CASE STUDY

Sentry™ Emergency Gas Scrubber (EGS)

Logan Aluminum Inc.
Russellville, KY

PureAiR
A cleanwater1™ Company

THE PROBLEM

As part of its Remelt Department operations, Logan Aluminum stores and utilizes one ton of chlorine for its filtration process. During routine tank changeovers, the facility recognized the potential risk of accidental chlorine releases. While an emergency wet scrubber using sodium hydroxide was already in place, Logan Aluminum identified the need for an additional layer of protection. To further enhance safety and ensure effective response to potential spills, the company sought an auxiliary chlorine neutralization system designed to safeguard employees while maintaining operational reliability.

To minimize exposure and prevent severe burns to the skin and eyes, personnel must wear appropriate personal protective equipment whenever managing sodium hydroxide.

PureAir's Emergency Gas Dry Scrubber (EGS) employs Safetysorb, an alumina-based chemisorbant media that is fireproof and non-hazardous in its unused and used form. The non-flamable properties of Safetysorb, combined with its minimal maintenance requirements, delivered the effective and hazard-free solution that met Logan Aluminum's safety and operational goals.

THE SOLUTION

PureAir provided Logan Aluminum with an EGS-8 to protect against a leak from the one-ton cylinder of chlorine. Additionally, PureAir provided multiple EGS-100 scrubbers filled with five cubic feet of Safetysorb media to adsorb chlorine purged during preventative maintenance of the chlorine piping system that feeds the smelting process. The new emergency chlorine scrubber systems removed the injury risks associated with handling sodium hydroxide while ensuring full compliance with all federal, state, and local regulations governing chlorine neutralization systems.

Since installing PureAir's EGS with Safetysorb, Logan Aluminum has an effective solution that stands guard against an emergency chlorine release while prioritizing the health and safety of personnel.