

CASE STUDY

Sentry™ Emergency Gas Scrubber (EGS)

Central Avenue Pump Station
Yonkers, New York



THE PROBLEM

In 2017, The City of Yonkers, New York completed an expansion and upgrade to its existing Water Treatment Plant. As part of the project, the facility was looking to install chlorine gas scrubbers to be on standby in the event of an emergency. The City partnered with Suez Water Environment Services (Suez) to evaluate available technologies that could be activated in the event of a chlorine leak.

After reviewing PureAir's proven performance at facilities such as the Princeton Meadows Wastewater Treatment Plant, Ed Little Water Reclamation Facility, and the Burbank Water Reclamation Plant, Suez and The City chose PureAir's Sentry™ Emergency Gas Scrubber (EGS) and Safetysorb chemisorbant media. This combination offered the level of safety, responsiveness, and reliability required for critical emergencies.



THE SOLUTION

The particular unit chosen was PureAir's EGS-605, a fiberglass-reinforced plastic vessel. A capacity analysis of Safetysorb media determined that 187 ft³ was needed to effectively neutralize the high volume of chlorine in the event of a leak.

The unit was installed in March of 2018, and the City was confident knowing they were prepared for any emergency event. Fortunately, the standby system has not been needed yet, but the City follows PureAir's recommended, simple maintenance schedule to ensure the scrubber remains fully operational.

In the event of a leak, the system is designed to detect chlorine gas, automatically turn on, and pull the toxic gas out of the environment. The EGS-605 is capable of handling the release from a one-ton chlorine canister, ensuring maximum protection for both plant personnel and the surrounding community.