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**Hazardous Waste Regulation  
Section 4 Operational Plan Guideline**

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This guideline was developed to clarify the requirements of the [Hazardous Waste Regulation](#) Section 4 Operational Plan. An example operational plan is available electronically by contacting the ministry's regional office.

The Hazardous Waste Regulation Section 4(2) states:

- (2) An operational plan under subsection (1) (c) shall specify all of the following:
- (a) which hazardous wastes will be stored, treated, recycled or disposed of at the facility;
    - (a.1) the maximum quantity of each hazardous waste specified under paragraph (a) that the owner estimates will be stored at the facility at any time;
    - (a.2) the facility's maximum daily capacity for treating, recycling or disposing of each hazardous waste specified under paragraph (a);
  - (b) details of the monitoring that will be carried out, including its content and frequency;
  - (c) details of the reporting that will be provided to a director, including its content and frequency;
  - (d) details of auditing activities.

Note that the September 21, 2006 amendment to the Hazardous Waste Regulation has the following requirement in s.4:

- (2.2) On or before January 31, 2007, an owner that has not had an operational plan in relation to a facility approved under this section shall submit for approval an operational plan that complies with subsections (2) and (2.1).

The term "operational plan" used in the regulation is not the operating plan many facilities have as a condition of their permit that include all regulatory and operational aspects of the operation. The Section 4 Operational Plan is required for approval and contains information that previously was contained in Special Waste permits.

The following outline is suggested for the Section 4 Operational Plan.

**Title Page**

- title of the document, i.e. Hazardous Waste Regulation Section 4 Operational Plan
- company registered name and contact representative information (name, phone, fax, e-mail)
- company registered address as listed with Registrar of Companies
- facility name and address
- property owner and contact information
- legal description of property where facility is located
- latitude/longitude of property where facility is located

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- ministry reference numbers, i.e. RS# and BCG#
- version number and date
- note that a site plan and location map is added as an appendix to the operational plan.

### 1.0 **Introduction**

It is recommended that a short introduction be provided on the business generating/managing hazardous waste, including information about the sources the hazardous waste and how treated wastes and residues are managed. Hazardous waste management companies should outline the industries they serve and how treated wastes are managed, utilized or disposed. Indicate the types of storage facilities (containers, tanks, surface impoundment, waste piles, land treatment) at the site.

### 2.0 **Hazardous Waste Stored, Treated, Recycled or Discharged**

List the type and maximum quantities of hazardous waste stored at the facility, and identify the rates of treatment, recycling or disposal of hazardous waste at the facility. This information should be provided in a table:

Waste Name (include TDG Class if applicable)	Max. Quantity Stored (kg or L)	Treatment Rate (L/d, kg/d, n/a)	Recycling Rate (L/d, kg/d, n/a)	Discharge Rate (L/d, kg/d, n/a) *

\* Note that discharge of hazardous waste is generally limited to secure landfills under Division 6 of the regulation and a permit is required under Section 14 of the Act.

In completing the table, the waste name should be an appropriate name determined using the naming protocol of the [Transportation of Dangerous Goods \(TDG\) Regulations](#) if the waste is a TDG regulated substance, or the waste name for the non-TDG hazardous wastes as shown in Schedule 6 or Schedule 7 of the Hazardous Waste Regulation. Waste names should reflect different management of wastes at the facility and be as specific as possible. For example, where some TDG Class 3 wastes are treated at the facility while other Class 3 wastes are not treated, there should be separate names in the table for each group of waste. Names should not be more general than the TDG classes and sub-classes.

A separate appendix to the table should be added for facilities that treat hazardous waste. This appendix should show the dates of ministry approvals for the demonstration trials and, if applicable, the dates of delisting approvals. An advantage of having this information in an appendix rather than in the Part 2.0 table is the ability to update the appendix without having to amend the operational plan whenever a new demonstration trial is approved. Indicate n/a (not applicable) if a demonstration trial or delisting protocol has not been approved for a specific entry.

### **Appendix A - Hazardous Waste Treatment and Delisting Approvals**

Specific Name of Hazardous Waste Treated (include TDG class if applicable)	Demo Trial Approval Date & Report Date [note Sec. 18 (2 & 4)]	Delisting Protocol Approval Date [note Sec. 53]

An appendix template is available electronically by contacting the ministry's regional office. The appendix should be signed and dated by an authorized officer of the hazardous waste facility.

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Please note that the Director may require financial security under provisions of Section 17(2) for Short Term Storage Facilities and Section 35(8) for Long Term Storage Facilities. Changes to the type or quantity of hazardous waste registered for storage will require reassessment of financial security. A [Financial Security Guideline](#) is available on the Ministry website and from Ministry regional offices.

### **3.0 Monitoring**

This part deals with waste characterization, environmental monitoring, delisting protocol monitoring, and monitoring under specific sections of the Regulation. The monitoring section does not include the record keeping and inspections required under various sections of the regulation. Environmental monitoring may not be required for all hazardous waste facilities, such as facilities where all hazardous wastes are off-loaded and stored indoors and there are no effluent discharges or emissions.

