

#### PARTNER CASE STUDY:

### Darrera Partners With AEM's Davis Brand to Solve Wastewater Treatment Challenges



#### **OVERVIEW**

Weather conditions can dramatically impact the operation of wastewater treatment facilities. For example, rainfall may influence decisions about how often and how long a facility needs to run its pumps. Or extreme weather may require additional staff to help with taking various precautions.

At best, failure to adapt to changing environmental conditions can introduce inefficiencies and drive up operating costs. At worst, it can jeopardize the safety of the facility, its employees, and the surrounding environment.

To stay on top of these dynamic conditions, the best facilities watch for any changes in key weather variables, including wind, temperature, humidity, precipitation, atmospheric pressure, and solar radiation.

### Challenge: Improving weather resilience

When three wastewater treatment facilities across Barcelona and Valencia, Spain needed help adapting their operations to changing weather conditions, they turned to AEM's local partner, Darrera. After careful consideration of all the challenges, Darrera found that the facilities needed a weather monitoring solution that would help them realize improvements in three key areas:

#### 1. IMPROVE TIMING OF SAFETY PRECAUTIONS

During extreme weather, the facilities must take well-timed precautions like adjusting schedules, securing equipment, and modifying treatment procedures.

#### 2. INCREASE EFFICIENCY

Some costly procedures are needed only under specific conditions. Real-time weather data would help the facilities reduce costs and run more efficiently.

#### 3. OPTIMIZE TREATMENT PROCESSES

There is no single "best" process for treating was tewater. Processes need to vary based on current conditions, including prevailing weather conditions.

#### **MEET DARRERA**

Headquartered in Barcelona, Spain, Darrera specializes in the design and installation of weather monitoring systems. In fact, over the past 35 years, they've installed more than 5,000 such systems for many public and private companies, in addition to government and non-government organizations.

The firm's process begins by gaining a deep understanding of each client's unique requirements for accuracy, flexibility, and cost. Based on that assessment, they put together reliable weather systems that meet their customers' requirements and perform according to specifications throughout the years.

To meet these stringent commitments, Darrera seeks out the most accurate, durable, and cost-effective instrumentation for their weather monitoring systems – instruments like our Davis Vantage Pro2™ Plus weather stations.

"The implementation of the Vantage Pro2 Plus weather stations has proven to be a significant step toward enhanced efficiency and safety in the customers' wastewater treatment processes."

- Marc Arazo,

CEO Darrera



# The Solution: Weather monitoring powered by Davis Instruments

After determining the improvements that each wastewater treatment facility needed to make, Darrera did not need to look far for a solution. Our Davis Vantage Pro2 Plus weather stations are perfectly suited for capturing reliable, real-time weather data and supporting the delivery of actionable insights. And with all their sensor options, they are more than capable of tracking all the necessary variables, including wind, temperature, humidity, precipitation, atmospheric pressure, solar radiation, and UV radiation.



#### SAFER OPERATIONS

When severe weather hits, minutes matter. Now the facilities can recognize weather changes as they happen and respond with the right precautions.



#### LOWER OPERATING COSTS

With real-time weather insights, the facilities can finally streamline their operations by eliminating unnecessary procedures and precautions.



#### **OPTIMIZED PROCESSES**

Each facility finally has all the information it needs to ensure it consistently uses the procedures that are best suited to current weather conditions.

# Achieving weather-resilient wastewater treatment operations

Since the installation of our Davis Vantage Pro2 Plus weather stations, Darrera's wastewater treatment customers have seen the value of real-time, hyperlocal weather data. They now have the insights they need, when they need them, to rapidly adapt their operations to changing weather conditions. And improved weather resiliency means they can now work more safely and efficiently.







#### WHY AEM?

AEM and our family of brands are empowering communities and organizations to survive – and even thrive – in the face of today's escalating environmental risks.

Partners like Darrera turn to AEM and our brands because they trust us to connect them and their customers with the highest quality data – like the reliable, hyperlocal environmental data that our Davis Instruments brand has been delivering for over three decades. They know the data will equip their customers with actionable insights that empower optimized decisions when moments matter.

In this case, Darrera turned to AEM and our Davis Instruments brand for three key reasons:

#### **RELIABLE SENSING**

Research-grade sensors deliver data with scientific precision. Rugged construction means they will continue to do so year after year, even in the toughest of conditions.

#### CONSISTENT CONNECTIVITY

The Davis Environonitor® Gateway provides a secure, seamless, and reliable connection to ensure captured weather data gets to where it is needed.

#### LOCAL SUPPORT, GLOBALLY

We don't try to support the entire world from a U.S. office; we sustain a truly global network of configuration, enablement, and support experts.