



How Source Control Integrates with Wastewater Treatment.

WHAT DOES SOURCE CONTROL DO?

Source Control focuses on the reduction or elimination of contaminants before they enter the sewer system in order to protect treatment works and the receiving environment.

SOURCE CONTROL PROTECTS WASTEWATER TREATMENT FACILITIES

A significant part of Source Control is focused on protecting sewage collection infrastructure, sewage workers, biosolids quality and wastewater treatment facilities. The program targets contaminants that can contribute to blocking or corroding sewer lines, producing noxious fumes, rendering biosolids unusable or killing beneficial bacteria in wastewater treatment processes.

SOURCE CONTROL PROTECTS OUR ENVIRONMENT

Source control plays a significant role in protecting the environment regardless of the level of wastewater treatment in place. Working with local industries, businesses and institutions, as well as promoting practices for household use, the program has greatly reduced the amounts of contaminants discharged to the marine receiving environment.

Reducing or eliminating contaminants at the source is important because some pollutants are not removed or only partially removed by treatment. Some contaminants can only be removed by very expensive treatment options, while others can be reactivated or negatively altered through wastewater treatment processes.



About the Initiative

The CRD and the business community have worked together to develop regulations and best management practices to reduce or eliminate the amount of contaminants entering the sewer system. Businesses are now adopting both regulatory and voluntary source control practices and are making a difference. The CRD is currently in the process of researching the positive impacts and public awareness resulting from the recent "Clean Water Begins at Home" campaigns on household behaviour change.

HOW DO I FIND OUT MORE ABOUT THE REGIONAL SOURCE CONTROL INITIATIVE?

Additional information is available by visiting www.crd.bc.ca or by calling the Source Control team at: 250.360.3256

HOW DO I FIND OUT MORE ABOUT WASTEWATER TREATMENT?

Additional information is available by visiting www.wastewatermadeclear.ca or by calling the Wastewater Project Team: 250.360.3001

www.wastewatermadeclear.ca



WASTEWATER TREATMENT MADE CLEAR

Core Area Wastewater Treatment Project

The Role of Source Control in Wastewater Treatment.



Making a difference...together

Regional Source Control Program

The Regional Source Control program is a pollution prevention initiative aimed at reducing the amount of contaminants that industry, businesses, institutions and households discharge into the district's sanitary sewer systems. The program has been active region-wide since the adoption of the CRD's Sewer Use Bylaw in August 1994. Source Control is a cost effective way protecting wastewater treatment facilities and the environment. The Regional Source Control program is one of seven liquid waste management programs that form part of the CRD's Core Liquid Waste Management Plan.

REGIONAL SOURCE CONTROL BYLAW

CRD's Sewer Use Bylaw serves as the main regulatory instrument for source control in sanitary sewer systems and applies to any discharge of waste into a sewer that is connected to a sewage facility operated by the CRD. The bylaw specifies the types of wastes that are either prohibited (Bylaw 2922 Schedule "A") or restricted (Bylaw 2922 Schedule "B") for discharge to sewer and the various conditions under which facilities must operate if they discharge waste into a sanitary sewer.

The program is designed to ensure that the bylaw and its associated policies and procedures are applied consistently, creating a level playing field for businesses and institutions throughout the Capital Region.

Monitoring & Enforcement

The Regional Source Control program can help you run a more environmentally friendly, responsible business. The program has a number of mandatory codes of practices for business owners in the Region. The following sectors are regulated by codes of practice:

- Automotive Repair
- Breweries & Wineries
- Carpet Cleaning
- Dental Operations
- Dry Cleaning
- Food Services
- Laboratories
- Photographic Imaging
- Printing
- Recreational Facilities
- Vehicle Wash

Other industries are regulated by permits and authorizations. Program staff have developed monitoring and enforcement policies and procedures to help ensure the bylaw is consistently applied throughout the region.

MONITORING

A comprehensive monitoring program is being carried out to verify permit compliance and confirm that the self-monitoring data being submitted by permitted facilities are representative of their discharges to sewer. This compliance monitoring includes collection and analysis of random audit samples from each permitted site twice per year. Additional sampling events are carried out, as necessary, on suspected problem discharges from permitted sites.

For facilities operating under codes of practice, monitoring is also carried out on a random basis at a number of the facilities in each sector per year. This monitoring is done to confirm the effectiveness of the treatment works and procedures required under each code.

ENFORCEMENT

The district has adopted a stepwise, cooperative approach to enforcement of the Sewer Use Bylaw, as outlined in Regional Source Control Program Enforcement Policy. This enforcement policy classifies offences, outlines enforcement steps and includes use of cooperative measures, such as increased communication, education and monitoring to resolve issues of non-compliance. This policy is regularly updated and approved by the CRD Board.

Where cooperative efforts to achieve compliance using the enforcement policy have failed, warnings or tickets of between \$50 and \$1000 per offence may be issued by CRD bylaw enforcement officers under the CRD Ticket Information Authorization Bylaw. For more serious or continuing offences, fines up to \$10,000 per offence per day may be issued under the Sewer Use Bylaw.

Clean Water Begins at Home

Residential Source Control is an expansion of the very successful Regional Source Control Program (RSCP) which initially focused on businesses. Residential Source Control promotes personal action to help reduce the amounts of contaminants entering the region's wastewater systems. Launched in 2007, the Clean Water Begins at Home initiative focuses on some key sources of wastewater contamination. Results will be measured through monitoring of the waste stream and surveys, in order to determine changes in public behaviour.

To date the initiative has focused on four primary waste types and their associated Source Control and/or Solid Waste practices:

MEDICATIONS

The initiative recommends and supports medications being returned to pharmacies participating in the Medications Return Program.

LAUNDRY DETERGENT (SURFACTANTS)

This initiative promotes using only half of the manufacturer's recommended amount of laundry detergent to get the same results when doing laundry because of the CRD's soft water.

FATS, OILS AND GREASE (FOG)

This initiative recommends:

- For small amounts of grease, sauces and salad dressings use a paper towel to wipe off most of the oily residue before rinsing the kitchenware in the sink. The paper towel should be disposed of in household garbage.
- For grease left over from cooking and frying, cool fats, then pour into a container. Store the container in the refrigerator or freezer until full and then dispose in the household garbage.
- For large amounts of liquid cooking oil (up to 10 litres) store the oil in its original container and take it to Hartland Landfill for recycling.

HOUSEHOLD HAZARDOUS WASTE

Household Hazardous Waste (HHW) is any leftover product that is marked flammable, corrosive, explosive or poison. Common examples are pesticides, varnishes, paints, cleaners, and batteries. HHW should be sealed, clearly labelled and returned to the Hartland Landfill's HHW Recycling Facility, and never disposed of in household garbage or down a drain.