Águas do Mondego SA

Challenge
Implement an advanced HD video surveillance system that is both cost effective and easy to operate to effectively oversee a massive, multi-municipal water supply and sanitation system in Portugal.

Solution
Águas do Mondego SA, the concessionary company operating the multi-municipal water supply and sanitation system in the Baixo Mondego-Bairrada region of Portugal, installed 55 Avigilon HD cameras to monitor 27 different facilities across 13 municipalities. Security officials at Águas do Mondego SA manage the high-definition system from their desktops inside the company’s main control room using the Avigilon Control Center (ACC) network video management software with High Definition Stream Management (HDSM)™ technology. The security team also uses the ACC Mobile application to view live and recorded images wirelessly and Avigilon Network Video Recorders (NVRs) to store up to 30 days of continuous surveillance footage.

Benefits
The versatile Avigilon HD solution has enabled Águas do Mondego SA to effectively manage multiple facilities, ensuring operational efficiency and water supply quality. Leveraging ACC Mobile, security staff can monitor all sites remotely and make logical decisions while offsite because of the clear image detail that the Avigilon solution provides. Avigilon’s HDSM technology is also instrumental in keeping the company’s bandwidth low, a crucial factor for the company as the majority of its network is required for other operational needs. The intuitive interface makes navigation simple for the 30-plus users of the system. As Águas do Mondego SA gradually transitions from their existing analogue system to an HD surveillance solution, they use Avigilon Video Encoders to ensure all cameras effectively run on the same platform.

- Remote access to all sites
- Easy to operate interface
- Reduced installation and maintenance costs
- Superior image quality
- Minimal impact on the network

Featured Products
- ACC Software
- 1 MP, 2 MP and 5 MP HD Camera
- ACC Mobile
- Analogue Video Encoder
- Network Video Recorder

Market: Critical Infrastructure
Location: Portugal
Partner: Domosinal Systems
Founded in 2004, Águas do Mondego SA was created with the goal of providing the best water supply and treatment services in Portugal. Today, the company has grown tremendously and is currently responsible for overseeing over 80 different sites in 13 municipalities across the country. Prior to deploying the Avigilon solution, Águas do Mondego SA used analogue video to cover the perimeter of just eight of those facilities. In order to protect their assets and the long-term safety of the water supply, the management team at Águas do Mondego SA knew they needed to invest in a full-scale HD video surveillance system. “Our legacy analogue CCTV system was expensive and did not provide usable image quality that we could use for process control,” said Carlos Capucho, engineer at Águas do Mondego SA. “With the old system, we could not do any remote monitoring and there were plenty of faults. Replacing our analogue system with an HD video solution was inevitable.”

The management team searched for a system that was easy to install, operate and upgrade and had a detailed but practical graphical user interface. With the assistance of Domosinal Systems, their Portugal-based partner, Águas do Mondego SA conducted a thorough market analysis of different HD video surveillance system providers before ultimately choosing Avigilon because of its image quality, ease of use and versatility. “We concluded that Avigilon’s end-to-end HD surveillance system was the most compatible with our operational needs,” stated Mr. Capucho. “In the years since installing Avigilon, we are pleased to report that the system has far surpassed our initial expectations.” As of December 2013, the company uses over 55 Avigilon cameras to oversee 27 facilities across Portugal with plans of expanding to 20 more facilities in the next year.

**Integration with SCADA Software**

Águas do Mondego SA uses supervisory control and data acquisition (SCADA) systems to gather and analyze real-time data of their water supply at each site. The management team at Águas do Mondego SA have been able to leverage the Avigilon ACC software as a complementary tool for their SCADA systems, enabling remote and reliable video verification with HD images without any dedicated maintenance. “The Avigilon solution is directly integrated into the SCADA management systems,” said Mr. Capucho. “If SCADA detects an event, the Avigilon supporting footage can be sent to the operators, giving them enough real-time information to make an educated decision. The integration between the Avigilon system and SCADA means operators have fewer platforms to monitor.”

**“If SCADA detects an event, the Avigilon supporting footage could be sent to the operators, giving them enough real-time information to make an educated decision.”**
Remote Access

Avigilon’s ACC Mobile application has made it convenient for the security team at Águas do Mondego SA to monitor each of the 27 sites. With their previous system, the company did not have remote access, forcing them to make long trips whenever a situation arose. “In the past, when we received alarms, we had to go back and forth between sites that were more than 80 kilometers apart,” Mr. Capucho said. “With the Avigilon system, we can use the high-resolution footage to track our system’s various stages of treatment online, without having to actually be on location.”

User-Friendly System

“\textbf{The Avigilon HD video surveillance system installed at Águas do Mondego SA is easy to use with almost no maintenance required.}”

According to Mr. Capucho, “The Avigilon HD video surveillance system installed at Agua do Mondego SA is easy to use with almost no maintenance required.” Mr. Capucho added, “The ACC software is an effective tool that helps us save on both cost and time when we need to go back and search for footage. The company has saved money on repairs and maintenance and it is easy to train all of our security staff on.”