

Preparation of a

Coliform Monitoring Plan

for the Small Non-Community Water System

October 2007



DOH PUB. #331-240
(Revised)

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COLIFORM MONITORING PLAN (CMP) for the Small Non-Community Water System

The purpose of the coliform monitoring program is to enable water purveyors to evaluate the microbial water quality of a water system using economical tests. These tests help to ensure the water provided to customers is free of disease-causing organisms. The main objectives for a Coliform Monitoring Plan (CMP) are to:

- Ensure representative routine sampling.
- Identify repeat sample sites.
- Improve water quality surveillance.
- Provide consistency of location and sampling technique between different people.

This version of the CMP was developed for single-connection water systems (for example, a store or church) or very simple, small water systems (for example, a store with two single-family homes). This document includes instructions (pages 1 and 2), a blank form for your use (pages 3 and 4), and two examples (pages 5 through 8).

Part A: Water System Information

Enter Water System Name and System ID Number which can be found on the Water Facilities Inventory form (WFI.) Please attach a copy of the current WFI. Also, enter the county where the system is located and the number of sample sites needed to properly represent the distribution system.

Part B: Routine and Repeat Sample Locations

- Choose *routine* sites which are good sample sites and are representative of the water system. An example of a good sample site is a cold water faucet at a clean restroom sink. If possible, do not collect samples from frost-free faucets, frost-free hydrants, swivel faucets, drinking fountains, faucets that leak or drip, or are close to the ground. Flush the faucet for at least five minutes and use proper technique when collecting the sample. (See Department of Health publication #331-225 – Coliform Sampling Procedures.)
- Repeat samples are required within 24 hours after notification of an unsatisfactory Routine sample. Repeat samples are used to confirm the presence of contamination and to help identify the source of contamination. **Do not batch or shock chlorinate prior to collecting the repeat samples unless prior authorization is given by DOH or your county health department.**
- Choose *four repeat* sites if the system collects one monthly routine sample. Choose *three* repeat sites if the system collects more than one monthly routine sample. It is best to collect the repeat samples from the location of the unsatisfactory Routine sample, an upstream site within five service connections, a downstream site within five service connections and one from the well or storage. This may be difficult to do if the number of good sample taps is limited. For example, if you only have one good sample location it is recommended that all repeat samples be collected at that tap. Contact the appropriate regional office if you have questions about choosing sample sites.

- Choose *five routine sites* for the month following one or more unsatisfactory samples(s.) This may or may not be a month when sampling is normally required for your system; even if it is a month without a regular sample required, sampling must be done in the month following an unsatisfactory routine sample. If all five of these samples are satisfactory, return to your normal sampling schedule. If there is any redundancy within the five sample sites, it is recommended to spread the sampling throughout the month to obtain a better picture of the water system quality. If your water system is closed and serves NO users during the month, please contact the appropriate regional office for guidance.

C: Routine Sample Rotation Schedule

Rotation of routine sample sites is recommended. For example, if there are two routine sites sampling would occur at each site every other month. With three sample locations, each site would be sampled every third month. Fill out the sample rotation schedule accordingly.



D: Attach a simple map or drawing of your water system

As appropriate for your system, show the source(s), pressure tank(s) and/or storage tank, treatment system, booster pumps, building(s), tap locations, etc. Number each of the routine sites starting with X, for example, X-1 or X2.

E: Preparation Information

Enter the name, position, and phone numbers of the person who prepared the CMP. Be sure to include the date completed. Do Not enter anything in the boxes titled *State Reviewer* and *Date Reviewed*.

COLIFORM MONITORING PLAN (CMP) for the Small Non-Community Water System

Part A: Water System Information

| | | |
|--|---|----------------------------|
| Name of Water System: _____ | County: _____ | System ID Number: _____ |
| <input checked="" type="checkbox"/> Attach Copy of Current Water Facilities Inventory (WFI) form | Number of Sample Sites Needed to Represent the Distribution System: _____ | |

Part B: Routine and Repeat Sample Locations

Please select Routine and Repeat sample sites and complete the table below:

| Location / Address for <u>Routine</u> Sample Site | Location / Address for <u>Repeat</u> Sample Sites | Sample Locations for <u>Month Following</u> Unsatisfactory Sample(s) |
|---|---|--|
| X # 1 | 1-1 | 1. |
| | 1-2 | 2. |
| | 1-3 | 3. |
| | 1-4 | 4. |
| | | 5. |
| | | |
| X #2 | 2-1 | 1. |
| | 2-2 | 2. |
| | 2-3 | 3. |
| | 2-4 | 4. |
| | | 5. |
| | | |

C: Routine Sample Rotation Schedule

| Month | Sample Site(s) | Month | Sample Site(s) |
|----------|----------------|-----------|----------------|
| January | | July | |
| February | | August | |
| March | | September | |
| April | | October | |
| May | | November | |
| June | | December | |



