New York State Energy Research and Development Authority's

Focus on Municipal Water and Wastewater

NYSERDA Focus SMALL WATER TREATMENT PLANT CHECKLIST

(If any are not applicable, do not provide a response for that particular question)

	YES	NO	Additional comments and information
1. LOW-LIFT PUMPS			
A. Do you have low-lift pumps?			
B. If yes, do you have variable speed control on the pumps?			
C. If yes, are your low-lift pumps equipped with premium efficiency motors?			
Subtotal Grayed			
2. HIGH-LIFT PUMPS			
A. Do you have high-lift pumps?			
B. If yes, do you currently operate your high-lift pumps mainly during off-peak hours?			
C. If yes, do you utilize in-system storage as a way to minimize pumping during peak hours?			
D. If yes, do you have variable speed control on the pumps?			
E. If yes, are your high-lift pumps equipped with premium efficiency motors?			
Subtotal Grayed			
3. FLOCCULATION/COAGULATION			
A. Do you currently have mixers?			
B. If yes, do you currently have 2-speed motors or VFDs on your mixers?			
C. If yes, are mixers currently equipped with premium efficiency motors?			
Subtotal Grayed			
4. FILTRATION/ DISSOLVED AIR FLOTATION			
A. Do you have filter backwash pumps?			
B. If yes, do you backwash filters based on filter head loss and/or effluent water quality (i.e., turbidity, particle counts, etc.)			
C. If yes, do you utlize elevated backwash water storage tanks to minimize backwash pumping?			
D. If yes, are your backwash pumps equipped with premium efficiency motors?			
E. Do you use dissolved air flotation for solids separation?			
F. If yes, are there premium efficiency motors installed on the blowers/compressors?			
Subtotal Grayed			
5. DISINFECTION			
A. Do you currently use an ultraviolet disinfection system?			
B. If yes, does the UV system utilize low-pressure, high-output lamps?			
C. If yes, is system currently operated via flow-pacing and/or dosing setpoint?			
D. Does your plant currently use ozone as a disinfectant?			
Subtotal Grayed			
6. RESIDUALS MANAGEMENT			
A. Does your plant currently haul residuals to another location for processing?			
B. Are your residuals currently used as part of a beneficial reuse program?			
C. Do you utilize centrifuges for dewatering residuals?			
Subtotal Grayed			
7. OTHER IMPROVEMENTS			
A. Has your plant undergone any energy improvement projects in the last 5 years?			
B. If yes, has any of these projects involved switching to more efficient lighting?			
C. If yes, has any of these projects involved load shedding and/or off-peak load shifting?			
D. If yes, has any of these projects involved installation of new or improved HVAC equipment?			
E. Is plant or will plant be undergoing capacity expansion and/or any other upgrade projects within next 2 years?			
F. If yes, are energy conservation measures included within the improvements?			
Subtotal Grayed			

(Attach additional pages for comments as needed)

TOTAL GRAYED

If more than 5 responses are in the gray areas, the potential for energy savings exist.
Please contact water@nyserda.org for additional information on available programs for energy conservation at water treatment facilities.