

# AMMONIA SCRUBBER

## METHOD OF ABATEMENT

The most effective way to abate ammonia is with a specialized ammonia scrubber. An ammonia scrubber is a specialized wet scrubber, that is specifically designed to remove harmful ammonia and particulates from industrial exhaust streams. It works by funneling the ammonia laden exhaust stream through the bottom of a packed tower, which sprays a solution from specialized nozzles. This chemical solution is carefully chosen to react with the ammonia in the exhaust stream, and is very often a 93% Sulfuric Acid ( $H_2SO_4$ ); this solution often achieves the best DRE, and keeps costs lower. Although Ammonia is not a Hazardous Air Pollutant (HAP), it is regulated as a precursor to PM2.5 and PM10 Criteria Air Pollutants. This is because it reacts with acid gas pollutants, to form respective ammonium salts in the atmosphere (such as ammonium sulfate or ammonium nitrate).



## ADVANTAGES

- Can handle high temperature streams
- Versatile
- Processes high moisture streams
- Smaller space requirements
- Can be retrofitted into current equipment (in some cases)
- Provides cooling of heated gases
- Higher removal capabilities than other equipment
- Lower cost of purchase
- Can remove gases and particulates, in a single unit
- Able to neutralize highly corrosive gases and dusts
- No secondary dust source
- No temperature limits
- Can handle highly flammable dusts, with very little risk of explosion
- Several customizable options, based on specific output and applications, often allowing for a reduction in cost.