

OHA - DWS

Membrane Filter Monthly Operating Report

County: **Lane**

System Name: **South Coast Water Co**

Month/Year: **Jan-2024**

PWS ID#: 41 - **00302**

Minimum test pressure applied || req'd: _____ psi || _____ psi

Plant ID: WTP - **A** (e.g., "A")

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}] | LRC [log removal] | DIT Daily |
|-----|---------------------------|--------------------|--------------------------------------|--------------------------------------------------------|----------------------------------------------------|----------------|
| | | | | 0.140 | 4.00 | |
| | | | | Highest PDR of day [^{psi} / _{min}] | Lowest LRV _{ambient} of day [log removal] | [Y/N] or "off" |
| 1 | 0.030 | 0.031 | 0.031 | 0.11 | 4.40 | Y |
| 2 | 0.032 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 3 | 0.029 | 0.031 | 0.031 | 0.11 | 4.40 | Y |
| 4 | 0.030 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 5 | 0.031 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 6 | 0.031 | 0.033 | 0.033 | 0.10 | 4.40 | Y |
| 7 | 0.029 | 0.031 | 0.031 | 0.11 | 4.40 | Y |
| 8 | 0.031 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 9 | 0.031 | 0.035 | 0.035 | 0.11 | 4.30 | Y |
| 10 | 0.032 | 0.034 | 0.034 | 0.11 | 4.30 | Y |
| 11 | 0.031 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 12 | 0.031 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 13 | 0.031 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 14 | 0.031 | 0.032 | 0.032 | 0.11 | 4.40 | Y |
| 15 | 0.030 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 16 | 0.030 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 17 | 0.031 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 18 | 0.031 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 19 | 0.030 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 20 | 0.032 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 21 | 0.032 | 0.034 | 0.034 | 0.12 | 4.40 | Y |
| 22 | 0.032 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 23 | 0.030 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 24 | 0.030 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 25 | 0.031 | 0.034 | 0.034 | 0.11 | 4.40 | Y |
| 26 | 0.032 | 0.033 | 0.033 | 0.11 | 4.40 | Y |
| 27 | 0.033 | 0.038 | 0.038 | 0.11 | 4.40 | Y |
| 28 | 0.034 | 0.042 | 0.042 | 0.09 | 4.60 | Y |
| 29 | 0.030 | 0.031 | 0.031 | 0.10 | 4.30 | Y |
| 30 | 0.030 | 0.033 | 0.033 | 0.10 | 4.30 | Y |
| 31 | 0.030 | 0.032 | 0.032 | 0.10 | 4.40 | Y |

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] (PDR ≤ PDR _{Max} , LRV ≥ LRC) | DIT Daily? |
| Yes | Yes | Yes | Yes | Yes |
| CT's met daily? (p. 2) | All Cl ₂ residual at EP ≥ 0.2 mg/L? | PDR ≤ PDR _{Max} ? | LRV _{ambient} ≥ LRC? | |
| Yes | Yes | Yes | Yes | |

PRINTED NAME: DANIEL REITZ **DATE:** 2/2/2024
SIGNATURE:  **WT CERT #:** 6528
Notes: **PHONE #:** 541-342-1718

* Used for optimization purposes only.