D: Attach a simple map of your water system

E: Preparation Information

| | | |
|--|--|--------------------------------------|
| Name of Plan Preparer: _____ | Position: _____ | Date Plan Completed: _____ |
| Daytime Phone Number: () ____ - _____ Evening Phone Number: () ____ - _____ | STATE REVIEWER: _____ _____ _____ | DATE REVIEWED: ____ / ____ / ____ |

Sample #1: Small Non-Community System (grocery store)

**COLIFORM MONITORING PLAN (CMP)
for the Small Non-Community Water System**

Part A: Water System Information

| | | |
|--|--|------------------------------------|
| Name of Water System: ClearWater Grocery | County: Pierce | System ID Number: AA010D |
| <input checked="" type="checkbox"/> Attach Copy of Current Water Facilities Inventory (WFI) form | Number of Sample Sites Needed to Represent the Distribution System: 2 | |

Part B: Routine and Repeat Sample Locations

Please select Routine and Repeat sample sites and complete the table below:

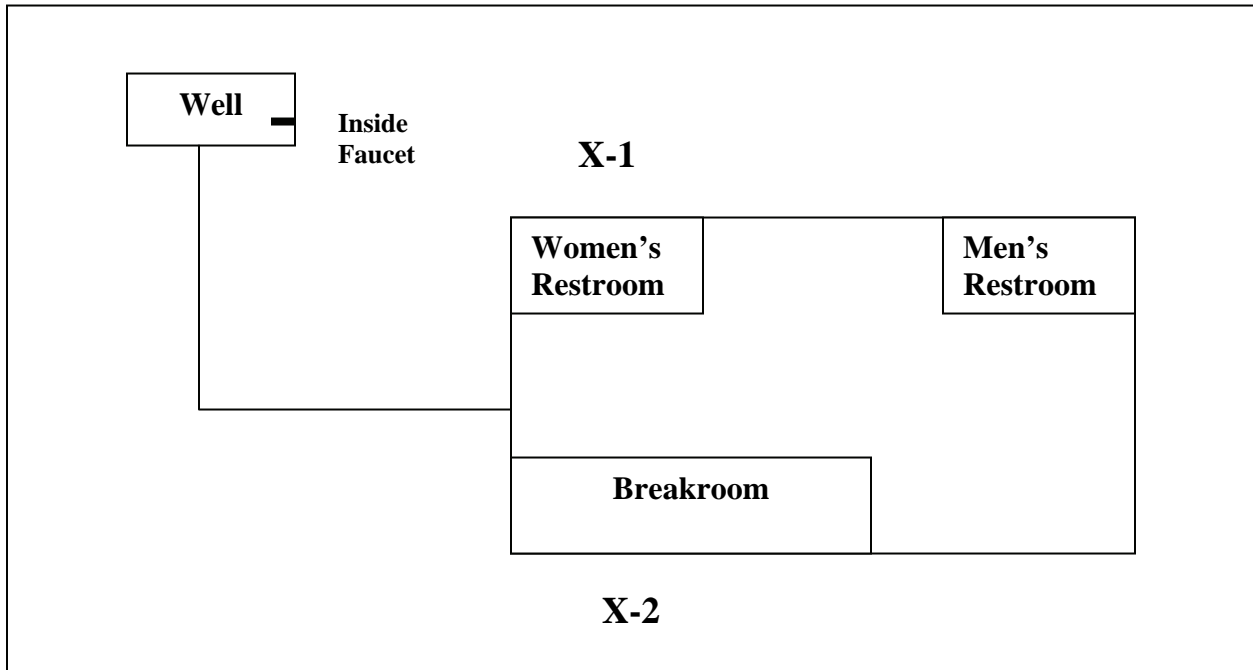
| Location / Address for Routine Sample Site | Location / Address for Repeat Sample Sites | Sample Locations for Month Following Unsatisfactory Sample(s) |
|--|--|---|
| X # 1 Women's Bathroom | 1-1 Women's Bathroom | 1. Women's Bathroom |
| | 1-2 Women's Bathroom | 2. Women's Bathroom |
| | 1-3 Breakroom | 3. Breakroom |
| | 1-4 Well | 4. Breakroom |
| | | 5. Well |
| X #2 Breakroom | 2-1 Breakroom | 1. Breakroom |
| | 2-2 Breakroom | 2. Breakroom |
| | 2-3 Women's Bathroom | 3. Women's Bathroom |
| | 2-4 Well | 4. Women's Bathroom |
| | | 5. Well |

C: Routine Sample Rotation Schedule

| Month | Sample Site(s) | Month | Sample Site(s) |
|----------|----------------|-----------|----------------|
| January | X-1 | July | X-1 |
| February | X-2 | August | X-2 |
| March | X-1 | September | X-1 |
| April | X-2 | October | X-2 |
| May | X-1 | November | X-1 |
| June | X-2 | December | X-2 |



D: Attach a simple map of your water system



E: Preparation Information

| | | |
|--|-----------------------------------|--|
| Name of Plan Preparer: Mr. Smith | Position: Manager | Date Plan Completed: 6/02/03 |
| Daytime Phone Number: (253) 474-1234 Evening Phone Number: (253) 474-5678 | STATE REVIEWER: _____ _____ | DATE REVIEWED: ____ / ____ / ____ |

