

November 2009

**Monthly Summary of Distribution System Coliform Monitoring
(including triggered source monitoring for systems subject to the Groundwater Rule)**

INSTRUCTIONS FOR COMPLETING THE REPORTING FORM

Begin by filling in the blanks at the top of the form for system name, system number, sampling month, and year.

1. Routine Samples:

Number Required: This is the number of bacteriological samples the water system is required to collect based on a Department-approved Total Coliform Sample Siting Plan.

Routine samples include:

- Samples required by Section 64422 and 64423.
- Extra samples required for systems collecting less than five routine samples each month that had one or more total coliform positives in the previous month, as required by Section 64424.
- Extra samples for systems with high source water turbidities that are using surface water or groundwater under the direct influence of surface water and do not practice filtration compliant with the regulations.

NOTE: *All other samples collected during the sampling period are one of the following:*

- *repeat samples, to be reported as described below;*
- *special samples, which should be labeled as such, are not used for compliance determinations, and should not be included on the form; or*
- *Groundwater Rule triggered samples, to be reported as described below and only required for system(s) subject to the triggered monitoring requirements of the Groundwater Rule.*

Number Collected: This number should be the same as the “Number Required”. If less, the system is not compliant.

Number of Total Coliform Positives: This includes only total coliform positives from the required routine samples.

NOTE: *All total coliform positive results and their associated repeat samples are to be tracked on the “Coliform Monitoring Worksheet”.*

Number of Fecal or E. Coli Positives: This includes only the number of Fecal or *E. Coli* Positives from the routine samples collected during the month.

2. Repeat Samples Following Total Coliform Positive Samples:

This refers to the total number of repeat samples collected for total coliform positives during the month.

NOTE: *All repeat samples must be collected within 24-hours of being notified of a total coliform positive result.*

Number Collected:

- For a system that normally collects more than one sample a month, this number should equal three times the number of total coliform positives in line 4(a), unless the system fails the MCL.
- For a system that normally collects one or fewer samples per month, this number should equal four times the number of total coliform positives in line 1.

In either case one of the repeat samples must be collected from the sample tap where the original total coliform-positive was taken. Additionally, one sample must be collected upstream and one sample must be collected downstream, within five service connections (unless there is no upstream and/or downstream connection).

Number of Total Coliform Positives: This includes only total coliform positives resulting from required repeat samples following routine and repeat total coliform positives.

Number of Fecal/E. coli Positives: This includes only the Fecal/E. coli positives resulting from required repeat samples following routine or repeat sample total coliform positives in line 1. If there are one or more Fecal/E. coli positives following any total coliform positive, this constitutes an acute MCL violation.

3. Repeat Samples Following Fecal/E. coli Positive Routine Samples:

This means the total number of repeat samples collected, following a positive Fecal/E. coli test of a routine sample, after repeat samples in line 2 have been collected.

NOTE: *This set of samples is only collected if a sample in line 2 is fecal or E. Coli positive.*

Number Collected: This is the total number of repeat samples collected following a fecal or E. coli positive result in the first repeat sample set. This number should equal three times the number of Fecal/E. coli routine positives in line 1.

Number of Total Coliform Positives: This is the total number of total coliform positives resulting from the repeat sample set. If this number is one or greater it constitutes an acute MCL failure.

Number of Fecal/E. coli Positives: This is the total number of Fecal/E. coli positives resulting from the repeat sample set. If this number is one or greater it constitutes an acute MCL failure.

4. MCL Computation for Total Coliform Positive Samples:

a. **Totals (Sum of columns):** Add the numbers in the vertical columns and fill in the corresponding blank for the “Number Collected” and the “Number of Total Coliform Positives”.

NOTE: *For systems collecting less than 40 samples per month, if two or more samples are total coliform positive, then the MCL is violated and the Department must be notified on that day. If the Department is closed, the Department must be notified within 24 hours.*

b. **If 40 or more samples are collected each month, determine the percent of samples that are total coliform positive.**

$$\frac{\text{Total number of total coliform positive samples}}{\text{Total number of samples collected}} \times 100 = \text{ _____\%}$$

Place the percent of total coliform positive samples in the blank on line 4b.

NOTE: *For systems collecting more than 40 samples per month, if more than 5 percent of the samples are total coliform positive, then the MCL is violated and the Department must be notified on that day. If the Department is closed, the Department must be notified within 24 hours.*

c. **Is system in compliance with fecal/E. coli MCL? [] yes [] no**

- If the box on line 2 for “Number of Fecal/E. coli Positives” has a number of one or more, then the system is not compliant.
- If either box on line 3 for the “Number of Total Coliform Positive” or “Number Fecal/E. coli Positives” has a number of one or more, then the system is not compliant.

Is system in compliance with the monthly MCL? [] yes [] no

- For a system collecting 40 samples or less, if in 4(a) above, the system has two or more samples that are total coliform positive, then the system is not compliant.

- If, in 4(b) above, the system has more than 5 percent of the total number of samples collected for the month which are Total Coliform Positive, then the system is not in compliance with the monthly MCL.

5. Source Samples Triggered by Routine Samples that are Total Coliform Positive:

This applies **only** to systems subject to triggered source monitoring under the Groundwater Rule.

NOTE: • Triggered source samples must be collected within 24 hours (before or after) of being notified of distribution system total coliform positive results.

- The triggered source sample indicator used must be either *E. coli*, enterococci, or coliphage (i.e. **not** fecal coliform). **The Department recommends using *E. coli*.**
- Triggered source samples are required for routine total coliform positive samples taken pursuant to Section 64422 or 64423 only. "Extra" samples, such as those taken pursuant to Section 64424 do not trigger source monitoring.
- All triggered monitoring results are to be tracked on the "Coliform Monitoring Worksheet".
- For systems serving ≤ 1000 persons, a triggered source water sample may be used as the fourth repeat if ***E. coli* was the indicator used.**

- In the blank under "Number Collected", enter the total number of triggered source samples collected. The value entered should be at least one of the following:

- For systems with no Department-approved representative monitoring plan, the number collected should be equal to ("Number Total Coliform Positives" in line 1) x (the number of groundwater sources operating when routine distribution samples were taken).
- For systems with a Department-approved Groundwater Rule representative monitoring plan, the number collected should be equal to the number indicated in the approved plan, with the understanding that a source sample must be taken for each routine distribution system total coliform positive.

- In the blank under "Number of Total Coliform Positives", put the total number of triggered source samples that were total coliform positive.

- In the box under "Number Fecal/*E. coli* Positives", put the total number of triggered source samples that were *E. coli*, enterococci, or coliphage positive. If the number in the box is one or more, the system must immediately notify the Department, provide Tier 1 public notification, and perform corrective action.

6. Invalidated Samples:

If any samples were invalidated, note:

- which samples were invalidated,
- why they were invalidated,
- who authorized the invalidation, and
- when replacement samples were collected. Attach additional sheets if necessary.

7. Summary Completed By:

Provide your signature, title, and the date in the blanks on the report.