

## HCl STATEMENT

The effectiveness of a packed wet scrubber to remove HCl gas and mist is directly related to the amount and size of the HCl mist. A packed scrubber will function as designed for HCl gas absorption and will significantly remove particulates in the size range of 8 to 10 microns and larger. An eductor venturi will effectively remove particles greater than 3 to 5 microns.

The white plume indicative of HCl exhaust systems is created by small mist particles (0.3 microns average) below the size removed by a packed scrubber or eductor venturi. These mist particles can be created when the HCl gas mixes with ambient air before the scrubber and when the air is humidified in the scrubber.

Predicting the exact proportion of HCl gas and HCl mist existing in a given airstream is presently impossible. Therefore, the removal efficiency of the scrubber and the intensity of the white plume are also impossible to predict.

The same phenomenon applies to scrubbing HBr contaminants.