CASE STUDY

NEW YORK STATE BEST MANAGEMENT PRACTICES FOR GOLF COURSES

Opportunities for Improvement of Wash Pad Operations

Project Details

Golf Course Profile:

- Location: Rochester, NY
- Annual rounds of golf: 22,000
- Staff: 6 year round, 18 in season
- Acreage: 150 acres
- Public or Private: Private

BMP Implementation:

Water conservation in equipment washing operations by using compressed air before washing and using a flow reducer or lower-flow nozzle.

Overview

Locust Hill Country Club served as the study site for a New York State Pollution Prevention Institute (NYS2PI) project at the Rochester Institute of Technology (RIT) in 2015 to evaluate opportunities to improve mower cleaning operations. This NYS Department of Environmental Conservation-funded project provided baseline information to use in the design of a low-cost mower wash pad system designed to conserve and recycle water, with equipment-cleaning water savings projected at up to 90%. A demonstration is planned for 2017 in a partnership of the NYS2PI program at RIT, Locust Hill, and the NYS BMP project.

Initial findings from the 2015 study include determinations of water use and wastewater quality, spray-nozzle trials to reduce water use, filtration testing for potential reuse, ultraviolet disinfection testing to reduce bacterial growth in water, and an economic analysis of these alternatives.

The findings are already paying off at Locust Hill. According to Superintendent Rick Slattery, Locust Hill is implementing two BMPs based on this study:

- Blowing air off equipment before cleaning to reduce wash time, and therefore water use, by 50%.
- Using either a flow reducer or lower gallons per minute (gpm) nozzle to achieve an additional 50% water savings.

More details on the NYS2PI study can be found on the RIT website at https://www.rit.edu/affiliate/nysp2i/sites/rit.edu.affiliate.nysp2i/files/docs/case-studies/Reductions_up_to_90_in_Equipment_Cleaning_Water_Use_Identified.pdf.