

# Environmental Guideline for the Operation of Wood-Burning Appliances



Department of Environment  
Government of Nunavut



# GUIDELINE: OPERATION OF WOOD-BURNING APPLIANCES

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This Guideline has been prepared by the Department of Environment's Environmental Protection Division and approved by the Minister of Environment under authority of Section 2.2 of the *Environmental Protection Act*.

This Guideline is not an official statement of the law and is provided for guidance only. Its intent is to increase the awareness and understanding of the risks and hazards associated with the operation of wood-burning appliances in Nunavut. This Guideline does not replace the need for the owner or person in charge, management or control of the wood-burning appliance to comply with all applicable legislation and to consult with Nunavut's Department of Environment, other regulatory authorities and qualified persons with expertise in the management of wood-burning appliances.

Copies of this Guideline are available upon request from:

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Electronic version of this Guideline is available at <http://www.gov.nu.ca/env>

Cover Photos: GNU Department of Environment

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## Introduction

With the increasing cost of heating oil in Nunavut, more homes and business owners have been considering the use of wood-burning appliances as a means to offset the high cost. The abundance of construction and demolition wood waste in Nunavut makes this a very attractive option.

While the Department of Environment encourages making use of a valuable material that would otherwise be consigned to a landfill (thus taking up large volumes of landfill space) there are potential impacts associated with the improper operation of wood-burning appliances within Nunavut communities; the primary one being nuisance emissions.

Section 5(1) of Nunavut's *Environmental Protection Act* states that "...no person shall discharge or permit the discharge of a contaminant into the environment."

A contaminant is defined as:

*"Any heat, noise, vibration or substance ... that, where discharged into the environment:*

- a) endangers the health, safety or welfare of persons,*
- b) interferes or is likely to interfere with the normal enjoyment of life or property,*
- c) endangers the health of animal life, or*
- d) causes or is likely to cause damage to plant life or to property."*

In the past, some of the commercial and residential wood-burning appliances operating in Nunavut have resulted in complaints from neighbouring businesses and residents because nuisance emissions (i.e. heavy smoke) were generated from the appliance. In many cases, the smoke from the appliance migrated into the ventilation systems of neighbouring buildings which increased the problem. In these cases, the Department of Environment ordered the operator to shut down the appliance until such time as this problem could be resolved.

Excessive or nuisance smoke is generally caused by one or more of the following factors: inefficient combustion; use of improper fuel such as treated wood and garbage; improper operation and maintenance of the appliance; and use of an improperly designed or uncertified appliance.

This document is intended to provide guidance on how to identify, operate and maintain a wood-burning appliance and remain in compliance with the *Environmental Protection Act*.

The *Environmental Protection Act* enables the Government of Nunavut to implement measures that preserve, protect and enhance the quality of the environment. Section 2.2 of the *Act* provides the Minister with authority to develop, coordinate, and administer the Guideline.

The Guideline is not an official statement of the law. For further information and guidance, the owner or person in charge, management or control of the wood-burning appliance is encouraged to review all applicable legislation and consult the Department of Environment, other regulatory agencies or qualified persons with expertise in wood-burning appliances.

