



FILTER BACKWASH RECYCLING RULE (FBRR) RECORDKEEPING

State Form 54186 (2-10)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)

OFFICE OF WATER QUALITY - DRINKING WATER BRANCH - COMPLIANCE SECTION

MONTH _____ YEAR _____

PWSID _____

System name _____

Plant/POE _____

Type of recycle stream	Indicate frequency at which flow is returned (or N/A)
Spent filter backwash	
Thickener supernatant	
Liquids from dewatering process	
Other (specify)	

Filter Information	Filter Number/ID			
Average duration of backwash (in minutes)				
Maximum duration of backwash (in minutes)				
Average backwash flow (in gpm)				
Maximum backwash flow (in gpm)				
Run length time of filter (include units)				
Criteria for terminating filter run	Head Loss: <input type="checkbox"/>			
	Run Time: <input type="checkbox"/>			
	Turbidity: <input type="checkbox"/>	Turbidity: <input type="checkbox"/>	Turbidity: <input type="checkbox"/>	Turbidity: <input type="checkbox"/>

Was treatment or equalization provided to the recycle flows? Yes No

If yes, please complete the following table:

Type of treatment provided <u>before</u> recycling	
Typical hydraulic loading rate (gpm/ft ²)	
Maximum hydraulic loading rate (gpm/ft ²)	
Specify type of chemical used	
Average dose of chemical (mg/L)	
Frequency of chemical addition	
Frequency at which solids are removed	
Monthly amount of solids removed	
Disposal or Treatment Method Used to Treat the Solids	

Instructions for Completing Filter Backwash Recycling Rule Recordkeeping Form

Effective June 8, 2004 this information must be collected and kept in your files on a **monthly** basis.

1. Please specify Month, Year, PWSID, System Name, and Plant/POE.
2. Please enter the frequency at which flow is returned. Examples include: continuous, once per day, etc.
3. Fill out information for each of your filters. If some or all of the filters are operated the same, note the appropriate filter numbers or ID's.
4. The backwash flow is obtained by multiplying filter surface area (in ft²) by backwash rate (gpm/ft²). 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:

$$\frac{(\text{Backwash Rate 1 X Duration 1}) + (\text{Backwash Rate 2 X Duration 2}) + \dots}{\text{Duration 1} + \text{Duration 2} + \dots}$$

5. The filter run length is the sum of the time the filter is producing water between backwashes. Please include units (hours, minutes, etc.)
6. Describe how run time length 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?

Please keep the completed forms on file for review by IDEM staff upon request.