



SEIDERS HILL

PROJECT-AT-A-GLANCE

Duperon Dual Auger System replaces grinder and drastically cuts associated plant maintenance.

SITE: *Seiders Hill Wastewater Treatment Plant*

EQUIPMENT: *One (1) Dual Auger System*

INSTALLED: *March 2021*

RESTORING RESILIENCE

The Schuylkill County Municipal Authority (SCMA), Seiders Hill wastewater treatment plant serves residential and institutional customers in Pottsville, Pennsylvania. Flows range from 13,000 GPD to 20,000 GPD at the plant, which is one of seven (7) operated by SCMA in the region.

THE CHALLENGE

Like many treatment facilities today, the Seiders Hill plant was plagued by chronic clogging of equipment caused by “flushable” wipes and other rags. The plant provides service to a long-term care facility, an assisted living center, and a health care provider office. Clogging of the EQ pumps and aeration return lines were problems. The plant was equipped with a small grinder designed to macerate influent debris. However, this did not remove the wipes; it merely shredded them into smaller pieces, which remained in the waste stream. Downstream, these ground up pieces would reconstitute into clumps, which would then clog the pumps. This resulted in downtime to clear the pumps.

Downstream, plant staff used pool skimmers to manually clean the EQ tank and clarifiers multiple times a week, removing the macerated debris before it could impact effluent quality. The process was time-consuming and took plant staff away from other operational tasks. With multiple treatment plants and thirty (30) pumping stations to manage and maintain, this additional maintenance and time spent clearing the EQ pumps placed unnecessary strain on the SCMA staff.

“Installation was really simple.”

THE SOLUTION

Operations Manager Jesse Weiss researched potential solutions but found few alternatives for smaller plants like Seiders Hill. Then they learned about the Duperon Dual Auger System. As the name suggests, the unit is comprised of two vertical, electrically driven, counter-rotating augers that catch, dewater, compact, and remove wipes and other debris from the waste stream, conveying them to a discharge chute or bin for disposal. The unit is fully submersible and compact enough to fit in tight spaces.

A key aspect of the Dual Auger System is its ability to provide effective removal of wipes and other non-organic debris, while still allowing fecal matter to proceed to downstream treatment.

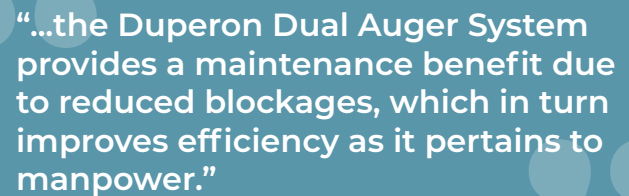
Weiss gave the Dual Auger System the green light and the unit was installed utilizing a turnkey solution from local Duperon representative Kappe Associates. "Installation was really simple," said Jim Moyer of Kappe Associates. "With some electrical preparation work, the grinder was removed and the Dual Auger System was operational within just a few hours."

THE RESULTS

Since its installation in March of 2021, the Duperon Dual Auger System has been operating around the clock—more than 4,300 hours of uninterrupted operation and counting. In that time, the plant has not experienced any blockages of the EQ pumps, dramatically improving its resilience. The system has successfully captured wipes and other debris, pushing it up into the discharge chute, which is just now reaching the top of its nine-foot span.

While the unit is typically installed in a wet well or manhole, at Seiders Hill WWTP the Dual Auger System was installed at the plant headworks. Duperon will be partnering with the site to optimize the bar openings for this type of application later this year.

Weiss is pleased with the unit's performance, noting that it has freed up plant staff from time-consuming maintenance hassles. "For us, the Duperon Dual Auger System provides a maintenance benefit due to reduced blockages, which in turn improves efficiency as it pertains to manpower," Weiss says.

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"...the Duperon Dual Auger System provides a maintenance benefit due to reduced blockages, which in turn improves efficiency as it pertains to manpower."

ABOUT DUPERON

Duperon Corporation is the leader in innovative preliminary liquid/solids separation systems. For more than 35 years, Duperon has provided simple yet innovative solutions for a variety of screening and solids handling applications in the water and wastewater industry. Duperon technologies are designed and manufactured in Saginaw, Michigan.