

Case Study

Ammonia Gas Removal for Safer Fertilizer Plant Operations

A leading fertilizer manufacturer sought a solution to eliminate ammonia gas ingress and ensure safe air quality in its control room.

THE PROBLEM

01

Ammonia entered the control room via fresh air intake, compromising air quality and operator safety.

02

The control room had to stay operational for one hour to allow safe plant shutdown.

03

The filtration system required seamless integration with existing HVAC, maintaining performance.

04

The solution had to work passively, providing reliable protection with minimal upkeep in emergencies.

THE AQOZA® OCU SOLUTION

Dry Scrubber System

Installed an ammonia dry scrubber on the control room's fresh air intake to remove toxic gases.

Self-Operating Design

Functions automatically without external power or moving parts, ensuring continuous protection even during emergencies.

High Efficiency

The system achieved 99.8% ammonia removal efficiency, tested up to 5,000 ppm as per ABEK Class-II standards.

Activated Carbon Media

Used special activated carbon that captures ammonia and other harmful gases effectively.

Enhanced Safety

Keeps the control room safe and breathable for at least one hour during a gas leak or explosion.

The Changes Observed in the Plant



Ensured industrial safety and environmental standards for toxic gas management.



Seamless Performance

Delivered continuous, efficient air purification without disrupting HVAC performance or plant operations.



Enabled safe, worry-free operation of critical systems.



Protected operators and equipment even during extreme gas leak or explosion scenarios.

Achieved crystal-clear, **ammonia-free air in the control room**, creating a healthier and safer workspace



Lower Maintenance Costs



Enhanced Safety Reputation



Uninterrupted Plant Operations



Reduced Operational Risk

Contact us to know more about space recovery and cost-effectively eliminating odour.
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