

STANDARD OPERATING PROCEDURE

SOP #

2

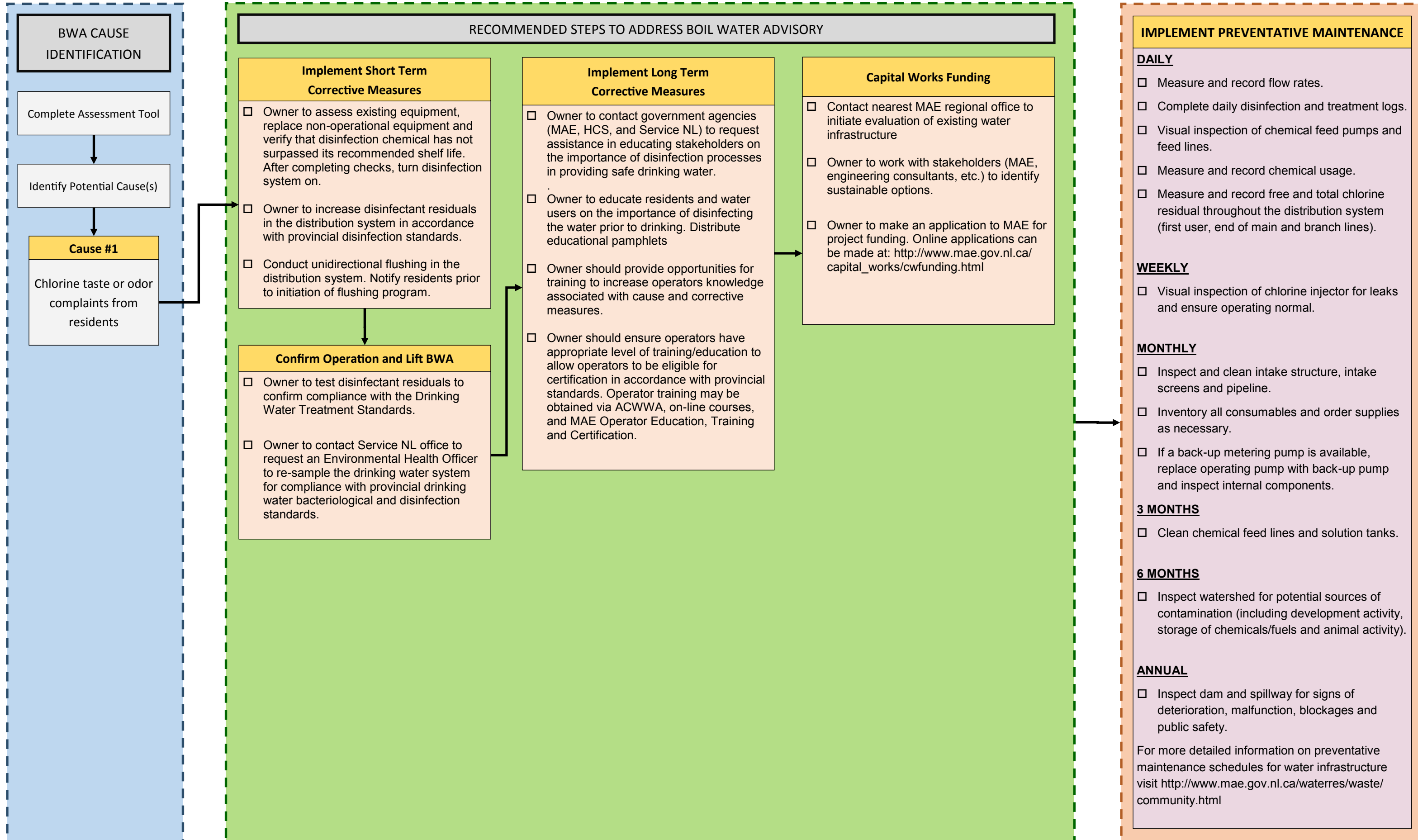
REASON CODE:

B1—Chlorination system is turned off by the operator, due to taste or other aesthetic conditions.

REV: 0

DATE:

Dec. 2015



BWA CAUSE IDENTIFICATION

- Complete Assessment Tool
- Identify Potential Cause(s)
- Cause #1**
- Chlorine taste or odor complaints from residents

RECOMMENDED STEPS TO ADDRESS BOIL WATER ADVISORY

- ### Implement Short Term Corrective Measures

 - Owner to assess existing equipment, replace non-operational equipment and verify that disinfection chemical has not surpassed its recommended shelf life. After completing checks, turn disinfection system on.
 - Owner to increase disinfectant residuals in the distribution system in accordance with provincial disinfection standards.
 - Conduct unidirectional flushing in the distribution system. Notify residents prior to initiation of flushing program.

Implement Long Term Corrective Measures

 - Owner to contact government agencies (MAE, HCS, and Service NL) to request assistance in educating stakeholders on the importance of disinfection processes in providing safe drinking water.
 - Owner to educate residents and water users on the importance of disinfecting the water prior to drinking. Distribute educational pamphlets
 - Owner should provide opportunities for training to increase operators knowledge associated with cause and corrective measures.
 - Owner should ensure operators have appropriate level of training/education to allow operators to be eligible for certification in accordance with provincial standards. Operator training may be obtained via ACWWA, on-line courses, and MAE Operator Education, Training and Certification.

Capital Works Funding

 - Contact nearest MAE regional office to initiate evaluation of existing water infrastructure
 - Owner to work with stakeholders (MAE, engineering consultants, etc.) to identify sustainable options.
 - Owner to make an application to MAE for project funding. Online applications can be made at: http://www.mae.gov.nl.ca/capital_works/cwfunding.html
- ### Confirm Operation and Lift BWA

 - Owner to test disinfectant residuals to confirm compliance with the Drinking Water Treatment Standards.
 - Owner to contact Service NL office to request an Environmental Health Officer to re-sample the drinking water system for compliance with provincial drinking water bacteriological and disinfection standards.

IMPLEMENT PREVENTATIVE MAINTENANCE

- ### DAILY
- Measure and record flow rates.
 - Complete daily disinfection and treatment logs.
 - Visual inspection of chemical feed pumps and feed lines.
 - Measure and record chemical usage.
 - Measure and record free and total chlorine residual throughout the distribution system (first user, end of main and branch lines).
- ### WEEKLY
- Visual inspection of chlorine injector for leaks and ensure operating normal.
- ### MONTHLY
- Inspect and clean intake structure, intake screens and pipeline.
 - Inventory all consumables and order supplies as necessary.
 - If a back-up metering pump is available, replace operating pump with back-up pump and inspect internal components.
- ### 3 MONTHS
- Clean chemical feed lines and solution tanks.
- ### 6 MONTHS
- Inspect watershed for potential sources of contamination (including development activity, storage of chemicals/fuels and animal activity).
- ### ANNUAL
- Inspect dam and spillway for signs of deterioration, malfunction, blockages and public safety.
- For more detailed information on preventative maintenance schedules for water infrastructure visit <http://www.mae.gov.nl.ca/waterres/waste/community.html>