

# Optimization Assessment Software

## Instructions

### Entering data from another spreadsheet (copy/pasting):

1. When entering data sets from another spreadsheet, use the DataEntryPaste worksheet. This will reduce problems that could occur due to formatting differences.
2. Before entering new data, you should clear the data entry area of any pre-existing data. This can be performed by clicking on the **CLEAR** button.
3. After the data is entered, click the **TRANSFER** button to transfer the data to the database.
4. Go to the DataEntryValues worksheet and enter the plant name and performance goals.
5. Click the **UPDATE** button to develop the Summary and Optimization Trend Reports.

### Entering individual data from plant records:

1. When entering daily data from plant records, use the DataEntryValues worksheet.
2. Before entering new data, you should clear the database of any pre-existing data. This can be performed by clicking on the **CLEAR** button.
3. After data is entered, click on the **UPDATE** button to develop the Summary and Optimization Trend Reports.



### Hiding columns in DataEntryValues worksheet:

1. If not all filter data columns are needed, unused columns can be hidden. For example, if a plant has 24 filters, the columns for filters 25 thru 36 can be hidden.
2. To hide columns, the worksheet must first be unprotected by going to the Tools and Protection commands. After this is done, select the columns to be hidden and then go to the Format and Column commands to hide the desired columns.

### Optimization Assessment Software

FILE: Turb-opt36filtersV4.xls  
AUTHOR: L. DeMers, K. Rakness, B. Hegg  
COMPANY: Process Applications, Inc.  
PURPOSE: To assess particulate removal in surface water treatment plants

### DATE MODIFIED: MODIFICATIONS & BY WHOM:

4/15/1999	LDD initiated program development.
5/26/1999	LDD modified program to include individual sedimentation and filter graphs.
5/27/1999	LDD modified program to indicate "out of range" warning for filter turbidity data entry.
7/23/1999	LDD initiated program modifications to use percentile calculation.
9/23/1999	LDD added column for combined filter effluent turbidity. Modifications also made to use percentile calculations.
9/25/1999	LDD modified program to include os
11/24/1999	LDD added worst filter cell conditions and screen hide during macro.
11/28/1999	LDD added worst sed basin cell conditions.
12/16/1999	LDD corrected 95% calc. error in max. sed. and filter columns. LDD modified to data input to allow up to 12 filters.
12/17/1999	LDD modified annual statistics to exclude STDEV and include % time meeting reg. requirement.
3/3/2000	LDD fixed y-axis on individual sed and filter graphs
5/13/2000	LDD corrected Leap Year problem (temporary fix until modifications to account for both Leap Year and non-Leap year data input is completed).

6/8/2000	LDD/KLR corrected Leap Year problem to allow data input for both Leap Year and non Leap Year data.
11/28/2000	LDD corrected error in max filter turbidity calc on DataEntryValues worksheet. Saved as turb-opt23p.xls.
3/27/2001	LDD corrected error in max settled water graph to plot the max value from four sed basins (versus the value from sed basin 1). Also corrected date range in same graph. Saved as turb-opt24a.xls.
4/18/2001	LDD added "Yes/No" step to clear macros. Changed color of macro buttons.
8/23/2002	LDD added LT-Trend worksheet to support LT Trend companion spreadsheet. Corrected y-axis lable on MaxFilter chart. Saved as turb-opt26a.xls.
4/20/2003	LDD added data entry cell for public water system number.
4/20/2003	LDD added annual calculations for individual basin/filter 95th % and % values meeting goal calculations. Saved as turb-opt27.xls.
1/4/2007	LDD completed program modifications to include turbidity data for up to 36 filters.
1/31/2007	LDD corrected chart error on optimization trend worksheet. Modified sed basin input to include up to 8 basins. Added input for system name. Changed combined filter turbidity RSQ datasets to include max. filter turbidity and combined turbidity.
2/5/2007	LDD modified settled water optimization trend chart to include all available settled water data instead of maximum settled water data. Updated long-term trend table and corrected error in copying filter data.
4/11/2007	LDD corrected error in monthly summary table range name that caused incorrect combined turbidity data. Changed name to Version 4+C26

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Model developed by: Process Applications, Inc. Fort Collins, CO 970-223-5787