



**Criminal and Suspicious Activity
at a Wastewater Utility**
Physical Security Case Study



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SECURITY LANDSCAPE OVERVIEW

A very large wastewater utility is located in a high-crime metropolitan area. Over the last few years, the utility has experienced a considerable level of criminal activity, leading to financial impacts and potential threats to the safety and security of utility personnel and property.

DESCRIPTION

In recent years, the utility has experienced a significant and increasing level of suspicious photography and surveillance, attempted breaches/intrusions (including the use of vehicles to ram gates), arson, and other general criminal activity, including drug dealers operating near the facility perimeter.

In one incident, an unknown male driving a pickup truck attempted to enter the facility at the employee entrance. When the gate did not open, he backed up and then rammed the barrier arm to gain entry. Operations personnel followed the vehicle throughout the facility for approximately 20 minutes until the arrival of police, who blocked the exits and deployed spike strips. They were eventually able to take the man into custody.

Criminal activities occurring in the area have the potential to, and have in the past, spilled over into the utility's property. In one late night incident, police deployed a tactical unit at the entry to the facility and alerted the guard that an armed man was approaching the facility on foot. The individual had robbed a nearby store and was threatening suicide when law enforcement attempted to arrest him. The suspect was arrested about a quarter mile from the facility after he fired at a police helicopter. A bullet believed to have been fired by the man was later found on the loading dock at the treatment plant.

The suspicious activity around the utility frequently includes surveillance and photography of the facility, potentially by individuals hoping to identify vulnerabilities to exploit. These incidents are usually resolved by a security guard approaching the suspicious individual(s). For example, one morning a man in a car circled the main entry gate area before driving back over the entry bridge to the facility. The driver then pulled onto the shoulder of the road at the entrance to the bridge. He exited the vehicle and while facing away from the facility took video of the entrance area by holding the camera facing back over his right shoulder, effectively blocking his face from the utility's surveillance camera. Security personnel responded and questioned the man, who claimed to be filming the sunrise even though he was pointing the camera in the opposite direction.

IMPACT

Ongoing criminal activities have not disrupted the utility's operational ability to serve the community. However, specific incidents have led to significant property damage and financial losses, for instance, criminals using their vehicles to ram the facility gates have led to tens of thousands of dollars in damages. These incidents also had the potential to cause harm to utility personnel and property. Finally, it led to an atmosphere where utility personnel did not always feel safe.

RESPONSE

In response to persistent criminal activity, the utility augmented its perimeter security and access controls by installing more flood lights, closed-circuit television (CCTV) security cameras, and a sally port gate used after business hours and weekends to reduce the incidence of gate-runners. The gate also acts to reduce the likelihood that a vehicle ramming the sally port gate will also be able to make it through the main entry gate into the facility. The utility also regularly reported incidents to local law enforcement, the regional fusion center, and WaterISAC. WaterISAC provided advice and connected the utility with a DHS protective security advisor (PSA) who conducted an in-person security assessment of the facility.

Local law enforcement has been very responsive to the utility's needs. They worked closely with the utility providing immediate and swift response to threats. They also provided routine patrols to demonstrate their presence and perform weekly drone surveys of the surrounding floodplain and wooded areas looking for unusual activity around the facility perimeter.

In addition, in the summer of 2022, the utility contracted with a group of off-duty police officers to assist with site security. The utility noted the added security cost is significant. However, it feels the costs are justified because since hiring the off-duty officers the utility has experienced a significant decrease in suspicious and criminal activity and an increased sense of security and safety on the part of the utility staff. Lastly, WaterISAC conducted a survey on behalf of this utility, asking water utilities across the country their procedures for hiring security contractors and other security best practices, which helped this utility identify the solution of hiring off-duty police officers.

LESSONS LEARNED

Lessons learned from this case study, include:

- Maintaining a positive working relationship with the local police department.
- Connecting with federal partners, such as the DHS PSA, in some cases with the assistance of WaterISAC.
- Connecting with other utilities to learn about their best practices for similar situations, in this case through a survey facilitated by WaterISAC.
- Training employees on suspicious behaviors and activities and appropriate channels for reporting them.
- Hiring more experienced security personnel, especially for coverage during non-business hours.
- Enhancing perimeter security to mitigate and create more challenging obstacles for threat actors to circumvent.
- Reporting incidents to WaterISAC to obtain insights and advice and help inform threat assessments for the benefit of other utilities and sector stakeholders.

REPORTING SUSPICIOUS ACTIVITIES AND INCIDENTS

WaterISAC encourages members to report suspicious activities and incidents to local law enforcement, their local FBI field office, and their local fusion center. It also encourages members to share information with WaterISAC by emailing analyst@waterisac.org, calling 866-H2O-ISAC, or using the online incident reporting form.



The Water Information Sharing and Analysis Center (WaterISAC) is the only all-hazards (cybersecurity, physical security, natural disasters) security information source for the water and wastewater sector. We were formed over 20 years ago by the sector's leading national associations at the urging of the White House, FBI, and EPA. We maintain two-way communication with DHS, FBI, EPA, fusion centers, and other federal, state, and local agencies in order to help protect and share information.