None
03	S	P107						Sample		Sample
04	S	P101, SPECIAL ED						Sample		Sample
05	S	308, HEAD START	8/1/2018			<0.05	P		P	None
06	S	309, FLEX CLASSROOM	8/1/2018			<0.05	P		P	None
07	S	310, HEAD START	8/1/2018			<0.05	P		P	None
08	S	311, HEAD START	8/1/2018			<0.05	P		P	None
09	B	DRINKING FOUNTAIN, GYM, LEFT	8/1/2018			<0.05	P		P	None
10	B	DRINKING FOUNTAIN, GYM, RIGHT	8/1/2018			<0.05	P		P	None
11	B	DRINKING FOUNTAIN, GYM, BOTTLE FILLER	8/1/2018			<0.05	P		P	None
12	S/B	ART, 126	8/1/2018			0.166	P		P	None
13	S/B	124, MUSIC	8/1/2018			0.176	P		P	None
14	S	102, FAMILY ROOM	8/1/2018			0.204	P		P	None
15	S	108A, NURSE						Sample		Sample
16	B	1ST FLOOR BY MAIN OFFICE, LEFT	8/1/2018			<0.05	P		P	None
17	B	1ST FLOOR BY MAIN OFFICE, RIGHT	8/1/2018			<0.05	P		P	None
18	B	1ST FLOOR BY MAIN OFFICE, BOTTLE FILLER	8/1/2018			<0.05	P		P	None
19	S	KITCHEN	8/1/2018			<0.05	P		P	None
20	S	KITCHEN	8/1/2018			<0.05	P		P	None
21	S	KITCHEN	8/1/2018			<0.05	P		P	None
22	S	129, RESOURCE ROOM	8/1/2018			0.125	P		P	None
23	S/B	133, FLEX	8/1/2018			<0.05	P		P	None
24	S/B	134, 1ST GRADE	8/1/2018			<0.05	P		P	None
25	S/B	135, 1ST GRADE	8/1/2018			<0.05	P		P	None
26	S/B	219, 2ND GRADE	8/1/2018			<0.05	P		P	None
27	S/B	218, 2ND GRADE	8/1/2018			<0.05	P		P	None
28	S/B	217, 2ND GRADE	8/1/2018			<0.05	P		P	None
29	B	2ND FLOOR BY RESTROOM, LEFT	8/1/2018			<0.05	P		P	None
30	B	2ND FLOOR BY RESTROOM, RIGHT	8/1/2018			0.092	P		P	None
31	S/B	209, FLEX	8/1/2018			<0.05	P		P	None
32	S/B	208, 3RD GRADE	8/1/2018			<0.05	P		P	None
33	S/B	205, 5TH GARDE	8/1/2018			<0.05	P		P	None
34	S/B	206, 3RD GRADE	8/1/2018			<0.05	P		P	None
35	S/B	203, 5TH GRADE	8/1/2018			<0.05	P		P	None
36	S/B	204, 4TH GRADE	8/1/2018			<0.05	P		P	None

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	boiler room	Arsenic	01-Aug-18	2 ppb	P
00	SE	boiler room	Cadmium	01-Aug-18	1 ppb	P
00	SE	boiler room	Copper	01-Aug-18	0.031 ppm	P
00	SE	boiler room	Iron	01-Aug-18	0.168 ppm	P
00	SE	boiler room	Lead	01-Aug-18	1 ppb	P
00	SE	boiler room	Total Coliforms	01-Aug-18	<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.