Decatur

Phase I: Twenty-three drinking fountains were sampled for first draw lead levels in the first phase of the testing program. Seven of the twenty-three had lead levels between 20 ppb and 50 ppb. Five of the samples had lead levels 50 ppb or greater.

Phase II: The second round of testing included twenty-five fountains tested both for first draw and flushed lead levels. A flushed sample of the inlet water into the school was also taken. 21 of 25 first draw drinking fountain samples were below 20 ppb lead. Four first draw samples showed a lead level between 20 and 50 ppb. 21 of the 22 flushed samples were below 20 ppb lead with one sample at 50 ppb lead. The inlet water measured well below 20 ppb lead.

Follow-up: Three follow-up samples were taken including the drinking fountain that had a high flushed lead level in Phase II (#22). The follow-up samples were 1-minute flushed samples and all were well below 20 ppb lead.

Plumbing Inspection: EES conducted a plumbing inspection on November 9, 1990 at Decatur because of the high flushed lead level found in a sample from drinking fountain #22.

The building was constructed during the 1961 with an addition built in 1967. The service line to the building is a 4" cast iron pipe that connects to the water main at the corner of 80th and 43rd NE. The service line was installed in September 1960.

The building plumbing is mostly galvanized pipe. Most of the piping in the building is concealed behind walls and is not accessible for physical inspection. There were no outward signs of corrosion on the piping that could be seen or on the drinking fountains themselves.

The plumbing inspection found some potential for lead corrosion into the water from the galvanized piping, however, the Phase II and follow-up sampling results indicate that the flushed water lead levels are generally low in the building. Lead in the 30 second flushed sample from drinking fountain #22 in the Phase II samples appears to be the result of localized corrosion in and around the drinking fountain.

Conclusions: The Phase I results were probably deceptively high because of lack of use during the summer period when the samples were taken. Phase II results are probably representative of the first draw morning lead levels and the flushed lead levels found throughout the school year.

Testing during the school year at Decatur indicates that some of the drinking fountains sampled in the school may be above 20 ppb lead in morning first draw samples. A 30 second flush reduced 4 of the 5 fountains with high lead levels below the recommended level of 20 ppb lead. Additional flushing on a follow-up sample (1 minute) reduced the remaining high lead level.

The follow-up samples and a plumbing inspection indicate that the probable cause of the high lead levels in the school is from corrosion of the drinking fountains and the connecting piping connecting the drinking fountains to the building plumbing.

Source: Seattle School District Drinking Water Quality Monitoring Program in School Drinking Fountains Phase II Technical Support Document Prepared by Economic and Engineering Services, Inc. 1993

Note: Alternative Elementary #2 is located at Decatur.

DECATUR

ppb Lead Level	PHASE I First Draw	PHASE II First Draw	PHASE II Flushed	FOLLOW-UP Flushed
0-20	11	21	21	3
21-49	7	4	0	0
50+	5	0	1	0
Total Number	23	25	22	3

Lead in Drinking Water
Seattle Public Schools

School	Sample Location	Fixture Type	Sample Type	Phase I Results (ppb lead)	Phase II Results (ppb lead)	Fixture Replaced	Phase V Results (ppb lead)	Phase VI Results (ppb lead)	Phase VII Results (ppb lead)
Decatur	1	bubbler	first draw	57	5				
Decatur	1	bubbler	flushed		1				
Decatur	2	bubbler	first draw	66	5				
Decatur	2	bubbler	flushed		1				
Decatur	3	bubbler	first draw	30	6				
Decatur	3	bubbler	flushed		1				
Decatur	5	bubbler	first draw	31	3				
Decatur	5	bubbler	flushed		1				
Decatur	6	bubbler	first draw		2				
Decatur	7	bubbler	first draw		1				
Decatur	8	bubbler	first draw		2				
Decatur	8	bubbler	flushed		2				
Decatur	9	bubbler	first draw		1				
Decatur	9	bubbler	flushed		1				
Decatur	10	bubbler	first draw		1				
Decatur	11	bubbler	first draw		1				
Decatur	12	bubbler	first draw	26	18		23		
Decatur	12	bubbler	flushed		4				
Decatur	13	bubbler	first draw	16	26	yes	9		
Decatur	13	bubbler	flushed		2				
Decatur	14	bubbler	first draw	8	6				
Decatur	14	bubbler	flushed		1				
Decatur	15	bubbler	first draw	19	6				
Decatur	15	bubbler	flushed		1				
Decatur	16	bubbler	first draw	34	4				
Decatur	16	bubbler	flushed		1				
Decatur	17	bubbler	first draw	16	4				
Decatur	17	bubbler	flushed		1				
Decatur	18	bubbler	first draw	8	6				
Decatur	18	bubbler	flushed		5				
Decatur	19	bubbler	first draw	4	5				
Decatur	19	bubbler	flushed		4				
Decatur	20	bubbler	first draw	25	3				
Decatur	20	bubbler	flushed		1				
Decatur	21	bubbler	first draw	22	23	yes	13		

