



On when
it counts.



City of Tulsa Water Plant Cuts Annual Energy Bill by \$22K, Saves \$10K per Year on Maintenance with Upgrade to Dialight LED Lighting



Dialight DuroSite® LED Low Bay Fixtures provide unparalleled illumination at A.B. Jewell Water Treatment Plant

Installation Snapshot

- Replaced 350 HID, metal halide and T12 fixtures at A.B. Jewell with 259 Dialight LED fixtures including:
 - 44 Area Lights
 - 64 High Bays
 - 6 Low Bays
 - 101 Low Bays
 - 44 Streetlights
- 446,576 kWh saved
- \$22,300 annual energy savings
- \$32,000 utility incentive
- \$10,000 per year saved on lighting maintenance

The Challenge

At the A.B. Jewell Water Treatment Plant in Tulsa, Okla., Facility management had grown tired of the headache and expense of never-ending lighting maintenance. With 350 fixtures, including metal halides, high-pressure sodium and T12 fluorescent lamps, the staff felt as though they were continuously “chasing our own tails trying to keep up with the lights.”

With only three or four electricians available to work on all projects within the facility, troubleshooting failed fixtures was a waste of time and money.

“It’s an important element of the facility—we cannot have lights out. But, some of the fixtures were in a position where we couldn’t even get to them. It was becoming a real problem,”

said John Curry, Facilities Maintenance Manager at the A.B. Jewell facility. “Anyone can change a light bulb. We need our electricians to be working on bigger projects, and other projects were getting put off for lighting maintenance.”

The dingy, distorted color of the metal halide and high pressure sodium lights was also a problem for visibility inside the plant. Workers had a hard time discerning between the green and blue colors on various pump motors, and the poor color rendition made it difficult to visually inspect the water to detect septic conditions.

The Solution

Aiming to upgrade, the A.B. Jewell staff began researching the options and selected a few LED samples for a fixture trial. After evaluating each system, they settled on Dialight’s LED StreetSense® streetlights and Vigilant® High Bays, Low Bays, Flood Lights and Area Lights. In addition to a better performing fixture, the Dialight LEDs offered the industry’s only 10-year full-performance warranty, covering the entire fixture, power supply and housing, which sealed the deal for A.B. Jewell.

A.B. Jewell’s electricians replaced the 350 existing lights, ranging from 70 to 400 watts, with just 259 Dialight LEDs, ranging from just 33 to 212 watts. Not only were they able to reduce the total fixture count, but the change out slashed 446,576 kWh from their annual consumption while dramatically improving the brightness and quality of light in and around the facility.



Before: High Pressure Sodium Lighting at A.B. Jewell



After: Dialight High Bay Fixtures at A.B. Jewell

The Result

“I was hesitant at first when I pulled [the Dialight fixture] out of the box,” said Mr. Curry. “I thought, ‘There is no way this is going to be bright enough.’ But, then we wired it up and those things are spectacular. The difference is like night and day.”

Because of the tremendous energy savings, the project qualified A.B. Jewell for a \$32,000 rebate incentive from its energy provider, the Public Service Company of Oklahoma, covering almost 20% of the total project cost and bringing the payback period down from 8.1 years to just 6.6 years. With every fixture guaranteed to be maintenance free under Dialight’s 10-year warranty, which means every dollar saved after 6.6 years goes straight to A.B. Jewell’s bottom line for reinvestment into other equipment and process upgrades.

“It’s been a complete 180,” said Mr. Curry. “We were practically giddy with excitement over the improvement in light. You can actually see into the equipment pits, and even the contractors that were here before the lights were switched out are so impressed. Once a week we get compliments from the guys working in the building, and morale is definitely higher.”



LED High Bay



LED Area Light Fixture

Dialight reserves the right to make changes at any time in order to supply the best product possible.

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