

Adding Value with Strategic Partnerships

In 2021, a petrochemical company in the West faced regulatory changes that mandated improvements to its wastewater treatment system. The new regulations imposed stringent limits on the discharge of PFOS (Perfluorooctanesulfonic acid) and PFOA (Perfluorooctanoic acid), demanding immediate action to ensure compliance. In response, they partnered with HPC Industrial to deploy a robust wastewater treatment solution capable of meeting these new standards while optimizing operational efficiency.

Our Approach

HPC Industrial implemented a state-of-the-art 1,500 gallons per minute (gpm) treatment system that operates continuously, to process the plant's effluent water before discharge. With a focus on maximizing space, the engineering and field teams meticulously designed the system layout to fit within the limited installation area. Special consideration was given to winterization, ensuring the system remains operational even in harsh weather conditions.

The engineering team made strategic recommendations regarding vessel arrangement and sizing, deviating from the initial specifications to enhance long-term operational efficiency. This proactive approach laid the groundwork for a system that not only met compliance requirements but also improved overall performance.

HPC's National Water Services team was essential to the project's success, consistently seeking ways to create value for the client. They identified and implemented multiple cost-saving measures throughout the project while adhering to the stringent effluent discharge criteria. By closely monitoring influent levels and assessing the media removal performance, HPC was able to achieve significant savings for the customer, totaling 45% over the four-year life cycle of the project.



Optimized Results

As of March 2024, HPC Industrial has successfully processed approximately 128 million gallons of water without a single discharge violation, demonstrating the effectiveness of the implemented treatment system. A thorough evaluation of carbon disposal requirements revealed that the used carbon could be reactivated rather than incinerated. This decision yielded dual benefits for the client: reactivation is substantially more cost-effective than incineration and it allows for the recycling and reuse of the media.

The reactivation process is conducted at a certified facility, ensuring compliance and providing a certification of destruction upon completion. This holistic approach not only meets regulatory standards but also promotes sustainability and cost efficiency, solidifying HPC's commitment to delivering exceptional service and value to its clients.