

Foxborough Stadium Complex H₂S Odor Control/FOG Reduction Program

Program Description

A membrane bioreactor (MBR) waste water plant (biological anoxic-aerobic process) is operated NSU under contract, at Gillette Stadium complex. A gravity collection system brings all wastewater to several low points on the properties where pump stations transfer sewage to the treatment plant, which is located behind the stadium in a separate utility building.

Treatment: Wastewater equalization (E.Q.) tanks buffer wide variations in flow because of scheduled stadium events, which can change the population served by the system by more than 75,000 on a given day. They had been receiving community odor complaints. The stadium complex had been using completive products (Ammonium Calcium Nitrate Salt) to control odors. The products were injected into two separate wet wells to control the odors which were emanating from the wells or flow equalization tanks. FOG's were being pumped out at the rate of 3,000 to 5,000 gallons per month.

The waste water complex continued to receive community odor complaints in spite of this treatment. BOC was asked to reduce the odor complaints, and as secondary objective reduce or eliminate the removal of FOG's in the main wet well. BOC began injecting EcoSystem Plus into the North Pumping Station wet well in August of 2012 and the vent cover on the flow equalization tanks. In July of 2013, BOC was injected into the second drain line originating from Building E. The odor complaints involving the pumping station and EQ tanks were eliminated. FOG pump outs have been eliminated since 6/1/2013



Treatment Plant Layout

WWTP and E.Q. Tanks

BO.000 Gal E.O. Tark Modified SBR with membranes WWTP





BOC Misting System Into EQ Tank Vent

ESP Misting System Installed In 12" Vent



BOC Misting System Installed Into 12" Exhaust Vent and Tote Bin Location