## 1.1 Definitions

Canadian CSA standard	Performance Testing of Solid-Fuel-Burning Heating Appliances CAN/CSA-B415.1@ standard published by the Canadian Standards Association, as amended from time to time.
<i>Certified Wood-Burning Appliance</i>	A solid-fuel-burning appliance that bears a certification mark certifying conformity with the Canadian CSA standard or US EPA standard.
<i>Commercial</i>	Actions undertaken for hire or reward.
<i>Commissioner's Land</i>	Lands that have been transferred by Order-in-Council to the Government of Nunavut. This includes roadways and land subject to block land transfers. Most Commissioner's Land is located within municipalities.
<i>Contaminant</i>	Any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe that, where discharged into the environment, (a) endangers the health, safety or welfare of persons, (b) interferes or is likely to interfere with normal enjoyment of life or property, (c) endangers the health of animal life, or (d) causes or is likely to cause damage to plant life or to property.
<i>Dangerous Good</i>	Any product, substance or organism included by its nature or by the Transportation of Dangerous Goods Regulations in any of the classes listed in the schedule provided in the <i>Transportation of Dangerous Goods Act</i> .
<i>Discharge</i>	Includes any pumping, pouring, throwing, dumping, emitting, burning, spraying, spreading, leaking, spilling, or escaping.
<i>Environment</i>	The components of the Earth and includes (a) air, land and water, (b) all layers of the atmosphere, (c) all organic and inorganic matter and living organisms, and (d) the interacting natural systems that include components referred to in paragraphs (a) to (c) above.
<i>Garbage</i>	All <u>non-hazardous</u> solid, semi-solid and liquid wastes generated from residential, commercial and industrial sources, including trash, refuse, rubbish, industrial wastes, vegetable or animal solids and semi-solid wastes and other discarded solid and semi-solid wastes but does not include untreated sawdust and untreated wood wastes.
<i>Hazardous Waste</i>	A contaminant that is a dangerous good and is no longer wanted or is unusable for its original intended purpose and is intended for storage, recycling, treatment or disposal.

<i>Inspector</i>	A person appointed under subsection 3(2) of the <i>Environmental Protection Act</i> and includes the Chief Environmental Protection Officer.
<i>Nuisance</i>	The emission into the atmosphere of smoke by any means, which unreasonably disturbs the comfort or convenience of persons in the vicinity.
<i>Outdoor Wood-Burning Appliance</i>	An outdoor wood-burning appliance or a solid-fuel-burning appliance, which is used for the space heating of buildings, the heating of water or other such purpose and which is located in a separate building or on the exterior of the building which it serves.
<i>Paint</i>	A uniformly dispersed mixture having a viscosity ranging from a thin liquid to a semi-solid paste consisting of (1) drying oil, synthetic resin or binder; (2) a solvent or thinner; (3) and organic or inorganic pigment.
<i>Paint Solvent</i>	Alcohol or petroleum-based liquids capable of dissolving paint pigments to form a uniformly dispersed mixture. Also used to thin paints or to clean painting equipment.
<i>Qualified Person</i>	A person who has an appropriate level of knowledge and experience in all relevant aspects of wood-burning appliance installation, operation and maintenance.
<i>Residential</i>	A dwelling where one or more persons primarily sleeps represented by the owner(s) or tenant(s).
<i>Responsible Party</i>	The owner or person in charge, management or control of the wood-burning appliance.
<i>Smoke</i>	The gases, particulate matter and all other products of combustion emitted into the atmosphere when a substance or material is burned including dust, sparks, ash, soot, cinders and fumes.
<i>Solid Fuel</i>	Untreated wood, wood wastes and sawdust.
<i>Treated Wood</i>	Wood of any species that has been chemically impregnated, painted or similarly modified to improve resistance to insects or weathering.
<i>Waste Petroleum Product</i>	A flammable or combustible petroleum hydrocarbon, with or without additives, that is unsuitable for its intended purpose due to the presence of contaminants or the loss of original properties, and includes gasoline, diesel fuel, aviation fuel, naphtha, fuel oil, waste lubricating oil and waste hydraulic oil, but does not include paint, solvent or propane.
<i>Wood-burning Appliance</i>	A solid fuel burning device including, without limitation, a stove, a fireplace, or any similar device.

<i>Unseasoned Wood</i>	Wood that has not been seasoned (dried) for at least six months.
<i>US EPA Standard</i>	The New Source Performance Standards, Title 40, Part 60, Sub-part AAA of the Code of Federal Regulations (USA), <sup>@</sup> published by the United States Environmental Protection Agency, as amended from time to time.

