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CoZYME•50™ Brings Waste Facility Into Compliance (Virginia)

**RESULTS OF USING BIOFEED SOLUTIONS PRODUCTS AT ALLIANT TECH SYSTEMS, INC.
RADFORD, VIRGINIA, USA.**

ABSTRACT

A pilot study was conducted to compare the effectiveness of Biofeed® CoZyme-50, an organic product that contains a complex of enzymes and co-enzymes that accelerate bio-oxidation in waste streams to reduce noxious odors caused by excessive ammonia and other noxious gases. Ammonia odor is objectionable and can be toxic to people and damaging to the environment.

BACKGROUND

Alliant Tech Systems, Inc (ATS) is a major US Government contractor that operates a waste treatment facility that utilizes a trickling filter system at its Radford, Virginia plant. The facility receives a variety of wastes ranging from municipal waste to manufacturing effluent. The bio-film in the trickling filter was highly anaerobic due to the presence of toxins and the filter was ineffective in removing the ammonia. Due to high levels of noxious gases the plant was out of compliance. Facility personnel were adding bacteria to the filter to improve performance but observed no benefits.

PROCEDURE

In March the company began adding bacteria to reduce the toxic levels of ammonia and observed no benefits. Then, in mid-June, facility personnel began adding Biofeed's CoZyme-50 to the trickling filter utilizing a small metering injector pump at a continuous rate of 1.5- 2 parts per million, (PPM) when the ammonia levels were near 10 Mg/L. Over the next three months, ammonia levels were monitored.

RESULTS

Following the application of CoZyme-50 began, ammonia levels immediately dropped to below 2 Mg/L and continued to drop and averaged 0.39 Mg/L for the duration of the year. The biofilm in the trickling filter began to convert to a healthy aerobic state and the facility again came into compliance.

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