



2019 Lead and Copper Rule Sampling Plan

Sample Pool and Selection

The District of Columbia Water and Sewer Authority (DC Water) will collect samples from at least 100 Tier 1 sites in two semester periods—January to June 2019 and July to December 2019. Sample sites meeting Tier 1 criteria under 40 CFR §141.86(a)(3)(ii) are single family structures with either full or partial lead service lines based on DC Water’s data.

DC Water maintains a LCR “Sample Pool” of sites listed in Table 1. DC Water also receives requests from our customers to sample their tap water for lead. DC Water will include these customer-requested sites in the LCR sampling program if they meet the Tier 1 criteria: single family structures having a full lead service line based on DC Water’s customer information and service line inventory records; agree to participate in the program; and are not already in the Sample Pool.

DC Water will attempt to send sample bottles to all sites in Table 1 and to the approved customer-requested sites until at least the minimum number of valid compliance samples has been collected. In the event that the number of valid compliance samples is insufficient to meet the LCR monitoring requirements, DC Water will add sites by random selection. The randomly selected sites will have full lead service lines, be a single family structure according to DC Water customer information and service line inventory records, and the customer agrees to participate in the LCR sampling program. DC Water will retain all randomly selected sites that provide samples (homes that do not return samples will not be included in the next semester’s Sample Pool).

DC Water will schedule and distribute samples to Sample Pool sites in the order listed in Table 1. DC Water may sample locations out-of-order if the first sample submitted was rejected (refer to Criteria for Sample Acceptance section) and the customer requests a second sample kit. DC Water may also sample out-of-order if the customer contacts DC Water and requests a different sample date. DC Water will not leave a sample kit under the following conditions:

- Abandoned residence
- Partial lead service line replacement within 60 days of sample kit drop-off;
- Customer requests not to participate;
- Tier 1 status is suspect (e.g. possible condo conversion); or
- Site is undergoing rehabilitation.

DC Water will investigate to determine if the site should remain in the Sample Pool; however, the site will not be sampled until the following compliance period unless requested by the customer.

Sample Collection

DC Water will collect samples between January and December 2019 (first monitoring period is January to June and the second is July to December). The homeowner will collect first and second draw samples following the instructions in the sample kit and complete the sampling form (or chain of custody; reference Appendix A). The samples will be sent to a certified laboratory, currently the Washington Aqueduct (WA), to analyze the lead, copper, and iron concentrations in the samples using Environmental Protection Agency (EPA) Method 200.8.

Criteria for Acceptance as a Valid Compliance Sample

DC Water will forward samples to WA using the following criteria:

1. Bottles:
 - First draw sample bottle is full; and
 - First draw sample bottle is identified.

2. Sampling form or bottles must have the following information:
 - Address on bottles match address on sampling form;
 - Site is a single family structure (i.e., answered “No” to having multiple dwelling units);
 - Date and time stagnation started;
 - Date and time sample collected;
 - Stagnation time at least 6 hours;
 - No leaks or water use during stagnation; and
 - If the customer has a water treatment unit installed, they must indicate that the system was bypassed for sampling.

DC Water will attempt to obtain any missing information from incomplete sampling forms by contacting the customer. DC Water will note the customer contact by logging the customer’s name, the date, questions asked, customer’s responses, and the initials of the DC Water staff person. DC Water will transfer the missing information onto the sampling form.

Sample Invalidation

DC Water will request invalidation from EPA Region III for samples analyzed by WA laboratory based on 40 CFR §141.86(f):

- The laboratory establishes that improper analysis caused erroneous results;
- The sample was taken from a site that did not meet Tier 1 criteria;
- The sample or sample container was damaged during transit; or
- There is substantial reason to suspect that the sample was subject to tampering.

Notifying Customers of Results

In accordance with 40 CFR §141.85(d), DC Water will mail sample results to the homeowner along with lead advisory information within 30 days of receiving sample results from the laboratory. Appendix B contains the template letter used to send residents their results, which includes the required information in accordance with 40 CFR § 141.85(d)(3).

DC Water has never obtained a first or second draw copper test result above the copper action level since the addition of chloramines. DC Water will provide customers with written notification if their copper test results exceed the copper action level.

Sample Pool Revisions (Table 2)

Sites will be removed from the Sample Pool under the following conditions:

- Site does not meet Tier 1 criteria (e.g. site is not a single family structure; condo conversion, no lead service line);
- Customer notifies DC Water that they do not want to participate;
- Customer cannot provide a valid sample (e.g. water treatment unit cannot be bypassed); or
- For the last four consecutive sampling events of the site (i.e., sample kit dropped at the site), valid compliance samples were not returned from the site.

