



COMMONWEALTH of VIRGINIA

DEPARTMENT OF HEALTH

OFFICE OF DRINKING WATER

Richmond Field Office

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August 4, 2026

Dr. Scott Morris, P.E., Director
City of Richmond Department of Public Utilities
730 East Broad Street, 6th Floor
Richmond, Virginia 23219

RE: City of Richmond Waterworks, PWSID 4760100

Dear Dr. Morris:

Thank you for your July 10, 2026 quarterly report, which provides a formal response from the City of Richmond to Appendix A, Paragraph a and e of the Order by Consent, which became effective on June 28, 2025 (Consent Order) and includes a quarterly update spreadsheet.

The City's quarterly report shows its progress in addressing reported unresolved deficiencies, areas of concern, and recommendations that had been identified. During the second quarter of 2026, the City completed tank overflow improvements for the Ginter Park storage tank and completed installation of automatic valve and actuators for both Plants 1 and 2. In addition, the major filter improvement project has advanced to the construction mobilization phase.

Thank you again for timely submitting the quarterly report. ODW looks forward to the City's next quarterly report.

Please feel free to contact me at james.reynolds@vdh.virginia.gov or (757) 406-1252 if you have any questions.

Sincerely,

James Reynolds, PE
Field Director
Richmond Field Office



DEPARTMENT OF
**PUBLIC
UTILITIES**

To: Compliance Specialist
VDH - Office of Drinking Water - Richmond Field Office
109 Governor Street, 6th Floor
Richmond, Virginia 23219

From: Scott Morris, DBA, P.E.
Director, Department of Public Utilities
City of Richmond

Date: July 10, 2026

Subject: Quarterly Progress Report Pursuant to Consent Order for City of Richmond Waterworks (PWSID No. VA4760100) -- Appendix A, Paragraphs (a) and (e)

In accordance with the Consent Order issued by the State Board of Health on June 12, 2025, for the City of Richmond (City) Waterworks (PWSID No. VA4760100), the City hereby submits this quarterly progress report for the second quarter of 2026.

Paragraph (a) requires quarterly progress reports on the City's efforts to address the significant deficiencies identified in the Sanitary Survey Report, as detailed in the Significant Deficiencies Corrective Action Plan (CAP). Paragraph (e) requires quarterly updates on the progress of corrective actions derived from various compliance documents, including the EPA Inspection Report, the Sanitary Survey Report, the After-Action Assessment Report, and the Comprehensive Waterworks Evaluation and Cost Estimate.

As permitted under paragraph (e), this submission combines the reporting requirements for both paragraphs (a) and (e) into a single comprehensive update.

Executive Summary of Progress

During the second quarter of 2026, the City demonstrated measurable progress toward full compliance with the Consent Order, achieving two additional completions during the quarter (AOC-31 on June 1, 2026, and HTNB-11 confirmation in June 2026) and advancing critical infrastructure improvement projects into active procurement and construction phases.

The City's overall compliance rate has improved to **94.0%**, reflecting the completion of AOC-31, and HTNB-11 in June 2026. Of the 233 total items being tracked, **219** are now **fully resolved**, with **14 items** continuing in progress with defined timelines and responsible parties. During the second quarter of 2026, the City advanced multiple capital improvement projects from procurement phases into active construction, with significant progress on clearwell overflow system improvements and several other critical infrastructure projects.

The table below provides a detailed breakdown of progress by source document:

Source Document	Total Items	Resolved	Pending
EPA Inspection Report	93	88	5
Sanitary Survey Report	90	88	2
After-Action Assessment Report	30	25	5
Comprehensive Waterworks Evaluation	20	18	2
TOTAL	233	219	14

The Sanitary Survey Report identified 90 items requiring corrective action. As of Q2 2026, 88 items are fully resolved, with 2 items continuing in progress with defined schedules: VDH-06 (completion date May 30, 2029) and VDH-33 (completion date April 30, 2028). The City's focused attention to these significant deficiencies demonstrates effective prioritization and resource allocation toward the most critical infrastructure improvements.

Detailed Progress Report

The attached spreadsheet titled "City of Richmond Quarterly Update" provides a comprehensive line-by-line inventory of all 233 tracked items. For each item, the spreadsheet documents the specific observation or deficiency, the City's corrective action taken or planned, the schedule or completion date, the current status (Resolved or Pending), and quarterly status updates reflecting progress during the second quarter of 2026.

The spreadsheet has been updated to reflect the significant progress made during the second quarter of 2026, including the advancement of multiple projects into bid phases and construction, and the achievement of additional project milestones. The City has maintained comprehensive documentation of project timelines, procurement processes, and construction schedules for all remaining corrective action items.

