

Salt Scrubber Hybrid Odor Control System

All the benefits of a chemical scrubber without the drawbacks.

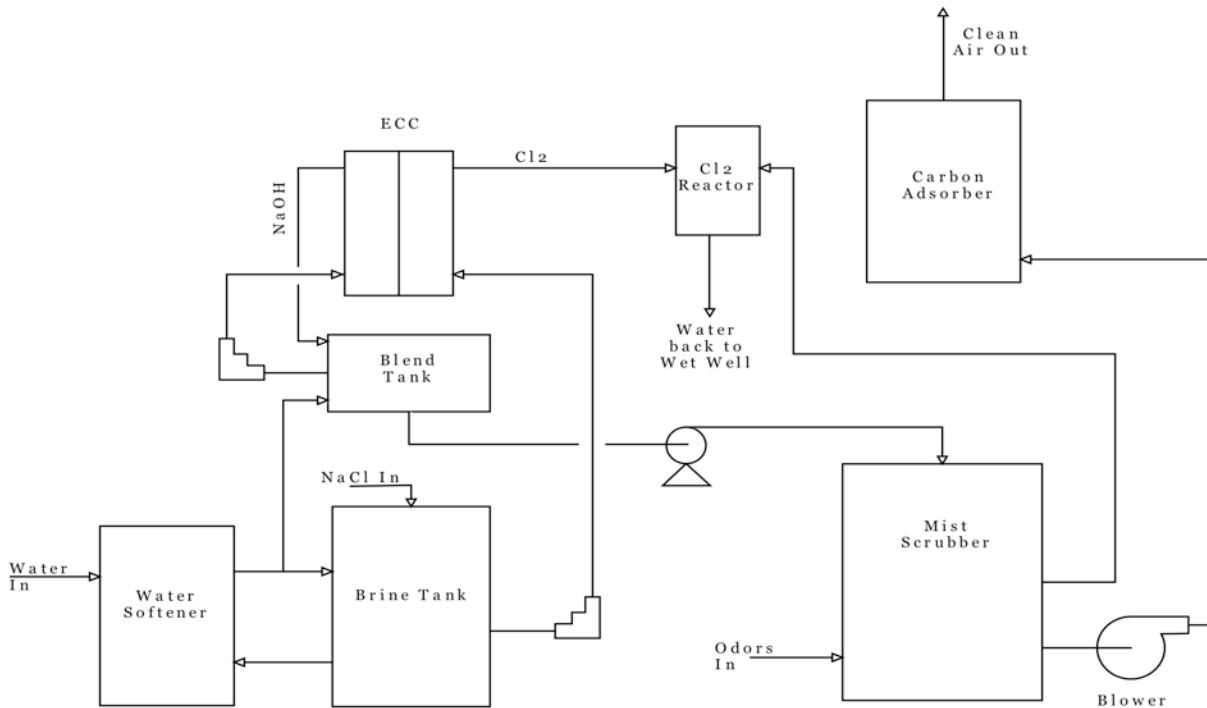
Activated carbon adsorption systems are capable of nearly complete removal of malodorous compounds, however, high hydrogen sulfide loadings can challenge their cost effectiveness as compared to chemical scrubbers. For those who are familiar with them, chemical scrubbers are considered not very user friendly. Bulk chemical storage tanks, secondary containment, dangerously high chemical concentrations, calcium fouling and finicky pH and ORP measurement and control systems are some of the common drawbacks to traditional chemical scrubbers.

ACS's new Salt Scrubber Hybrid Odor Control System can handle H₂S concentrations in the hundreds of ppm without handling any chemicals except ordinary water softener salt pellets. The system uses a unique electrochemical process to generate the chemicals needed to capture and oxidize H₂S. Concentrations of these chemicals are kept low to keep operators and the public safe. In fact all of the above listed traditional chemical scrubber drawbacks are eliminated with this system.



Hybrid Salt Scrubber

Simplified Process Flow Diagram



Modular Design

The above PFD shows a simplified schematic of how the system works. It can be applied to green field applications as well as retrofits to existing chemical scrubbing systems. The electro-chemical cell is of a modular design that can be expanded to meet any H₂S loading rate.

Cost Effectiveness

Water softener pellets can be purchased for < \$0.10/lb retail, or about half that if purchased wholesale. For large projects evaporated purified salt can be purchased for about one to two cents per pound. Compare this to the cost of trucking in sodium hydroxide and sodium hypochlorite solution.

Service

ACS offers full service contracts on its Salt Scrubber Systems. For those who have enough on their plate, let us handle the required PM.