DC Water will assess the geographic distribution of the sites in the Sample Pool to ensure that they are representative of the residential lead service line distribution in the District. DC Water will select new sites to improve geographic distribution if the sites are not representative of the lead service line distribution.

Reporting Format

The lead and copper monitoring report will be submitted to EPA Region III in electronic format by July 10, 2019 and January 10, 2020, which are 10 days following the end of the LCR monitoring compliance periods. The report format will comply with 40 CFR §141.90. DC Water will report lead results as “0.0000” that have been reported by the WA laboratory as non-detect (<0.0002 mg/L). DC Water will notify EPA Region III within 48 hours of determining that the 90th percentile lead or copper action level has been exceeded.

Optimal Corrosion Control Treatment Monitoring (OCCT)

DC Water will monitor for the OCCT Water Quality Parameters (WQP) twice per calendar year at 10 sites as required by 40 CFR §141.87(e)(2)(i). In order to achieve seasonal variability, DC Water will collect samples quarterly at the 10 sites listed in Table 3. One set of 5 sites will be sampled in February and August and a second set of 5 sites will be sampled in May and November. The parameters monitored will be pH, dissolved orthophosphate, nitrite, and free ammonia. DC Water will report entry point data collected by the Washington Aqueduct along with the WQP distribution system data by the 10th of the month following the end of the quarter (April, July, October, and January), which is 10 days following the end of the OCCT WQP monitoring compliance period.

Table 1. January – June 2019 Sample Pool

No	Address	Pipe Material
1	10 S St NW	Lead
2	1012 DOUGLAS ST NE	Lead
3	1020 INDEPENDENCE AVE SE	Lead
4	106 V St NE	LEAD
5	1119 C ST NE	Lead
6	1123 BUCHANAN ST NW	LEAD
7	118 18TH ST SE	LEAD
8	119 16TH ST NE	Lead
9	1220 Linden Pl NE	Lead
10	1221 F ST NE	Lead
11	1247 GIRARD ST NE	LEAD
12	125 Madison St NW	Lead
13	1315 FRANKLIN ST NE	Lead
14	132 11th St SE	LEAD
15	1326 G ST SE	Lead
16	1346 F St NE	Lead
17	1354 D St SE	Lead
18	1407 A ST SE	LEAD
19	1409 Allison St NW	LEAD
20	1425 VARNUM ST NW	Lead
21	15 Milmarson Pl NW	Lead
22	1505 Buchanan St NW	Lead
23	1505 CRITTENDEN ST NW	Lead
24	1519 Olive St NE	Lead
25	1520 Buchanan St NW	LEAD
26	1620 Webster St NW	Lead
27	1635 WEBSTER ST NW	Lead
28	1649 HARVARD ST NW	Lead
29	1703 D St NE	Lead
30	1706 NEW JERSEY AVE NW	Lead
31	1726 13th St SE	Lead
32	1823 Monroe St NE	Lead
33	2007 37TH ST NW	Lead
34	2032 37TH ST NW	Lead
35	2246 Ontario Rd NW	LEAD
36	228 V ST NE	Lead
37	2427 North Capitol St NE	Lead
38	2435 33RD ST SE	Lead
39	2717 11th St NW	Lead
40	2719 O ST NW	Lead

No	Address	Pipe Material
41	2913 Brandywine St NW	Lead
42	2923 Cathedral AVE NW	Lead
43	2942 Ordway St NW	Lead
44	3004 Alabama Ave SE	Lead
45	3011 Warder St NW	LEAD
46	307 South Carolina Ave SE	LEAD
47	3074 Clinton St NE	Lead
48	313 5TH ST NE	Lead
49	3205 38TH ST NW	Lead
50	3206 38th St NW	Lead
51	3211 Central Ave NE	Lead
52	3213 OLIVER ST NW	LEAD
53	322 TENNESSEE AVE NE	Lead
54	3221 OLIVER ST NW	LEAD
55	3227 Northampton St NW	Lead
56	324 Douglas St NE	Lead
57	3309 35TH ST NW	Lead
58	338 14th St SE	Lead
59	3400 ORDWAY ST NW	Lead
60	3407 ORDWAY ST NW	LEAD
61	3420 34th St NW	Lead
62	3608 Park Pl NW	LEAD
63	3629 Everett St NW	LEAD
64	3636 13TH ST NW	Lead
65	3670 Park Pl NW	LEAD
66	3708 Reno Rd NW	LEAD
67	3710 Huntington St NW	Lead
68	3718 CHESAPEAKE ST NW	LEAD
69	3727 T St NW	Lead
70	3743 W ST NW	LEAD
71	3819 Jenifer St NW	LEAD
72	3822 Albemarle St NW	Lead
73	3838 BEECHER ST NW	Lead
74	3908 13TH ST NW	Lead
75	3920 5TH ST NW	Lead
76	3928 HUNTINGTON ST NW	Lead
77	4011 13TH ST NW	Lead
78	4014 Grant St NE	Lead
79	412 BRANDYWINE ST SE	Lead
80	4131 YUMA ST NW	Lead
81	421 Hamilton St NW	Lead
82	4214 8th St NW	Lead
83	422 Independence Ave SE	LEAD

