

Requirements for the Environmental Cleanup of Illegal Drug Manufacturing Sites

Illegal drug manufacturing sites and associated dump sites are a growing problem throughout British Columbia. The ministry and local governments are concerned that they pose serious health and environmental threats because of the hazardous chemicals used. Sites where these drugs are made can be found almost anywhere in the community, often in residential areas. Ecstasy and methamphetamine are common illegal drugs produced.

What chemicals are typically found at illegal drug manufacturing and dump sites?

The chemicals used vary depending on the type of drug produced. The following are common:

- acetone
- ammonia
- benzene
- ether
- freon
- hydriodic acid
- hydrochloric acid
- iodine crystals
- lithium metal
- methanol
- phosphine gas
- pseudophedrine
- red phosphorous
- sodium hydroxide
- sulphuric acid
- toluene

Illegal drug manufacturing sites produce a great deal of waste which usually contains a variety of solvents and acids. The waste is often contained in five gallon pails, or in the chemical containers it originally was supplied in, and sometimes in 205 litre drums. The material found at these dump sites can be very hazardous and should only be searched or handled by persons wearing proper protective equipment.

What risks do these substances pose to human health and the environment?

Contact with these substances can cause a wide range of ailments such as respiratory disorders, blindness, liver disease, ulcers, and chemical burns.

The risks to human health depend on the type and quantity of chemicals associated with the operation, as well as on the manufacturing practices of the operator. For example, some operators dispose of chemicals through septic fields, discharge to the ground, or into the sewer system. When large quantities of these substances are released into the environment, they can migrate to neighbouring properties, posing risks, for example, by contaminating drinking water and soils used for agriculture.

What other risks do these substances pose?

Such chemicals may degrade utilities, causing damage to water or gas lines and to sewage treatment plants. Most chemicals used to make methamphetamine are extremely flammable, explosive, or toxic either by themselves or when mixed with other chemicals. This can make buildings in which the drug is made unsafe to occupy. Further, because of the criminal element associated with this type of activity, threats to personal safety may exist. To obtain more information about these issues, please contact the RCMP or your local municipality.

Who is responsible for cleaning up illegal drug manufacturing sites?

If wastes from illegal drug manufacturing sites have been spilled or deposited onto land, the spill or deposit site may be contaminated. Under the *Environmental Management Act* (the Act), those who cause contamination are responsible for paying the cleanup costs.

The property owner is usually considered to be the primary responsible person for a site. Most sites where illegal drug manufacturing occurs are rental properties. This means that the operator of the site may also be held responsible. Typically, however, the operator is difficult to locate (given the nature of the operation), so the cleanup must often be carried out by the property owner. Occasionally the local government where the property is located will investigate and, if necessary, remediate the site if the risks are considered to be high.

The RCMP or the local government may notify the ministry about illegal drug manufacturing sites so that the ministry can assess whether any risks exist to the environment or human health. After the initial cleanup, additional remediation should be done as necessary, in keeping with the requirements of the Act and Hazardous Waste and Contaminated Sites Regulations. Please see Fact Sheet 31, "Remediation of Sites Contaminated by a Spill" for further information on spill site cleanups.

What are the remediation options?

Several cleanup options are available under B.C.'s contaminated sites system. These include:

- independent remediation;
- remediation facilitated by the oversight of an Approved Professional; and
- remediation facilitated by the oversight of ministry staff.

Please note that the RCMP must be contacted before the onset of any remedial activities.

A property owner who wishes to conduct independent remediation should be aware of the notification requirements associated with starting and completing this work. Please refer to Fact Sheet 21, "Requirements for Independent Remediation" for more information. Direct ministry involvement is necessary on high risk site cleanups.

Is a site profile required upon decommissioning of an illegal drug manufacturing site?

Yes. Illegal drug manufacturing sites would be considered an activity (A9 or E11) under Schedule 2 of the Contaminated Sites Regulation if the drug is a controlled substance listed in the Federal *Controlled Drugs and Substances Act*. Methamphetamine, ecstasy and marijuana are all controlled substances under that Act. Site profile submissions triggered by the decommissioning of an illegal drug manufacturing site must be sent directly to the ministry for review.

If there are any 'yes' answers in sections IV through IX of a site profile it should be submitted to a Director for assessment and a decision on the need for a site investigation. If there are all 'no' responses, the site profile should be forwarded to the Site Registrar in Victoria who will upload it directly to the Site Registry. Please refer to Administrative Guidance Document 1, "Completing and Submitting Site Profiles" for further information on completion and submission procedures for site profiles.

What is required if contamination from illegal drug manufacturing sites has migrated onto neighbouring properties?

If a site investigation or independent remediation work reveals that one or more substances have migrated (or are likely to migrate) onto a neighbouring property and are causing (or are likely to cause) contamination of a neighbouring property, the owner of the

neighbouring property must be notified within 15 days of the responsible person becoming aware of the situation. Please see Fact Sheet 34, "Requirements for Offsite Contaminant Migration" for further information on requirements of responsible persons.

Note: This summary is solely for the convenience of the reader. The current legislation and regulations should be consulted for complete information.

For more information, contact the Environmental Management Branch at site@gov.bc.ca.