

## **LIQUID WASTE DECISION FLOW CHART TEXT GUIDE**

### **INTRODUCTION**

The attached decision flow chart has been developed to assist liquid waste generators in the Capital Regional District (CRD) to determine the most appropriate disposal option for their particular waste. Liquid waste generators should start at Step 1 of the chart and proceed through the chart until a suitable disposal option is identified. A text component that more fully describes each step is provided below to assist the proponent in this process.

It is important to follow the steps in their prescribed order to ensure the waste is properly characterized and managed in accordance with all legislation, regulations and bylaws. Adherence to this order will also ensure the management option with the highest environmental hierarchy is used, i.e., prevention before recycle, recycle before treatment, treatment before disposal, etc.

It should be noted that this tool has been established strictly for liquid wastes generated within the CRD and is not appropriate for other wastes or jurisdictions. It should also be noted that this tool discusses a pollution prevention option that could lead to the prevention of the generation of waste.

### **POLLUTION PREVENTION**

Over the past few years, business, government and other groups have recognized that the traditional practices of controlling pollution at the point of discharge are becoming increasingly complex and costly. It is for these reasons that environmental priorities are now shifting from control and treatment to prevention. From treating the symptoms – to eliminating the causes of pollution.

Pollution Prevention (P2) can be defined as the use of materials, processes or practices that reduce or eliminate the creation of pollutants or wastes at the source. A P2 plan is a written record of measures designed to conserve raw resources, improve process efficiencies and eliminate and reduce waste generation. Its core principle is based on the elimination and/or avoidance of waste products, processes, wastes and environmental responsibilities.

During the development of P2 plans, partnerships and cooperation may be forged between industry, government and the public. The ultimate goal of a P2 plan is to refocus environmental protection efforts from a reactive to a proactive approach that anticipates and prevents pollution. A successful P2 plan provides benefits to the environment and cost savings to the business implementing the plan. P2 planning that could potentially lead to the elimination of the creation of liquid wastes should be considered as a first step in a responsible environmental management plan.

### **DIRECT DISCHARGES TO THE ENVIRONMENT**

Liquid wastes that are discharged directly to the environment rather than using the disposal methods listed in this tool fall directly under the jurisdiction of the *Waste Management Act* of BC. These discharges usually require a permit or an operating certificate issued by the Ministry Water Land and Air Protection (MWLAP). Contact your local regional office of MWLAP for further information.

## LIQUID WASTE DECISION FLOW CHART

### Step 1

The CRD's **Enhanced Model Storm Sewer Bylaw** includes a prohibition of the discharge of wastes other than "stormwater" (which it defines as water resulting from natural precipitation from the atmosphere and which is intended to be transported in a storm sewer or watercourse) into a storm sewer system or watercourse. It includes the following exceptions: water resulting from domestic activities customarily incidental to a residential use of the land, including garden and lawn maintenance and non-commercial car, building and driveway washing.

Many of the municipalities in the Greater Victoria area have adopted the CRD's model bylaw and some have drafted their own. Check with your specific municipality to confirm what may be discharged in the storm sewer in your area.

### Step 2

Many liquid wastes are recyclable and can be reused or reprocessed. The CRD is one source of recycling information. It publishes an annual recycling directory and operates a recycling hotline. Check the directory or consult with the CRD on its hotline to determine if your waste is listed as recyclable. The CRD recycling hotline phone number is (250) 360-3030. Other sources of recycling information include your municipality, the MWLAP, the yellow pages and environmental consultants. If your waste is not recyclable, proceed to Step 3.

### Step 3a

Domestic sewage (i.e., liquid wastes from washrooms and non-commercial kitchens) can be disposed of via an authorized connection to the municipal sanitary sewer system where one is present. **CRD Sewer Use Bylaw No. 5, 2001, A Bylaw to Regulate the Discharge of Waste into Sewers Connected to a Sewage Facility Operated by the Capital Regional District** (Bylaw No. 2922), defines "domestic waste" as the sanitary waste or grey water generated from a residential or personal recreational use of land that is discharged directly or indirectly into a sewer connected to a sewage facility operated by the District. If your waste meets this definition and does not contain any of the "restricted waste" or "prohibited waste" defined in Bylaw No. 2922, check with your municipality to determine if a sewer connection is available in your area.

### Step 3b

If a sewer connection is not available in your area, proceed to Step 10 of this guide.

