



COMMONWEALTH of VIRGINIA

Karen Shelton, MD, FACOG
State Health Commissioner

Department of Health
OFFICE OF DRINKING WATER
Culpeper Field Office

400 S. Main Street, 2nd Floor
Culpeper, VA 22701
Phone: 540-829-7340

August 29, 2025

Rapidan Service Authority
Attn.: Mr. Timothy Clemons, General Manager
via email: tclemons@rapidan.org

Re: Wilderness Waterworks, Orange County, Public Water System Identification (PWSID)
VA6137999
Approved Corrective Action Plan and Schedule
Order by Consent – Effective June 13, 2025

Dear Mr. Clemons:

This letter is to inform the Rapidan Service Authority that the Culpeper Field Office (CFO) of the Virginia Department of Health (VDH) Office of Drinking Water (ODW) has reviewed and approved the Corrective Action Plan and Schedule submitted by you on behalf of the Rapidan Service Authority for the Wilderness waterworks on August 28, 2025. The CAP and Schedule is accepted as a part of the Order by Consent between the Rapidan Service Authority and the State Board of Health, which became effective on June 13, 2025.

If you have any questions or need assistance, please call me at (540) 829-7340 or email Jeremy.Hull@vdh.virginia.gov.

Sincerely,

Jeremy D. Hull, P.E.
Engineering Field Director

Attachments: Copy of Approved Corrective Action Plan and Schedule

ec: Case File

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CORRECTIVE ACTION PLAN AND SCHEDULE

RAPIDAN SERVICE AUTHORITY

WILDERNESS WATERWORKS

In response to the State Board of Health Order by Consent issued to Rapidan Service Authority (RSA or the Owner) for Wilderness Waterworks – PWSID No. 6137999, the owner representative – Mr. Timothy L. Clemons, General Manager, Rapidan Service Authority – submits on behalf of RSA the following corrective action items and proposed timeline for approval.

Corrective Actions: (Actions to be taken and Timeline)

Corrective Action Plan Item	Corrective Actions	Deadline
1.	Task: Continue implementing operational changes to actively and routinely monitor raw water quality and odor, including an updated raw monitoring schedule and recording results on daily bench sheets. Corrective Action: RSA has implemented operational changes by requiring the plant staff to observe the raw water quality and any odor at the plant pre-sedimentation basin at plant start-up and every four hours while operating. The observations are noted on the plant daily bench sheets.	Corrective Action Completed on November 22, 2024
2.	Task: Continue implementing policies and procedures to ensure infrastructure improvements at Wilderness waterworks are closely monitored and overseen with a proactive construction inspection program before equipment is placed into operation. Corrective Action: Prior to placing any critical piece of equipment in service, RSA requires on-site inspection by an RSA Manager or consultant. A “critical piece of equipment” is equipment for which the equipment’s failure is likely to negatively impact the quality or reliability of the water provided to customers. RSA will have a written standard operating procedure (SOP) completed by December 31, 2025. This policy and procedure will be implemented by RSA via communication with RSA staff and contractors and sharing the SOP with them. Revisions to the SOP and further training will be conducted as needed.	Complete Development and Initial Implementation of SOP by December 31, 2025

3.	Task: Create an asset management plan. Corrective Action: The creation of an asset management plan is underway and will be completed by June 13, 2027.	Complete by June 13, 2027
4.	Task: Review, and revise, if necessary, RSA's emergency management plan as required by EPA for community water systems. Corrective Action: RSA has already reviewed and updated its Emergency Management Plan as required by EPA for community water systems. It was reviewed by an EPA representative on June 25, 2025. The EPA representative confirmed that the 2021 version as well as the 2025 update met or exceeded all of EPA's requirements.	Corrective Action Completed on June 25, 2025
5.	Task: Develop and implement a standard operating procedure to improve methods of customer notification and outreach for both emergency and non-emergency events. Corrective Action: RSA has already made improvements to the frequency and methodology of customer notification delivery. RSA will have a formal SOP written and implemented by training relevant staff on the SOP by September 30, 2025. Revisions to the SOP and further training will be conducted as needed.	Complete Development and Implementation of SOP by September 30, 2025
6.	Task: Complete ongoing upgrades to the existing water treatment plant consisting of a new one million gallons per day treatment train and raw water intake modifications. Corrective Action: These upgrades will be completed as part of the following ongoing construction projects: Germanna-Wilderness Water Improvements Plan (G-WWIP) Phase 1A and Phase 1B.	Complete by December 31, 2026
7.	Task: Install security upgrades, including a camera at the intake. Corrective Action: RSA has installed an access control system for buildings at the water treatment plant. A security camera is being added to RSA's CCTV system to monitor the raw water intake area.	Complete by December 31, 2025
8.	Task: Submit to CFO, for review and approval, a preliminary engineering report, signed and sealed by a professional engineer, for installation of granular activated carbon filtration (the PER).	Submit PER to CFO by December 31, 2026

	Corrective Action: RSA is authorizing a consulting engineering firm to develop a water quality profile of the existing system, a coagulation study, a disinfection byproduct formation study and a granular activated carbon (GAC) polishing pilot study. These studies will inform recommendations for future treatment options in the PER, including installation of GAC filtration. RSA will submit the PER to CFO for approval.	
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Progress Reports

RSA shall submit a quarterly progress report to the ODW Culpeper Field Office.

Modifications to Scope of Work

The scope of work set forth in this corrective action plan and schedule may be modified based on new or unforeseen information. Any modifications shall be submitted in writing by the Owner with 30 days notice to the Compliance Specialist at the Culpeper Field Office; to be reviewed and approved by the Office of Drinking Water Culpeper Field Office.

Rapidan Service Authority submits for approval by the Office of Drinking Water, and agrees to comply with, this Corrective Action Plan and Schedule with respect to the Wilderness Waterworks.

Timothy L. Clemons
Print Name

General Manager
Title

Timothy L. Clemons
Signature

8/28/25
Date