

APPENDIX B

Interpreting Monitoring Data

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The “Highest Level Detected” column should display the annual average of all samples collected during the CCR calendar year. In order to calculate the highest level detected data, one of the following methods should be used based on the individual public water supply’s requirements. Note: If a public water supply has several entry points or treatment plants (TPs), you must use the data from the TP that had the highest values.

Contaminants Monitored Annually or Less Frequently (triennial)

For public water supplies with one sampling location (in most cases each active entry point or TP), the single sample result from that location is used. For systems with multiple TPs, the location with the highest detected level is used in the table. If a confirmation sample was collected, the confirmation sample is averaged with the routine sample. In this case, the sampling location with the highest average is used in the table.

Contaminants Monitored Quarterly

For each location sampled (in most cases, each active entry point or TP), a quarterly average is calculated using all routine/confirmation samples collected during the quarter. Next, an annual average is calculated for each location by adding the quarterly averages and dividing by four. The location sampled with the highest annual average is used in the table.

Contaminants Monitored Two or Three Quarters per Year

For all locations sampled (in most cases, each active entry point or TP), a quarterly average is calculated for each quarter having sample data. Next, an annual average is calculated for each location by adding the quarterly averages, and dividing by the number of quarters tested (either two or three). The location sampled with the highest average is used in the table.

Turbidity

When reporting turbidity as an indicator of filtration performance, systems must report the highest single measurement and the lowest monthly percentage of samples meeting the requirements

	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source
Turbidity	TT = 0.3 NTU	N/A	99.7%	99.7-100			Soil runoff
Turbidity	TT = 1 NTU max	N/A	1	N/A			Soil runoff

Calculating a Running Annual Average

The following example describes the calculation process for a running annual average. This example illustrates an **atrazine** running annual average (RAA) that is calculated for two treatment plants or TPs.

Monitoring Quarter	TP 01 SOUTH WTP (ug/l)		TP01	TP 02 WEST WTP (ug/l)		TP02
	Atrazine Quarterly Results	Running Annual Average*		Atrazine Quarterly Results	Running Annual Average*	
Jan 2007 thru March 2007	3	NC		1	NC	
April 2007 thru June 2007	10	NC		2	NC	
July 2007 thru Sept 2007	9	NC		4	NC	
Oct 2007 thru Nov 2007	4	NC		1	NC	
Jan 2008 thru March 2008	2	6.3	OVER MCL	2	2.3	Under MCL
April 2008 thru June 2008	1	4	OVER MCL	1	2	Under MCL
July 2008 thru Sept 2008	2	2.3	Under MCL	1	1.3	Under MCL
Oct 2008 thru Dec 2008	2	1.8	Under MCL	1	1.3	Under MCL
<i>NC = Running Annual Average was not calculated.</i>						
* The running annual average is calculated by adding the <u>current quarter</u> plus the <u>three previous quarters</u> and then dividing by four.						

In this example, TP 01 had the highest results; thus, these values will be used in the detected contaminants table. For TP 01, no individual quarterly results exceeded the MCL during 2008; however, the running annual average exceeded the MCL for two quarters.

Therefore, your detected contaminant table for atrazine would look like:

	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical Source
Atrazine	3	3	6.3	1-2		YES	Runoff from herbicide used on row crops

NOTE: In your Violation Summary Table, you must include the length of the violation, corrective action being taken by the water supply, and the mandatory health effects language.