

Dutch Elm Disease Prevention/Control Measures

Responsibilities and Authority under the APA

Overview

Under the *Alberta Agricultural Pests Act* (APA) “Pest and Nuisance Control Regulation (PNCR)” both Dutch elm disease (DED) pathogens, smaller European elm bark beetle (SEEBB) *Scolytus multistriatus* (Marsh), and the native elm bark beetle (NEBB) *Hylurgopinus rufipes* (Eichh) are named declared pests. All municipalities, counties and MDs in the province of Alberta have the responsibility and authority to prevent and control DED under the APA.

Under the *Plant Protection Act* “Plant Protection Regulation” of Canada, the movement of both Dutch elm disease (DED) pathogens, *Ophiostoma ulmi* and *Ophiostoma novo-ulmi* are regulated. Elms from a DED infected province cannot be shipped to a disease-free province. Alberta and British Columbia are classified as DED-free.

For those municipalities that do not have a DED bylaw in place the APA provides a means for enforcement. Several sections of the APA and the Regulation can be applied. It is an offence not to take “active measures” and not to follow an Inspector’s Notice which can be issued by an agricultural fieldman, community peace officer, a municipal officer that has dual municipal and provincial appointments or a Pest Inspector. They all have the powers and responsibilities outlined under the APA Section 17 to enforce the DED Prevention/Control Measures to the land owner.

APA Section 10 (1) The local authority of a municipality shall appoint a sufficient number of inspectors to carry out this Act and the regulations within the municipality. (2) Two or more local authorities may, (a) jointly appoint inspectors to act within the municipalities represented by the local authorities, and (b) enter into an agreement for the sharing of the costs of the inspectors appointed jointly. Pest Inspectors can be trained in advance to identify elm wood and DED symptoms and start surveys immediately on private property if DED is found.

When issuing an Inspectors Notice, the Form 2 “NOTICE TO CONTROL PESTS” of the PNCR must be used. Municipalities can add their municipal logo on the Form 2 but cannot change the wording. An Official Municipal Pest Inspector’s Card would be issued to the appointed Pest Inspector by the municipality and must be shown upon request by the landowner.

It is best to serve a notice by hand delivery to the landowner. However, if this is not possible, then the notice can be left with someone (18 years or older) at the place of business or residence. If this is not possible, then the notice has to be mailed or posted on the infected land. In the first instance where a notice is hand delivered, the inspector can give a shorter time to rectify the issue. It is at the inspector’s judgement to decide when the pest needs to be controlled.

APA Section 20 If a third party has contravened the APA, the Minister may issue a Stop Order.

Dutch Elm Disease Prevention/Control Measures

“Elm tree” means any tree or part of a tree of the *Ulmus* genus and its cultivars, including the American, Siberian and Japanese elm.

1. *Elm Pruning Ban*

Pruning ban period means the period commencing on April 1 and ending on September 30 of the same year.

Elm bark beetles (EBB), the vectors of DED, are active between these dates and can be attracted to the scent of fresh tree cuts, possibly infecting a healthy tree.

2. Elm Preventive Pruning

Pruning elms can only be carried out commencing October 1 to March 31 the following year. Elm trees can be removed any time of the year (4. - Elm Tree Removal)

Preventive pruning is essential to eliminate breeding material for the elm bark beetles (EBB). Preventive pruning is the systematic removal of dead, damaged, or diseased (other than from DED) branches from healthy elm trees. If a tree is dead or dying it should be removed. All elm wood must be properly disposed (4 - Elm Tree Removal ; 5a - Elm Wood Disposal). Keeping elms well-maintained will aid in the control of DED.

Improper pruning techniques and tree topping can weaken the elm tree, creating a hazard and increase the risk of attracting EBBs.

To avoid spreading DED, all equipment must be sterilized before pruning a different elm tree. To sterilize your tools, use methyl hydrate, a 25% solution of bleach and water, or a 70% concentrate of rubbing alcohol. Note that bleach can rust iron-based tools.

3. DED Confirmation

The presence of the DED must be confirmed by a laboratory test. If a tree is removed before diagnostic testing is complete, the tree must be treated as if it is infested with DED and disposed of according to the guidelines (5a - Elm Wood Disposal).

All DED suspect elm trees must be sampled properly and the samples sent to Alberta Agriculture and Forestry's Alberta Plant Health Lab for diagnostic testing. Suspect DED samples are tested at no cost to the sender. For suspect DED sample instructions and submission form see [Submitting DED lab samples](#).

All samples taken from private trees must be sent to the lab by a Municipality, Agricultural Fieldman, Tree Company or STOPDED. Tree Companies must contact the municipality, Agricultural Fieldman's or STOPDED before sending a sample to the lab. Samples cannot be sent directly by a property owner.

Once the sample is confirmed to be DED positive, the lab will contact the appropriate contacts for a regulated pest detection.

Call the STOPDED hotline at 1-877-837-3567 for more instructions.

4. Elm Tree Removal

When an elm tree has tested positive for DED, the tree must be removed immediately and properly disposed of (5a - Elm Wood Disposal). The stump must also be properly treated (7 - Elm Stump Treatment). Prompt removal of infected trees is an imperative first step in slowing down the spread of DED. To eliminate EBB breeding material, remove all dead and dying elm trees.

