

**Model Municipal Bylaw
for Regulating
Residential Backyard Burning**

Water, Air and Climate Change Branch

Ministry of Water, Land and Air Protection

PREFACE

Recent studies have found that fine particulates can pose a greater danger to our health than the better-known kinds of air pollution, such as smog (ground-level ozone) and sulphur dioxide. Fine particulates are linked with numerous health problems – from a runny nose and coughing, to bronchitis, asthma and even death.

In fact, new research in the United States suggests that fine particulates are responsible for tens of thousands of deaths in that country each year. A 1993 study for the Provincial Health Officer found that exposure to fine particulates in wood smoke may be causing substantial illness and some deaths within the province. Fine particulates are also a visual blight, capable of reducing visibility so much that beautiful views are blotted out, and road and air travel is made difficult.

Residential backyard burning is a significant source of airborne fine particulate matter. In B.C., residential backyard burning falls under the municipal jurisdiction. Most municipal bylaws dealing with backyard burning are for fire protection. In many cases, they do not adequately address air quality issues. Recently, however, in recognition of smoke problems, several municipalities and regional districts in the province have passed bylaws that completely prohibit backyard burning or limit burning to dry, garden refuse under strict rules.

This document presents a model municipal bylaw aimed at controlling or prohibiting residential backyard burning. It is meant to help municipal authorities who wish to update their fire-prevention bylaws and further reduce smoke in their jurisdictions. It was developed by this ministry, the Fire Commissioner's Office, the Ministry of Municipal Affairs and the Union of B.C. Municipalities. A municipality may, in consultation with its legal advisors, select suitable sections from the model bylaw according to its needs. Comments and questions are welcome. Please contact:

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This was written in 1997 by the Air Resources Branch, now the Water, Air & Climate Change Branch.

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INTRODUCTION

Historically, human beings have found open burning to be the most convenient method for disposing of debris from gardening, agriculture, land development and numerous other activities. Burning debris, however, generates smoke which contains tiny particles called fine particulates. These fine particulates are not fine for people because they can remain in the air for days and penetrate deep into our lungs. A number of organic carbon compounds potentially harmful to human health have been found in smoke from combustion processes.

Backyard burning usually occurs during poor dispersion conditions at, or close to, ground level in populated areas – resulting in high concentrations of fine particulates in residential areas. The problem becomes even more serious when backyard burning is used to dispose of garbage or burn prohibited materials such as demolition waste, painted wood, and manufactured wood products.

The effects of fine particulates vary, from irritation of the eyes and respiratory tract to more serious disorders, including asthma, bronchitis, reduced lung function and early mortality. Children, the elderly, and people with lung disease tend to be most vulnerable. Fine particulates are also a visual blight, capable of reducing visibility so much that beautiful views are blotted out, and road and air travel is made difficult.

Rather than dumping yard debris in a fire and producing clouds of smoke, yard residue should be recognized as a valuable natural resource, which can be chipped, composted and reused in many ways. Several municipalities in British Columbia either already have or are actively considering leaf collection and central chipping services for their residents.

In most B.C. communities, residential backyard burning is controlled under a municipal bylaw. Most such bylaws deal with backyard burning for fire protection and do not adequately address air quality issues. Recently, however, several municipalities and regional districts have passed bylaws that completely prohibit backyard burning or limit burning to only dry, garden refuse under strict rules.

This document presents a model municipal bylaw aimed at controlling or prohibiting residential backyard burning – to help municipal authorities who wish to update their fire-prevention bylaws and further reduce smoke in their jurisdictions. This model bylaw provides the following two options:

Option 1 Ban Backyard Burning

The first option from an air quality, health, safety and economic point of view, is to completely ban residential backyard burning. This is particularly suitable for

municipalities with high population density where the risk to air quality from burning yard residue can be significant and the cost of alternative debris management can be clearly justified. Banning backyard burning will not only improve air quality but will also encourage people to deal with debris in a more responsible and productive manner.

Option 2 Restrict Burning to Dry Garden Refuse Only, During Good Ventilation

This option should be exercised only when other technological approaches which provide more productive methods of debris management (e.g., leaf collection service, drop-off location for yard waste, chipping service for brush, canes and tree pruning, composting, etc.) are not available.

Option 2(a)

In option 2(a), the bylaw authorizes the Fire Chief or his/her designate to issue a burning permit, allowing the burning of dry, segregated garden refuse only, under conditions specified in the bylaw.

Option 2(b)

In option 2(b), a permit is not required: the bylaw itself states that only dry, segregated garden refuse may be burned in an open fire, and prescribes the conditions under which this burning may occur.

