## **Equipment Automation and Efficiency – 2017**

There has been an ongoing and consistent effort to embrace SCADA and all that it can do in terms of plant operations and automation. The following items are worthy of mention for 2017.

An upgrade of the SCADA system was budgeted for and approved for 2017. This includes updated software, new HMI's, and some custom programming for items that have been problematic and documented since the last time work was done on the system. The SCADA integrator was on site the week of 3/6/17 to gather site specific information and this effort should be considered in process.

HOV welcomed UW Milwaukee students for an industrial assessment last September. No major deficiencies were discovered in the report. Lighting is being converted over to LED lighting on an as needed burn out basis. High efficiency motors and VFD's are installed already dating back to 2006 and earlier. HOV staff will continue to consider energy savings or more cost effective ways of doing things while performing our daily duties.

One operational move being considered is the sequencing of feeding the ATAD late in the day after peak electrical hours. There are several sequences that all would have to work harmoniously in order to take advantage of the lower electrical rates off peak. The SCADA instrumentation reacts to the ORP and speeds up the blowers, jet mix pumps and foam suppression pumps within minutes as ATAD begins to digest the daily waste sludge batch. The process can take up to 24 hours to complete depending on the amount of sludge generated from plant loadings. There is potential for cost savings if SCADA and all the ancillary instrumentation can control the process in the absence (off peak hours) of the plant staff. This will be vetted out further once the SCADA upgrade is completed as described above.