An elm tree can be removed at any time of year as long as it is immediately disposed of (5a–Elm Wood Disposal).

Elm tree removal means to remove the trunk and all other parts of a tree including the stump.

5a. Elm Wood Disposal

Elm wood cannot be stored (5b. - Elm Wood Storage), or transported unless en route to the closest elm wood disposal site. All elm wood must be properly disposed of immediately by either burning or burying to a minimum depth of 25 cm. If elm wood is uninfested with DED, another option is chipping (6 - Elm Chipping). Immediate disposal of the elm wood ensures the destruction of overwintering beetle larval broods and adults and eliminates EEB breeding material.

Every municipality must designate a disposal site where elm wood may be burned or buried.

5b. Elm Wood Storage

Storage of elm wood is prohibited at any time of year unless the wood has been treated as described below:

1. all bark has been removed from the wood¹
2. the wood has been treated by kiln drying it to a moisture content of 18% or less, or heating it to 56°C for at least 30 minutes¹

6. *Elm Chipping*

If an elm tree is diagnosed with DED, all wood must be burned or buried. It cannot be chipped.

Elm wood not infected with DED can be chipped into pieces not more than 5 cm. Larger elm wood chips can harbor the vector. Fresh chips will give off a scent that will attract the vectors therefore chips may be destroyed or stock piled for at least one year before using them in a landscape setting.

7. *Elm Stump Treatment*

All elm stumps must be properly destroyed. A freshly cut stump with the bark still intact, gives off the same scent of a dead or dying tree. The remaining stump from a DED infected tree can also produce infected shoots. Remove the stump to a minimum depth of 10 cm below the soil line and fill the hole with soil or treat the elm tree stump in a manner satisfactory to an inspector.

8. *High Risk Tree*

A high risk tree is defined as a stressed tree that has deteriorated to the point of making it capable of supporting elm bark beetle habitation and breeding. There are many reasons why a tree may become a high risk such as environmental causes or improper pruning such as topping. If an inspector has declared an elm tree to be a high risk, the tree must be removed and properly disposed of (4 - Elm Tree Removal ; 5a - Elm Wood Disposal).

9. *Hazard Tree*

Hazard is defined as a branch or a whole tree that is in imminent danger of failing and causing damage or harm to property or people. In the event an elm branch is damaged making it a hazard during the elm pruning ban, corrective pruning can only be done to the hazard branch with inspector approval. A hazard tree can be removed at any time of the year without inspector approval (4 - Elm Tree Removal). All elm material must be properly disposed of (5a - Elm Wood Disposal).

Components of a DED prevention/control management program

Program Component	Timing	Responsible Agency
Delivery and Administration of the Provincial DED Prevention Program	Continuous	STOPPED
Enforce Plant Protection Act of Canada	Continuous	Federal
Administration of the APA and PNCR	Continuous	AB Agriculture and Forestry
Enforce Alberta APA and PNCR	Continuous	Municipality, Municipal District, County
Firewood Confiscation	Continuous	Municipality, Municipal District, County
Removals - DED infected elm	Continuous	Property Owner
Elm Pruning Ban	April 1 to Sept. 30	Property Owner/Arborist
Elm Bark Beetle Control	April 1 to Sept. 30	Property Owner
Elm Pruning	Oct. 1 to March 31	Property Owner/Arborist
Upgrading Disposal Site	As required	Municipality, Municipal District, County
Site-Specific Elm Inventory	Continuous	Municipality, Municipal District, County
Technical Direction & Information	Continuous	Municipality, Municipal District, County
Monitoring for Vectors	April 1 to Sept. 30	Property Owner
Monitoring for DED	Mid-June to Aug. 30	Property Owner
Elm Tree Replacements	April to October	Property Owner

¹ Manitoba Dutch Elm Disease Act <https://web2.gov.mb.ca/laws/statutes/1998/c01798e.php>

How the Act and Regulation apply

The [Agricultural Pests Act](#) (APA), [Pest and Nuisance Control Regulation](#) (PNCR) outline the duties and responsibilities for municipalities, Municipal Districts and Counties as follows:

Agricultural Pests Act (APA)

Section 5 of the APA “Duty of individual”

This section contains the duties to take “active measures” with respect to pests.

- (2) An owner or occupant of land or property or the owner or person in control of livestock shall take active measures to
 - (a) prevent the establishment of pests on or in the land, property or livestock unless otherwise authorized by the Minister,
 - (b) control or destroy all pests on or in the land, property or livestock unless otherwise authorized by the Minister, and
 - (c) destroy any crop, vegetation or other matter that contributes or may contribute to the maintenance or spread of a pest on or in the land, property or livestock.

Section 6 of the APA “Duty of local authority”

This section identifies the duties of the local authority of a municipality to prevent the establishment of a pest or to control or destroy a pest in a municipality.

