FILTER BACKWASH RECYCLING RULE RECORDKEEPING FORM

The following recycle flow information must be collected and retained on file for review and evaluation by the Connecticut Department of Public Health beginning June 8, 2004 pursuant to Section 19-13-B102(h)(8)(B) of RCSA.

SYSTEM NAME_____

PWSID_____**OPERATING PERIOD**[1]_____

Type of Recycle Stream	**Frequency at which flow is returned**[2]
Spent Filter Backwash	
Thickener Supernatant	
Liquids from Dewatering Process	
Other	
Other	

Filter Number[3]				
Filter Information				
Average Duration of Backwash (in minutes)				
Maximum Duration of Backwash (in minutes)				
Average Backwash Flow[4] **(in gpm)**				
Maximum Backwash Flow[4] **(in gpm)**				
Run Length Time of Filter[5] **(include units)**				
Criteria for Terminating Filter Run[6]				

Is treatment or equalization provided for recycle flows?_____Yes _____No

Type of Treatment Provided		
Physical Dimensions of Unit		
Typical Hydraulic Loading Rate		
Maximum Hydraulic Loading Rate		
Type of Chemical Used		
Average Dose of Chemical (mg/L)		
Frequency of Chemical Addition		
Frequency of Solids Removal		

See instructions on next page

Instructions

1. Note the operating period for the information provided.

2. The frequency at which the recycle stream is returned can be described as continuous, once a day, or as another frequency.

3. Fill out all information for each of your filters. If some or all filters are operated the same, note the appropriate filter numbers.

4. The backwash flow is obtained by multiplying filter surface are (in ft^2 by backwash rate (gpm/ft^2). Use the average backwash rate to get the average flow and the maximum backwash rate to get the maximum flow. If the flow is varied throughout the backwash process, then the average can be computed on a time-weighted basis as follows:

$$\frac{(\text{Backwash Rate 1} \times \text{Duration 1}) + (\text{Backwash Rate 2} \times \text{Duration 2}) + \ldots}{\text{Duration 1} + \text{Duration 2} + \ldots}$$

5. The filter run length time is the sum of the time that the filter is producing water between backwashes.

6. Describe how run length time is determined. For example, is the run length based on head loss across the filter, turbidity levels of filter effluent, a predetermined amount of time, or another method?