Key Accomplishments and Progress this Quarter

The second quarter of 2026 was marked by the transition of multiple capital improvement projects from design and procurement phases into active construction and bid phases. Significant accomplishments during this quarter include:

- Q2 2026 Completion: AOC-31 Ginter Park Water Storage Tank Overflow System Improvements**

On June 1, 2026, the City completed AOC-31 (tank overflow system improvements), marking measurable progress toward full compliance with the Consent Order. This significant accomplishment included installation of fine mesh screening on the manway riser and entry door, completion of the overflow system redesign by Whitman Requardt and Associates (WRA), and subsequent construction completion of the WRA design. The completion of AOC-31 represents successful resolution of a critical sanitary protection deficiency and advances the City's overall compliance rate to 94.0%. This item was accomplished through coordinated design work with consulting engineers and demonstrates the effectiveness of the City's systematic approach to infrastructure improvements.

2. **Q2 2026 Completion: HTNB-11 Valve and Actuator Installation Confirmation**

During June 2026, the City received confirmation of completion for HTNB-11 (automatic valve and actuator installations), completing all outstanding equipment installation work at both Plants 1 and 2. Plant 1 actuator installations were substantially complete by June 2025, with final installation of the 24" BWS actuator (Filter #3) completed on February 18, 2026, due to a valve body replacement issue. All Plant 2 effluent valve installations were completed, with the final Plant 2 valve (Filter #22) installed on April 27, 2026, after resolution of valve seal issues. This completion confirms all automated valve control systems are now in place at the treatment facilities, supporting enhanced operational control and system reliability as required by the After-Action Assessment recommendations.

3. **Bid Phase Transitions**

Multiple capital improvement projects advanced into critical bid phases during the second quarter. Projects that had been in design phases through the first quarter of 2026 now moved forward with bid solicitations. These include projects addressing interior and exterior coating systems (O-27, O-28), roof support beam reinforcement (O-30), and other critical infrastructure systems. The advancement of these projects from design into procurement and construction represents a major milestone in the City's comprehensive corrective action implementation.

4. **Filter Improvement Project Construction Mobilization**

The comprehensive filter improvement project (HTNB-9, HTNB-10) advanced through the bid phase in Q2 2026 with construction mobilization scheduled for July 2026. This integrated project incorporates control logic enhancements developed in consultation with the City's engineering contractors and addresses multiple after-action assessment recommendations through a single coordinated effort. The project represents one of the most significant infrastructure improvements resulting from the Water Crisis investigation.

5. **Plant Pipe Replacement and Coating Contracts**

The City advanced procurement activities for Plant 1 and Plant 2 pipe replacement and cleaning projects (AOC-18). Building on proposals and quotes received in Q1 2026, the City completed cleaning Plant 2 pipes and initiated contract negotiations and preparation during Q2 2026 for Plant 1. The coordination of these pipe system improvements supports water quality assurance and protects critical distribution infrastructure from corrosion and deterioration.

6. **Electrical Systems Relocation Construction Planning**

Phase 2 of the electrical systems relocation project (HTNB-26) progressed from design into construction preparation during the second quarter of 2026. This critical infrastructure project addresses the vulnerability of electrical equipment in flood-susceptible areas by relocating systems to safer locations. The phased approach allows for systematic implementation while maintaining operational continuity.

7. **Operational Enhancements and Emergency Response Procedures**

Emergency Operating Procedure Manuals continued development during Q2 2026, with annual refresher training scheduled for July 2026 (HTNB-18). These comprehensive operational procedures ensure that all personnel understand critical emergency response protocols and can execute coordinated responses to system failures or emergencies. The updated procedures incorporate lessons learned from the Water Crisis and reflect industry best practices for system reliability.

8. Asset Management and Preventative Maintenance Implementation

The Department of Public Utilities continued work on converting corrective maintenance procedures to preventative maintenance protocols (SEH-5.2.4.1). Contracted engineers completed reviews of maintenance procedures, and DPU reformatted data systems to enable improved preventative maintenance tracking and reporting. These improvements support long-term asset preservation and reduce the risk of equipment failures during critical operations.

These accomplishments demonstrate the City's effective transition from planning and design phases into active construction implementation. The advancement of multiple coordinated projects position the waterworks system for significant operational and infrastructure improvements during the remainder of 2026 and into 2027.

Schedule Adherence and Ongoing Commitments

The City remains firmly committed to executing the comprehensive CAP in full alignment with the approved Schedule. Throughout the second quarter of 2026, the City achieved critical project milestones, the advancement of design phases, the progression of bids and contract awards, and the initiation of construction activities. The City's performance demonstrates consistent execution of planned project timelines.

