

PFAS & EMERGING CONTAMINANTS

Veolia Stanton WTP – PFAS Treatment for Public Health

[Setup a Consultation](#)



Veolia North America partnered with Newterra to design and implement one of the largest PFAS treatment systems in the United States, located at the

Stanton Water Treatment Plant in Wilmington, Delaware.

INDUSTRY

Municipal Potable Water

LOCATION

Wilmington, Delaware

TECHNOLOGY

PFAS – Pressure Vessel Systems

EXECUTIVE SUMMARY

The system treats 30 million gallons per day and protects more than 100,000 residents in New Castle County from harmful PFAS compounds—four years ahead of federal mandates. Newterra supplied 21 CP40K-12 systems (42 vessels total) and custom valve racks configured for lead-lag operation. The solution is not only scalable and media-flexible, but also emblematic of a community-centered approach to public health, equity, and sustainability.

CLIENT AND COMMUNITY



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Client: Veolia North America, a leading environmental services firm managing municipal water systems, delivers sustainable water and environmental services to both municipal and industrial clients.

Community Served: The Stanton WTP supplies drinking water to more than 100,000 residents of New Castle County, Delaware. The area includes historically underserved populations, many of whom lack access to household filtration systems. Water is sourced from local rivers including Red Clay Creek.

PROJECT OBJECTIVES AND COMMUNITY-CENTERED AIMS

- **Primary Goal:** Comply with EPA's newly released PFAS regulations by removing harmful "forever chemicals" from the drinking water supply.
- **Community Focus:** Ensure access to PFAS-free water for all residents, particularly those unable to afford filtration systems, and restore public confidence in the safety of local water.
- **Environmental & Social Mission:** Support Veolia's "GreenUp" initiative for ecological transformation, which emphasizes both environmental responsibility and community resilience.

CHALLENGES AND STAKES FOR THE COMMUNITY

- **PFAS Contamination:** Prior to the upgrade, PFAS levels in the community's water reached up to 29 parts per trillion (ppt), exceeding new regulatory limits and exposing residents to potential long-term health risks including cancer, liver damage, thyroid issues, and developmental effects in children.

- **Public Trust & Urgency:** Continued exposure would have deepened public health disparities, especially among vulnerable households. The stakes extended beyond compliance—this was about restoring public trust and proactively protecting the health of an entire region.





THE NEWTERRA SOLUTION: PROTECTING THE COMMUNITY

Newterra supplied 21 CP40K-12 granular activated carbon (GAC) systems, totaling 42 twelve-foot diameter pressure vessels, along with 21 lead-lag valve racks. These modular systems were engineered for media flexibility and long-term adaptability. The plant was also designed to house on-site pilot systems for continuous innovation and media testing.

The installed system treats up to 30 million gallons per day, with PFAS levels in finished water reduced to non-detectable levels. The Stanton WTP is now operational four years ahead of the EPA's 2029 compliance deadline, demonstrating both leadership and urgency in addressing emerging contaminants.



COMMUNITY IMPACT AND BENEFITS

- **Health & Safety:** Delivers PFAS-free drinking water to over 100,000 people, ensuring safety well before federal mandates.
- **Equity & Inclusion:** Especially benefits residents in underserved areas who otherwise lack access to in-home filtration solutions.
- **Public Trust & Transparency:** Local leaders and health advocates praised the facility as a “**generational investment in community protection.**”
- **Sustainability & Readiness:** The media-flexible design allows for integration of next-generation adsorptive technologies, positioning the community for future-proof water safety.



WHY IT MATTERS

This project represents more than an engineering achievement—it's a public health milestone. Veolia's early action and Newterra's reliable, high-capacity systems delivered what communities urgently needed: clean, safe, equitable drinking water. In an era of rising scrutiny around PFAS and environmental justice, the Stanton WTP stands as a model for how public-private partnerships can lead with purpose and deliver results.



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We Are Here to Help

Partner with Newterra to maximize your water resources. Together, we'll design solutions specific to your needs in the food and beverage industry, boosting your efficiency and driving success.