CATALYTIC PRODUCTS INTERNATIONAL

VANGUARD AMMONIA REMOVAL SYSTEMS

Catalytic Products International, Inc provides a customized pollution control solution for ammonia and other organics found in waste water.

Ammonia and other organic compounds are commonly found in waste water from a variety industrial processes and landfill leachate systems. Catalytic Products International, Inc has developed a propriety system that effectively removes the ammonia from the waste water and results in near zero ammonia and nitrogen oxide release to atmosphere.

In a waste stream, ammonium ions exist in equilibrium with ammonia. Below pH 7, most ammonia will be soluble ions. Above 12, most of the ammonia will be dissolved in the gas. The percentage of dissolved gas increase with temperature and pH, therefore a controlled temperature and pH can be used to liberate ammonia from the solution.

The VANGUARD System is a two phase system. The first phase liberates the ammonia from the liquid solution and returns a clean liquid for disposal. The second phase destroys the ammonia in vapor for release to atmosphere. Certain design strategies are important to follow in each phase of the process, in order to maximize overall removal efficiency and low utility use.

The VANGUARD System incorporates unique features that allow for NOx removal without the use supplemental reactants (urea or anhydrous ammonia) thus eliminating the safety risks associated with storage and delivery of reactant and lowering the capital and operating cost of the system.

The VANGUARD System provides over 99% removal of water-bound contaminates and 99% removal of the liberated air contaminates.

Catalytic Products International, Inc provides the expertise for the design and integration of a complete system. From concept, design, to implementation, Catalytic Products International, Inc can provide total turnkey solutions for your process.

Thermal Oxidizers, Regenerative Thermal Oxidizer's, Catalytic Oxidizer's, Heat Recovery System's, Energy Conservation, Repair and Retrofit Services, Maintenance Services, Engineering

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