

OHA - DWS

Membrane Filter Monthly Operating Report

System Name: _____
 PWS ID#: 41 - _____
 Plant ID: WTP - _____ (e.g., "A")

County: _____
 Month/Year: _____
 Minimum test pressure **applied** || **req'd**: _____ psi || _____ psi

DIT = Direct Integrity Test on filter(s) [Yes, No, or "off" if all filters are offline] ⇔
PDR = Pressure Decay Rate
LRC = Log Removal Credit

Day	CFE Daily Turbidity [NTU]	Highest CFE* [NTU]	Highest IFE [NTU] (>15 min duration)	PDR _{Max} [^{psi} / _{min}]		DIT Daily
				LRC [log removal]		
					4.00	
				Highest PDR of day [^{psi} / _{min}]	Lowest LRV _{ambient} of day [log removal]	[Y/N] or "off"
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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27						
28						
29						
30						
31						

Compliance summary (operator to complete any blank fields)

95% of daily turbidity readings ≤ 1 NTU? [Y/N]	All turbidity readings ≤ 5 NTU? [Y/N]	All IFE turbidity readings ≤ 0.15 NTU? [Y/N]	Performance std met? [Y/N] <small>(PDR ≤ PDR_{Max}, LRV ≥ LRC)</small>	DIT Daily?
CT's met daily? (p. 2)	All Cl ₂ residual at EP ≥ 0.2 mg/L?	PDR ≤ PDR _{Max} ?	LRV _{ambient} ≥ LRC?	

PRINTED NAME: SIGNATURE: Notes:	DATE: WT CERT #: PHONE #:
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♣ Used for optimization purposes only.

OHA-DWS

Disinfection Monthly Operating Report

System Name: _____

PWS ID#: 41 - _____

Plant ID : WTP - _____

↩ Log
Inactivation
Required via
Disinfection

Day	Minimum Cl ₂ Residual at 1 st User (C) ♦ [mg/L = ppm]	Contact Time (T) [minutes]	Actual CT C x T (Formula)	Temp [° C]	pH	Required CT (Formula)	CT Met? ♦ [Yes / No] (Formula)	Peak Hourly Demand Flow [GPM]	Notes (e.g. "Plant Off")
1									
2									
3									
4									
5									
6									
7									
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30									
31									

♦ If chlorine concentration at entry point < 0.2 mg/L, or CT not met, notify DWS within 24 hours.

Submit this monthly report by the 10th of following month by

mail: Drinking Water Services
PO Box 14350
Portland, OR 97293-0350

email: dwp.dmce@odhsoha.oregon.gov

fax: 971-673-0458

Definitions & Additional Information

Glossary of Terms:

CFE = Combined Filter Effluent **IFE** = Individual Filter Effluent
PDR = Pressure Decay Rate \cong **DIT** = Direct Integrity Test **LRC** = Log Removal Credit
LRV = Log Removal Value **TMP** = Transmembrane Pressure
Cl₂ = Chlorine **CT** = chlorine **C**oncentration x contact **T**ime

LRV_{ambient}: The preferred performance metric Oregon is moving towards

LRV_{ambient} is a performance metric of the filter's *Cryptosporidium* removal efficiency; [log] units.

LRV_{ambient} is calculated using the last DIT results & operating conditions (e.g., flow, temp. & TMP)

A filter whose LRV_{ambient} is less than the LRC must be taken off-line, repaired and then re-tested.

LRV_{ambient} is an LRV calculated using most recent DIT results (e.g., PDR in ^{psi}/_{min}), current filter flowrate, water temperature, and TMP.

An LRV_{ambient} of 4-log is equivalent to 99.99% removal of *Cryptosporidium*.

The nature of membrane filtration requires higher pathogen removal rates. Therefore, 4-log is typically the minimum pathogen removal target.

Highest PDR (Pressure Decay Rate):

Enter the highest pressure decay rate in ^{psi}/_{min} measured for DITs of all operating filters in a day.

A filter whose PDR exceeds the PDR_{Max} must be taken off-line, repaired and re-tested.

(PDR_{Max} is an Upper Control Limit (UCL) based on the DIT Pressure Decay Rate)

DIT Daily:

Enter "Y" if ALL filters operating in a given day were subjected to a DIT.

Enter "N" if ANY operating filter did not have a DIT.

Enter "Off" if ALL filters were off-line for the day.

Each filter producing water for human consumption in a given day must undergo a DIT

Highest IFE [NTU]: Must be continuously monitored.

If ever exceeds 0.15 NTU for > 15 minutes: Run a DIT, & complete Turbidity Triggered DIT form

Highest CFE [NTU]:

Data is collected for optimization purposes. Not for compliance.