



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 19TH AIRLIFT WING (AMC)
LITTLE ROCK AIR FORCE BASE, ARKANSAS

4 January 2017

MEMORANDUM FOR 19 CES/CEOIU
19 CES/CEIE
19 AW/PA
19 AW/JA

FROM: 19 AMDS/SGPB

SUBJECT: Little Rock AFB Water Quality Report (Q4, 2016)

1. In accordance with (IAW) AFI 48-144, *Drinking Water Surveillance*, the Little Rock AFB Bioenvironmental Engineering Flight (BEF) conducts the water surveillance and compliance program for the installation. The base drinking water program is supported by numerous base agencies which include: Civil Engineering-Water/Fuels Maintenance (CEOIU), Civil Engineering-Environmental (CEIE), Public Affairs (PA), Judge Advocate (JA) and the BEF. Together, these agencies comprise the Drinking Water Working Group (DWWG). The water surveillance and compliance program consists of 1) Routine compliance sampling to meet federal, state, and Air Force (AF) requirements, 2) Non-routine/response samples required following incidents affecting drinking water quality (i.e. water service line breaks), 3) Cooperation with the Jacksonville Water Board (Water Purveyor) and 4) Direct correspondence with the Arkansas Department of Health (ADH). The ADH has primacy for the state of Arkansas and regulates all public water systems within the state, IAW the Safe Drinking Water Act.

2. Routine compliance sampling conducted by the BEF during Q4, 2016 included bacteriological, chlorine and pH monitoring conducted at 12 locations throughout the water system. Quarterly disinfection by product samples were collected by the ADH at 2 locations during Q4, 2016.

a. All routine samples taken during Q4 were found to be total coliform and fecal coliform absent. This complies with all ADH and AF requirements. Additionally, 27 samples collected at child development centers, youth centers, community centers and aircraft water servicing points were found to be coliform and fecal coliform absent IAW AFI 48-144, *Drinking Water Surveillance*.

b. Chlorine measurements collected throughout the system during Q4 demonstrate that an effective disinfectant residual is being maintained within the system. The range of free-available chlorine during the Q4 period was 0.38 mg/L to 1.68 mg/L. This complies with ADH and AF requirements

c. PH measured throughout the system during Q4 ranged from 6.8 to 7.6. This compares to the Safe Drinking Water Act secondary standards of 6.5 to 8.5.

d. Two samples were collected by the ADH in Q4 for disinfection by-products IAW the Disinfectant By-Product Monitoring Rule. Analysis was performed on these samples for Total Trihalomethane (TTHM) and Haloacetic Acid (HAA) contaminants. These samples were collected at Building 1423 and the water main adjacent to Building 1389. Compliance is based on a running annual average for the entire water system and a locational running average for each location. The Q4 2016 annual running average for the system was 63 parts per billion (ppb) for TTHM contaminants and 25 ppb for HAA contaminants. The Q4 2016 Operational Evaluation Limit was 61 ppb for TTHM contaminants and 20 ppb for HAA contaminants. This compares to a compliance standard of 80 ppb for TTHM and 60 ppb for HAA.

Additionally, results show that flushing lines near Camp Warlord aided in the successful attempt to lower high residuals of TTHMs within the LRAFB water system. This plan was applied due to the exceedance in the Operational Evaluation Limit which occurred in 2014. We recommend that CEOIU continues to flush this area until water infrastructure upgrades are completed. Once upgrades are complete, BEF will evaluate TTHM levels to provide an appropriate recommendation on TTHM flushing requirements.

3. Four samples were collected during Q4, 2016 in response to water service line breaks. All samples collected during Q4 were found to be coliform and fecal coliform absent. Following negative results, water lines were returned to normal service operations by CEOIU.

4. Members of the LRAFB water quality team attended a private water review board meeting with Jacksonville Water Works on 12 December 2016. Attendees included: Lt Col Weaver, MSgt Stein, SrA Monroy and SrA Morris from the BEF, and Ms. Gamber from CEIE. Topics discussed included the overall status of the LRAFB water distribution system, updates on the new water analysis tasking for perfluorinated compounds and the procedures of the Jacksonville Water Works water distribution system. Currently, Jacksonville Water Works has provided a final proposal for privatization of LRAFB water and wastewater to the Defense Logistics Agency. No other updates were discussed during this meeting.

5. If you have any questions regarding this survey please contact SrA Monroy or myself at 987-7398.

AARON D. WEAVER, Lt Col, USAF, BSC
Flight Commander, Bioenvironmental Engineering

cc:

19 CES/CEO
19 MDG/SGP
19 AMDS/CC