FOCUS ON WASTEWATER

TOP 25 LOW COST - NO COST SAVING OPPORTUNITIES

1. Meet with your electric supplier to evaluate your current rate schedule and identify the most efficient rate for your facility.
2. Demand Management – Contact your electric supplier to review your energy rate schedule and identify on-peak hours.
   - Review your operations during on-peak hours to identify idle operation of non-essential equipment.
   - Determine if a portion of your treatment process(es) can be adjusted to operate during off-peak hours.

   Examples Include:
   - Operate thickening or dewatering equipment during off-peak hours.
   - Shift recycling of supernatant to off-peak hours.
   - Load digesters during off-peak hours.
   - Operate mixers or aerators in aerobic digesters during off-peak hours.
   - Accept or treat hauled-in wastes during off-peak hours. Utilize storage, if applicable.
   - Shift filter backwash cycles to off-peak hours.
   - Bump diffusers to off-peak hours or not at all, if practical.
   - Test repaired equipment during off-peak hours.
   - Change lead-lag equipment operation during off-peak hours.
   - Do not mix solids holding tanks during on-peak hours.
3. Maintain pumps and blowers; inspect, lubricate, and replace seals and bearings; check belt tension and alignment and adjust for optimal operation per manufacturers recommendations.
4. Turn off aerobic digester blower periodically or operate intermittently (i.e. 2 hours on / 4 hours off; repeat).
5. Modify the dissolved oxygen (DO) level in the aeration tank(s).
6. Operate select aeration tanks as needed.
7. Change intake filters for aeration blowers regularly to provide minimum resistance for intake air.
8. Identify, assess and repair aeration system air main leaks.
9. Identify and repair compressed air leaks.
10. Identify equipment speeds and re-sheave blowers to gain efficiencies.
11. Turn off unnecessary lighting and install occupancy sensors.
12. Idle aeration basins or zones seasonally, if not needed.
13. Adjust system operations when there is a change in wastewater load.
14. Raise wet well levels to reduce static head in the pump system.
15. Lower aeration tank levels to reduce air header static pressure.
16. Shift nightly low flow periods or seasonal low flow periods to smaller HP pumps / blowers, if applicable.
17. Operate minimum number of UV lamps as possible while still meeting disinfection needs if applicable.
18. Regularly clean UV lamp sleeves to improve transfer efficiency.
19. Test and calibrate / replace DO sensors if needed.
20. Identify the best location to install DO probes in the aeration tanks.
21. Install programmable thermostats and utilize night set back / set up settings.
22. Assess the potential for organics removal prior to entering the secondary treatment system. Assess the capability for high organic dischargers to feed loadings directly to a digester.
23. Review your operations to identify if any pumps or blowers are being throttled. If throttled pumps and blowers are identified, review to determine if they can be unthrottled to operate more efficiently.
24. Idle any unnecessary equipment.
25. Review Focus on Energy's Water and Wastewater Energy Efficiency Best Practices Guide. This updated guide outlines the basic steps in building an energy management program, as well as providing detailed information on water, wastewater, building efficiency, and general best practices.

Focus on Energy, Wisconsin utilities' statewide program for energy efficiency and renewable energy, helps eligible residents and businesses save energy and money while protecting the environment. Focus on Energy information, resources and financial incentives help to implement energy efficiency and renewable energy projects that otherwise would not be completed.

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Partnering with Wisconsin utilities