



DEPARTMENT OF THE AIR FORCE
316TH OPERATIONAL MEDICAL READINESS SQ (AFDW)

27 October 2020

MEMORANDUM FOR 316 CES/CEOIU

FROM: 316 OMRS/SGXB

SUBJECT: Bacteriological Water Sampling Results for October 2020

- References: (a) AFI 48 – 144, *Drinking Water Surveillance Program*.
(b) Environmental Protection Agency (EPA), Safe Water Drinking Act 1974 (Amended 1984 and 1996).
(c) 40 CFR 141, National Primary Drinking Water Standards.
(d) 40 CFR 143.3, National Secondary Drinking Water Standards.

1. INTRODUCTION: During the month of October 2020, A1C Madeline Lassegue and SrA Gabriel Leak from the Bioenvironmental Engineering (BE) Flight collected routine water samples from Joint Base Andrews facilities for bacteriological, chlorine, and pH analysis.

2. BACKGROUND: Sampling locations and frequency were determined by the Joint Base Andrews Environmental Sampling Plan. Bacteriological sampling was conducted using IDEXX Colilert sampling media and the samples were then incubated at 35°C for 24 hours. The chlorine and pH were analyzed with the HACH water test kit model DR-900 (SN: 152290001001) Sampling is performed on a monthly basis IAW above references (a) through (d).

3. RESULTS:

Bldg #	Location	pH ¹	Free-Available Chlorine ^{2, 4, 5}	Total Coliform ³	E. coli	Date Sampled
1225	213 AS Water Point	7.5	0.46	Negative	Negative	7 Oct 20
4575	CDC #1	8.5	0	Negative	Negative	7 Oct 20
4783	CDC #2	7.7	0.42	Negative	Negative	7 Oct 20
3725	CDC #3	7.5	0.2	Negative	Negative	7 Oct 20
4700	Youth Center	7.03	0.03	Negative	Negative	8 Oct 20
5016	PAG Water Point (right hose)	+++	0	Negative	Negative	7 Oct 20
5016	PAG Water Point left hose	+++	0.02	Negative	Negative	7 Oct 20
1900	89 APS Truck 03L00046	7.7	0.12	Negative	Negative	20 Oct 20
1900	89 APS Truck 03L00096	7.6	0.59	Negative	Negative	20 Oct 20
1060	MDG Room 1B39	7.5	0.06	Negative	Negative	20 Oct 20
1900	89 APS Water Point	7.4	0.2	Negative	Negative	23 Oct 20
3635	459 th Maintenance Squadron	8.1	0.09	Negative	Negative	20 Oct 20
3056	Emergency Management	7.3	0.42	Negative	Negative	23 Oct 20
N/A	Davidsonville	7.9	0.38	Negative	Negative	23 Oct 20

- 1) Acceptable pH range is 6.5-8.5 IAW 40 CFR 143.3 National Secondary Drinking Water Standards
2) EPA chlorine residual limit is <4.0 IAW 40 CFR 141 National Primary Drinking Water Standards
3) Absent coliform is acceptable IAW 40 CFR 141 National Primary Drinking Water Standard
4) BE internal standard for chlorine residual for CDCs and Youth Center is 0.01 -- 4.0 ppm
5) BE internal standard for chlorine residual not to include CDCs and Youth Center is 0.02 -- 4.0 ppm

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4. FINDINGS:

a. The pH for the left and right hoses at the PAG aircraft watering points in building 5016 were greater than 8.5. The HACH water test kit model DR-900 utilized for analysis is unable to quantify above this level. The PAG water points were negative for total and fecal coliform. This has been noted as a continuing issue and Terrapin Utility has been notified. Terrapin will continue to flush the fire hydrants around building 5016 until the issue is remediated.

b. The chlorine levels at Child Development Center (CDC) 1 were unable to be read by the HACH test kit model DR-900. BE will notify Terrapin about this issue.

5. RECOMMENDATIONS:

a. BE has recommended that Terrapin flush the water lines around building 5016 on a weekly basis in an attempt to adjust the pH within normal levels. Flushing of all other water lines around JBA is recommended on a bi-monthly basis to alleviate stagnancy within the water lines on Joint Base Andrews.

b. BE will conduct additional monitoring of building 5016 for elevated pH levels and make further recommendations as required.

6. If you have any questions or concerns please contact BE at DSN 857-3380 or by email at usaf.jbanafw.11-mdg.mesg.bioenviromental-eng@mail.mil.

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