SMALL WASTEWATER TREATMENT PLANT CHECKLIST

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

	YES	NO	Additional comments and information
1. INFLUENT/EFFLUENT PUMPING			
A. Do you have influent and/or effluent pumps?			
B. If yes, do you have variable speed control on the influent pumps?			
C. If yes, are premium-efficiency motors currently installed on the influent pumps?			
D. If yes, do you have variable speed control on the effluent pumps?			
E. If yes, are premium-efficiency motors currently installed on the effluent pumps?			
Subtotal Grayed			
2. PRE-AERATION/POST-AERATION			
A. Does your plant utilize aeration blowers/compressors for preaeration, post-aeration or other aerated channels?			
B. If yes, are there currently means to throttle the amount of air delivered or otherwise adjust output?			
Subtotal Grayed			
3. INTERMEDIATE PUMPING			
A. Do you have intermediate pumps to convey flow from primary to secondary processes or from secondary to tertiary treatment processes?			
B. If yes, do you have variable speed control on the intermediate pumps?			
C. If yes, are premium-efficiency motors currently installed on the intermediate pumps?			
Subtotal Grayed			
4. BIOLOGICAL PROCESSES - ACTIVATED SLUDGE PROCESSES			
A. Does your plant utilize aeration blowers/compressors as part of the activated sludge process?			
B. If yes, are there currently means to throttle the amount of air delivered or otherwise adjust output?			
C. If yes, are premium-efficiency motors currently installed?			
D. Does your plant use mechanical aerators (including mixers in pure oxygen systems)?			
E. If yes, do the aerators have variable speed control?			
F. Is your aeration system controlled via dissolved oxygen levels and/or pressure differentials?			
G. If yes, are dissolved oxygen/pressure sensors located within the aeration basins?			
H. Do you currently use a fine-bubble aeration system?			
I. If you have a pure oxygen system, do you have a vacuum pressure swing adsorption (VPSA) O2 generation system?			
J. Do you currently have variable speed return activated sludge (RAS) pumps?			
K. Do you currently have variable speed waste activated sludge (WAS) pumps?			
Subtotal Grayed			
5. BIOLOGICAL PROCESSES - FIXED FILM (trickling filters, RBCs, etc.)			
A. Does your plant utilize supplemental aeration blowers/compressors as part of a fixed film process?			
B. If yes, are there currently means to throttle the amount of air delivered or otherwise adjust output?			
C. If yes, are premium-efficiency motors currently installed?			
D. Do you utilize pumping for conveying flow to the trickling filters?			
E. If yes, do you have variable speed control on the these pumps?			
F. Are your trickling filter distribution arms mechanically driven?			
Subtotal Grayed			

6. 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 based on water quality?

Subtotal Grayed

7. SLUDGE PUMPING

A. Do you process sludge on an intermittent (less than 24 hours per day) basis?
B. If yes, do you currently process sludge during off-peak hours?
C. Do you currently have any equalization capacity within your existing sludge handling process?
D. If no, do you have variable speed capability on your sludge transfer pumps?

Subtotal Grayed

8. SLUDGE STABILIZATION

A. Does your plant utilize aerobic digestion?
B. If yes, has there been any discussion of switching to anaerobic digestion and/or other stabilization method (i.e., lime stabilization)?
C. Do you currently have the capability to produce biogas (methane) from anaerobic digestion processes?
D. If yes, is biogas currently flared and/or vented?
E. If yes, is biogas currently being used for thermal or electrical power generation?
F. Does your plant currently accept hauled waste at the headworks to the plant?
G. If yes, is there equalization to allow hauled wastes to be introduced gradually or during low loading periods?

Subtotal Grayed

9. SLUDGE THICKENING AND DEWATERING

A. Does your thickening and/or dewatering equipment run intermittently (less than 24 hours per day on average)?
B. Do you use centrifuges for thickening, dewatering, or both?
C. Do you currently use sludge drying beds for dewatering?
D. Does your plant currently haul sludge to another location for processing?
E. Does your plant use incineration for sludge stabilization/disposal?

Subtotal Grayed

10. OTHER

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 to comply with Part 750?
F. If yes, are energy conservation measures included within the capacity improvements?

If energy improvement projects are related to processes included in items 1 through 9, please include a note indicating such in the additional comments and information area adjacent to the process.

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 wastewater treatment facilities.