



Recirculating Sand Filter
Fixed Film Treatment System
Flows <10,000 gpd and Domestic Strength Waste

This Management Plan identifies some of the basic requirements for proper operation and maintenance of the Recirculating Sand Filter (RSF) wastewater treatment device for residential use. Refer to the Operation & Maintenance Manual for detailed instructions on the proper system operation and maintenance. Refer to your soil treatment system management plan (below or above-grade) for additional management requirements.

The Operation & Maintenance Manual was developed by the Minnesota Pollution Control Agency (MPCA) and can be found at the MPCA's website: <http://www.pca.state.mn.us/programs/ists/productregistration.html>.

SYSTEM COMPONENT	TASK	MINIMUM FREQUENCY	RESPONSIBLE
Recirculating Sand Filter with Flows less than 10,000 gpd and Domestic Strength Wastewater	Monitor alarm	On-going	User & Service Provider
	Monitor flow	Annually <1,500 gpd	Service Provider
	Check mechanical and electrical components		
	Verify flow splitting devices are performing accurately & adjust as needed		
	Check for excessive odor and verify proper ventilation	Bi-Annually >1,500 gpd <5,000 gpd	
	Check distribution system, flush and clean as needed.		
	Verify recirculation ratios and adjust as needed.	Quarterly >5,000 gpd <10,000 gpd	
	Check for biomat and ponding in filter		
	Perform operational field tests on influent/effluent quality including odor, color, turbidity, temperature, and pH as appropriate		
	Sample effluent as required in the local Operating Permit*	See Operating Permit and Table on following	

		page	
	For seasonal use, follow MPCA guidelines	As required based on seasonal usage	

Items not permitted in SPSF in the

MPCA's Recommend Standards and Guidance.

At the time of each service visit, Form 7-1: Media Filter should be completed. See <http://www.onsiteconsortium.org/omspchecklists.html>

Sampling requirements may be specified in local operating permits. The protocol for collection of wastewater samples is specified in the MPCA's Recommend Standards and Guidance.

Minimum sampling frequencies:

Treatment Goal	Design Flow (gpd)	Parameter	Minimum Sampling Requirement*
B	< 1,500	Fecal coliform	Annually
B	> 1,500 – <5,000	Fecal coliform	Bi-annually
B	>5,000 – < 10,000	Fecal coliform	Quarterly
Total Nitrogen	<5,000	Total Nitrogen =	Bi-annually
	>5,000 – < 10,000	TKN + NO ₃ ⁻	Quarterly

*These minimum sampling requirements assume a system that is operated year round. These values may be reduced if the system is not used year round or as system performance is documented.