### Step 4

Schedule A of CRD Bylaw No. 2922 contains a list of various wastes that are "prohibited waste" and can not be disposed of into any sewer connected to a CRD treatment facility. If your waste includes any of the wastes identified as prohibited in the CRD bylaw, proceed to Step 5. If your waste does not contain any "prohibited waste", proceed to Step 6.

### Step 5

"Prohibited waste" specified in the CRD's bylaw may also be a "special waste" as defined by the **Special Waste Regulation of BC**. If you have a "prohibited waste", please consult the **Special Waste Regulation** and the Special Waste Legislation Guide to determine if your waste is a "special waste". If your waste is a "special waste", please proceed to Step 14. If it is not a "special waste", please proceed to Step 10.

### Step 6a

The CRD Sewer Use Bylaw provided a number of exemptions which allow certain “non-domestic wastes” to be disposed of in the sanitary sewer. “Pool” water and “uncontaminated water” in volumes less than 2 cubic metres per day (2,000 L/day) are exempted and can be discharged to the sanitary sewer system without a CRD permit. Check the definition of “uncontaminated water” provided in CRD Bylaw No. 2922 to see if your waste meets the requirements of these exemptions. If not exempted as “pool” water or less than 2 cubic metres of “uncontaminated water”, proceed to Step 6b.

### **Step 6b**

If the waste is a “stormwater” and prior authorization is obtained from the CRD “sewage control manager”, it may be disposed of in a sanitary sewer. Apply for authorization from the “manager”. If not, proceed to Step 6c.

### **Step 6c**

“Recreational vehicle waste” (RV), defined as domestic waste accumulated in a holding tank in a trailer, camper, transportable housing unit, bus, or aircraft, can be disposed of at a sani dump facility connected to the sanitary sewer system which has a permit, authorization or order from the CRD. If your wastes meet this definition, check with the CRD Source Control program to determine which facilities meet this requirement. If not an RV waste, proceed to Step 6d.

### **Step 6d**

“Ship and boat waste”, is defined as the sanitary waste and grey water accumulated in a holding tank on a pleasure boat, houseboat, commercial vessel or naval vessel but not including bilge water, ballast water or wastewater sludge. Ship and boat waste can be disposed of to sewer under a permit or authorization, can be disposed of at a “ship and boat waste disposal facility” connected to the sanitary sewer system which has a permit or authorization from the CRD or be disposed at an approved septage disposal facility (see Step 10). If your wastes meet this definition, check with the CRD Source Control program to determine which facilities meet this requirement. If not a ship and boat waste, proceed to Step 7.

### **Step 7a**

The CRD has developed a number of codes of practice for various industry sectors and specific types of wastes. Check with the CRD to see if your industry sector is a “discharging operation” and has a code of practice and whether the code requires your facility to be registered with the CRD. If yes, then proceed to Step 7b. If not, skip ahead to Step 8.

### **Step 7b**

If your waste and/or industry are one of those with a code of practice and the waste and your facility meet the requirements of the code, then the waste can be discharged to the sanitary sewer system in accordance with the code of practice. If not, then proceed to Step 9.

### **Step 8**

CRD Bylaw 2922 allows for the discharge of “non-domestic waste” to the sanitary sewer system provided the waste does not contain any contaminant concentrations exceeding the “restricted waste” criteria, and the waste is less than 10 cubic metres a day or 300 cubic metres in any 30 consecutive day period. The “restricted waste” criteria are found in Schedule B of Bylaw 2922. Analytical data which documents the concentration of these contaminants in the wastewater will be needed for comparison to the “restricted waste” criteria. If your waste meets these conditions, it is an unregulated waste and can be discharged at an authorized connection to the municipal sanitary sewer system without a CRD permit. If it does not meet these conditions, proceed to Step 9.

## Step 9

If your waste is “non-domestic waste” and does not meet any of the conditions provided above, you may still be able to discharge the waste to the sanitary sewer system with a permit from the CRD. Check with the CRD “Source Control program” to see if your waste meets the requirements and apply for a permit. If your permit is denied, proceed to Step 10.

## Step 10

The **CRD’s Septage Disposal Bylaw No. 2, 2000, A Bylaw to Regulate the Discharge of Septage into Septage Disposal Facilities Operating under a Septage Services Agreement with the Capital Regional District** (Bylaw No. 2827 and amendments), includes a set of quality criteria (Schedule B) and waste definitions (Section 1) that define what wastes should be accepted by approved private septage disposal facilities. If your waste meets these criteria, obtain the list of approved facilities from the CRD and apply for permission from the facility operator to dispose of one waste. If outside the definitions or quality criteria or rejected by the private facility, proceed to Step 11. Note these facilities may also accept some wastes outside the definitions and criteria in the above noted bylaw, however, this would be at the private facilities’ discretion and in accordance with the facilities in-house acceptance rules.