No	Address	Pipe Material
84	423 GALLATIN ST NW	Lead
85	431 Tennessee Ave NE	LEAD
86	4413 5th St NW	Lead
87	4418 14th St NE	Lead
88	4425 14th St NE	Lead
89	450 Newton Pl NW	Lead
90	4529 Douglas St NE	Lead
91	4622 15TH ST NW	Lead
92	4624 9TH ST NW	LEAD
93	4703 Macarthur Blvd NW	Lead
94	4806 Kansas Ave NW	Lead
95	4810 KANSAS AVE NW	Lead
96	4929 GLENBROOK RD NW	Lead
97	5019 16TH ST NW	LEAD
98	511 Tennessee Ave NE	LEAD
99	5122 7TH ST NW	Lead
100	519 12th St ne	LEAD
101	522 4TH ST SE	Lead
102	523 12th st NE	LEAD
103	5306 KANSAS AVE NW	LEAD
104	5312 ILLINOIS AVE NW	Lead
105	5337 BROAD BRANCH RD NW	Lead
106	543 TENNESSEE AVE NE	Lead
107	5520 CAROLINA PL NW	LEAD
108	559 23rd Pl NE	Lead
109	5600 NEBRASKA AVE NW	Lead
110	5601 32ND ST NW	LEAD
111	5731 3rd Pl NW	Lead
112	619 12th St NE	Lead
113	6409 7TH ST NW	Lead
114	6516 8TH ST NW	Lead
115	6806 LAUREL ST NW	LEAD
116	702 9th St SE	Lead
117	804 Delafield Pl NW	Lead
118	821 E ST SE	Lead
119	905 Kent Pl NE	Lead
120	912 Emerson St NW	Lead
121	914 Evarts St NE	LEAD
122	921 Emerson St NW	Lead
123	923 9TH ST NE	Lead
124	926 Hamilton St NW	Lead
125	928 10th St NE	Lead
126	1100 EAST CAPITOL ST NE	Partial Lead

No	Address	Pipe Material
127	1211 Carrollsburg Pl SW	Partial Lead
128	1222 HAMILTON ST NW	Partial Lead
129	1332 Ritchie Pl NE	Partial Lead
130	1353 JEFFERSON ST NW	Partial Lead
131	1412 S St NW	Partial Lead
132	1420 INGRAHAM ST NW	Partial Lead
133	1437 Ives Pl SE	Partial Lead
134	1453 S St NW	Partial Lead
135	1529 27TH ST NW	Partial Lead
136	1613 Webster St NW	Partial Lead
137	1806 LAWRENCE ST NE	Partial Lead
138	1808 KEARNY ST NE	Partial Lead
139	1826 Jackson St NE	Partial Lead
140	231 K St NE	Partial Lead
141	2408 2nd St NE	Partial Lead
142	3030 44TH ST NW	Partial Lead
143	3036 P St NW	Partial Lead
144	308 9th St SE	Partial Lead
145	313 10TH ST SE	Partial Lead
146	3301 BROWN St NW	Partial Lead
147	3416 9th St NE	Partial Lead
148	351 Tennessee Ave NE	Partial Lead
149	36 Florida Ave NW	Partial Lead
150	3724 CHESAPEAKE ST NW	Partial Lead
151	3809 ALTON PL NW	Partial Lead
152	3907 13th St NW	Partial Lead
153	3917 8th St NW	Partial Lead
154	4002 ILLINOIS AVE NW	Partial Lead
155	414 DOUGLAS ST NE	Partial Lead
156	4215 39th St NW	Partial Lead
157	4233 JENIFER ST NW	Partial Lead
158	4413 IOWA AVE NW	Partial Lead
159	4607 5th St NW	Partial Lead
160	4707 GEORGIA AVE NW	Partial Lead
161	4818 8th ST NW	Partial Lead
162	4926 Glenbrook Rd NW	Partial Lead
163	502 A ST SE	Partial Lead
164	5223 KANSAS AVE NW	Partial Lead
165	5301 RENO RD NW	Partial Lead
166	5404 39TH ST NW	Partial Lead
167	5923 33rd St NW	Partial Lead
168	6213 7TH ST NW	Partial Lead
169	722 5th St NE	Partial Lead

No	Address	Pipe Material
170	744 9TH ST SE	Partial Lead
171	912 EVARTS ST NE	Partial Lead

