Successful Chemical and Steam Coil Cleaning At High-Rise Building

**Problem**
A high-rise building in the Midwestern U.S. had never had the facility's outdoor air handling units (AHUs) professionally cleaned and they were not working very well. This was causing several problems: the units were working harder than necessary leading to accelerated wear on the equipment, the building was not being cooled properly, and there had been an increase in energy costs to operate the building. The facility's manager had resorted to running water over the AHU coils in an attempt to keep them cool. This was not solving the issue and also created the additional problem of increased water consumption.

**Analysis**
Chem-Aqua Services surveyed the site and recommended a combination of professional chemical and steam coil cleaning for the building’s AHUs. The units were so filthy (one was completely covered in dirt) that a combination of the two methods was deemed necessary since the coils were potentially plugged. A non-acid cleaner was recommended for the initial cleaning to help remove dirt from the coils, followed by steam to completely clean the coils.

**Solution**
The customer was eager to have Chem-Aqua Services do the coil cleaning work and agreed to the combined chemical and steam plan. After the AHUs were cleaned, the increase in air flow ranged from 38-51% higher than prior to cleaning. The improved air flow from the clean coils increased system efficiency and also decreased the building’s energy costs. The customer was very pleased and arranged to have Chem-Aqua Services clean the AHUs quarterly to prevent a repeat of the same type of problem in the future. Furthermore, the customer asked Chem-Aqua Services to survey other office buildings in the area for additional coil cleaning jobs.

The customer was very satisfied with the combined chemical and steam coil cleaning work, as well as the subsequent increase in air flow. Quarterly coil cleaning was scheduled due to the success of the initial cleaning job.