EXAMPLE COLIFORM MONITORING PLAN

## Example: Clean Water Resort

**COLIFORM MONITORING PLAN (CMP)**

***System Information Plan Date: 3/31/16***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Water System Name**  Clean Water Resort Grocery Store | | | | | | **County**  Pierce | | | | **System I.D. Number**  AA010D | | | |
| **Name of Plan Preparer**  Josephine Operator | | | | | | **Position**  Manager | | | | **Daytime Phone #**  253-987-6543 | | | |
| **Coliform Monitoring Population (January through December)** | | | | | | | | | | | | | |
| 5 | 5 | 5 | 300 | 350 | 500 | | 500 | 500 | 400 | | 100 | 5 | 5 |
| **Coliform Monitoring Schedule (January through December)** | | | | | | | | | | | | | |
| 1 | 0 | 0 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 0 | 0 |
| **Sources:** DOH Source Number, Source Name, Well Depth & Pumping Capacity | | | | | | S01/well 1, 85’, 12 gpm | | | | | | | |
| **Storage:** Number and List | | | | | | None | | | | | | | |
| **Pressure Zones:** Number and name | | | | | | One, entire system | | | | | | | |
| **Population by Pressure Zone** | | | | | | 5 - 500 | | | | | | | |
| **Number of Routine Samples Required Monthly by Regulation:** 1 | | | | | | **Number of Sample Sites Needed to Represent the Distribution System:** 2 | | | | | | | |

1. **Laboratory Information**

|  |  |
| --- | --- |
| **Laboratory Name**  Perfect Analysis Every Time | **Office Phone #**  253-123-4567 |
| **Address**  999 99th Ave E  Tacoma WA | **After Hours #**  253-951-3578 |
| **Hours of Operation**  Mon-Friday 8 to 5, Sat. 8-12 | |
| **Contact Name**  Jane Micro | |
| **Emergency Laboratory Name**  Clean Beaker Laboratory | **Office Phone #**  206-852-1397 |
| **Address**  111 11th Ave W  Seattle WA | **After Hours #**  206-456-9871 |
| **Hours of Operation**  Monday – Friday 7:30-5:30, Sat. 8-4 | |
| **Contact Name**  John Scope | |

1. **Routine, Repeat, and Triggered Source Sample Locations**

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| --- | --- | --- | --- | --- |
| Location/Address for  **Routine Sample Sites** | Location/Address for  **Repeat and Triggered Source Sample Sites** | | **Sample Location for Month Following an Unsatisfactory Sample(s) when the following month normally doesn’t not have a sample requirement** | |
| **X1.** |  | **1-1.**Cabin 105 |  | **X2** |
| Cabin 105 |  | **1-2.** Cabin 102 |  |  |
|  |  | **1-3.** Cabin 107 |  |  |
|  |  | **S01** |  |  |
|  |  |  |  |  |
| **X2.** |  | **2-1.** Cabin 110 |  | **X1** |
| Cabin 110 |  | **2-2.** Cabin 107 |  |  |
|  |  | **2-3.** Cabin 113 |  |  |
|  |  | **S01** |  |  |
|  |  |  |  |  |

If you need more than three routine samples to cover the distribution system, attach additional sheets as needed.

**Important notes for Sample Collector:**

1. **Sample early in the month and early in the week.**
2. **Do not sample in a week when experienced staff are on vacation or a holiday may create schedule conflicts.**
3. **Check the sample tap before filling the bottle to make sure that everything is normal, so that the sample will be representative of the water in the system.**
4. **Routine Sample Rotation Schedule\***

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

**\*** If January sample is Total Coliform-Present, a February sample is required. If February sample is Total Coliform Present, a March sample is required.

**\*\***If October sample is Total Coliform-Present, a November sample is required. If November sample is Total Coliform Present, a December sample is required.

**D. Level 1 & Level 2 Assessment Contact Information**

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| **Name**  John Smith | **Office Phone #** |
| **Address** | **After Hours #** |
| **Name**  Sam Jones | **Office Phone #** |
| **Address** | **After Hours #** |