## **1.2 Roles and Responsibilities**

### **1.2.1 Department of Environment**

The Environmental Protection Division of the Department of Environment is the key environmental agency responsible for ensuring the proper management of wood-burning appliances on Commissioner's Land. Authority is derived from the *Environmental Protection Act*, which prohibits the discharge of contaminants to the environment and enables the Minister to undertake actions to ensure appropriate management measures are in place. Although programs and services are applied primarily to activities taking place on Commissioner's and municipal lands and to Government of Nunavut undertakings, the *Environmental Protection Act* may be applied to the whole of the territory where other controlling legislation, standards and guidelines do not exist. A complete listing of relevant legislation and guidelines can be obtained by contacting the Department of Environment or visit the web site at <http://www.gov.nu.ca/env> .

The Department of Environment will provide advice and guidance on the proper management of wood-burning appliances. However, it remains the responsibility of the owner or person in charge, management or control of the wood-burning appliance to ensure all applicable statutes, regulations, standards and guidelines are fully complied with.

### **1.2.2 Owner-Operator**

The owner-operator of a wood-burning appliance is responsible for ensuring that the appliance is kept in good working order and that operation of the appliance does not contravene current environmental and other regulations and codes of practice including the National Fire Code, local and Territorial building codes and any applicable Municipal by-laws.

### **1.2.3 Other Regulatory Agencies**

As there may be other environmental or public and worker health and safety issues to consider, other regulatory agencies may have to be contacted regarding the installation, operation and maintenance of wood-burning appliances. Some of the other agencies include:

#### **Department of Community and Government Services**

The Office of the Fire Marshal administers the Nunavut Territorial *Fire Prevention Act*. The Fire Marshal derives authority from the Territorial *Fire Prevention Act*, *National Fire Code*, and *National Building Code*.



### **Department of Health and Social Services**

Emissions from wood-burning appliances may impact adjacent residences or other buildings thereby potentially affecting public health. The Office of the Chief Medical Officer of Health or Regional Environmental Health Officers should be consulted to ensure the health and safety of the public. The Chief Medical Officer of Health derives authority from the *Public Health Act*.

### **Workers' Safety and Compensation Commission**

The Workers' Safety and Compensation Commission is responsible for promoting and regulating workplace health and safety. The Commission derives its authority from the *Workers' Compensation Act*, *Mine Health and Safety Act* and *Safety Act*.

### **Local Municipal Governments**

The local municipal government may have by-laws respecting the installation, operation and maintenance of wood-burning appliances. The local fire department may have to be called upon if fire or other public safety issues are identified.

#### **1.2.4 Insurance Companies**

Insurance companies tend to be very strict with respect to installation and operation standards for wood-burning appliances. Insurers may require that the wood burning appliance be installed by a qualified person. ***It is recommended that before considering the purchase of a wood-burning appliance, your insurance company be consulted to determine what requirements are in place with respect to the installation, operation and maintenance of wood-burning appliances.***

## Environmental and Health Hazards Associated with Wood-Burning Appliances

### 2.1 General

Wood smoke contains a number of pollutants that can affect the quality of the environment and be harmful to human health. In addition to impacting outdoor air quality, smoke can enter into buildings, including nearby homes, affecting indoor air quality. The air inside the building where the appliance is located can also be affected when the unit is opened to add fuel, or if the appliance has leaks.

Wood smoke contains a number of pollutants that can negatively impact the environment and human health. The main pollutants from wood smoke are:

<i>Particulate Matter</i>	Solid or liquid particles found in the air. They can be very small and travel deep into the lungs, causing respiratory and heart problems.
<i>Carbon Monoxide</i>	A colorless, odorless gas that is poisonous at high levels. It can interfere with the delivery of oxygen in the blood to the rest of the body.
<i>Volatile Organic Compounds</i>	A wide range of carbon-based chemical compounds that are released as gases from certain solids or liquids. These compounds usually have no color, taste or smell. Some cause direct health effects, while others contribute to smog.
<i>Polycyclic Aromatic Hydrocarbons</i>	Complex carbon-based chemical compounds that are a health concern because of their potential to cause cancer.

