

SUCCESS STORY | USA | DECEMBER XXXX, 2021

# U.S. wastewater treatment plant deploys ABB cyber security solutions

The facility plays a key role in protecting the environment from toxic waste



A sewage treatment plant located on the East Coast of the U.S. protects the adjacent harbor against pollution by removing human, household, business and industrial pollutants. The wastewater that arrives at the plant is treated in grit chambers and goes through various stages of purification before it is released into the harbor as clean water.

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01 East Coast, U.S.A.

ABB, a long-time provider of automation and cyber security solutions to the customer, was recently selected by the wastewater treatment facility to implement the latest cyber security solutions. A robust cyber security structure will protect the plant's digital systems and solutions from online threats and malware, which can potentially disrupt the entire process of removing pollutants and keeping the environment safe.

## Defense-in-Depth for uninterrupted operation

As the volume of pollutants continue to increase and the need for uninterrupted operations become more critical, the wastewater plant required a trusted cyber security partner to guide it through a comprehensive and evolving Defense-in-Depth cyber security program. ABB suggested a comprehensive risk reduction roadmap that required deploying various security controls.

ABB's long-standing association with the customer enabled it to build on the deployed security controls and develop an advanced cyber security program.

ABB was already on board for providing Application Allow-listing and other advanced cyber security controls packages to the customer.

ABB's team of experts customized a service solution to meet the customer's requirements, which included:

- ABB Ability™ Cyber Security Updates
- ABB Ability™ Cyber Malware Protection
- ABB Ability™ Cyber Security Backup & Recovery
- ABB Ability™ Cyber Security Application Allow-listing
- ABB Cyber Security Consultation Services.

These solutions provide a wide range of services from patch management, antivirus management, disaster recovery to allow-listing, and ABB's industrial cyber experts help to deploy them.

The key benefits of the Defense-in-Depth program are the layered approach of security controls that complement each other's functionality to cover weaknesses. This protects against redundancies, such as if security controls fail or have a vulnerability that can be exploited, an overlapping control may mitigate or protect against the failure. This layering of controls also allows for the Defense-in-Depth program to be phased in. By following the risk reduction roadmap in a phased manner, it strengthened and expanded the security coverage of the plant over time, allowing for safe and efficient adoption.

It also allowed plant personnel to get comfortable with each implemented security solution rather than learning a full suite of security solutions all at once. This phased approach allows more efficient use of security solutions and more willingness to use them with more profound knowledge of how to use each of them.

### Trusted long-term partner

Wastewater treatment facilities play a crucial role in providing clean water and ensuring public safety. Collecting and treating sewage as well as purifying and returning water to the environment are the cornerstones of public health and safety. This project has also helped us guide the customer for subsequent projects with advanced controls as its security posture increases.

ABB Process Automation has rich experience in digital systems and solutions, including cyber security offerings for secure, efficient and effective wastewater treatment. Data is at the center of digitalization and automation, so protecting data from cyber threats is key to maintaining plant performance. Powered by integration capabilities, Process Automation solutions improve productivity, sustainability and protect scarce resources through smart technologies. Our proven local knowledge and expertise coupled with data-driven insights change how the industry plans, invests and manages water.

"ABB has been a trusted partner for nearly five years, enabling us to build a strong security framework that has increased efficiency of our wastewater plant. As our security coverage expands, ABB will further strengthen our plant systems and solutions," a company executive said.

<b>Industry</b>	Power and Water
<b>Customer</b>	Wastewater treatment plant on U.S. East Coast
<b>Country</b>	USA
<b>Solutions</b>	<ul style="list-style-type: none"> <li>• Wastewater treatment facility</li> <li>• ABB Ability™ Cyber Security portfolio offerings</li> <li>• Advanced security controls</li> <li>• Patch management</li> <li>• Malware protection management</li> <li>• ABB Ability™ Cyber Security Updates</li> <li>• ABB Ability™ Cyber Malware Protection</li> <li>• ABB Ability™ Cyber Security Backup &amp; Recovery</li> <li>• ABB Ability™ Cyber Security Application Allow-listing</li> <li>• ABB Ability™ Cyber Security Consultation Services</li> </ul>