



## Case study

# 1,700 million liters wastewater treated for Chicago

Nedap supplied the lamp drivers for the UV wastewater purification plant in Chicago. As one of the largest UV waste water installations in the world, the plant can treat 1,700 million liters of wastewater.

### UV wastewater plant, Chicago

The Terrence J. O'Brien Water Reclamation Plant (WRP) in Skokie, Illinois was upgraded with an UV treatment process. The system substantially improved the quality of water throughout the Chicago Area Waterway System, while protecting the region's drinking water supply in Lake Michigan.

### Solution

The patented Nedap technology is used to power the 900 state of the art low pressure high output UV lamps, in the most efficient way.

### Results

- Low number of UV lamps required
- Energy saving
- Ease of operation and maintenance

# Saving energy

In the end, the decisive factor was our approach to energy consumption. This not only saves a great deal of money, but no less importantly, also reduces CO2 emissions, emphasizing Nedap's focus on more sustainable operation.

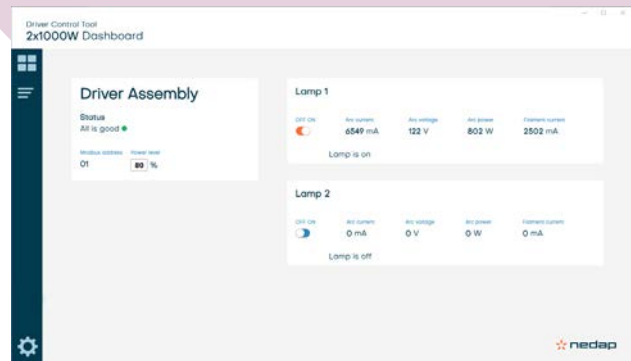
## Most efficient UV driver technology

After investigating various approaches and technologies, officials determined that UV was the optimal solution for the plant and application. A low total cost of ownership and the fact that, with UV, there are no by-products to worry about were key factors in the decision.

Nedap's Low Pressure Lamp Drivers have a proven efficiency of at least 95%.



▲ UV treatment process at Chicago wastewater plant.



▲ Nedap intelligent lamp drivers allow full monitoring.

## Full control with Nedap software

Dedicated Nedap software can be used by engineers to test the electronic platform and to fine tune the UV lamp settings in relation to the required UV levels.

The embedded software has a diagnose functionality to report about lamp status, lamp failure, lamp driver temperature and other system operations. A perfect solution to improve the implementation processes and to reduce installation costs and time.

**We power UV**  
*Smart UV driver technology for more sustainable operation*



**Nr. 1 technology** • Most efficient driver technology, requires less installation space >900.000 electronic UV lamp drivers installed and in use worldwide.



**Reliable** • Nedap drivers are designed to last. The average lifetime production of our UV drivers is more than 10 years.



**Flexibility** • Digital lamp selection and optimization and UV lamp dimming down to 30% and beyond.



**Insights** • Embedded software for system data reporting.