The 14 remaining items continue to progress according to their respective schedules. Several major projects have now transitioned from planning phases into active construction, which will drive completion of multiple corrective action items during the third and fourth quarters of 2026. The City maintains detailed project schedules, contingency planning, and regular communication with consulting engineers to ensure timely completion of all remaining items.

The City continues to collaborate closely with the Richmond Field Office on all aspects of CAP implementation. This collaborative approach ensures that corrective actions not only meet regulatory requirements but also incorporate best practices and represent sustainable, long-term improvements to system reliability and resilience.

Next Quarter Priorities

The third quarter of 2026 will focus on active construction management and project completion, with particular emphasis on:

1. Monitoring and supporting ongoing construction activities for the filter improvement project and related corrective action work, with critical completion milestones anticipated in Q3 and Q4 2026;
2. Executing final contracts and mobilizing construction for Plant pipe replacement and cleaning projects (AOC-18), interior and exterior coating systems (O-27, O-28), and roof support reinforcement (O-30);
3. Advancing Phase 2 electrical systems relocation work (HTNB-26) through the construction phase, ensuring systematic movement of vulnerable equipment to safer locations;
4. Conducting annual refresher training on Emergency Operating Procedure Manuals (HTNB-18) in July 2026, ensuring all staff understand updated emergency response protocols;
5. Completing asset management data system improvements and implementing preventative maintenance protocols based on engineering reviews; and

6. Tracking and documenting completion of construction activities, testing and commissioning of new systems, and final resolution of remaining corrective action items as projects reach substantial completion.

Conclusion

This quarterly progress report demonstrates the City of Richmond's sustained commitment to full compliance with the Consent Order and to implementing comprehensive improvements to the waterworks system's reliability and resilience. The progress achieved during the second quarter of 2026 represents the successful completion of one significant corrective action item and the transition of multiple capital improvement projects from design and procurement phases into active construction and implementation.

With 219 of 233 items resolved (94.0% completion), the City has achieved measurable progress toward full compliance. The completion of AOC-31 during Q2 2026 demonstrates the City's ability to execute complex corrective actions on schedule. The remaining 14 items are now in advanced stages of implementation, with multiple projects currently under construction or in final procurement phases. The Department of Public Utilities remains committed to completing all remaining items according to approved schedules while maintaining the integrity of all previously completed improvements and ensuring continued full regulatory compliance.

Should the Richmond Field Office require additional information, clarification, or supporting documentation regarding any aspect of this submission, please contact me directly at (804) 646-5710 or scott.morris@rva.gov.

Respectfully submitted,

Scott Morris

Scott Morris, DBA, P.E.
Director, Department of Public Utilities
City of Richmond

Attachment: City of Richmond Quarterly Update Spreadsheet

This spreadsheet is in compliance with Section e. of Appendix A for Consent Order PWSID No. VA4760100						
Number	Reference Document	Entity/Organization Finding	Specific Observation, Regulatory Violation, Area of Concern, Recommendation, or Deficiency Identified	City of Richmond Corrective Action Taken, Planned, or Acknowledged	Schedule, Deadline, Date of Completion	Progress - Resolved or Pending (from City of Richmond's perspective)
1,2,3,4, 5....	Insert # or reference to specific report - Tie it to the underlying document	Insert VDH, EPA, HNTB, and/or SEH, Inc.			Insert date or explanation if no action is necessary	Provide additional explanations
O-27	Environmental Protection Agency (EPA) Safe Drinking Water Act Compliance Inspection Report. Date: April 7, 2025	Observations That Were Not Identified Areas of Concern – ODW inspection in 2025	EPA observed corrugated steel around the base of the elevated tank; there was some algal growth visible where the base of the Warick Road tank met the corrugated steel siding . No change. Condition has not changed, algal growth and some rusting observed. There are some bars that appear welded to the exterior of the tank that can act as a ladder to the top of the tank, there is no fence at the tank. 2023 tank inspection report recommends full rehabilitation of tank including exterior and interior recoating.	Acknowledged	06/30/27	Pending
O-28	Environmental Protection Agency (EPA) Safe Drinking Water Act Compliance Inspection Report. Date: April 7, 2025	Observations That Were Not Identified Areas of Concern – ODW inspection in 2025	VDH-ODW will follow-up in summer 2025. 1.Overflow located in a vault that also contains the drain and riser pipe. The overflow and tank drain go to the storm sewer. It is unknown if there is an air gap or screen and is a potential cross connection. 2.COR representatives that are tasked with escorting personnel to distribution facilities should be trained and familiarized with the facilities including locations of drains, overflows, inlet/outlet piping and their discharges. Discharges of overflows and drains should be identified and determined if they pose cross connection hazards.	Acknowledged	06/30/27	Pending