OHA-DWS

Disinfection Monthly Operating Report

System Name: **South Coast Water Co**

Date: **Jan-2024**

PWS ID#: 41 - **00302**

0.5

↩ Log
Inactivation
Required via
Disinfection

Plant ID : WTP - **A**

| 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 | 0.45 | 104 | 46.8 | 11.9 | 8.60 | 28.1 | YES | | |
| 2 | 1.01 | 104 | 105.0 | 12.1 | 8.10 | 24.8 | YES | | |
| 3 | 1.60 | 104 | 166.4 | 12.5 | 7.60 | 21.5 | YES | | |
| 4 | 1.90 | 104 | 197.6 | 12.1 | 7.60 | 22.9 | YES | | |
| 5 | 1.80 | 104 | 187.2 | 11.1 | 7.70 | 25.1 | YES | | |
| 6 | 0.34 | 104 | 35.4 | 11.2 | 7.60 | 20.4 | YES | | |
| 7 | 0.41 | 104 | 42.6 | 10.9 | 7.60 | 21.0 | YES | | |
| 8 | 0.35 | 104 | 36.4 | 11.2 | 7.50 | 19.7 | YES | | |
| 9 | 0.28 | 104 | 29.1 | 11.3 | 7.60 | 20.1 | YES | | |
| 10 | 0.29 | 104 | 30.2 | 10.3 | 7.80 | 23.1 | YES | | |
| 11 | 0.26 | 104 | 27.0 | 10.4 | 7.70 | 22.1 | YES | | |
| 12 | 0.30 | 104 | 31.2 | 10.8 | 7.70 | 21.6 | YES | | |
| 13 | 0.25 | 104 | 26.0 | 10.7 | 7.80 | 22.4 | YES | | |
| 14 | 0.27 | 104 | 28.1 | 9.9 | 7.80 | 23.7 | YES | | |
| 15 | 0.30 | 104 | 31.2 | 8.1 | 7.70 | 25.9 | YES | | |
| 16 | 0.34 | 104 | 35.4 | 8.1 | 7.50 | 24.2 | YES | | |
| 17 | 0.25 | 104 | 26.0 | 11.9 | 7.60 | 19.3 | YES | | |
| 18 | 0.30 | 104 | 31.2 | 12.1 | 7.70 | 19.8 | YES | | |
| 19 | 0.30 | 104 | 31.2 | 11.9 | 7.80 | 20.8 | YES | | |
| 20 | 0.40 | 104 | 41.6 | 10.9 | 7.80 | 22.5 | YES | | |
| 21 | 0.34 | 104 | 35.4 | 12.7 | 7.80 | 19.8 | YES | | |
| 22 | 0.33 | 104 | 34.3 | 13.1 | 7.80 | 19.3 | YES | | |
| 23 | 0.26 | 104 | 27.0 | 13.2 | 7.70 | 18.3 | YES | | |
| 24 | 0.28 | 104 | 29.1 | 12.9 | 7.80 | 19.4 | YES | | |
| 25 | 0.26 | 104 | 27.0 | 13.1 | 7.80 | 19.1 | YES | | |
| 26 | 0.26 | 104 | 27.0 | 12.8 | 7.70 | 18.8 | YES | | |
| 27 | 0.24 | 104 | 25.0 | 14.4 | 7.60 | 16.2 | YES | | |
| 28 | 0.23 | 104 | 23.9 | 15.3 | 7.60 | 15.3 | YES | | |
| 29 | 0.24 | 104 | 25.0 | 14.8 | 7.50 | 15.2 | YES | | |
| 30 | 0.24 | 104 | 25.0 | 14.2 | 7.50 | 15.9 | YES | | |
| 31 | 0.24 | 104 | 25.0 | 14.2 | 7.50 | 15.9 | YES | | |

♦ 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

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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.

Turbidity-Triggered Direct Integrity Test (DIT) Reporting Form

OHA - Drinking Water Services

To be used when IFE exceeds 0.15 NTU, and submitted to OHA-DWS [▲]

Water System Name: South Coast Water Co

Water System ID: 00302 [00302 Water System Profile on DataOnline](#)

Treatment Plant ID: WTP- A PDR_{Max} = maximum allowed pressure decay rate for a passing DIT

County: Lane LRC = Log Removal Credit granted for filtration, LRV_{ambient} must be ≥ LRC.

Month - Year: Jan-24

| Date/Time and membrane unit(s) affected | | Pressure Decay Rate (PDR) [^{psi} / _{min}]: 0.14 | | | LRC: 4.00 | |
|-----------------------------------------|-----------------------------|----------------------------------------------------------------------------|-------------------|---------------------------------------------------------|-----------------------------------|------------------------------------------------|
| Date/Time | Membrane unit/skid/cell ID# | Turbidity level > 0.15 NTU resulting in DIT [NTU] | Corrective action | DIT Re-test Results [^{psi} / _{min}] | Return-to-service turbidity [NTU] | Return-to-service LRV _{ambient} [log] |
| | | | | | | |
| | | | | | | |
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| | | | | | | |
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| | | | | | | |
| | | | | | | |

Monthly Summary

All return to service turbidity readings ≤ 0.15 NTU? (Enter Yes or No) ⇒

All membrane units removed from service until a DIT passes? (Enter Yes or No) ⇒

All return to service LRV_{ambient} ≥ LRC? (Enter Yes or No) ⇒

Name: _____

Signature: _____

Phone #: _____

Date: _____

WT Cert #: _____

▲ OAR 333-061-0036(5)(d)(C)(iv) states that if indirect integrity monitoring includes turbidity and the filtrate turbidity readings are above 0.15 NTU for a period greater than 15 minutes (i.e., two consecutive 15-minute readings above 0.15 NTU), direct integrity testing in accordance with subparagraphs (5)(d)(B)(i) through (v) of this rule must immediately be performed on the associated membrane unit.

Return by 10th of following month by email, fax, or mail to:
 dwp.dmce@odhsoha.oregon.gov; 971-673-0458; or Drinking Water Services, PO Box 14350, Portland, OR 97293-0350

Revised 2/17/2023