## Step 11

Consult the “Special Waste Regulation” and the Special Waste Legislation Guide to determine if your waste is a “special waste”. If your waste is a “special waste”, please proceed to Step 14. If it is not a “special waste”, please proceed to Step 12.

## Step 12

Many municipalities operate vector waste storage and/or disposal facilities for municipal vacuum truck wastes collected from catch basins and stormwater retention ponds. If the wastes are acceptable to the municipality, and the waste and facility meet the requirements of the *Waste Management Act of BC* and other applicable legislation and regulation, the waste may be disposed of at the municipality’s vector waste facility where allowed. If the waste is not a vector waste, the municipality does not allow wastes other than municipal vector waste disposal, or the waste does not meet the above requirements, proceed to Step 13.

## Step 13

The CRD accepts a number of liquid and semi solid wastes as “controlled waste” at its Hartland Road landfill facility. The **Hartland Landfill Tipping Fee and Regulation Bylaw**, Bylaw 2338 and amendments contains a definition of the liquid wastes that are accepted as “controlled waste” at Hartland Road landfill. If your waste meets the definition, submit an application to dispose of controlled waste to CRD Environmental programs. If approved by issuance of a permit, contact the landfill directly to arrange a time for disposal. Note that “controlled waste” is only accepted from permitted waste generators with a scheduled delivery time. If a permit is not granted, proceed to Step 14.

## Step 14

Consult the *Special Waste Regulation* and the Special Waste Legislation Guide to determine if your waste is a “special waste”. If your waste is a “special waste”, dispose of it in a facility with a license to accept “special waste”. When selecting a facility, preference should be given to those that will recycle or treat the waste as opposed to those that will simply dispose of it in a secure landfill. Note that “special waste” may be treated on site, however, specific requirements outlined in the “Special Waste Regulation” would apply. If your waste is not a “special waste”, proceed to Step 15.

## **Step 15**

If you reach this point, you may not have a “special waste” but there are no public recycling, treatment or disposal options for your waste. You must, therefore, dispose of your waste at a private recycling, treatment or disposal facility. Consult your yellow pages, the CRD or an environmental consultant for possible disposal options.

## References

Enhanced Model Storm Sewer Bylaw, Engineering Department Staff Report, Capital Regional District, October 13, 1998. Available from the CRD Environmental Services Department 360-3045, [www.crd.bc.ca](http://www.crd.bc.ca)

A Bylaw to Regulate the Discharge of Waste into Sewers Connected to a Sewage Facility Operated by the Capital Regional District, Bylaw No. 2922, Capital Regional District, December 12, 2001. Available from the CRD Environmental Services Department 360-3045, [www.crd.bc.ca](http://www.crd.bc.ca)

Special Waste Regulation of BC, B.C. Reg. 63/88, O.C. 268/88, including amendments up to B.C. Reg. 52/95, Crown Publications, Updated June 19, 1998. Available from Crown Publications 386-4636, [www.crownpub.bc.ca](http://www.crownpub.bc.ca)

Special Waste Legislation Guide Industrial Waste and Hazardous Contaminants Branch, BC Environment, May 1992. Available from Crown Publications 386-4636, [www.crownpub.bc.ca](http://www.crownpub.bc.ca)

A Bylaw to Regulate the Discharge of Septage into Septage Disposal Facilities Operating Under a Septage Services Agreement with the Capital Regional District, Bylaw No. 2827, Capital Regional District, November 22, 2000. Available from the CRD Engineering Department 360-3045, [www.crd.bc.ca](http://www.crd.bc.ca)

Hartland Landfill Tipping Fee and Regulation Bylaw, Bylaw 2338, Capital Regional District, October 11, 1995. Available from the CRD Environmental Services Department 360-3045, [www.crd.bc.ca](http://www.crd.bc.ca)

Waste Management Act, R.S. Chapter 482, Crown Publications 1996 Updated October 1, 1998. Available from Crown Publications 386-4636, [www.crownpub.bc.ca](http://www.crownpub.bc.ca)

## Liquid Waste Decision Flow Chart







