



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

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August 17, 2022

Mr. Tony Wilkerson, Superintendent
e-copy: norriswaterdept@att.net
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. Wilkerson:

On July 28, 2022, 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 you, along with all staff met during the inspection, for the 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, which became effective on October 2, 2020 and expires on August 31, 2025, 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. Instantaneous flow is calculated from plant water usage. A review of Discharge Monitoring Reports (DMRs) for the inspection period indicated no permit limit violations.

Total Suspended Solids (TSS), pH, settleable solids, and total chlorine residual are tested on-site by NWC water and wastewater personnel. Aluminum is sent to a third-party laboratory for analysis. Equipment and standards used for analyses were in good condition.

3. Sludge Handling

The Norris WTP dredges the backwash lagoon as needed, 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) 340-6341 or email at Greg.Mize@tn.gov.

Sincerely,



Greg Mize, Environmental Consultant
Knoxville Environmental Field Office
Division of Water Resources

cc: DWR, Nashville Central Office (e-copy)