

Lead and Copper Sampling Plan

NJARNG Facilities
2018

Second Round – Proposed Sampling Plan

A First Round of water sampling was conducted at NJARNG sites between 1/25/2018 and 4/13/2018 by students in the Collaborative Environmental Internship Program through Stockton University (SUEIP). Sampling was organized and managed by the Program Intern Advisor, with cooperation from DMAVA EMB staff. See “Water Sampling Results” Excel Sheet.

First Round Details

Facility Armorers were contacted prior to sampling to identify faucets that were commonly used for consumption purposes (drinking water, coffee making, food preparation, etc). SUEIP students traveled to each facility, and collected 2 samples from every targeted faucet:

First Draw – Water that had remained stagnant in the pipes for a minimum of 8 hours.

Second Draw – Sample taken after water had been flushed through the pipes for several minutes.

Armorers were instructed to place an “Out Of Order Sign” on the targeted faucets the night prior to sampling. This was to ensure that the first sample (FIRST DRAW) we collected was water that had remained stagnant in the pipes for a minimum of 8 hours prior to sampling.

Samples were taken to J.R. Henderson Labs Inc. in Beachwood, NJ for analysis within 14 days of collection. Lab results were sent to DMAVA staff and the SUEIP Intern Advisor. See “Water Sampling Results” Excel Sheet and charts below for results.

Completed	
First Round Of Water Sampling	
Total # Samples Collected	199
Total # Faucets Sampled	100
# Faucets Sampled Twice	1
# Samples Above AL	16
# Faucets Above AL	14
# Samples Below AL	183
# Faucets Below AL	86

Second Round Proposed Plan

All faucets that produced samples above or equal to the AL of Pb (0.015 mg/L) or Cu (1.3 mg/L) on Draw 1 or Draw 2 will be re-tested. Additionally, a randomized subset (10%) of the faucets that were not above AL will be re-tested. The subset was generated in excel using the =rand()

randomizing function to produce random values for every First Draw sample. The randomly generated values were then sorted highest to lowest, and the first 9 samples were selected for re-testing. See charts below:

Proposed Second Round Of Water Sampling	
# Faucets That Were ≥ AL In First Round	13
Randomized Subset Of Faucets That Were Below AL In First Round (10%)	9
Total # Faucets To Sample	22
Total # of Samples	44

Round 2 Targeted Faucets

Faucets That Produced Samples ≥ the AL of Pb or Cu on Draw 1 and/or 2

Site	Building	Floor #	Faucet Description	First Round Sample ID	Draw	Lead Action Level (mg/L)	Lead Results (mg/L)	Copper Action Level (mg/L)	Copper Results (mg/L)
Atlantic City	Armory	1	Gym Kitchen Sink	AY-1-29-18-1A	1	0.015	0.019	1.3	0.2
Lawrenceville	Marshalls	1	Water Fountain by bathroom	LVF-2-8-18-1A	1	0.015	0.093	1.3	0.5
Teaneck	Armory	Basement	Basement Sink 2	TNA-2-2-18-4A	1	0.015	<0.002	1.3	5.9
Westfield	FMS	1	Sink by washer FMS	WDF-2-2-18-1A,1B	1,2	0.015	0.005, <0.002	1.3	1.3, 1.3
Westfield	Armory	Basement	Bar Sink	WDF-2-2-18-3A	1	0.015	0.219	1.3	12.0
Woodbridge	Armory	1	Armory Water Fountain	WBE-2-15-18-1B	2	0.015	0.02	1.3	0.2
Woodbridge	Armory	1	Armory Kitchen	WBE-2-15-18-2A	1	0.015	0.235	1.3	0.2
Somerset	Armory	1	Kitchen Sink 2, Food Prep, Under Space Heater	ST-2-15-18-2A	1	0.015	0.05	1.3	1
Woodstown	Armory	1	Right sink by wall	WN-2-23-18-2A	1	0.015	0.033	1.3	0.2
Mercer	State Police Office	1	Break Room	MR-02-22-18-1B	2	0.015	0.048	1.3	0.07
Sea Girt	Bldg. 66 Museum	1	Water fountain	SG-03-01-18-13A	1	0.015	0.023	1.3	0.04
Dover	Armory	1	Lower level kitchen sink	DR-3-9-18-1A	1	0.015	0.02	1.3	1
Hackettstown	Armory	1	Kitchen Sink by fire extinguisher SYS1	HACK-4-5-18-1A	1	0.015	<0.017	1.3	0.2
Newark	Armory	1	Break room sink	NK-4-13-18-1A, 1B	1,2	0.015	0.017, 0.034	1.3	0.7, 0.6

Round 2 Targeted Faucets

Randomly Generated Subset of Faucets That Produced Samples < The AL of Pb or Cu on Draws 1 and 2

Site	Building	Floor #	Faucet Description	First Round Sample ID	Draw	Lead Action Level (mg/L)	Lead Results (mg/L)	Copper Action Level (mg/L)	Copper Results (mg/L)
Sea Girt	Bldg. 21 Barracks	1	Water fountain	SG-03-01-18-22A	1	0.015	<0.002	1.3	0.7
Tuckerton	Armory	1	Kitchen Sink	TN-1-29-18-1A	1	0.015	0.012	1.3	0.09
Somerset	FMS	1	Locker Room	ST-2-15-18-3A	1	0.015	<0.002	1.3	0.2
Hammonton	Armory	1	Kitchen Sink	HN-03-08-18-1A	1	0.015	0.003	1.3	0.07
Sea Girt	Bldg. 11 Mess Hall	1	Chow house sink in dish return room	SG-03-01-18-2A	1	0.015	0.005	1.3	<0.04
Vineland	Armory	B	Kitchen sink by ice machine	VD-03-08-18-2A	1	0.015	<0.002	1.3	0.04
Vineland	Armory	1	Water fountain by bathrooms	VD-03-08-18-3A	1	0.015	<0.002	1.3	0.1
Hammonton	Armory	1	Water Fountain by Mens Room	HN-03-08-18-2A	1	0.015	<0.002	1.3	0.04
Woodbury	Armory	1	Right faucet, back of kitchen	WY-2-26-18-1A	1	0.015	0.002	1.3	1

All samples will be collected following the same methods as in the First Round. Second Round sampling will be completed by the end of September, 2018.