In communities where wood heating is common, wood smoke may account for as much as 25% of the airborne Particulate Matter, 15% of the Volatile Organic Compounds and 10% of the Carbon Monoxide in the atmosphere. Wood smoke can also contain other toxic compounds, including nitrogen oxides and chlorinated dioxins. These can contribute to smog, acid rain and other environmental and health hazards.

### 2.2 Health Hazards Associated with Wood Smoke

Exposure to the pollutants in wood smoke can cause eye, nose and throat irritation, headaches, nausea and dizziness. Wood smoke can also make asthma worse, and has been associated with an increase in respiratory problems. In large populations where wood smoke is a significant contributor to outdoor air pollution, studies have linked wood smoke to severe health risks, including increased hospital admissions and even premature death.

Studies of laboratory animals suggest that prolonged exposure to wood smoke may weaken the immune system.

While breathing wood smoke is not healthy for anyone, it poses a particularly greater health risk to people with existing heart and lung problems. Children are also at greater risk because their respiratory systems are still developing, and because they inhale more air due to their higher rates of activity.

In extreme cases where the appliance is old, damaged or where improper fuel is used, its operation can result in carbon monoxide poisoning and death. This is especially the case when wood-burning appliances are left in operation overnight. For this reason, it is recommended that smoke and carbon monoxide detectors be installed in any home, business or other building that is heated using a wood-burning appliance.

### **2.3 Other Health Hazards**

Wet or moldy wood should not be stored in one's home or place of business, as this may expose the occupants to molds and spores that can harm their health. People with respiratory conditions are thought to be especially sensitive to mold. There is also evidence to suggest that chronic exposure to moulds and spores can result in long-term health consequences even in healthy individuals.

### **2.4 Fire Hazards**

Wood-burning appliances pose a number of fire hazards which can result in serious property damage, personal injury and even death. Common causes of accidental fires include errant sparks from the appliance, proximity of combustible materials and chimney fires. Although a detailed discussion on fire prevention techniques is beyond the scope of the Guideline, the following are general advisories for consideration:

- Wood-burning appliances should be located a safe distance from combustible materials and the immediate area in proximity to the appliance should be constructed of, or protected with, a heat and fire-proof shield. Safe set-back distances are specified by the appliance manufacturer, appropriate fire safety authority or Building Code.
- Wood-burning appliances and in particular, fireplaces should be fitted with spark-arresting devices.
- Chimney fires, which can be explosive, result from the buildup of creosote. Creosote buildup is caused by using improper fuel, such as unseasoned or wet wood and resin-rich softwoods. Cool flue temperatures also create creosote buildup. Chimneys should be inspected and cleaned on a regular schedule. The manufacturer's specifications and instructions should address the issue of creosote buildup or, if not, the manufacturer should be contacted for further advice.

***The owner-operator should consult with the Office of the Fire Marshall or their local Fire Chief for guidance on fire safety precautions as they apply to wood-burning appliances.***

## Wood-Burning Appliance Operations and Maintenance

### 3.1 Unit Selection and Installation

The risks to the environment and human health associated with the use of wood-burning appliances can be significantly reduced by installing modern “advanced-combustion” wood-burning appliances. When contemplating the purchase of a wood-burning appliance, the prospective owner should look for a sticker from the Canadian Standards Association (CSA) or the United States Environmental Protection Agency (EPA) certifying conformity with the Canadian CSA standard or US EPA standard. The sticker certifies that the appliance emits up to 95% fewer particulates and is up to 20% more fuel efficient than conventional models.

