

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

November 14, 2019

Mr. Dean Harshbarger, Chairman Norris Water Commission P.O. Box 1090 Norris, TN 37828

RE: Compliance Evaluation Inspection

Norris Water Commission NPDES Permit No. TN0004553 Anderson County

Dear Mr. Harshbarger:

On October 31, 2019, personnel from the Division of Water Resources (DWR) visited the Norris 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. Tony Wilkerson, 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 Norris WTP has a design capacity of 0.432 MGD and was operational at the time of inspection. The plant's source is Clear Creek Spring. Raw water is injected with a polymer (Aluminum Sulfate) prior to entering two parallel pressure sand filters. Finished water is chlorinated and fluoridated as it enters a 100,000 gallon clearwell. Approximately twice per month, both pressure filters are backwashed to the system's backwash lagoon where it is given time to decant solids prior to being discharged via a valve to Clear Creek.

2. Records & Reports

The NPDES permit requires the Norris WTP to grab sample once a month for Total Suspended Solids (TSS), pH, Aluminum, Settleable Solids, and total chlorine residual during times of discharge to Clear Creek. A review of the Discharge Monitoring Reports (DMRs) back to October 2017 revealed the occurrence of no permit limit violations.

3. Sludge Handling

The Norris WTP dredges the backwash lagoon approximately every 10 years and transports the sludge to the Norris Wastewater Treatment Plant for drying and disposal. Current monitoring data and appearance of the lagoon does not indicate a need for dredging ahead of the established schedule.

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.

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. Tony Wilkerson, Superintendent DWR, Nashville Central Office (e-copy)