



## Waste Authorizations and Best Practices

**Purpose of this Document.** When camps are established to house workers within BC<sup>1</sup>, waste is generated. This document provides guidance on what should be done to manage waste from camps with emphasis on authorizations required by the BC Ministry of Environment. Information is also provided for best management practices when authorization is not required.

**What is an Authorization?** Within this document, the term “authorization” refers to an approval, a permit, a regulation, or a code of practice. The specific type of authorization required depends on the waste or activity occurring onsite.

**How long will it take to obtain Authorization?** The time required to acquire an authorization depends on the completeness and accuracy of the application submitted.

Please plan ahead for the amount of time needed to prepare the application documents, including the environmental impact study and operating plan.

MoE welcomes a pre-application meeting between the applicant and Environmental Protection Division staff to ensure that the proponent is aware of all application requirements and to provide direction on the scope of the application.

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<sup>1</sup> Such as industrial, oil and gas, mining or construction operations, including camps in remote locations.

Once a complete application is received, it is placed in the authorizations queue for processing and review. Please refer to the ministry’s [Publicly Viewable Application Queues](#) for more information.

**What are the Requirements for Municipal Wastewater (Sewage)?** Provincial requirements for municipal wastewater vary depending on discharge rate, the receiving environment (water or ground), and whether or not reclaimed water is used. Applicable regulations are summarized below.

Please note that in any case below if land is required for ground disposal of effluent the land must be included in the camp land tenure that Forests, Lands and Natural Resource Operations authorizes.

**[Example 1] Design flow rate less than 22.7 m<sup>3</sup>/day discharged to ground (typically less than 100 persons).** Authorization is required under the provincial *Public Health Act - Sewerage System Regulation* (SSR). For information on the SSR, see the Ministry of Health [website](#) or contact the Environmental Health office of the applicable [Health Authority](#).

**[Example 2] Discharge to a temporary holding tank (any flow rate).** Holding tanks are covered under the SSR. When a holding tank is used, no discharge to the environment is permitted onsite (i.e. tank must be watertight, and sewage must be transported to an authorized facility). Please be aware that some facility operators, including local governments, may not accept

sewage from camps. Before using or constructing a temporary holding tank, please contact the local health authority to determine whether or not there are limitations on the use of holding tanks in the area.

**[Example 3] Design flow rate is 22.7 m<sup>3</sup>/day or greater discharged to ground (typically 100 or more persons), or any discharge to water, or any reclaimed<sup>2</sup> water use.** Authorization is required under the provincial *Environmental Management Act* - Municipal Wastewater Regulation (MWR). Please refer to the [MWR webpage](#) for more information, including guidance on the registration process and documentation required for registration (e.g., Environmental Impact Study, Operating Plan, Closure Plan).

Some highlighted requirements under the MWR to be aware of:

**Construction Timing** Construction of a wastewater facility must not begin until after receiving written notification that registration is effective or after receiving written notification from MoE that construction may begin.

**Operator Certification** Operators of wastewater systems under the MWR must be certified under the Environmental Operators Certification Program (EOCP).

**Temporary Camps** All camps of a temporary nature (with a wastewater system that serves a non-permanent population) must have a closure plan submitted as part of registration. The closure plan must be prepared by a qualified professional and detail how the treatment works will be decommissioned upon camp closure.

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<sup>2</sup> Such as reuse of treated effluent for irrigation or industrial purposes

**Discharges to At-Grade Systems** The MWR does not specifically recognize at-grade systems so these must be evaluated on a case-by-case basis. An at-grade system proposed as a reclaimed water discharge would be subject to the requirements of MWR Part 7.

**[Example 4] Facility collects an average daily volume of 100 m<sup>3</sup> or more of influent and discharges to surface water.** In addition to applicable provincial regulations, a facility which collects an average daily volume of 100 m<sup>3</sup> or more of influent and discharges to surface water (e.g., river, stream, lake, marine) may be subject to the federal [Wastewater Systems Effluent Regulations](#) (WSER). Please contact [Environment Canada](#) for all information regarding WSER.

Please note that WSER uses a different calculation for flow rate to determine applicability of the regulation as compared to BC regulations (i.e., average daily volume of influent for WSER and facility design flow rate for MWR).

