

FOREST HEALTH LEGISLATION AND POLICY
2018 Study Session

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Legislation

Provincial Legislation

Weed Control Act, SA 2008, c W-5.1

Overview

The *Weed Control Act* is the provincial legislation for invasive plant control and is administered by the Ministry of Agriculture and Rural Development. This Act overrides any other provincial legislation dealing with invasive plants, and the Crown is bound by it.

The Act underwent change in 2010, which included the reclassification of weed categories. Before there were three: noxious, restricted, and nuisance weeds. Now there are only two: noxious and prohibited noxious weeds with each classification requiring a different duty. Noxious weeds must be *controlled* by the landowner or by the person who occupies the land (s. 2). Prohibited noxious must be *destroyed* by the landowner or by the person who occupies the land (s. 3). Another important change was amending the debt recovery provision to facilitate effective enforcement. The change allows Weed Inspectors to file a certificate with the court of the Queen's Bench to recover debt in situations where the landowner/occupants of weed-infested land do not pay tax.

Duties and Prohibitions

The *Weed Control Act* (WCA) requires that the occupant (or if the land is unoccupied, the owner) of land must control all Noxious (s. 2) and destroy all Prohibited Noxious (s. 3) weeds. The difference between "occupant" and "owner" is defined in s. 1, where "occupant" means, subject to s. 26, a person who occupies, exercises control over or has the right to occupy or exercise control over land (s. 1(k)), and owner means the person who is registered as an owner of the land under the *Land Titles Act* or legally owns the land, has lawful possession of it, or has the right to exercise control over it, as per s. 1(l) of the WCA. A schedule of plants designated as noxious or prohibited noxious can be found in the Regulations.

The Minister of Agriculture is responsible for all WCA designations, but municipalities can elevate plants listed as "noxious" to "prohibited noxious" under the by law provision of the WCA regulations (s. 9 (1)). This goes to show the high level of municipal involvement in WCA activities. Note that while plants can be elevated, municipalities cannot delist them.

Other prohibitions are designed to prevent the spread of noxious/prohibited noxious weed seed by addressing disposal and storage practises: listed weeds cannot be disposed where they might spread, and any waste that might contain listed weeds must be stored in a spill-free container. It also states that no person shall deposit weed seeds or material containing weed seeds in a place where they might grow or spread and that the movement of a machine or vehicle is prohibited if the movement is likely to cause the spread of a noxious or prohibited noxious weed. These prohibitions make the WCA a proactive - and not just a reactive - framework.

Enforcement

Enforcing the *WCA* is delegated to local municipalities, who carry out most enforcement activities. The *WCA* gives municipal inspectors the authority to enter onto private property after securing consent from the occupant, and may issue an “Inspector Notice” in cases of non-compliance. S. 14 outlines the contents of the Notice:

- Must outline compliance method and compliance time
- May include specific directions
- Must not require the destruction of a commercially viable crop that exceeds 20 acres

While most notices are discretionary, a notice **must** be issued when an inspector finds prohibited noxious weeds that have not been destroyed, as per s. 13 (2).

The Minister can also designate provincial inspectors under s. 8(1) in situations where a municipality does not have a designated weed inspector, or when the designated inspector is not properly enforcing or promoting compliance with the Act. This does not happen too often. There are currently only eight provincial weed inspectors. None are tasked with an operational role.

Notices generally carry cost implications that are to be paid to the authority issuing the notice, as per s. 21. Debtors have the right to appeal any debt recovery notices issued to the appeal board and then to the Minister for final review, as per s. 19. Local authorities can recover debt via property tax, or by filing a certificate with the clerk of the Court of Queen’s Bench (s. 21 (4)(a)). The certificate filing option is a brand new provision designed to provide an avenue for collecting debt from people who do not pay property tax. It has yet to be used or tested, but could be an avenue for collecting *WCA* debt from disposition holders.

Enforcement of the act by municipalities varies throughout the province, and is often a result of adjacent landowner complaints. Weed notices issued to ESRD itself, for vacant public land, or to *Public Lands Act* disposition holders (occupants) in the Green Area are uncommon, but have been received in the past.

Weed Control Act, Weed Regulation 19/2010

The Weed Regulation provides additional information about the processes outlined in the *Weed Control Act*, including the appeal process, the designation of weeds, and regulations specific to seed cleaning facility licences. It also includes a schedule of plants that are formally designated as noxious or prohibited noxious in Alberta.

While the Ministry of Agriculture and Rural Development has the designated responsibility for updating the provincial weeds list (which includes listing new weeds and up-listing/down-listing existing weeds), municipalities play a key role in identifying weeds as noxious or prohibited noxious, or in up-listing existing weeds.

Agricultural Pests Act, RSA 2000, c A-8

Overview

This Act allows the Minister of Agriculture to declare an animal, bird, insect, plant or disease a “pest” or a “nuisance,” and to take active measures to prevent its spread. Designating a species as a “pest” is only triggered if the Minister determines that the pest is harming, destroying or likely to destroy or harm the land, livestock or property in Alberta. The designation of the pest is also “in Alberta” or “throughout Alberta” thus implying that the pest must already be present in the province for such action to take place. The controlled pests are listed in the regulations. The purchase, sale, disposal, transport or distribution of pests is also controlled through this Act. Note that while the Act has wording similar to the *Weed Control Act*, it places a greater onus on the occupant than on Pest Inspectors, who are not bound by the act to issue control notices in every instance of a pest’s occurrence.