Sample #2: Small Non-Community System (daycare)

**COLIFORM MONITORING PLAN (CMP)
for the Small Non-Community Water System**

Part A: Water System Information

| | | |
|--|--|------------------------------------|
| Name of Water System: Healthy Kids Daycare | County: Mason | System ID Number: 12345B |
| <input checked="" type="checkbox"/> Attach Copy of Current Water Facilities Inventory (WFI) form | Number of Sample Sites Needed to Represent the Distribution System: 2 | |

Part B: Routine and Repeat Sample Locations

Please select Routine and Repeat sample sites and complete the table below:

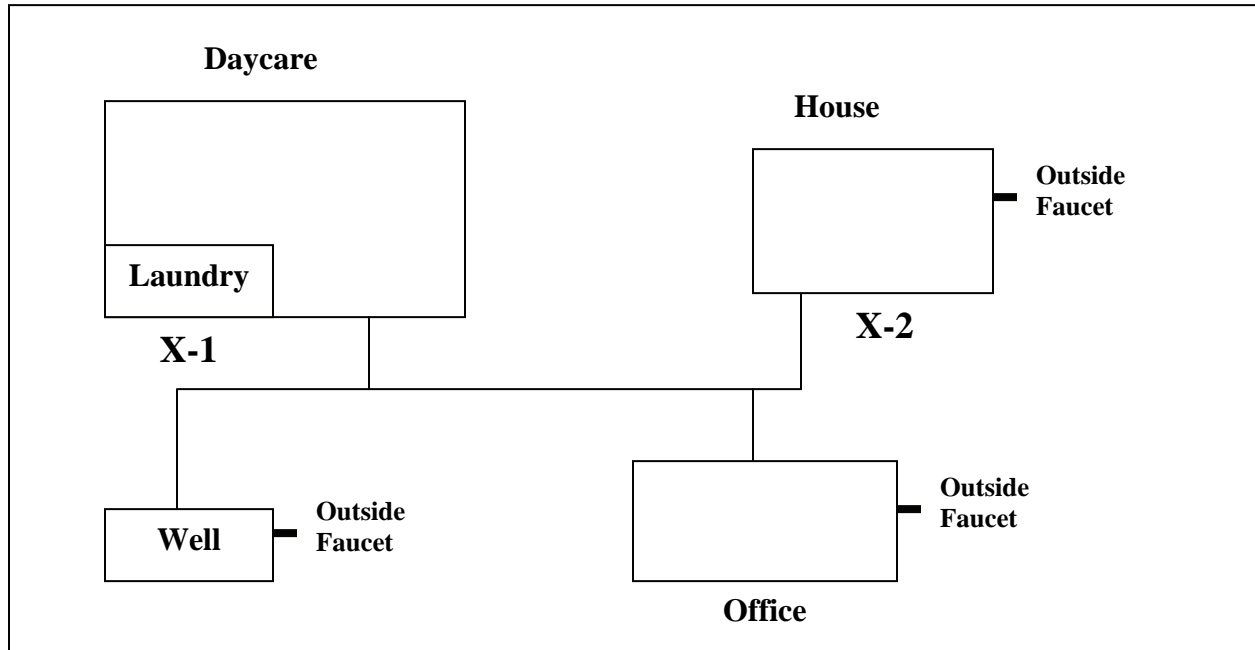
| Location / Address for Routine Sample Site | Location / Address for Repeat Sample Sites | Sample Locations for Month Following Unsatisfactory Sample(s) |
|--|--|---|
| X # 1 Daycare Laundry | 1-1 Daycare Laundry | 1. Daycare Laundry |
| | 1-2 House | 2. Daycare Laundry |
| | 1-3 Office | 3. House |
| | 1-4 Well | 4. Office |
| | | 5. Well |
| X #2 House | 2-1 House | 1. House |
| | 2-2 Daycare Laundry | 2. House |
| | 2-3 Office | 3. Daycare Laundry |
| | 2-4 Well | 4. Office |
| | | 5. Well |

C: Routine Sample Rotation Schedule

| Month | Sample Site(s) | Month | Sample Site(s) |
|----------|----------------|-----------|----------------|
| January | X-1 | July | X-1 |
| February | X-2 | August | X-2 |
| March | X-1 | September | X-1 |
| April | X-2 | October | X-2 |
| May | X-1 | November | X-1 |
| June | X-2 | December | Closed |



D: Attach a simple map of your water system



E: Preparation Information

| | | |
|--|------------------------------------|---------------------------------------|
| Name of Plan Preparer: Mr. Jackson | Position: Superintendent | Date Plan Completed: 6/3/03 |
| Daytime Phone Number: (360) 427-1234 Evening Phone Number: (360) 427-5378 | STATE REVIEWER: _____ _____ | DATE REVIEWED: ____ / ____ / ____ |