

ChemTreat Provides Superior Odor Control For A Large Municipal Water Plant

Background

A North Carolina municipal wastewater facility struggled with odors for several years. The plant, which processed 3.5 million gallons of water a day, obtained 75% of its water volume from a meat processing plant. The water had a high biological oxygen demand and elevated levels of ammonia and hydrogen sulfide. Since the municipal plant was located near schools, homes, and local businesses, the odors presented a significant public relations issue. The plant tried various misting systems and biological treatments, all of which failed to produce acceptable results.



Solution

ChemTreat proposed a two-step solution which involved treating the waste stream effluent of the meat processing plant with an EPA-designated "Design for the Environment" product and installing vapor blowers inside the municipal facility to deliver a highly effective blend of odor neutralizing compounds.

First, ChemTreat suggested application of CT9104 to provide an environmentally friendly solution to the meat processing effluent water. CT9104 is specifically designed to bind and neutralize hydrogen sulfide and mercaptan odors. In addition, with the neutralization of hydrogen sulfide, this product would deliver the added benefit of reduced corrosion in the city piping.

Second, ChemTreat suggested installing two vapor blowers in the municipal water plant to deliver ChemTreat's CT9113, which would decrease overall odor intensity. Unlike masking agents that overwhelm the malodor and actually increase odor intensity, CT9113 is specifically formulated to neutralize nuisance odors using a low maintenance vapor phase technology. ChemTreat's vapor phase technology does not require water or a pump to deliver treatment, but instead utilizes a small wick to continuously absorb CT9113 from a reservoir. The blower simply directs air across the wick and into the desired treatment area. CT9113 would not be restricted to indoor use, as it is stable below freezing temperatures.

The municipal water plant agreed to a 60-day trial to determine the effectiveness of ChemTreat's two-step solution.

Results

After installation of the odor control equipment at the municipal plant and treatment of the meat processing plant effluent water with CT9104, the municipal plant experienced immediate odor reduction. Within one day, the plant managers ended the trial, and implemented the treatment as a permanent part of plant operations.

Summary

The municipal plant was very pleased with the results, and the odor issues have disappeared. ChemTreat's vapor phase blower solution requires virtually no maintenance, so the plant did not have to invest any additional service time in sustaining this treatment plan. ChemTreat's success at this municipal plant generated so much interest in the local community that officials from other odor-plagued facilities made specific requests to visit the plant.

