

Groundwater Discharges from Contaminated Sites

This bulletin explains the applicable by-laws and permitting requirements for discharging groundwater from Contaminated Sites.

Site remediation and redevelopment activities can lead to the collection of groundwater that needs to be appropriately managed and removed from the site. In the City of Vancouver's urban setting this is most readily done by discharging to the sanitary or storm sewer systems. All discharges to any part of the sewer systems are regulated by City of Vancouver's *Sewer and Watercourse By-law No. 8093* (the By-law). If your site is contaminated, special consideration is required to determine whether the discharge must be directed to the sanitary or the storm sewer system.

CAN YOUR SITE DISCHARGE GROUNDWATER TO THE STORM SEWER SYSTEM?

The By-law defines a Contaminated Site as an area of land in which the soil or underlying groundwater or sediment contains a hazardous waste or prescribed substance in any quantities or concentrations exceeding provincial risk based or numerical criteria, standards, or conditions. For the purposes of this policy, this includes sites with confirmed contamination, a risk-based Certificate of Compliance, or a requirement from the BC Ministry of Environment (BC MoE) to undertake further investigation. Discharges from dewatering activities on such sites are not permitted to be directed to the storm sewer system unless permitted by an Inspector.

In order to obtain permission from an Inspector, the *Contaminated Site Groundwater Quality Declaration* form (attached) must be completed by a Qualified Professional as defined in BC MoE Environmental Protection Division's Procedure 8. Analytical data demonstrating that the groundwater on the site is not contaminated, as defined in the By-law, must be included with the declaration form. Inability to provide data demonstrating the groundwater quality meets the applicable standards and to the satisfaction of the Inspector will result in the Inspector denying the authorization to discharge to the storm sewer.

GROUNDWATER DISCHARGE TO THE STORM SEWER FROM YOUR SITE IS NOT PERMITTED, BUT CAN YOU DISCHARGE TO THE SANITARY SEWER?

If the conditions to discharge to the storm drainage system cannot be met for a site, then the discharge from dewatering activities must be directed to the sanitary sewer system. However, *Greater Vancouver Sewerage & Drainage District Sewer Use Bylaw No. 299, 2007* prohibits the discharge of contaminated groundwater or storm water to the sanitary sewer without a Waste Discharge Permit, which is subject to a number of conditions. The City of Vancouver's Environmental Protection branch issues and administers these permits within the City of Vancouver. Information on applying for the Waste Discharge Permit and the application form can be found at <http://vancouver.ca/home-property-development/wastewater-discharge-permit-for-construction-at-contaminated-sites.aspx>

HOW WILL THIS IMPACT APPLICATIONS FOR OTHER PERMITS?

If your site is 1,000m² or more or the depth of the excavation will be greater than one storey, then an Erosion Sediment Control Plan (ESC Plan) will be required as part of the application for a building permit. For more information on the requirements of the ESC Plan please refer to [Bulletin 2002-003-EV](#). Should discharge to the sanitary sewer under a Waste Discharge Permit be required for the site, then this should form part of the ESC Plan.

If your site is less than 1,000m² and the excavation depth is one storey or less, then you must follow the requirements of [Bulletin 2002-002-EV](#). In the event that your site does not require an ESC Plan, but is a contaminated site, any groundwater discharge is not exempted from the conditions of *By-law No. 8093* and may be required to obtain a Waste Discharge Permit for dewatering activities.

ENFORCEMENT

Failure to comply with the conditions outlined in this bulletin may result in a **STOP WORK ORDER** being placed on the site.

For further information contact Environmental Protection at 3-1-1, 604.873.7000 if you're outside of the City of Vancouver, or email at environmentalprotection@vancouver.ca

(Original signed by)

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Attached: Contaminated Sites Groundwater Quality Declaration form



CONTAMINATED SITE GROUNDWATER QUALITY DECLARATION

SITE IDENTIFICATION

Address: _____
PID: _____ MoE Site ID: _____

SITE INFORMATION

Schedule 2 Uses: _____
APECs: _____
PCOCs/COCs: _____

GROUNDWATER QUALITY

Summary of investigation work completed: _____

Tables of groundwater quality data and laboratory analysis reports are attached Y

DECLARATION

I, _____, certify that the information provided on this form is consistent with the findings of the site investigation work completed and the attached groundwater quality data. I have reviewed the site investigation findings and confirm that the groundwater does not contain any substance in a concentration that exceeds any of the following standards:

- a) numerical aquatic life use standards in the Contaminated Sites Regulation of the *Environmental Management Act*;
- b) aquatic life use or the aquatic life water quality standards contained in applicable protocols, policies or guidance issued by the BC MoE; or
- c) Wastewater and Storm Water Discharge and Quality Standards in Section 3 of City of Vancouver By-law No. 8093.

Signature of Qualified Professional (with stamp)

Date