Bylaw Administration

In order to offset the cost of administering this bylaw, the Municipal Council may levy one or more of the following fees or penalties;

- (a) Permit application fee (Fee sufficient to cover administrative cost – suggest \$25 and up).
- (b) Permit noncompliance fine (Issue tickets based on cost to manage the debris alternatively, e.g., cost to grind debris).
- (c) Fine for failure to obtain a permit before burning (Issue tickets \$300 and up).
- (d) Cost recovery for fire protection services (includes cost of investigating a fire when a permit has not been previously obtained).
- (e) In case of option 2 (b), where a permit is not required but the bylaw prescribes the conditions under which burning can take place, fines may be levied for noncompliance with the bylaw (suggest \$25 and up).

BYLAW TO CONTROL RESIDENTIAL BACKYARD BURNING

The Municipality or Regional District of _____

Bylaw No. _____

The Municipal Council of the City of _____ or the Village of _____ or the Town of _____ or the Regional District of _____ or the Corporation of the District of _____ (state full legal name of the municipality or regional district) enacts the following:

Title

This bylaw may be cited as the *Residential Backyard Burning Bylaw*.

A bylaw of _____ (state full legal name of the municipality or regional district).

1. Interpretation

1.1 In this bylaw

(a) Animal Organic Waste

"Animal Organic Waste" means solid organic waste material of animal origin and includes flesh, carcasses, offal, hides, feces and feathers;

(b) Approval

"Approval" means acceptance as satisfactory to the Fire Chief or an officer of the Fire Department of the Corporation of (state full legal name of municipality) _____;

(c) Council

"Council" means the Municipal Council of the Corporation of _____;

(d) District

"District" means the Municipal Council of the Corporation of the District of _____;

(e) Debris

"Debris" means disturbed or undisturbed vegetative matter targeted for management or disposal by open burning;

(f) Demolition Waste

"Demolition Waste" means any material resulting from or produced by the complete or partial destruction or tearing down of any structure;

(g) Domestic Incinerator

"Domestic Incinerator" means any metal or masonry container equipped with a tight-fitting wire screen lid of a mesh not greater than 1 centimetre (or 3/8") to restrict any sparks or flying debris. It is used for the burning of dry segregated garden refuse from any single or multi-family dwelling unit occupied by a single-family or multi-family. Burning garden refuse in a domestic incinerator is classed as open burning defined under (o);

(h) Domestic Waste Materials

"Domestic Waste Materials" means household material and food waste but does not include newspaper and cardboard;

(i) Fire Chief

"Fire Chief" means the person appointed by the Council of The City (or The Village, or The Town or The Regional District) to be in charge of the Fire Department and the firefighting personnel or firefighters of The City (or The Village or The Town or The Regional District);

(j) Firefighter

"Firefighter" means a member of the Fire Department of the District (or the City or Town);

(k) Garden Refuse

"Garden Refuse" means leaves, foliage, prunings, weeds, crops or stubble for domestic purposes or in compliance with the *Weed Control Act*;

(l) Garbage

"Garbage" means all household and commercial waste or refuse, whether it contains the remains of edible food or not;

(m) Incinerator

"Incinerator" means a combustion device specifically designed for controlled high temperature burning of waste materials and equipped with a stack or chimney for discharge of contaminants (smoke) to the atmosphere.

An incinerator does not include an outdoor "domestic incinerator" as defined in (g) above;

(n) Noxious Material

"Noxious Material" includes tires, plastics, rubber products, drywall, demolition waste, construction waste, paint, special waste, animal organic waste, vegetable waste, food waste, biomedical waste, tar, asphalt products, battery boxes, plastic materials, waste petroleum products, all of which may produce heavy black smoke or noxious odours;

(o) Open Burning

"Open Burning" means the combustion of material without control of the combustion air and without a stack or chimney to vent the emitted products of combustion to the atmosphere. Open burning includes burning of garden refuse in a domestic incinerator operated outdoors but it does not include charcoal fires contained within barbecues and hibachis for the purpose of cooking food;

(p) Order

"Order" means any order, decision, requirement or direction given by the Fire Chief or his/her designate;

(q) Permit

"Permit" means a document issued pursuant to the provisions of this bylaw authorizing a person to undertake backyard burning under the conditions specified in the document;

(r) Smoke

"Smoke" means the gases, particulate matter and products of combustion emitted into the atmosphere from burning; and

(s) Ventilation Index

"Ventilation Index" means the Environment Canada forecast Ventilation Index which provides regional information on airflow venting.

