

# STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION KNOXVILLE ENVIRONMENTAL FIELD OFFICE

3711 MIDDLEBROOK PIKE
KNOXVILLE, TENNESSEE 37921-6538
PHONE (865) 594-6035 STATEWIDE 1-888-891-8332 FAX (865) 594-6105

April 12, 2018

Mr. John Russell, President Arthur-Shawanee Utility District 112 Kirby Street Harrogate, TN 37752

**RE:** Compliance Evaluation Inspection

Arthur-Shawanee Utility District NPDES Permit No. TN0081639 Claiborne County

Dear Mr. Russell:

On March 29, 2018, personnel from the Division of Water Resources (DWR) visited the Arthur-Shawanee Water Treatment Plant (WTP) and performed a Compliance Evaluation Inspection (CEI) of the filter backwash water. The inspection consisted of a records review to document the operational performance of the system and an on-site inspection of the facility. The Division would like to thank Mr. Eric Garland and Mr. Richard Johnson, along with all staff met during the inspection, for their courtesy, willingness to work with the Division, and timely responses to Division requests.

As a result of the inspection the following comments, deficiencies, and/or recommendations have been noted:

### 1. Site Review

The Arthur-Shawanee WTP utilizes conventional filtration with a design capacity of 1.8 MGD and was operational at the time of inspection. Backwash water from the plant is sent to one of two lagoons where the water is allowed to settle. When full, the lagoons decant to the Davis Branch impoundment, which is a raw water holding pond at mile 0.5 of Davis Branch. The impoundment overflows to the Powell River at mile 15.

### 2. Records & Reports

The NPDES permit, which expires in August of 2020, requires the Arthur-Shawanee WTP to grab sample once a month for Total Suspended Solids (TSS), pH, Aluminum, Iron, Settleable Solids, and total chlorine residual during times of discharge to the Davis Branch impoundment. A review of the Discharge Monitoring Reports (DMRs) back to April 2016 revealed the occurrence of only one permit limit violation for Total Suspended Solids in April 2017.

## 3. Sludge Handling

To date, the lagoons have not required cleaning; however, they are becoming full and will require attention in the near future. The utility has the option to dispose of sludge in an approved landfill or spread the water plant sludge on an approved land application site. The site and sludge application must be for beneficial land application but not for construction purposes. Please contact Division personnel for additional assistance and/or approval of sites.

### General Observations, Comments, and/or Other Recommendations

It was noted that all records were well organized and available for review and NPDES signage requirements are being met in accordance with the permit. Furthermore, the Arthur-Shawanee WTP is implementing Method Update Rule (MUR) requirements for laboratory processes.

Again, I would like to thank facility personnel for their assistance and courtesy. If you have any questions or need additional information, please contact me at the Knoxville Environmental Field Office. My telephone number is (865) 594-5513.

Sincerely,

Gred Mige

Greg Mize, Environmental Consultant

Knoxville Environmental Field Office

Division of Water Resources

cc: Mr. Eric Garland, General Manager, ASUD DWR, Nashville Central Office