Other factors to consider when selecting and installing a wood-burning appliance include:

- The Office of the Fire Marshall must be consulted with respect to any certification or other requirements under their legislation.
- Installation must conform to applicable local and Territorial building codes.
- The Municipality in which the appliance is to be located must be consulted with respect to any certification or other requirements under their By-Laws (refer to Section 3.2 – Location and Siting of Outdoor Wood Burning Appliances).
- The building being supplied with heat from a wood-burning appliance should be equipped with an alternate form of heating (i.e. fuel oil, propane, electric) sufficient to meet space heating requirements, so that during episodes of high pollution levels or where the use of wood-burning appliances has been temporarily banned by the Government of Nunavut, the building may continue to be heated.

### 3.2 Location and Siting of Outdoor Wood-Burning Appliances

The local Municipality and the Office of the Fire Marshall should be consulted with respect to the location of outdoor wood-burning appliances. Considerations may include:

- Minimum lot area required;
- Number and size of units permitted;
- Minimum distance from all property lines;
- Minimum distance from any building on the property;
- Minimum perimeter ground area around the unit to be kept clear of combustible materials;
- Type of non-combustible material that should be used as a foundation for the unit (i.e. gravel, sand, concrete pad);
- Minimum distance fuel is to be stored from the appliance; and
- Minimum distance from residential areas, property or buildings.

### 3.3 Operation

#### 3.3.1 General

The wood-burning appliance must be operated and maintained according to manufacturer's instructions.

The wood-burning appliance should be fitted with a blower or fan to feed large volumes of air into the combustion chamber. This improves the efficiency of the burn and reduces the level of particulate matter in the smoke, which is the major cause of public complaints with respect to wood-burning appliances.

Do not overfill the burn chamber with over-sized pieces of wood. It is recommended that a wood chipping or shredding device be used in conjunction with commercial-sized wood burning appliances. Experiences in the Yukon and in the NWT suggest that breaking the wood up into smaller pieces results in a much cleaner and more efficient burn, which in turn results in less nuisance emissions.

The exhaust system should be fitted with a spark arrestor to prevent sparks, cinders or other hot objects from being discharged to the air.

An operation log should be maintained on-site to include start-up and refueling dates and times, run times, amount of solid fuel used, and operator signature.

#### 3.3.2 Restriction on Fuels for Wood Burning Appliances

Only untreated, seasoned wood or wood-based manufactured products (i.e. pellets or fire logs) should be used in a wood-burning appliance.

It would be impractical to provide an exhaustive list of items that should not be burned in a wood-burning appliance. For illustrative purposes, the following is a listing of items commonly found in and around homes and businesses and which should not be burned in a wood-burning appliance.

- Wet or unseasoned wood
- Garbage
- Treated wood
- Painted wood
- Plastic products
- Rubber products
- Waste oil
- Paints
- Paint solvents
- Coal (unless the appliance has been specifically designed and certified as a coal-wood burner)
- Glossy or coloured papers
- Particle board
- Hazardous waste
- Any material not specifically intended for use in a CSA or EPA approved wood-burning appliance, in accordance with its manufacturer's design parameters and specifications.

### **3.4 Nuisance Emissions**

Nuisance smoke from wood-burning appliances is the primary cause of public complaints received by the Department of Environment where these devices are concerned.

Wood-burning appliance fires should be maintained so as to burn 'hot' in accordance with manufacturer's instructions. This will reduce nuisance from wood smoke to neighbouring residents. Exceptions will be made for the brief periods during which the appliance is being started up or being refueled. If the Department of Environment receives complaints about the smoke from a wood-burning appliance, an inspection will be conducted. The inspection will include an assessment of the appliance and of the fuel being used. Other factors, including indoor air quality of neighbouring buildings, will be considered. Other agencies (i.e. Department of Health and Social Services, Office of the Fire Marshall) and other qualified persons may be consulted in the determination of nuisance.

If the inspector has reasonable grounds to believe that smoke from the appliance "endangers the health, safety or welfare of persons; interferes or is likely to interfere with normal enjoyment of life or property; endangers the health of animal life; or causes or is likely to cause damage to plant life or to property", the inspector may issue a Stop Order to the owner or operator of the wood-burning appliance. This Stop Order will remain in effect until such time as the problem has been resolved to the inspector's satisfaction.

