

November 15, 2017

Isaac Robert- Program Manager
Office of Laboratory Licensure & Certification
Bureau of State Laboratory Services
250 N 17th Avenue
Phoenix, Arizona 85007

Dear Mr. Robert,

In response to your letter dated October 24, 2017, the City of Cottonwood has developed the following corrective action plan for your review and approval. By completing and implementing the corrective actions listed below, the city is hopeful that it has addressed the issues and concerns identified in your findings to your satisfaction. Should there be additional issues or concerns the city may have overlooked or not addressed sufficiently to your satisfaction, please let us know so that we may develop and incorporate further corrective actions into our action plan as required.

Corrective Actions:

All activities and personnel associated with the laboratory are now the sole responsibility of the laboratory director. All testing, sampling, report writing and other duties associated with the laboratory will be at the exclusive direction and oversight of the laboratory director. No personnel, other than those authorized by the laboratory director, shall participate in any activities related to the operation of the laboratory including, sampling, data collection, testing and report writing.

The City of Cottonwood's laboratory personnel have discontinued collecting the drinking water microbiological samples. The city has reassigned the task of collecting drinking water microbiological field samples to the city's water department, where a dedicated sample storage area has been created. The water treatment operators collect all field samples according to the Microbiological Site Sampling Plans for each water system. Collected samples are transported on ice by water operations personnel to the water sample storage area where the samples will be stored in a refrigerator dedicated exclusively for drinking water microbiological samples, prior to being transported by a third party freight company to a certified contract laboratory for analysis. The city initiated this program of sending drinking water microbiological samples to a certified independent laboratory on August 7, 2017.

The city's laboratory license for drinking water and wastewater coliform parameters was up for annual renewal on 12/3/2017 and the city has elected not to renew the laboratory's certification for Coliforms, Total and E.Coli by Colilert (ONPG-MUG) for Drinking Water. In order to immediately eliminate one of the primary issues and concerns identified in your findings, the city has elected to have all microbiological drinking water samples analyzed by a certified independent laboratory at this time.

A new Quality Assurance Plan (QAP) and Standard Operating Procedure (SOP) for field water sampling has been created. (See Exhibit 1a and 1b)

All water treatment operations personnel have completed in-house sampling and procedure training of Colilert P/A field sampling. Water treatment operations personnel have also been given copies of the QAP and SOP's. The City has purchased and is now utilizing a third party safety/policy software training program to create training sessions related to the QAP and SOP, laboratory training, ethics and other relevant courses. All water treatment operations personnel are required to read and understand the course content. To determine staff's level of knowledge and understanding of the subject matter, regular testing is and will continue to be administered. The software allows management to generate reports, schedule and track completion of trainings, and produce statistical information that assists management in identifying where and when additional training may be required.

On October 10, 2017, all water treatment and wastewater laboratory personnel attended a Test America webinar titled "The Relationship of the Field Sampler and the Lab".

The city has purchased a traceable Memory Loc Datalogging thermometer to ensure the dedicated sample refrigerator at the water department is maintaining the required temperature. This device has audible alarms, high and low alarm set points, alarm event data that includes date/time out of range, date/time back in range and has datalogging capability. This device was installed on September 7, 2017.

The city has also purchased Traceable Memory Loc Datalogging Thermometers for the incubator and refrigerator at the Mingus Avenue laboratory. These devices have the same capabilities as noted above, except the incubator datalogger has two bottle probes; one for each shelf. Each probe records the data and triggers alarms separately. The Traceable Memory Loc Datalogging thermometer for the incubator was installed on September 15, 2017. The Traceable Memory Loc Datalogging thermometer for the refrigerator at the Mingus Avenue laboratory was installed on September 12, 2017.

The city has ordered atomic digital wall clocks for the Mingus and Riverfront laboratories to ensure the accuracy of time being recorded. The city is using an atomic digital clock at the water samples storage area.

As of August 21, 2017, the city has been sending all groundwater sampling and bacteriological analysis for water main replacements, repairs and installations to a certified independent laboratory for analysis. Included with each sample is the appropriate chain of custody documentation.

The city has revised the Colilert MPN-Standard Operating Procedure and the Quality Assurance Plan to reflect the changes that have occurred. (See Exhibit 2a and 2b).

In response to number 11 of your findings, the city mistakenly reported the geometric mean number twice. Staff did send the E.coli results reports in the data package for the November 2016, monthly DMR which does indicate the daily maximum value should have been recorded as 59.1 MPN.

We appreciate that ADHS has afforded the city the opportunity to address the findings and allowed us to maintain our wastewater laboratory license. We look forward to working with you in the future.

Regards,

Doug Bartosh City Manager Debbie Breitkreutz

Regulatory Compliance,

Safety and Education Administrator

Enclosures:

Quality Assurance Plan-Drinking water 2017 -- Exhibit 1a

Standard Operating Procedures- P-A Sop for sampling 9-2017 Exhibit 1b

Quality Assurance Plan-11132017 Exhibit 2a

Standard Operating Procedure-Quanti-tray SOP 11-13-2017 Exhibit 2b