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| CITY OF MOLALLA WATER  C:\Users\nlennartz\Desktop\Logos for City\2 inch Emblem Spot.jpgTREATMENT PLANT | TURBIDIMETER MAINTENANCE  AND HOLD OPTION | DATE ISSUED  MAY-2018 |
| SOP  #17 |

**Overview**

The Molalla Water Treatment Facility has several turbidimeters, one for raw water turbidity, one on each filter for individual filter performance and a combined unit on the North wall of the treatment building. Turbidity readings for regulatory compliance are recorded on the SCADA within the Effluent turbidity trend screen. Individual Effluent Turbidity is also logged on SCADA with Data backed up on chart recorders in the Motor Control Room.

**Maintenance**

Please follow maintenance intervals provided in manufacturer’s recommendations. Turbidimeters need to be cleaned and flushed 1X weekly or more often as needed. Turbidimeters need to be calibrated quarterly and recorded onto the calibration records located in the “operational document” file cabinet. Bulbs need to be replaced annually and then re-calibrated. While preforming cleaning and maintenance please put the turbidimeter controller into the hold position. If for any reason you fail to put the turbidimeter into “hold” and perform maintenance or dump the sample please make a note in the operator log book so we know why there was a turbidity spike. Some of the older turbidimeter controllers do not have the “hold” option so please make a note in the operator log book when you preform the maintenance.

**To use the “HOLD” option on the 1720D Turbidimeter**

Press “Menu”,

Press to the “Sensor Menu” option press “enter”,

Press to “1720D Turbidimeter” press “enter”,

Press to “Hold outputs”, press “enter”,

Select “Hold for 30 minutes”, “enter”,

Press the “Exit” button until you return to the turbidimeter reading.

**Cleaning**

Please refer to the manufacturer’s recommendations for cleaning. Follow the directions above to place the unit in “hold” before cleaning.

*Photocell*

1. Clean the photocell with DI water and a soft cloth or Kimwipes.

*Turbidimeter body*

1. Turn off sample flow to turbidimeter body.
2. Remove the head assembly from the body.
3. Drain the body by removing the plug or open the ball valve located at the bottom of the unit.
4. Remove the bubble trap, rinse and brush bubble trap and body with bottle brush.
5. Replace bubble trap and head assembly.
6. Restore sample flow and check flow rate.
7. Once the readings stabilize and are back to normal take the controller out of “hold” mode as described above.

**Service**

Hach technical support 1-800-227-4224.