**Table 2. Sites Added, Removed, and Pipe Material Changed
From the Previous Sample Pool (2018 July – December)**

No	Address	Change
1	1220 Linden Pl NE	Added during July-December 2018 Monitoring Period
2	1354 D St SE	Added during July-December 2018 Monitoring Period
3	1823 Monroe St NE	Added during July-December 2018 Monitoring Period
4	2427 North Capitol St NE	Added during July-December 2018 Monitoring Period
5	2717 11th St NW	Added during July-December 2018 Monitoring Period
6	2942 Ordway St NW	Added during July-December 2018 Monitoring Period
7	3004 Alabama Ave SE	Added during July-December 2018 Monitoring Period
8	3074 Clinton St NE	Added during July-December 2018 Monitoring Period
9	324 Douglas St NE	Added during July-December 2018 Monitoring Period
10	4529 Douglas St NE	Added during July-December 2018 Monitoring Period
11	4622 15TH ST NW	Added during July-December 2018 Monitoring Period
12	4707 GEORGIA AVE NW	Added during July-December 2018 Monitoring Period
13	928 10th St NE	Added during July-December 2018 Monitoring Period
14	314 VARNUM ST NW	Full lead service line replacement 10/17/2018
15	1430 Crittenden St NW	Full lead service line replacement 6/8/2018
16	126 16TH ST NE	Full lead service line replacement 8/17/2018
17	351 Tennessee Ave NE	Pipe material changed from full to partial lead; resident reported copper pipe at point-of-entry
18	4707 GEORGIA AVE NW	Pipe material changed from full to partial lead; resident reported copper pipe at point-of-entry
19	912 EVARTS ST NE	Pipe material changed from full to partial lead; resident reported copper pipe at point-of-entry
20	3742 Benton St NW	Removed; Added during July-December 2018 Monitoring Period and removed when the resident recorded the house was multi-family
21	3742 Benton St NW	Removed; multi-family residence
22	645 LAMONT ST NW	Removed; multi-family residence
23	1011 Taylor St NE	Removed; no valid samples in last four sample events
24	1304 E ST NE	Removed; no valid samples in last four sample events
25	1627 Gales St NE	Removed; no valid samples in last four sample events
26	2005 37th St NW	Removed; no valid samples in last four sample events
27	2830 BRENTWOOD RD NE	Removed; no valid samples in last four sample events
28	3402 10th St NE	Removed; no valid samples in last four sample events
29	3722 MCKINLEY ST NW	Removed; no valid samples in last four sample events
30	3913 8TH ST NW	Removed; no valid samples in last four sample events
31	3925 13th St NW	Removed; no valid samples in last four sample events
32	4409 Lowell St NW	Removed; no valid samples in last four sample events
33	519 9TH ST SE	Removed; no valid samples in last four sample events
34	5310 13th St NW	Removed; no valid samples in last four sample events
35	627 Quebec Pl NW	Removed; no valid samples in last four sample events
36	8 N St SW	Removed; no valid samples in last four sample events
37	816 MADISON ST NW	Removed; no valid samples in last four sample events

No	Address	Change
38	823 BUCHANAN ST NW	Removed; no valid samples in last four sample events
39	905 WEBSTER ST NW	Removed; no valid samples in last four sample events
40	2921 7th St SE	Removed; POE filter cannot be bypassed
41	307 7th St NE	Removed; resident requested to not participate

Notes for Table 2:

¹ Sites are added when a customer contacts DC Water to request a lead test, and agree to participate in the Lead and Copper Monitoring Program. DC Water confirms that the address met Tier 1 criteria under 40 CFR 141.86(a)(3)(ii) as single family structure with a full lead service line based on DC Water's customer information and service line inventory records.

²Customers that do not return valid samples for four consecutive LCR sampling events are removed from the Sample Pool.

Table 3
Sample Sites for OCCT

	Site ID	Location	Sample Month
1	2H-3 BKJV	Truesdale Elementary School, 800 Ingraham St NW	Feb, Aug
2	3H-3 BKJV	St. Johns High School @ 27th & Military	Feb, Aug
3	A1H-5	BP Gas Station, 5207 Nannie Helen Burroughs Ave NE	Feb, Aug
4	1H-14	FH # 12, 2225 5 th St NE	Feb, Aug
5	4H-9	FH #20, 4300 Wisconsin Ave NW	Feb, Aug
6	A3H-5	Dept. of Human Services, 3851 Alabama Ave SE	May, Nov
7	L-4	Harbor Police Station, 550 water St SW	May, Nov
8	A2-H8	My 3 Sons Barber Shop, 3125 MLK Ave SE	May, Nov
9	L-27	Starbucks, 325 7 th St NW	May, Nov
10	3H-14	Spicy Delight, 308 Carroll St NW	May, Nov