



WATER RESOURCES / WATER SERVICES

INTERIM FLUSHING GUIDELINES FOR WATER MAIN COMMISSIONING

The 2016 Standard Specifications for Waterworks Construction (effective date April 11, 2016) includes the requirement that “*All flushing water directed to the storm system shall be de-chlorinated to the satisfaction of the Director, Water Services.*” This applies to all potable water used during Subdivision construction for the initial cleaning flush, pressure testing, and post chlorination flushing prior to final sampling.

As per standard practice, only the super-chlorinated water used for mains disinfection is permitted to be discharged to the sanitary sewer system.

Intent:

The intent of this Guideline is to minimize the possibility of non-compliant releases of chlorinated water to the watershed via the storm drainage system during the construction, testing, or commissioning of water mains with respect to the legislative requirements of the Federal Fisheries Act and the Alberta Environmental Protection and Enhancement Act.

Recommended Free Chlorine Level:

The City of Calgary Water Services de-chlorinates all discharged potable water to a maximum free chlorine level of 0.1 mg/L by means of chemical de-chlorination prior to discharge to the storm system. The Director therefore requires that all water main commissioning water directed into the storm drainage system during subdivision development construction activity be de-chlorinated to a maximum concentration of **0.1 mg/L** or lower free chlorine prior to being accepted into the City’s storm drainage system.

Acceptable Methods of De-Chlorination:

1. Discharge of de-chlorinated water to the storm drainage system under a Drainage Permit. This may be achieved through the use of commercially available chemical compounds and/or end of hose delivery systems used as per respective manufacturers recommendations. Local Distributors of chemicals and equipment include: Cleartech.ca, Guardianchem.ca and others.
2. Discharge of flushing water to the owner’s land surface in a manner that complies with the requirements of an existing Drainage Permit, City Code of Practice for Drainage Activities and the intent of this Interim Guideline.

Compliance:

Water Resources Staff may periodically monitor any construction activities by the Contractor and issue Orders where compliance to City Specifications, Codes or Guidelines is, in the opinion of the Director’s representative, in question. Legal responsibility for any regulatory non-compliance resulting from de-chlorination activities on private property shall rest solely with the Developer, his agents and their assignees.