

Case Study: SRVSA Bridgewater, New Jersey



NJ Sewerage Authority Wastewater Facility "Like Night & Day" with New Dialight LED Lighting Upgrade

Plant-wide Retrofit Alleviates Lighting Maintenance Hassles

Serving seven New Jersey communities, the Somerset Raritan Valley Sewerage Authority (SRVSA) treats 19 million gallons of waste per day on a 32-acre site in the Township of Bridgewater. Originally built in 1958, the facility annexed a former industrial treatment facility in the 1980's.

Improved Lighting Conditions

As a result of the integration, it's electrical and lighting systems were not only outdated, but also a hodgepodge of equipment that made procuring replacement bulbs and other parts extremely difficult. The antiquated lighting also meant inadequate lighting with many places.

"To say we had inadequate lighting is an understatement," said Sherwin Ulep, Manager of Engineering at SRVSA. "We run 24 hours a day, which means three shifts of operators and at night in the winter, it's really dark in certain areas by 5 p.m. Even our exterior tank lighting was from the 1980s and it was very dim."

Not to mention, lighting maintenance was a bit of a nightmare. The corrosive hydrogen sulfide produced by the wastewater wreaked havoc on the lights, causing premature fixture failure. With so many different models of fixtures installed, keeping replacement bulbs on hand was extremely difficult and, because of their age, some were getting hard to find.



Dialight LED fixtures illuminate the exterior tanks in Bridgewater, NJ.

"We bought crates and crates of halogen lamps and we kept them everywhere in storage containers throughout the plant for fast replacement in critical areas," Ulep said. "One bulb might last five years, and another less than a year and because nothing was standardized, we'd have to look for specific bulbs for each building. It was extremely unpredictable and keeping up with replacements was a huge problem."

Dialight: The Right Solution at the Right Time

Looking for a more modern and reliable solution, the SRVSA team took the advice of a consulting engineer who was working on a new building at a satellite facility and installed some sample lights from Dialight, the world leader in industrial LED lighting. "We knew about LEDs but not about Dialight. Our engineer told us how great they were, that they were very robust and reliable," Ulep said. "When we drove out to Delaware to see them installed, we were really impressed."



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Dialight offered exactly the combination of guaranteed reliability, low maintenance and improved visibility SRVSA needed, along with the industry's best warranty—a full 10 years on every product they needed.

Now with about 60% of the new Dialight lighting installed throughout the plant, Ulep says the SRVSA is pleased with the results.

'Like Night and Day'

With the Dialight fixtures, the improvement in lighting at SRVSA "is like night and day," Ulep said. "It creates a much better working environment. Even our superintendent says, 'I've never seen this building lit up like this in my 25 years at the facility!' and I was very happy to hear that."

In one area of the WWTP's influent pump station where a flood destroyed the lighting system about 15 years ago, the new Dialight fixtures have made a huge difference, with clear visibility down all five flights of stairs.



Dialight LED Area Lights providing a brighter, safer work environment.

The lighting upgrade has also substantially improved security at SRVSA. Because SRVSA sees a lot of truck traffic with deliveries of graywater, septage and sludge, keeping those visitors on authorized routes is important, and the improved visibility with the Dialight lighting enhances the quality of security camera footage, allowing staff to better monitor traffic and respond to any issues.

Once complete, the Dialight retrofit project will cover about 90% of the plant. In about 18 months, SRVSA also plans to upgrade the lighting and electrical in its incinerator building.

Installation Snapshot

- Somerset Raritan Valley Sewerage Authority, Bridgewater, NJ
- Entire plant retrofit of antiquated halogen fixtures
- 400 Dialight fixtures installed:
 - Linears, Street Lights, Area Lights, Floodlights, RTOs, Low-Profile Linears
- 25 SafeSite hazardous location-certified fixtures
- Improved visibility and plant security
- Solved complex lighting maintenance problem



Dialight High Bay



Dialight Area Light

To learn more about Dialight's class-leading industrial LED lighting solutions for public works, water and sewage applications, visit www.dialight.com.

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