2. Open Burning (or Open Fires)

2.1 In this section, "open burning" refers to burning of dry, combustible, segregated garden refuse as defined in section 1.

2.2 Open burning is prohibited during times specified by the Fire Chief as burning ban periods.

2.3 A person shall not start or maintain an open fire, or cause or allow an open fire to be started or maintained unless the fire is allowed under subsection (2.5 C) or under a permit issued by the Fire Chief.

2.4 The Fire Chief or his/her designate may withhold or cancel any permit issued where, in his/her opinion, the igniting of a fire may create a hazard or nuisance to persons or property, and the Fire Chief or his/her designate may extinguish or order the extinguishing of any fire that is causing a nuisance to persons, or any fire started without a permit to do so.

Optional Sections

2.5A All open burning of domestic or residential waste, either household and/or yard material, including garden refuse, is prohibited.

or 2.5B No person shall light, ignite, start, or burn any fire in the open air for burning residential debris, including yard material or garden refuse, without first having obtained a permit to do so from the Fire Chief. Permits will be issued for open burning of garden refuse only, provided:

or 2.5C A person may burn dry, segregated garden refuse as an open fire without a permit provided:

- (a) there are no alternative methods — e.g. leaf collection service, drop-off location for yard debris, compost facility, chipping service — available for

- managing or disposing of the garden refuse (or vegetative yard debris);
- (b) the garden refuse to be burned is thoroughly dried and fed to the fire in such a way that rapid ignition and burning occurs;
 - (c) the fire is for the purpose of tidying the premises where burning is taking place and the conditions ensure proper combustion of material being burned without risk of igniting surrounding material;
 - (d) the fire is burning during the time period between 10:00 hours and 16:00 hours local time of the same day;
 - (e) the fire is on designated days (Fridays and Saturdays) during the period April 1st to May 31st, and October 1st to November 30th (or other designated periods in spring and fall) of each year;
 - (f) the fire is on the person's property and is at least 4.6 m from all property lines and buildings, and at least 1.5 m from any grass, shrubs, trees, or wooden fence;
 - (g) for the purpose of preventing danger, damage and injury to property and/or a person because of the fire, the fire is continuously supervised and controlled by a person who is at least 16 years old;
 - (h) the person supervising the fire has emergency equipment that is readily available and is capable of controlling or putting out the fire in five minutes at any stage for the purposes in paragraph (g); and
 - (i) the person supervising the fire is taking every reasonable precaution to prevent smoke being generated or becoming a nuisance.

3. Burning of Garbage and Noxious Material

No person shall burn garbage and/or noxious material in an open fire, in a domestic incinerator, or in any other similar device.

4. Inspection and Orders

The Fire Chief or any person under his/her authority may:

- 4.1 enter at all reasonable times on any property that is subject to the

requirements or regulations of this bylaw, to ascertain whether the regulations in this bylaw or directions made under this bylaw are in compliance;

4.2 make orders directing the owners or occupiers of property to bring the fire into compliance with this bylaw;

4.3 prevent material not properly prepared (i.e. dried) from being added to fire;

4.4 call on the Ministry of Water, Land and Air Protection's Conservation Officers if a person is burning waste in contravention of the *Waste Management Act*;

4.5 no person shall obstruct or prevent the Fire Chief or person acting under the Fire Chief's authority from conducting an inspection under this bylaw; and

4.6 order the operator to immediately put the fire out.

5. **Favourable Weather for Smoke Dispersion**

Unless otherwise directed by the Fire Chief, residential backyard burning must not be initiated unless the Ventilation Index is forecast as "good" for the period during which the burning is to take place.

6. **Issuance of Burning Permits**

6.1 A written permit shall be in the form set out in Schedule A attached hereto, or to like effect, and shall be valid for one day only, during the specified period designated under Section 2.6 (d) of this bylaw. A person shall apply for a separate permit for each day of burning.

6.2 The Fire Chief or his/her designate may withhold or cancel any permit issued where, in his/her opinion, the igniting of a fire may create a hazard or nuisance to persons or property.

6.3 If at any time the Fire Chief or his/her designate on account of the existence of hazardous conditions, inclusive of meteorological or ambient air quality conditions, deems it advisable, he/she may suspend for such time as it is necessary, any right to burn granted pursuant to this bylaw including all or any permits issued pursuant to this bylaw, or he/she may attach to any or all such permits such conditions and restrictions as deemed proper.