**E*. E. coli* Present Sample Response Plan**

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| --- | --- | --- | --- | --- | --- |
| **Distribution System *E. coli* Response Checklist** | | | | | |
| **Background Information** | **Yes** | **No** | **N/A** | | **To Do List** |
| We inform staff members about activities within the distribution system that could affect water quality. |  |  |  | |  |
| We document all water main breaks, construction & repair activities, and low pressure and outage incidents. |  |  |  | |  |
| We can easily access and review documentation on water main breaks, construction & repair activities, and low pressure and outage incidents. |  |  |  | |  |
| Our Cross-Connection Control Program is up-to-date. |  |  |  | |  |
| We test all cross-connection control devices annually as required, with easy access to the proper documentation. |  |  |  | |  |
| We have identified one or more individuals who are able to conduct a Level 2 assessment of our water system. |  |  |  | |  |
| We have procedures in place for disinfecting and flushing the water system if it becomes necessary. |  |  |  | |  |
| We can activate an emergency intertie with an adjacent water system in an emergency. |  |  |  | |  |
| There is enough bottled water immediately available to our customers who are unable to boil their water. |  |  |  | |  |
| We have messages prepared and translated into different languages to ensure our consumers will understand them. |  |  |  | |  |
| **Policy Direction** | **Yes** | **No** | **N/A** | | **To Do List** |
| If we find *E. coli* in a routine distribution sample, the policy makers want to wait until repeat test results are available before issuing advice to water system customers. |  |  | |  |  |
| **Potential Public Notice Delivery Methods** | **Yes** | **No** | | **N/A** | **To Do List** |
| Our customers pass by a single location where we could post an advisory and expect everyone to see it. |  |  |  | |  |
| We need a news release to supplement our public notification process. |  |  |  | |  |

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| ***E. coli*-Present Triggered Source Sample Response Checklist** | | | | |
| **Background Information** | **Yes** | **No** | **N/A** | **To Do List** |
| We review our sanitary survey results and respond to any recommendations affecting the microbial quality of our water supply. |  |  |  |  |
| We address any significant deficiencies identified during a sanitary survey. |  |  |  |  |
| There are contaminant sources in our Wellhead Protection Area that could affect the microbial quality of our source water, and  If yes, we can eliminate them. |  |  |  |  |
| We routinely inspect our well site. |  |  |  |  |
| We have a good raw water sample tap installed at our well. |  |  |  |  |
| After we complete work on our well, we disinfect the source, flush, and collect an investigative sample. |  |  |  |  |
| **Alternate Sources** | **Yes** | **No** | **N/A** | **To Do List** |
| We can stop using this source and still provide reliable water service to our customers. |  |  |  |  |
| We have an emergency intertie with a neighboring water system that we can use until corrective action is complete (perhaps for several months). |  |  |  |  |
| We can provide bottled water to all or part of our distribution system for an indefinite period. |  |  |  |  |
| We can quickly replace our existing supply source with a more protected new source of supply. |  |  |  |  |
| **(Cont.)** | | | | |

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| --- | --- | --- | --- | --- |
| ***E. coli*-Present Triggered Source Sample Response Checklist** | | | | |
| **Temporary Treatment** | **Yes** | **No** | **N/A** | **To Do List** |
| This source is continuously chlorinated, and our existing facilities can provide 4-log virus treatment (CT = 6) before the first customer.  If yes, at what concentration? \_\_\_\_\_ mg/L |  |  |  |  |
| We can quickly introduce chlorine into the water system and take advantage of the existing contact time to provide 4-log virus treatment to a large part of the distribution system. |  |  |  |  |
| We can reduce the production capacity of our pumps or alter the configuration of our storage quantities (operational storage) to increase the amount of time the water stays in the system before the first customer to achieve CT = 6. |  |  |  |  |
| We can alter the demand for drinking water (maximum day or peak hour) by using conservation messages to increase the time the water is in the system prior to the first customer in order to achieve 4-log virus treatment with chlorine. |  |  |  |  |
| **Public Notice** | **Yes** | **No** | **N/A** | **To Do List** |
| We will immediately post a public notice of an *E. coli*-present source sample result. |  |  |  |  |
| We have prepared templates and a communications plan that will help us quickly distribute our messages. |  |  |  |  |

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| **Distribution System *E. coli* Response Plan** |
| **If we have *E. coli* in our distribution system, we will immediately:**   1. Issue a Health Advisory (HA) 2. Call DOH and our local health department food permit contact 3. Collect repeat samples per Part C. Collect additional investigative samples as necessary. 4. Inspect our water system components for proper operation. 5. Interview staff to determine whether anything unusual was happening in or around the store recently. 6. Review new construction activities, pipe breaks, and pressure outages that may have occurred during the previous month. 7. Review cross-connection control status. 8. Await repeat sample results and respond accordingly. If all repeats are OK, lift the HA. If at least one repeat is unsatisfactory, ask DOH for a system inspection and respond to inspection findings accordingly. |

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| ***E. coli*-Present Triggered Source Sample Response Plan** |
| **If we have *E. coli* in our source water, we will immediately:**   1. Call DOH 2. Post required notice 3. Interview staff 4. In concert with DOH, begin work on corrective action plan. Corrective action options: discontinue use of the contaminated source; provide 4-log virus treatment of the source. |

1. **System Map**

X-2

120

118

116

114

112

110

108

106

104

102

119

117

115

113

111

109

107

105

103

101

X-1

S01