Waste characterization monitoring should include sampling and analyses of waste received at a hazardous waste management facility to confirm the hazardous waste characteristics (note Section 5 of the regulation). This monitoring may be done through a random sampling program that provides assurance that the waste received at the facility is properly characterized.

Environmental monitoring should include monitoring of effluent discharges and emissions, and monitoring of the receiving environment. Stormwater discharge quality should be monitored if there is potential for the hazardous waste to impact stormwater quality at the facility or in the surrounding area. The discharge monitoring results must meet criteria in Schedule 1.2 for effluent and stormwater and Schedule 2 for emissions. A receiving environment monitoring program may be necessary if there is potential for the hazardous waste facility to cause off-site impacts (i.e. groundwater, surface water, ambient air).

Delisting protocol monitoring should be included if there are monitoring requirements in an approved protocol under s.53 of the Regulation.

Some sections of the Regulation have specified monitoring requirements that should be included:

- incinerators and thermal facilities (Sec. 20 & 21),
- secure landfills (Sec. 26 & 27),
- waste piles, surface impoundments and land treatment facilities (Sec. 29, 30, 31 & 32), and
- long-term storage facilities (Sec. 34 & 35).

### **4.0 Reporting**

A report should be prepared and submitted on a regular basis, such as annually, which summarizes the records, inspection and monitoring information and provides a brief assessment of compliance issues and their resolution. The Director will determine if the proposed frequency of reporting is acceptable. It is not necessary to report detailed information, only summarized information. However, the detailed information must be available at the facility.

Environmental monitoring data should be analyzed by a qualified professional in terms of applicable criteria such as water quality guidelines and summarized with recommendations for resolving problems where there are negative environmental impacts. The name and qualifications of the qualified professional should be provided with the summary assessment report.

It is not necessary to send copies of laboratory data reports, only a summarized data table.

Reports may be submitted to the Environmental Protection Regional Manager by regular mail or e-mail. An e-mail address for the ministry will be provided upon request.

## 5.0 Auditing

Audits are to review facility compliance in terms of all applicable aspects of the *Environmental Management Act* and the Hazardous Waste Regulation (HWR). The act has general requirements relative to waste disposal and pollution prevention, plus specific requirements relative to hazardous waste. The audit should identify and report on any approved changes in requirements (HWR Section 51). The audit report should include information on each requirement of the regulation indicating how the requirement is met, starting with Section 3: i.e. if siting standards for the facility are met (HWR Sec. 3), whether plans have been approved, the date of plan approval, whether they are still up-to-date and if the facility and its operation complies with the plans (HWR Sec. 4), how waste information is being assessed and documented (HWR Sec. 5), etc. Any aspects or regulation requiring approval should indicate date of ministry approval. Any parts of the regulation that are not applicable should be noted.

Compliance auditing should be done by an independent qualified professional. The ministry has defined "qualified professional" in a number of regulations, such as the Municipal Sewage Regulation, as an applied scientist or technologist specializing in a particular applied science or technology including, but not necessarily limited to, agrology, biology, chemistry, engineering, geology, or hydrogeology and (a) who is registered in British Columbia with their appropriate professional organization, acting under that association's Code of Ethics and subject to disciplinary action by that association, and (b) who, through suitable education, experience, accreditation and knowledge, may be reasonably relied on to provide advice within their area of expertise.

It is generally up to the registered professional to determine if he or she is suitably qualified. Most professional associations include in their code of ethics a requirement that the professional shall undertake and accept responsibility for professional assignments only when qualified by training or experience. A BC Professional Engineer would be considered a professional and has the responsibility to determine his or her own qualifications.

It should be noted that the Canadian Standards Association (CSA) [<http://www.csa.ca>] published document Z773-03 entitled Environmental Compliance Auditing and the Canadian Environmental Auditing Association [<http://www.ceaa-acve.ca>] certifies environmental auditors.

In cases where there is history of a facility being in compliance (i.e. the past two years), the auditing frequency may be reduced from the typical annual frequency with a provision that significant noncompliance (as determined by the director) would result in an auditing frequency every 6 months until compliance is achieved. For facilities where the ministry has no compliance history, annual auditing is recommended until a reduced frequency can be supported.

Audit reports should include a summary of noncompliance issues and include an outline of the professional qualifications of the auditor. The audit report should be signed by the auditor with the statement "**Standard auditing principles were followed and the audit represents a true compliance assessment of the facility in terms of the Environmental Management Act and the Hazardous Waste Regulation**".

Audit reports may be submitted to the Environmental Protection Regional Manager by regular mail or e-mail. If e-mail is used, the certification statement should be sent directly from the auditor. An e-mail address for the ministry will be provided upon request.

A cover letter should outline the company's plans for resolving any noncompliance issues contained in the audit report.