## Conclusion

The Department of Environment encourages the practice of making maximum use of finite and valuable resources such as wood waste. Every year, hundreds of tons of wood waste— mostly construction debris -- are discarded into landfills around Nunavut. Much of it can be salvaged and re-used for a number of useful purposes, including providing supplementary heat to homes and businesses to offset the high cost of heating fuel. While the Department encourages making good use of wood waste for supplementary heat, there are a number of potential impacts associated with this practice including nuisance emissions. Nuisance emissions can be largely eliminated through careful consideration and research *before* purchasing a wood-burning appliance and after the purchase, proper installation, operation and maintenance of the appliance.

This document provides guidance to the public and industry in operating wood-burning appliances *and* remaining in compliance with the *Environmental Protection Act*. It is intended to inform the reader of the risks and hazards associated with these appliances and to assist in their proper installation, operation and maintenance. Familiarity with this Guideline does not replace the need for the owner or person in charge, management or control of wood-burning appliances to comply with all applicable legislation and to consult with Nunavut's Department of Environment, other regulatory authorities and qualified persons with expertise in the management of wood-burning appliances. The public and industry are encouraged to place air quality as a high priority when choosing any wood-burning appliance.

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## **APPENDICES**





## **APPENDIX 1 - ENVIRONMENTAL PROTECTION ACT**

The following are excerpts from the *Environmental Protection Act*

1. "Contaminant" means any noise, heat, vibration or substance and includes such other substance as the Minister may prescribe that, where discharged into the environment,
  - (a) endangers the health, safety or welfare of persons,
  - (b) interferes or is likely to interfere with normal enjoyment of life or property,
  - (c) endangers the health of animal life, or
  - (d) causes or is likely to cause damage to plant life or to property;

"Discharge" includes, but not so as to limit the meaning, any pumping, pouring, throwing, dumping, emitting, burning, spraying, spreading, leaking, spilling, or escaping;

"Environment" means the components of the Earth and includes

- (a) air, land and water,
- (b) all layers of the atmosphere,
- (c) all organic and inorganic matter and living organisms, and
- (d) the interacting natural systems that include components referred to in paragraphs (a) to (c).

"Inspector" means a person appointed under subsection 3(2) and includes the Chief Environmental Protection Officer.

- 2.2 The Minister may
  - (a) establish, operate and maintain stations to monitor the quality of the environment in the Territories;
  - (b) conduct research studies, conferences and training programs relating to contaminants and to the preservation, protection or enhancement of the environment;
  - (c) develop, co-ordinate and administer policies, standards, guidelines and codes of practice relating to the preservation, protection or enhancement of the environment;
  - (d) collect, publish and distribute information relating to contaminants and to the preservation, protection or enhancement of the environment:
3. (1) The Minister shall appoint a Chief Environmental Protection Officer who shall administer and enforce this Act and the regulations.  
  
(2) The Chief Environmental Protection Officer may appoint inspectors and shall specify in the appointment the powers that may be exercised and the duties that may be performed by the inspector under this Act and regulations.
5. (1) Subject to subsection (3), no person shall discharge or permit the discharge of a contaminant into the environment.  
  
(3) Subsection (1) does not apply where the person who discharged the contaminant or permitted the discharge of the contaminant establishes that
  - (a) the discharge is authorized by this Act or the regulations or by an order issued under this Act or the regulations;
  - (b) the contaminant has been used solely for domestic purposes and was discharged from within a dwelling house;
  - (c) the contaminant was discharged from the exhaust system of a vehicle;
  - (d) the discharge of the contaminant resulted from the burning of leaves, foliage, wood, crops or stubble for domestic or agricultural purposes;

- (e) the discharge of the contaminant resulted from burning for land clearing or land grading;
- (f) the discharge of the contaminant resulted from a fire set by a public official for habitat management of silviculture purposes;
- (g) the contaminant was discharged for the purposes of combating a forest fire;
- (h) the contaminant is a soil particle or grit discharged in the course of agriculture or horticulture; or
- (i) the contaminant is a pesticide classified and labelled as "domestic" under the *Pest Control Products Regulations* (Canada).

