



Water Quality Emergency Planning - An Overview

Section 43(1) of *The Water Regulations, 2002* requires all waterworks permittees to have a Quality Assurance and Quality Control (QA/QC) Policy in place by December 31, 2003.

A Waterworks Emergency Plan (WEP), a stand-alone plan, or Water Quality Contingency Plan (WQCP), which complements an existing Corporate/Municipal Emergency Plan, is a vital component of the operational and maintenance component of a QA/QC policy. WQCPs or WEPs are also vital in protecting the health of consumers served by a waterworks and will be valuable as an example of "due diligence" in the event that serious problems do affect a waterworks.

A WQCP or WEP will help to ensure waterworks owners and operators know what to do in the event of a problem and act accordingly, rather than losing valuable time which could ultimately result in greater contamination and cost to resolve. Owners/operators who are not directly involved in the development of the waterworks specific plan should familiarize themselves with the final plan content.

Water quality emergency planning guides and templates are provided to aid waterworks owners and operators in completing either a WQCP or a WEP. Many municipalities (and corporations) have existing Emergency Plans, as required by *The Emergency Planning Act, 1989*. These waterworks owners need only to complete an addition (called a WQCP) to their existing plans. The Water Quality Contingency Planning Guide, EPB 240B, is to help waterworks develop a plan. When developed, the WQCP is not intended to override the existing Municipal or Corporate Emergency Plan but, in fact, the contingency plan should complement it.

If, however, a waterworks owner does not have an existing Emergency Plan for the whole municipality or entity, they should then complete a WEP, such as the example waterworks emergency plan contained in the Waterworks Emergency Response Planning Template, EPB 241B. The information provided in the example is only for demonstration purposes and is not intended to be a complete WEP. For additional help with this type of plan, waterworks owners should refer to the Guidelines for Waterworks Emergency Response Planning, EPB 240.

The Guidelines for Waterworks Emergency Response Planning includes the rationale for a WEP and guidance on how to develop a plan from scratch. The Water Quality Contingency Plan Guide provides guidance to completing an addition to an existing emergency plan. Lastly, the Waterworks Emergency Response Planning Template is a template that provides some guidance that may apply to common problems and upset conditions that occur at waterworks from time to time. Those persons using this should not only complete the blank contact lists and other information, but also should verify and update these listings on an annual basis to ensure that if an emergency occurs, the required aid is available.

WEP: Waterworks Emergency Plan

WQCP: Water Quality Contingency Plan

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A typical WQCP or WEP will contain several items, many of which are already provided in the Waterworks Emergency Response Planning Template. Items normally found in a WEP or a WQCP includes:

- ❑ a listing of all contacts that may be necessary in the event of a problem;
- ❑ a listing of the most common and anticipated problem situations and early response actions;
- ❑ information on emergency notification and communication procedures for media contacts;
- ❑ signs and postings that may be needed to warn consumers of water quality problems and example Precautionary Drinking Water Advisories or Emergency Boil Water Orders;
- ❑ operational manuals for equipment and stand-by equipment (if available); and
- ❑ drawings or maps of the water distribution system, control points (valves) and flush-out points.

A finished WQCP or WEP will detail the actions to be taken by the municipality in the event of a water quality incident. Saskatchewan Environment (SE) should always be advised of these measures. SE may require specific remedial actions and may still proceed with other preventive measures such as issuing a Precautionary Drinking Water Advisory.

All WEP and WQCP are required to be submitted to SE for approval. These plans should be approved by management and/or council prior to being submitted to the Environmental Project Officer in your area.

The three documents (listed below) are designed to form the basis for a WQCP or WEP for use by small municipal waterworks such as those found in a hamlet, village, resort village, northern village and some smaller towns. It may also provide a useful example for private waterworks regulated by SE and some sections will be of value to pipeline owners and operators.

Further material and example information is available from the following SE publications:

- Guidelines for Waterworks Emergency Response Planning, EPB-240 (Planning assistance to make a stand-alone WEP);
- Waterworks Emergency Response Planning Template, EPB 241B (An example stand-alone WEP); and
- Water Quality Contingency Planning Guide, EPB-240B (Planning assistance for a WQCP that adds to an existing Municipal or Corporate Emergency Plan).