Phase I, 7/90-8/90
Phase II, 9/90-11/90
Phase V, 9/92-11/92
Phase VI, 1/93 - 2/93
Phase VII, 2001-02

Lead in Drinking Water
Seattle Public Schools

School	Sample Location	Fixture Type	Sample Type	Phase I Results (ppb lead)	Phase II Results (ppb lead)	Fixture Replaced	Phase V Results (ppb lead)	Phase VI Results (ppb lead)	Phase VII Results (ppb lead)
Decatur	21	bubbler	flushed		11				
Decatur	22	bubbler	first draw	178	4	yes	37		
Decatur	22	bubbler	flushed		50				
Decatur	23	bubbler	first draw	9	34	yes	29		
Decatur	23	bubbler	flushed		13				
Decatur	26	bubbler	first draw	19	7				
Decatur	26	bubbler	flushed		1				
Decatur	27	bubbler	first draw	12	11				
Decatur	27	bubbler	flushed		3				
Decatur	28	bubbler	first draw	15	24	yes	12		
Decatur	28	bubbler	flushed		1				
Decatur	99	faucet	flushed		1				

Phase I, 7/90-8/90
Phase II, 9/90-11/90
Phase V, 9/92-11/92
Phase VI, 1/93 - 2/93
Phase VII, 2001-02

Seattle Public Schools

How to Read Previous Drinking Water Test Results

July 2004

School - Schools are identified by the building name rather than the program name, e.g. Summit K-12 is listed as Addams. Results are provided for buildings that no longer exist or that have since been renovated or relocated (please see footnote for individual schools).

Sample Location - The sample location number correlates with the Fountain ID Number and Location in School from Table 3 of the results of water quality testing currently available on the District web site. Sample location number 99 indicates that the sample was collected at the building inlet.

Fixture Type - The terms bubbler and fountain are used interchangeably.

Sample Type - First draw results are for concentrations measured in the first 250 mL of water from the bubbler that has stood in the piping and fixture for between 8 and 18 hours. Flushed results are from concentrations measured in a 250 mL sample collected after running the bubbler for 30 seconds.

Phase I Results - Phase I included the testing of drinking water from 85 District sites. Samples from 1152 water sources were collected and analyzed for lead during the summer of 1990. Phase I represented a worst case scenario because water at most sites had been standing for several weeks. Phase I was conducted by District personnel. Results are reported in parts per billion (ppb).

Phase II Results - Phase II included the testing of drinking water from 80 District sites. 2700 water samples from more than 1400 bubblers were collected and analyzed from lead from September 1990 through November 1990. Phase II was conducted by Economic and Engineering Services, Inc.

Note: Phase III and Phase IV did not include testing. Phase III was to identify bubblers with the lowest lead content and Phase IV was to replace all bubblers that had lead levels at or above 20 ppb.

Phase V Results - Between September 1992 and December 1992 follow-up sampling and analysis was conducted on all the replaced bubblers. Additional sampling was conducted on bubblers where Phase II analysis revealed levels between 15-20 ppb lead. Samples were also taken at new and renovated schools where no Phase II testing was done. A total of 633 samples were taken.

Phase VI Results - Phase VI was conducted between January 1993 and February 1993.

Phase VII Results - Water samples collected by District personnel between 2001 and 2002.