Electronic Supplementary Material (ESI) for Environmental Science: Water Research & Technology.

Supplemental File

A case study on tap water quality in large buildings recommissioned after extended closure due to the COVID-19 pandemic

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SI-1 Buildings Information

Some point of use water heaters were present in buildings A1 and B4. As building B4 had undergone minor construction, some of the fixtures that were sampled during extended stagnation, were not available for flushing and sampling later in study. The information was extracted from the card readers located at the buildings entrance to count the times someone accessed the buildings. No card reader was installed in building A2, and information for building A3 was not available.

SI-2 Blanks

The field blanks were filled using the Ultrapure Millipore treated water in the field. For trip blank the sampling bottles were filled with the Ultrapure Millipore treated water in lab and have transferred to the field and returned to the lab for analysis.

Table 1: The average values for finished water quality reported by local water utility in 2020[31] ([a]Total trihalomethanes, [b]Haloacetic acids, *90% of homes tested by the water utility had levels less than the reported value)

Parameter	Value	Parameter	Value
TTHMs[a] (µg/L)	7.6	Phosphate (mg/L)	1.0
HAAs[b] (µg/L)	3.7	Chloride (mg/L)	5.3
Chlorine (mg/L)	1.2	Fe (µg/L)	10.0
Alkalinity (mg/L)	51.0	Pb (µg/L)	8.7[c]
Hardness (mg/L)	47.0	Cu (µg/L)	300.0[c]
Ca (mg/L)	10.4	pH	7.2

Table SI-2: The number of total access to the studied buildings during the extended stagnation and after flushing (NA: information not available)

Building Name	During extended stagnation (April, 2019)	After Flushing (June, 2019)	% Change in number of access to buildings
A1	141	600	325
A2	NA	NA	-
A3	NA	NA	-
B1	3	8	167
B2	34	29	-15
B3	373	561	50
B4	44	59	34
B5	235	167	-29
B6	79	115	46
B7	71	98	38

Table SI-3: Duration of water flushing and total chlorine residuals in the first hot water tap after flushing

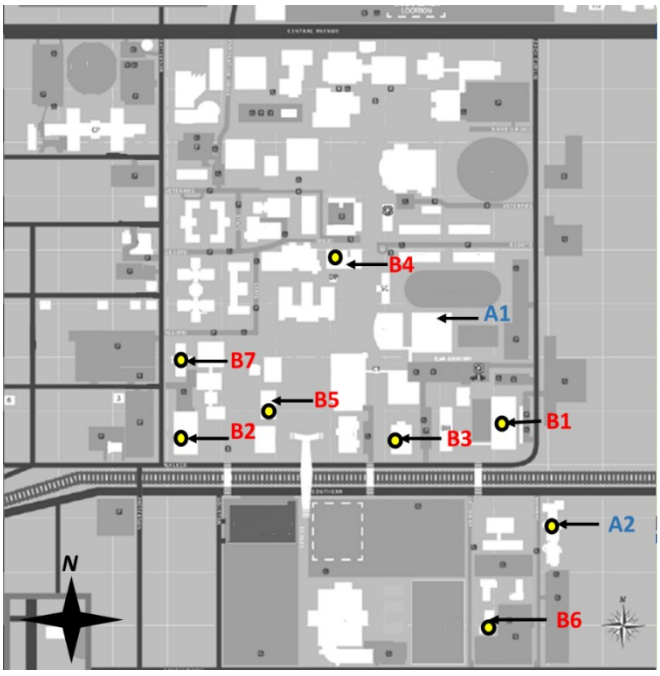

Figure SI-1: The location of sampled building at the main campus, building A3 is located approximate 1.4 miles from the main campus