



Case Study Mount Holly Municipal Utilities Authority Mount Holly, New Jersey

Equipment:	EcoFilter® EF124
Odor Source:	WWTP Sludge Storage Tank & Surge Tank
Airflow:	4,000 cfm (6,800 m ³ /hr)
Design Inlet H ₂ S Range:	avg 5 ppmv, peak 25 ppmv
Actual Inlet H ₂ S Range:	0-10 ppmv
Avg. Outlet H ₂ S Concentration:	< 0.01 ppmv
Design Outlet H ₂ S Concentration:	< 0.50 ppmv
Actual Outlet H ₂ S Concentration:	< 0.01 ppmv
Design Outlet Odor Concentration:	600 D/T
Actual Outlet Odor Concentration:	270 D/T



Mount Holly Municipal Utility Authority's Rancocas Road WWTP is located along a busy road in a dense residential and commercial neighborhood near historic downtown Mount Holly, NJ. Although H₂S concentrations within the plant were fairly low, the odors from H₂S and other compounds were very offensive in the area around the plant, creating a long-term odor nuisance for the community. The authority was in need of a low-maintenance, low-footprint, cost-effective technology that could treat the H₂S and organic odors emanating from the plant.

The Owner and Engineer chose an EcoFilter EF124 system by BioAir for a challenging application treating combined odor from a Sludge Holding Tank and a Surge Tank. The system was installed and activated in 2010, and almost immediately improved the air quality in the surrounding neighborhood. The EcoFilter was designed to reduce the outlet H₂S concentration to < 0.5 ppmv and to reduce the outlet odor concentration to < 600 D/T. It achieved an outlet H₂S concentration of < 0.01 ppmv and an outlet odor concentration of 270 D/T, greatly exceeding the performance requirements in the Specification.

Mount Holly MUA personnel stated that "the simplicity of the design of the systems has proven to be very effective in eliminating the need for maintenance" and that "performance of the EcoFilter units has surpassed all expectations of MUA staff in every respect."