### **What are the Requirements for Refuse Handling and Disposal (Non-hazardous Waste)?**

**Recycling** Please note that many wastes can be recycled—see the [Recycling Council of British Columbia](#) (RCBC) for information on recyclable wastes and depot locations.

**Putrescible (Organic) Waste** Putrescible waste may be incinerated in a properly designed incinerator or disposed of at an authorized municipal landfill. Care must be taken when storing putrescible waste onsite to avoid encounters with bears and other wildlife. Animal-proof containers and/or wildlife exclusion (electric) fencing may be required.

**Non-Putrescible (Non-organic) Waste** Non-putrescible waste is to be disposed of at an

authorized municipal landfill. Please contact the appropriate Regional District to discuss policies for accepting camp refuse at municipal landfills.

***Can work camp waste be landfilled onsite?***

Landfills for work camps are generally not permitted with the exception of very remote sites which lack road access. All municipal solid waste landfills require a site specific authorization issued by the Ministry. Please refer to the most current version of the Landfill Criteria for municipal solid waste landfills posted on the Ministry's [website](#) for the latest performance standards and operational requirements for landfills.

***What are the requirements for incineration of camp waste at remote sites?*** Refuse incinerators for camps may require authorization depending on the size of the camp (see guidance below). Where incineration is authorized, the authorization document will specify the types of waste that are permitted in the refuse stream for burning. Generally, incineration is limited to putrescible wastes. Note that incineration of hazardous wastes (such as most waste oils, oily rags, filters, waste paint, waste solvents) is prohibited (see the Hazardous Waste section below for more information).

Environment Canada has developed [technical guidance for batch waste incineration](#) for owners and operators of remote camps using refuse incineration. In order to achieve the intent of the Canada-wide Standards for toxic substances including dioxins and furans, dual chamber controlled air incinerators are recommended in all remote camp circumstances.

***Camps of less than 100 persons*** Remote camps of under 100 persons are exempt from requiring an authorization under EMA if they use a commercially available, auxiliary fuel fired,

refuse incinerator ([Waste Discharge Regulation](#) section 3 (7)). In addition, it is recommended that these should be dual chambered to reduce the release of toxic substances including dioxins and furans. Due diligence is required when operating incinerators for these camps, as they must not cause pollution as per Section 6 (4) EMA. Implementing best management practices, such as Environment Canada's [6 Steps to Better Incineration](#), will help to ensure that operations have minimal environmental impact.

***Camps of 100 or more persons*** Camps of 100 or more persons planning to incinerate refuse require a site specific authorization under the EMA to authorize the air emissions from the incinerator.

Facilities planning to combust more than 400 kg of waste per hour will be required to meet criteria established by the Ministry of Environment. Please refer to the Combustion of Municipal Solid Waste FactSheet on the Ministry's [Waste to Energy webpage](#).

For large camps, air dispersion modelling of incinerator emissions may be required. A pre-application meeting is recommended.

***How Should Hazardous Waste be Handled at Camps?*** The [Hazardous Waste Regulation](#) (HWR) under EMA regulates the generation, storage, transport and disposal of hazardous wastes.

Camps may generate a variety of hazardous wastes, including waste oils, solvents, paint, batteries and various types of filters (amine, glycol, oil, water, etc.). It is the responsibility of the waste generator to determine whether or not a waste material is classified as "hazardous waste". See the definitions in the [HWR](#), and Schedules 6 and 7 to determine what materials are considered hazardous wastes.

Hazardous wastes must be handled, stored, transported and disposed of in accordance with the HWR. Camps may need to register as a generator as well as ensure that hazardous wastes are transported by a licensed carrier to an authorized facility for treatment and disposal. Please see the [Hazardous Waste webpage](#) for more information. Hazardous wastes are not to be disposed of by dilution, burial or incineration unless such activities are specifically authorized.

Please note that many hazardous wastes (i.e. batteries, oil, paint) can be recycled—see the [Recycling Council of British Columbia](#) for information on recyclable wastes and depot locations.

#### **What are the Rules for Open Burning of Vegetative Debris During Camp Construction?**

Open burning of vegetative debris from activities that occur during camp construction such as land clearing, forest harvesting, and right of way maintenance can be burnt in accordance with the [Open Burning Smoke Control Regulation](#) (OBSCR). Among other conditions, the OBSCR contains a list of prohibited materials that may not be included with the vegetative debris that is open burned. Open burning during the operation or occupancy of a camp is discouraged.

