THE „NEW NORMAL“ FOR SPENT CAUSTIC & SOUR WATER

Spent Caustic & Sour Water

Spent Caustic is considered a hazardous material with noxious properties and a significant impact on downstream treatment plants, the environment and humans. “Normal” handling and treatment of such solutions is usually difficult and costly.

Industry professionals consider Spent Caustic to be one of the most difficult streams to handle.

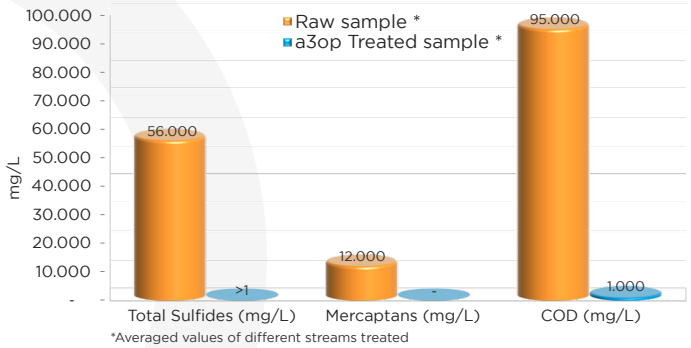
Typical conventional treatment options often entail high capital deployment per unit basis, high operating costs and associated safety concerns.

TYPES OF SPENT CAUSTIC

- ☑ Sulfidic/Disulfidic
- ☑ Sour Water
- ☑ Cresylic
- ☑ Mercaptanic
- ☑ Phenolic
- ☑ Naphtenic

a3op - the better solution

up2e!’s acoustically activated AOP process (a3op) for the treatment of Spent Caustic is a technology platform with focus on high operational safety, advantageous operating cost and low capital investment.



*Averaged values of different streams treated

a3op - why is it the better solution?

The operation at ambient temperature and pressure eliminates safety concerns relating to high temperature and pressure operations. Outside these operating conditions, additional system features such as a cooling loop and gas handling system are included to ensure continuous safety of the operation.

The a3op technology platform is modular by design and flexible to accommodate for adjustments to most specific waste stream profiles.

a3op treated wastewater yields several important benefits when it comes to onsite biological treatment plants. Toxicity issues and lack of oxygen is eliminated, ensuring better performance of onsite bio-treatment thus reducing personnel demand and improving perfomance.

KEY ADVANTAGES:

- ☑ Safe process (ambient pressure & temperature
- ☑ Low maintenace & personnel demand
- ☑ Easy to operate & control
- ☑ Economically advantageous