A local authority of a municipality shall take active measures

- (a) prevent the establishment of, or
- (b) to control or destroy, pests in the municipality

Section 10 of the APA “Appointment of inspectors by local authority”

- (1) The local authority of a municipality shall appoint a sufficient number of inspectors to carry out this Act and the regulations within the municipality
- (2) Two or more local authorities may
 - (a) jointly appoint inspectors to act within the municipalities represented by the local authorities, and
 - (b) enter into an agreement for the sharing of the costs of the inspectors appointed jointly.

Section 12 of the APA “Notice”

This section states inspectors can issue notices that specify the DED prevention or control measures a person must take to address a pest issue and this section authorizes inspectors to respond to cases of non-compliance. It is at the inspector’s judgement to decide when the pest needs to be controlled.

- (1) When an inspector is of the opinion that land, property or livestock contains or is likely to contain a pest or should be protected against a pest, the inspector may issue a notice in writing directed to the owner or occupant of the land or property or to the owner or person in control of the livestock
 - (a) setting out the legal description of the land affected or a description of the livestock affected and the legal description of the land on which the livestock are located,
 - (b) naming the pest,
 - (c) specifying the measures to be taken and the material, if any, to be used to prevent the establishment of or to control or destroy the pest, and
 - (d) requiring the measures described in clause

(c) to be taken within a specified period of time.

Section 17 of the APA “Powers of the inspector”

- (1) In this section, “land” does not include a private dwelling house.
- (2) An inspector may, for the purpose of carrying out the inspector’s duties,
 - (a) enter at any reasonable hour on any land to inspect the land or any buildings, property or livestock on the land,
 - (b) on giving reasonable notice, direct the owner or person in control of livestock to assemble and confine the livestock for the purpose of an inspection, and
 - (c) take specimens of a pest or nuisance and of any matter or thing that contains or is suspected of containing a pest or nuisance.
- (3) An inspector shall carry the identification supplied to the inspector by the local authority or Minister appointing the inspector and shall show it on request to a person owning or in charge of anything affected by the inspector’s activities under this Act or the regulations.

Section 20 of the APA “Stop order”

This section states a stop order can be issued if the Minister is satisfied that a person has contravened or is contravening the APA.

- (1) Notwithstanding anything in this Act, if the Minister is satisfied that a person
 - (a) has contravened or is contravening this Act or the regulations, or
 - (b) owns or operates anything that causes the maintenance or spread of a pestthe Minister may direct a stop order to that person in accordance with subsection (2).
- (2) In a stop order, the Minister may order the person to whom it is directed to
 - (a) cease the contravention specified in the order,
 - (b) stop the operation of a plant, structure, equipment or thing specified in the order, either permanently or for a specified period, or
 - (c) cease the contravention under clause (a) and stop the operation under clause (b), and the stop order shall contain the Minister’s reasons for making it.
- (3) The Minister shall cause a copy of the stop order to be served on the person to whom it is directed, and that person, on receipt of the copy, shall comply with the stop order forthwith.
- (4) A person who is served with the stop order under subsection (3) and fails to comply with the stop order forthwith is guilty of an offence and liable to a fine of not more than \$1000 for each day that the offence continues.
- (5) If the person to whom a stop order is directed fails to comply with the stop order forthwith on service of a copy of it on the person, the Minister may apply to the Court for an order directing that person to comply with the stop order.
- (6) If the person to whom the stop order is directed fails to comply with the Court order,
 - (a) the failure to comply with the stop order may be dealt with by the Court as a civil contempt of the Court,
 - (b) an inspector authorized by the Minister for the purpose and persons assisting the inspector may, without notice and without incurring liability, enter on any land and do any acts necessary to carry out the stop order,
 - (c) a civil enforcement bailiff may assist the inspector and the inspector’s assistants in enforcing their powers and duties under clause (b), and
 - (d) the Minister may recover by action any expenses incurred by the Crown in carrying out the stop order from the person to whom the stop order was directed.

- (7) The Minister may
- (a) amend a stop order if the Minister considers it advisable in the circumstances to do so, or
 - (b) revoke a stop order,
- and shall notify accordingly the person to whom the stop order was directed.
- (8) Service of the stop order, Court order and notification under subsection (7) shall be effected by any of the methods set out in section 12(3).

Pest and Nuisance Control Regulation (PNCR)

Section 4 of the PNCR “Transactions, etc., in pests and infested matter”

This section prohibits “dispositions” of “infestable” items. Care must be taken when transporting an elm tree positively diagnosed as contaminated with DED to the disposal site. All tree material must be covered and secured, eliminating the chance of contaminating healthy elm trees.

- (1) A person shall not import, purchase, sell or otherwise dispose of, transport, distribute or plant any infestable item that is infested or any pest without the prior written authorization to do so of a provincial inspector or, if the article is to be kept in Alberta, of a local inspector who is empowered to act in the local jurisdiction where it is to be kept.

The *Alberta Agricultural Pests Act* (APA) and the *Pest and Nuisance Control Regulation* (PNCR) can be found at: APA @ <https://open.alberta.ca/publications/a08>

PNCR @ https://open.alberta.ca/publications/2001_184

To report a DED suspect elm tree or for more information, call the Society to Prevent Dutch Elm Disease (STOPDED) hotline at 1-877-837-ELMS or visit www.stopeded.org