

Reference case

Cyanide removal as an alternative to classic wet chemical water treatment

The background

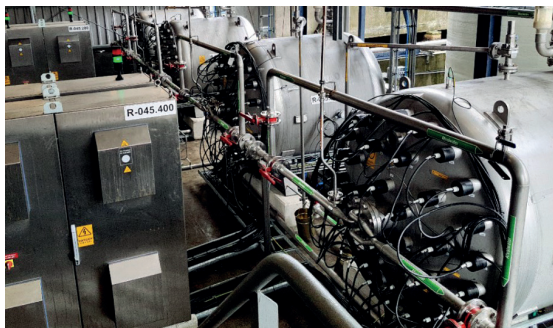
Traditionally wet chemical processes are used to remove cyanide from water streams often with hypochlorite. These processes create potentially toxic compounds (AOX) and have a low sustainability score coupled with relatively high operational cost.

The case

Then Chemtura, now Lanxess wanted a new and sustainable alternative for their wet chemical treatment using Sodium Hypochlorite. One of the main drivers was the high amount of AOX that process created and the operational cost.

The solution

Preliminary research by Royal Haskoning (RHDHV) showed Advanced Oxidation to be a viable alternative that fitted all criteria. Van Remmen was chosen together with Antea and HMVT to engineer and test a system which was done in close cooperation with the customer.



Results

The eventual configuration developed and tested in close cooperation with the customer was capable to clean the water in almost half of the estimated time. The Advanox™ technology removed total Cyanide from 140-160ppm to <0,9ppm with extensive automation and integrated cleaning cycles.

Facts

Contractor

Chemtura/Lanxess

Location

The Netherlands,
Amsterdam

Purpose

Cyanide removal

Solution

Advanox™ Flow series

Customer quote:

Paul Verkooyen, Lanxess: "From the start to the end of the project there has always been technical- and chemical theoretical support from Van Remmen UV Technology"