

FACTSHEET 3 INCINERATION OF SOLID OR SEMI-SOLID WASTES

JULY 2011

Code of Practice for the Slaughter and Poultry Processing Industries

Frequently Asked Questions (FAQs)

Q. Who does this Code of Practice apply to?

A. This Code applies to operators that slaughter and sell poultry or red meat for human consumption <u>and</u> produce wastes that may be discharged to the environment.

The air emissions from incinerating solid or semisolid wastes are an example of a waste discharge to the environment. You do not need to register under this Code if the solid or semi-solid waste is picked up by a rendering company, or brought to an authorized municipal landfill.

Exception

If you slaughter livestock or poultry strictly for your personal consumption and not for sale, or produce less than 5 tonnes of live weight killed (LWK) red meat per year, or less than 1.5 tonnes of live weight killed (LWK) poultry meat per year in your farm slaughter facility, you are exempt from the requirements of the Code and do not need to register. You are still required to ensure that your activities do not harm the environment.

5 tonnes (5,000 kgs.), is approximately 8 cows, 179 goats, 91 sheep, or 50 hogs. **1.5 tonnes** (1,500 kgs.), is approximately 708 chickens or 136 turkeys. These animal numbers are <u>estimates</u>, <u>based on average</u> animal weights. Actual weights should be used, if possible, to determine whether or not your facility meets the exemption threshold.

Q. What if I already have a permit authorizing my waste discharges?

A. You may keep your permit and continue doing business (following you permit requirements) or you may opt to cancel your permit and register under the Code.

1. Introduction

If you operate a red meat or poultry slaughter facility (also called an abattoir), you produce solid waste: feathers, hides, offal, bones, carcasses or parts of carcasses, and wastewater. If the blood, fats, oils and grease are separated from the wastewater, these are termed semi-solids, and may be disposed of in the same manner as solid waste. The Code allows solid or semi-solid wastes to be disposed of by landfilling, incinerating, or composting and land applying the compost product.

Incineration of solid or semi-solid wastes from slaughter facilities is regulated by the **Code of Practice for the Slaughter and Poultry Processing Industries** (Code) under the Waste Discharge

Regulation of the *Environmental Management Act*.

You can download a copy of the Code as well as access background information by following this link:

http://www.env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm.

This factsheet is intended to assist slaughter facility operators in understanding the incineration requirements under the Code. For legal purposes, the *Environmental Management Act*, Waste Discharge Regulation and Code shall prevail. Other provincial and federal legislation, guidelines and best management practices that are not described in this document may also apply to slaughter operations.

Please note the Canadian Food Inspection Agency (CFIA) requires producers, transporters, and processors to obtain permits for transporting, accepting and disposing of specified risk material (SRM). For further information consult the website at:

http://www.inspection.gc.ca/english/anima/heasan/disemala/bseesb/enhren/enhrene.shtml.

The Provincial Agricultural Land Commission (ALC) also has requirements for the handling of red meat wastes and SRM within the Agricultural Land Reserve (ALR). For further information, consult the ALC website at:

http://www.alc.gov.bc.ca/alr/alr main.htm.

Under this Code of Practice, an incinerator can be used *only* for the disposal of solid or semi-solid wastes from a slaughter facility. You are not allowed to burn any other kind of waste in the incinerator, such as domestic garbage or yard waste.

2. Docking stations for mobile slaughter facilities

Docking stations for mobile slaughter facilities must follow the same requirements as fixed facilities. The person discharging the waste is required to register under the Code. This may be the docking station operator or the mobile facility operator. In most cases, it will be the docking station operator, because the mobile facility operator would have to register each site where they operate.

3. Registration and Recording Requirements

If you operate a slaughter facility that introduces wastes to the environment, you must:

Register with the Ministry of Environment (MOE). Registration forms are available online via the following website link:

http://www.env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm.

Forms can be printed, completed and sent in by registered mail, courier or fax, or obtained from the Regional MOE office and returned to MOE headquarters in Victoria together with payment of the annual fee.

 Keep records of your annual production (in tonnes of live weight killed meat per year) If you are unable to weigh live animals, you can estimate live weight from carcass weight using Table 1.

Table 1 Carcass Weights as Percentage of Live Weight	
Species	Carcass Weight
Cattle and Bison	50 % of live weight
under 30 months	
Cattle and Bison	40 % of live weight
over 30 months	
Hogs	55 % of live weight
Sheep and Goats	60 % of live weight
Poultry	74% of live weight

Van Kleeck, R., Investment Agriculture Foundation, 2006

 Keep records of how the solid or semi-solid wastes are disposed of (e.g., incineration).

Note: if the solid waste is picked up by a rendering company, or brought to an authorized municipal landfill, you are not required to register for that solid waste discharge.

- Confirm that any plans that may be required under this Code have been prepared.
- Comply with all plans that are required to be completed under the Code.
- Keep all the required records and plans for at least 10 years and make them available to an officer within two days of a request.
- Notify a director in writing within 30 days after there is any change in information provided in your registration.

4. Requirements for the Operation of Incinerators

If you operate an incinerator to burn solid or semisolid wastes from your slaughter facility, you must comply with the following requirements:

i. Location

- The incinerator must be located at least 500 meters away from any residence other than your own.
- The incinerator must be located at least 1,000 meters away from any business other than your

own, and any school, hospital or continuing care facility.

ii. Operation

- The incinerator must be installed, operated and maintained according to the manufacturer's specifications and instructions.
- You must control dust and odour caused by the operation of the slaughter facility and the incinerator.
- The maximum amount of solid or semi-solid wastes you can burn (loading rate) in a continuous feed incinerator is 400 kilograms/hour.
- The maximum amount of solid or semi-solid wastes you can burn (loading rate) in a batch feed incinerator is 400 kilograms/load.

If the loading rates exceed the above maximums, a waste discharge permit is required.

iii. Monitoring and Emission Rates

Incinerators produce emissions in the form of smoke that consists of gases and particulate matter. These emissions must be monitored and recorded (stack monitoring).

- On the first day of operation, and at least once a year after that, the emissions from the incinerator must be tested according to the Stationary Air Emissions Testing section in the latest version of the Ministry of Environment's Field Sampling Manual. You can access the Manual on-line by following this link:
 http://www.env.gov.bc.ca/wsd/data_searches/field_sampling_manual/field_man_03.html
- The Ministry of Environment may require additional testing if it is considered necessary or advisable under the circumstances.
- The emissions from the incinerator must not contain more than 50 milligrams/cubic meter of total particulate matter at reference conditions of dry gas at 25° Centigrade and 101.3 kilopascals corrected at 11% Oxygen.

 The emissions from the incinerator must not exceed 10% total opacity averaged over 6 consecutive minutes.

iv. Record Keeping

- You must keep records of the results from the emissions tests for 10 years.
- You must record how much solid waste is burned in the incinerator.

For more information, consult our website at: http://www.env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm

or email the Environmental Management Branch at envprotdiv@victoria1.gov.bc.ca.