O-30	Environmental Protection Agency (EPA) Safe Drinking Water Act Compliance Inspection Report. Date: April 7, 2025	Observations That Were Not Identified Areas of Concern – ODW inspection in 2025	No security fencing observed, temporary fencing removed, and no permanent fencing put in place. Tank staining observed at time of inspection. 2023 tank inspection recommends exterior power wash, and immediate repairs to roof support beams.	Evaluated	06/30/27	Pending
AOC-18	Environmental Protection Agency (EPA) Safe Drinking Water Act Compliance Inspection Report. Date: April 7, 2025	Identified Areas of Concern by EPA with Response from COR and Follow-up by VDH-ODW	The air scour pipes above the filters were significantly corroded on the exterior. Failure of the air scour process could impair the filter performance. The filter beds are contained in an enclosed structure subject to the humidity and chlorine from the filter bed water; the exposed unpainted air scour piping had severe rust and corrosion damage.	Planned	05/30/29	Pending
AOC-35	Environmental Protection Agency (EPA) Safe Drinking Water Act Compliance Inspection Report. Date: April 7, 2025	Identified Areas of Concern by EPA with Response from COR and Follow-up by VDH-ODW	Byrd Park Main Pump Station operations at the pump station are manual and poorly maintained, reducing reliability to operation, capacity, and emergency response. The pump station is not tied to SCADA and requires manual operation. There were several housekeeping concerns at the pump station. There were not adequate logs or recordkeeping at the pump station for operator activities	Planned	04/10/29	Pending

VDH-06	SUBPART H SYSTEM SANITARY SURVEY REPORT	VDH-ODW	No overflow piping observed for Plant 1 or Plant 2 filtered water clearwell. This means there is no ability to route overflowing clearwell water away from flooding the pipe gallery area. When water in the clearwell reaches overflow levels, water floods the pipe gallery area through the clearwell vents and other pipe penetrations and access hatches and bolted covers. It is likely that a portion of this water migrates back into the clearwell, along with potential contamination from the floor and pumping equipment. This is a potential cross connection that should be mitigated by minimizing flooding events in the pipe gallery and keeping the area clean. COR should conduct an engineering evaluation to determine if sealing of pipe penetrations, access hatches, and other means of entry into the clearwell is advisable.	Acknowledged	05/30/29	Pending
VDH-33	SUBPART H SYSTEM SANITARY SURVEY REPORT	VDH-ODW	The exterior of tanks at Jahnke Road, Warwick Road, Ginter Park appeared to have some rusting. COR should evaluate if recoating of the exterior of the tanks is necessary.	Planned	04/30/28	Pending
HTNB -9	After-Action Assessment Report	City of Richmond	Add clearwell high level floats that signal control system to override filter effluent valve commands to close the valves. An engineered design is required to ensure that the WTP operates as designed with the addition of these floats.	Planned	05/30/29	Pending

HTNB -10	After-Action Assessment Report	City of Richmond	Ensure all filter valve actuators are rated as watertight and provide seal-tight fitting and conduit drain fitting prior to the seal-tight fitting within 10-inches of the actuator body. Install a breather fitting near the basement ceiling. Inspect the seal-tight fittings initially after one (1) month and then annually to check if water intrusion has occurred. (DPU has indicated that this has been completed and the recommended inspection checks will be conducted).	Planned	05/30/29	Pending
HTNB -18	After-Action Assessment Report	City of Richmond	Expand DPU Emergency Operations Manual to include scenario-specific and process-specific actions for plant staff to follow during emergency events. Ensure plan is kept current and readily accessible per 12VAC5-590-505	Planned	07/31/26	Pending
HTNB -24	After-Action Assessment Report	City of Richmond	Install dewatering pumps, such as hydraulic-driven pumps, which avoid high suction head issues affecting the priming of the existing dewatering pumps. Dewatering pumps should also have higher flow rates than the existing dewatering pumps, 3,000 to 6,000 gpm is recommended, and permanent piping that routes water away from the plant basements.	Planned	08/01/27	Pending
HTNB -26	After-Action Assessment Report	City of Richmond	Raise as many critical electrical systems above the plant basements as practical	Planned	09/30/26	Pending
SEH-5.2.2.1	Comprehensive Waterworks Evaluation and Cost Estimate	SEH	Where hydraulic valves are used, provide a local means of supplying hydraulic pressure through booster pumps and/or stored in pressure tanks.	Planned	05/30/29	Pending
SEH-5.2.4.1	Comprehensive Waterworks Evaluation and Cost Estimate	SEH	Continue transition to proactive maintenance program for all plant assets. Develop a formal asset management plan. Re-evaluate current work order system to identify if other key assets are missing from the system. Solicit input from experienced operations and maintenance field personnel.	Planned	12/31/26	Pending