

STANDARD OPERATING PROCEDURE

SOP #

1

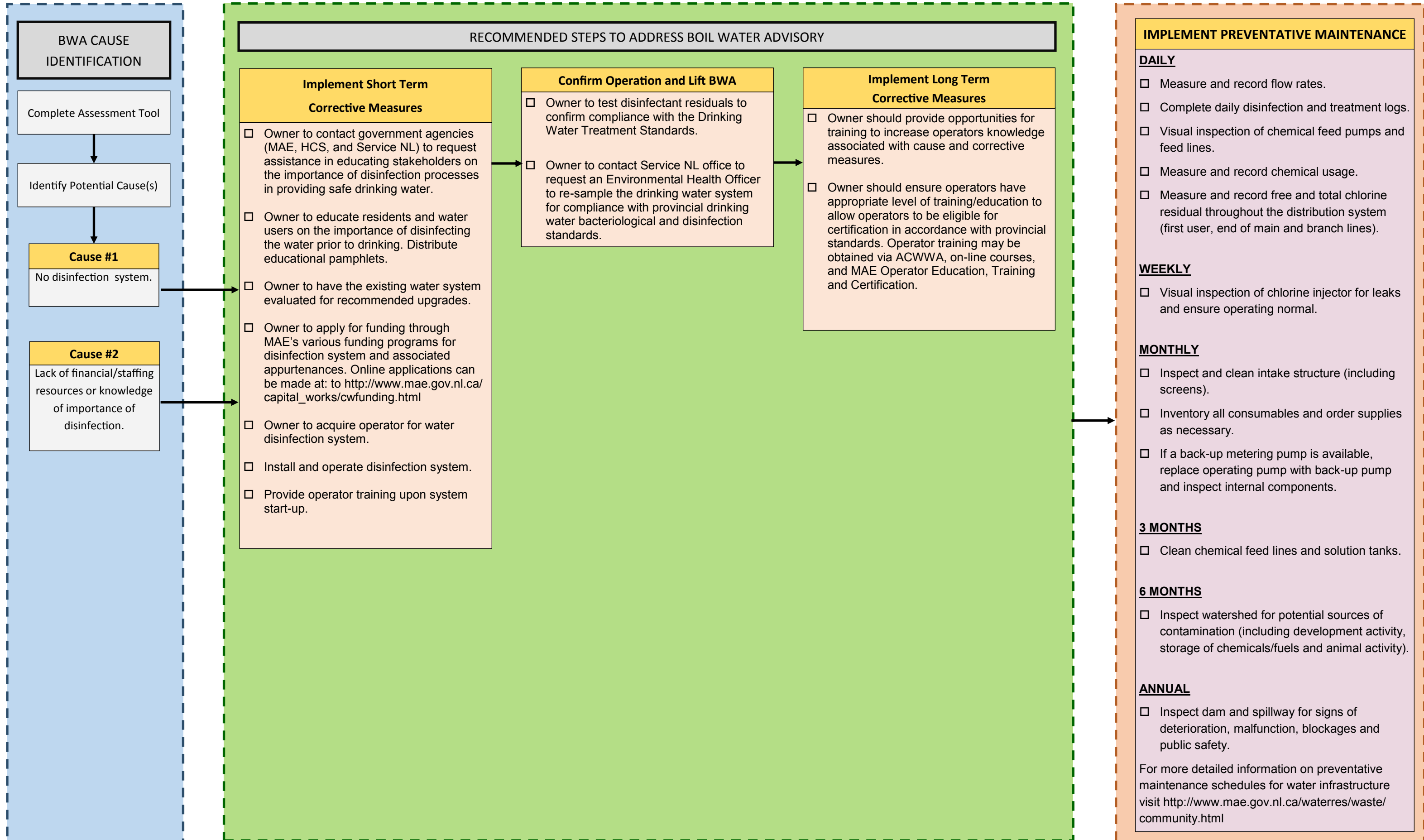
REASON CODE:

A — Water supply has no disinfection system

REV: 0

DATE:

Dec. 2015



BWA CAUSE IDENTIFICATION

Complete Assessment Tool

Identify Potential Cause(s)

Cause #1

No disinfection system.

Cause #2

Lack of financial/staffing resources or knowledge of importance of disinfection.

RECOMMENDED STEPS TO ADDRESS BOIL WATER ADVISORY

Implement Short 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 to have the existing water system evaluated for recommended upgrades.
- Owner to apply for funding through MAE's various funding programs for disinfection system and associated appurtenances. Online applications can be made at: to http://www.mae.gov.nl.ca/capital_works/cwfunding.html
- Owner to acquire operator for water disinfection system.
- Install and operate disinfection system.
- Provide operator training upon system start-up.

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 Long Term Corrective Measures

- 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.

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 (including screens).
- 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>