(4) The exceptions set out in subsection (3) do not apply where a person discharges a contaminant that the inspector has reasonable grounds to believe is not usually associated with a discharge from the excepted activity.

- 5.1. Where a discharge of a contaminant into the environment in contravention of this Act or the regulations or the provisions of a permit or license issued under this Act or the regulations occurs or a reasonable likelihood of such a discharge exists, every person causing or contributing to the discharge or increasing the likelihood of such a discharge, and the owner or the person in charge, management or control of the contaminant before its discharge or likely discharge, shall immediately:
- (a) subject to any regulations, report the discharge or likely discharge to the person or office designated by the regulations;
  - (b) take all reasonable measures consistent with public safety to stop the discharge, repair any damage caused by the discharge and prevent or eliminate any danger to life, health, property or the environment that results or may be reasonably expected to result from the discharge or likely discharge; and
  - (c) make a reasonable effort to notify every member of the public who may be adversely affected by the discharge or likely discharge.
6. (1) Where an inspector believes on reasonable grounds that a discharge of a contaminant in contravention of this Act or the regulations or a provision of a permit or license issued under this Act or the regulations has occurred or is occurring, the inspector may issue an order requiring any person causing or contributing to the discharge or the owner or the person in charge, management or control of the contaminant to stop the discharge by the date named in the order.
7. (1) Notwithstanding section 6, where a person discharges or permits the discharge of a contaminant into the environment, an inspector may order that person to repair or remedy any injury or damage to the environment that results from the discharge.
- (2) Where a person fails or neglects to repair or remedy any injury or damage to the environment in accordance with an order made under subsection (1) or where immediate remedial measures are required to protect the environment, the Chief Environmental Protection Officer may cause to be carried out the measures that he or she considers necessary to repair or remedy an injury or damage to the environment that results from any discharge.

## APPENDIX 2 - LEGISLATION, CODES AND STANDARDS

### Government of Nunavut

- *Environmental Protection Act*
- *Environmental Protection Act: A Simplified Summary*
- *Industrial Projects on Commissioner's Lands*
- *Environmental Guideline for Air Quality – Sulphur Dioxide and Suspended Particulates*
- *Environmental Guideline for the General Management of Hazardous Waste*

The above documents are available for viewing at  
<http://env.gov.nu.ca/programareas/environmentprotection>

If you do not have Internet access and wish to obtain copies contact your local Conservation Officer or the Environmental Protection Division of the Department of Environment.

### Codes

- *National Fire Code of Canada 2005*
- *National Building Code of Canada 2005*

The above Codes cannot be accessed through the Internet but may be purchased from the National Research Council Canada in Ottawa. Their website address is <http://www.nrc%2Dcnrc.gc.ca/eng/publications/index.html> . Alternatively, the local Municipality or the Office of the Fire Marshall may have copies available for viewing.

### Standards

#### Canadian Standards Association (CSA)

- *Performance Testing of Solid-Fuel-Burning Heating Appliances CAN/CSA-B415.1*. Available at <http://shop.csa.ca/en/canada/fuel%2Dburning%2Dequipment/b4151%2D10/inv/27013322010>
- *Installation Code for Solid-Fuel Burning Appliances and Equipment CAN/CSA-B365-10*. Available at <http://shop.csa.ca/en/canada/fuel%2Dburning%2Dequipment/b365%2D10/inv/27013182010>

#### United States Environmental Protection Agency

- *List of EPA Certified Wood Stoves*. Available at <http://www.epa.gov/compliance/resources/publications/monitoring/caa/woodstoves/certifiedwood.pdf>
- General Information of Wood-Burning Appliances can be found at <http://www.epa.gov/burnwise>