DISINFECTION PROPOSAL PLAN

## Disinfection Criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of Installation:** | * **Watermain** | * **By-pass** | | * **Service Hose** |
| **Pipe Diameter : mm** | | Length: m | | **Pipe Material: PVC, DI, Other:\_\_\_\_\_\_\_\_\_\_\_\_** |
| **Disinfection Method:** | * **Continuous Feed** | * **Slug** | | **Concentration: mg/L** |
| **Contact Time:** | * **24 hrs** | * **3 hrs** |  |  |
| **Backflow Preventer to be used:** | * **RP** |  | | **Disinfectant to be used:** |
| **Discharge to:** | * **Storm** * **Sanitary** * **Combined** | **Location of source water:** | | |
| **Source provided by:** | | * **Watermain Hydrant** * **By-pass** |

|  |
| --- |
| **Disinfection Site Map:** Note: If this sketch area is not used with submission **any attached sketch must include all pertinent information N** |

|  |
| --- |
| **Identify the following:**  Line valves (V-1, V-2, V-3, etc.):  CL2 Application (A)  Flushing (F) example: F-1, F-2  Sampling (S) example: S-1, S-2  Backflow Preventer (BFP) |

|  |
| --- |
| **Contractor Company Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:**  **Contractor Representative Name**  ***Print:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |

|  |
| --- |
| **Approved by Contract Administrator Date:**  ***Print:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** |

**DISINFECTION RECORD**

#### Contract Administrator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Contractor Company Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Drawing Attached:  Yes  No Disinfectant Used: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Disinfection of:  Watermain  By-pass  Service Hose Backflow Preventer Used:  RP

Complete All Items On This Disinfection Checklist:

* Backflow prevention device tested by certified tester and test form submitted
* Pipe hydrostatic pressure tested prior to disinfection
* Flushing / Scouring velocity met
* Disinfection Process documented (Complete Table 1)
* Water quality documented during bacteriological sampling (Complete Table 2)
* Post-flushing water quality criteria met: Turbidity is less than 1 NTU, Total Chlorine Residual is between 0.50 mg/L and 2.5 mg/L
* Submitted all laboratory bacteriological sample chain of custody / submission forms with this form

Table 1: Disinfection Process

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Location ID | START | | | | | END | | | Δ |
| Date | Turbidity | | Total Chlorine Residual | | Total Chlorine Residual | | | Decrease in Chlorine Concentration |
| NTU | Time of Testing | Initial  (mg/L) | Time of Testing | After Contact Time (mg/L) | Date | Time of Testing | (Initial – After)  (mg/L) |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

The following people acknowledge that the above information conforms to the limits set out in TS 7.30~~:~~

Certified Operator/ Water Quality Analyst: [Print] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Signature] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [OWWCO Certificate No.]\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contract Administrator: [Print] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [Signature] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SAMPLING AND TESTING

1. Confirm 350 metre sampling point distancing met:  Yes
2. Confirm that second set of bacteriological sampling is a minimum 16 hours after the first set:  Yes
3. Licensed Laboratory performing analysis: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Table 2A: Post-flushing Water Quality, Sampling and Testing Record (First of Two Consecutive Sets of Samples)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Location ID and Bacteriological Sample Description | Date | Time of Sampling | \*Turbidity (NTU) | \*Total Chlorine Residual (mg/L) | Lab Chain of Custody / Sample Submission No. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

\*Turbidity and Total Chlorine Residual MUST be field-tested at the same time(s) and at the same location(s) as any bacteriological sampling

**Table 2B: Post-flushing Water Quality, Sampling and Testing Record (Second of Two Consecutive Sets of Samples)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Location ID and Bacteriological Sample Description | Date | Time of Sampling | \*Turbidity (NTU) | \*Total Chlorine Residual (mg/L) | Lab Chain of Custody / Sample Submission No. |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

\*Turbidity and Total Chlorine Residual MUST be field-tested at the same time(s) and at the same location(s) as any bacteriological sampling

The following people acknowledge that the above information conforms to the limits set out in TS 7.30:

Certified Operator / Water Quality Analyst: [Print] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Signature] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [OWWCO Certificate NO.]\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contract Administrator: [Print] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ [Signature] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Exception to installation and disinfection of connections greater than one pipe length and up to a total length of 40 m :

Checkboxes that confirm when exception used that watermain:

Crosses a transportation corridor, the extended closure of which could result in significant community impacts (e.g., traffic congestion, loss of emergency vehicle access, safety concerns) , Yes

or

Cannot be constructed to within one pipe length of the existing watermain due to the potential for destabilizing an existing thrust block.  Yes

Checkboxes that confirm:

The new watermain and appurtenances forming the connection shall be sprayed or hand swabbed with a minimum 1% sodium hypochlorite solution, aboveground or in the excavation, immediately prior to installation.  Yes

A Certified Operator is required to witness the installation of the connection to ensure that sanitary construction practices are followed, and proper disinfection is performed.  Yes