Open burning of vegetative debris that is not in accordance with OBSCR or open burning of other materials will require a permit or approval under the *Environmental Management Act*.

Anyone contemplating open burning should also check that there is not a prohibition or restriction on burning issued under the BC *Wildfire Act* and Regulation. See also the [Fire Prohibitions and Area Restrictions](#) website.

**What Activities and Wastes do not Require Authorization?** Activities or wastes that are not prescribed in the [Waste Discharge Regulation](#) (WDR) under the [Environmental Management Act](#) (EMA) do not require authorization from the Ministry. Instead, these activities or wastes are captured by section 6(4) of EMA which requires that the discharge or activity not cause pollution.

The Ministry of Environment may inspect the site to ensure that activities are not causing pollution.

#### **Reject water from a water treatment plant**

Discharge of reject water from a drinking water treatment plant is one example of a waste that is not prescribed by the WDR. If the reject water is discharged directly to the environment (i.e. through a sump) then, in order to ensure that the discharge does not cause pollution, the following is recommended and may be required:

- Have a qualified professional conduct a receiving environment assessment for the proposed discharge, using the appropriate BC water quality guidelines. The assessment should identify sensitive receptors and specify a corresponding monitoring program.
- Implement an operating plan for the treatment plant discharges including a sampling program and a contingency plan (in the event of unplanned releases).

If the reject water is directed to the camp municipal wastewater (sewage) treatment facility, then the discharge will be covered under the authorization for that facility.

**Reuse of Reject Water** Reject water from the drinking water treatment plant can be reused (i.e. reclaimed) without authorization from the Ministry, but, as above, the onus is on the

discharger to ensure that the reuse does not cause pollution.

**What Other Legislation Applies to Camp Wastes or Activities?** The onus is on the discharger to ensure they comply with all applicable Provincial and Federal legislation and local bylaws. Other legislation not discussed in this document which may apply to work camps includes, but is not limited to:

- Code of Practice for Concrete and Concrete Products Industry (MoE)
- *Fire Service Act* (BC Fire Commissioner)—fuel storage
- *Fisheries Act* (Environment Canada)
- Industrial Camps Regulation (MoH)
- Petroleum Storage and Distribution Facilities Storm Water Regulation (MoE)—fuel storage tanks
- Spill Reporting Regulation (MoE)—spills of reportable volumes of fuel oil, sewage, etc.
- *Water Act* (MoE)—licenses to withdraw surface water

**What are the Requirements for Using Pesticides?** Pesticide use must be in accordance with the [Integrated Pest Management Act](#) and [Regulation](#). In particular for industrial camps, anyone who provides a service controlling pests, such as rats, insects or vegetation, must hold a provincial license. Resources for pest prevention and a list of licensed pest control companies is available [here](#).

**Contact Information.** Please contact the Ministry of Environment Northern Authorizations office in Prince George for additional information or to set-up a pre-application meeting.

**BC Ministry of Environment**  
Northern Authorizations Office  
325–1011 4th Avenue  
Prince George B.C. V2L 3H9  
(250) 565-6135

### Abbreviations

EC	Environment Canada
EMA	Environmental Management Act
EOCP	Environmental Operators Cert. Program
HWR	Hazardous Waste Regulation
MoE	BC Ministry of Environment
MoH	BC Ministry of Health
MWR	Municipal Wastewater Regulation
OBSCR	Open Burning Smoke Control Regulation
RCBC	Recycling Council of British Columbia
SSR	Sewerage System Regulation
WSER	Wastewater Systems Effluent Regulations

### Web Resources

#### BC Ministry of Environment

- [Waste Management, including:](#)
  - Garbage (refuse)
  - Hazardous Waste
  - Industrial Waste
  - Recycling
  - Sewage (municipal wastewater)
  - Waste Discharge Authorizations
  - Publicly Viewable Application Queues

#### BC ministry of Health

- [Industrial Camps Regulation](#)
- [Onsite Sewage Systems](#)

#### Environment Canada

- Batch Waste Incineration:
  - [Factsheet](#)
  - [Technical Document](#)
- [Wastewater Systems Effluent Regulation](#)

#### Other

- [Recycling Council of British Columbia](#)