Steam System Optimization Program Saves Public Schools Over $170,000 per Year

Water Management, Inc.’s (WMI) reputation as a leading water conservation company led Johnson Controls to subcontract WMI to find and implement unique ways to decrease their client’s utility expenses through a two-phase steam system optimization program. Their client, Prince George’s Public Schools (PGPS) in Maryland, had a total of 2,706 steam traps throughout 38 buildings.

Water Management’s project scope included surveying all of the existing steam traps and engineering appropriate replacements. Upon the start of the program, it was learned the PGPS had no preventive maintenance program for the steam traps. Further investigating found that the majority of traps had no maintenance for well over ten years and some buildings appeared to have the original steam traps dating back to when the buildings were built.

As a result, WMI found a high number of failed traps indicated by direct testing methods, observations of elevated condensate temperatures and venting steam from receiver tanks. This includes schools that have had steam trap repairs within the last three years.

During construction, WMI provided all materials, fittings, labor and supervision for the completion of the project. Thermostatic steam traps were repaired with new Barnes and Jones cage units and new covers. The savings from implementing the steam system optimization program was approximately $172,433.