6.4 All permits issued pursuant to this bylaw shall be subject to such

conditions, restrictions and provisions as the Fire Chief or his/her designate may consider necessary and expedient to incorporate therein.

7. Cost Recovery

Every owner/occupant of a dwelling who starts or allows to be started any outdoor fire or open burning is responsible for such fire. If, in the opinion of the Fire Chief, the fire presents a hazard, has escaped or threatens to escape from the owner's control or is prohibited under the terms of this bylaw, the Fire Department may be summoned to control or extinguish the fire. The owner shall be liable for all costs and expenses incurred by the Fire Department or the District to control or extinguish the fire.

In addition, the Fire Department may levy fines as it deems appropriate. The costs and expenses, including penalties, may be recovered from the owner together with any administration costs in like manner as municipal taxes.

8. Liabilities For Damages

This bylaw shall not be construed to hold the Corporation nor its authorized agent or agents responsible for any damage to persons or property by reason of:

- (a) inspections authorized by this bylaw, or
- (b) failure to carry out an inspection, or
- (c) a permit issued as herein provided.

9. Scope and Penalties

9.1 In the event of there being any conflict between the terms and provisions of this bylaw and the terms and provisions of the *Fire Services Act* or the *Waste Management Act* and regulations thereunder or other provincial acts or regulations, the terms and provisions of the said acts and regulations shall prevail.

9.2 Any person guilty of an offence under this bylaw shall be punishable as a minimum, in accordance with the appropriate *Municipal Offence Act*.

9.3 Any person who commits an offence contrary to the provisions of this

bylaw shall be liable to a maximum fine of two thousand dollars (\$2,000.00), or required to perform community labour (or to imprisonment not exceeding six months), or to both for the violation related to this bylaw.

9.4 Each day a violation is caused or allowed to continue constitutes a separate offence.

10. Effective Time

This bylaw is effective and in force and binding on all persons as from the day following the day of its adoption.

DONE AND PASSED BY THE COUNCIL ON THE DAY OF _____
199__.

I HEREBY CERTIFY the above to be a true and correct copy of Bylaw
No. _____ of the _____ of _____.

MUNICIPAL CLERK _____

Reconsidered, Finally Passed AND ADOPTED by the Municipal Council, signed
by the Mayor and Municipal Clerk and sealed with the corporate seal on the ____
_____ day of _____ 199__.

_____ MAYOR

_____ MUNICIPAL CLERK

Schedule A

OUTDOOR FIRE PERMIT APPLICATION

Corporation of the District
of

Date of Application _____

Name of Applicant _____

Address of Applicant _____

Telephone Number _____

Options other than burning and reasons for rejecting such options:

Location of Proposed Fire _____

Property Owner/Occupier _____

Date(s) of Proposed Fire _____

Purpose of Proposed Fire _____

Material to be Burned _____

Permit Fee Paid _____

I hereby confirm that I have read and understood the _____'s *Residential Backyard Burning Bylaw No. _____* and that the proposed fire, if permitted, will be carried out in accordance with all the regulations of the Bylaw.

Signature of Applicant

Date

Suggested Schedule of Fees

Permit Application Fee: \$25.00

Permit Fee (when a permit is issued): \$40.00

Penalties for Permit Violations

Burning Without Permit: \$300.00

Failure to Display Permit at Burn Site: \$25.00

Burning Prohibited Material: \$500.00

An Escaped Fire: cost recovery to be determined by the fire department

Permit Violation: Minimum \$500.00

Schedule B

OUTDOOR FIRE PERMIT

Corporation of the District
of

Authority is granted to _____
(the permittee)

Telephone _____

Address: _____

to set and maintain a fire for **one day only** on the following lands:

(the site address)

for the purpose of:

(type of fire)

during the period _____ to _____;

subject to the following conditions:

1. The permittee shall be responsible for the fires authorized by this permit.
2. The permittee shall provide at the site at all times during the fire authorized by this permit a person of 16 years of age or older equipped with suitable tools and water to effectively safeguard a fire.
3. The permittee shall ensure that under this permit only dry, combustible garden refuse will be burned.

4. Prior to lighting the fire, the permittee shall ensure that the Ventilation Index is rated as good. (For the Ventilation Index, contact the local media, or the BC Weather Service: 1-900-451-5009).
5. The permittee shall ensure that the fire will be operated between the hours of 10:00 A.M. to 4:00 P.M. (local time).
6. The permittee shall post this permit in a conspicuous location near or at the site where the fire is operated.
7. The permittee is liable for costs associated with fire damage to property or persons, as well as costs incurred by local fire authorities for extinguishing the fire.