Declaration of pest or nuisance

2(1) Subject to subsection (2), if the Minister considers that an animal, bird, insect, plant or disease is destroying or harming or is likely to destroy or harm any land, livestock or property in all or part of Alberta, the Minister may, by regulation, declare the animal, bird, insect, plant or disease to be

(a) a pest, or

(b) a nuisance,

throughout Alberta or in part of Alberta.

2(2) In subsection (1), "animal" and "bird" do not include

(a) big game,

(b) a bird of prey,

(c) a game bird, or

*(d) an endangered animal,
as defined in the Wildlife Act.*

Prohibitions and Duties

Prohibitions are outlined in s. 22 of the Act, where it states that no person shall willfully misuse or fail to use poison, insecticide, compound, device or equipment; acquire, sell, distribute or use any seed, root tuber or other vegetable material containing a pest. Doing so could incur penalties and possibly a prison sentence.

Duties are outlined in s. 5 and 6, with some specific to individuals and others to authorities. Owners and occupants must take proactive steps to prevent pests from emerging on their lands (s. 5 (1)), and take reactive measures on pests that are on their land and destroy matter that contributes to the pest infestation (s. 5 (2)). The duty of care for nuisances is discretionary (s. 5). For local authorities (i.e. municipalities), the Act only requires them to manage pests (s. 6).

Enforcement

The enforcement provisions of the *APA* are somewhat similar to those of the *Weed Control Act*, where inspectors and agriculture fieldmen can inspect suspected areas and issue notices whenever necessary. However the decision to issue a notice is discretionary under the *APA*.

Notice

12(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.

Similar to the *WCA*, the inspector may carry out the measures described in the notice or do any things necessary in the inspector's opinion and consistent with good agricultural practice to prevent the establishment of or to control or destroy the pest (s. 13 (2)).

Debt: Similar to the *WCA*, expenses incurred for enforcing the *APA* may be recovered by the Crown by withholding funds (grant, rent, other moneys that would otherwise be payable by the Crown to the local authorities) as per s. 3 (c). However, the option of filing a certificate with the Queen's Bench is currently unavailable as a course for debt collection.

Stop Orders: The *APA* allows the Minister to issue stop orders that can order people to cease a contravention and/or stop the operation of a "plant, structure, equipment or thing specified in the order, either permanently or for a specified period" along with reasons for doing so (s.20 (2)).

Penalties: a person who does not comply with an enforcement or stop notice is guilty of an offense and can be liable of a fine up to \$5000. If the fine is not paid, the person may be imprisoned to a maximum of 60 days.

Agricultural Pest Act Regulation: Pest and Nuisance Control-184-2001

The Pest and Nuisance Control Regulations enumerate species declared as pests and nuisances; clarify pest management prohibitions in s. 4(1); and allow the Minister to declare a quarantine in all or any part of Alberta. There are other provisions specific to certain pests including rats,

warble larva, root vegetable bacteria, and the management of skunks and coyotes. Schedule 1 of these regs features the form used to issue a pest/nuisance notice.

Public Lands Act, RSA 2000, cP-40

Overview

The *Public Lands Act*, administered by ESRD, extends through all public land in Alberta except areas under the administration of another Ministry either by virtue of another Act or by Cabinet (s. 2(2)). ESRD personnel, like forest officers, range agrologists, and land officers, are tasked with enforcing the Act. Timberland foresters and others involved in on-the-ground forest management are designated as Forest Officers by the ESRD Senior Forester, Enforcement, and the Act applies to them as well. Tourism, Parks and Recreation is also a designated authority.

The *Public Lands Act (PLA)* governs most of the 60 per cent of Alberta that is public land. Public land (aka Crown land) is land that:

- Is not privately owned (e.g., farms, municipal property owners).
- Is not owned by a city.
- Is not “federal,” in that it is not a federal national park, first nations reserve, or department of national defense military training base.
- Is not used for provincial infrastructure or provincial parks.

This Act deals with the selling and transferring of public land, as well as the management of rangeland and activities permitted on designated land. The Act outlines the process to obtain land dispositions and the rules associated with occupying public land. With regard to invasive plant prevention and control, the *PLA* details the duties of a holder of a disposition issued pursuant to this Act. The Act was updated April 1, 2010, to better manage the long-term health of public land.

The weed control duties required of holders of dispositions issued pursuant to the *PLA* are reasonably clear and would apply to dispositions that are issued in relation to forestry operations (e.g. camps, roads, processing sites and other associated land uses).

Duties and Prohibitions

The *PLA* explicitly requires disposition holders to use only seed that is free of prohibitive noxious and noxious weeds within the meaning of the *Weed Control Act* and to cut, keep down and destroy all noxious and prohibited noxious weeds to which the *Weed Control Act* applies (s. 63).

By incorporating the *Weed Control Act* into the *PLA*, the standard of zero tolerance for prohibited noxious weeds along with the requirement to control noxious weeds is applicable to all public land dispositions, including those under reclamation.

In addition to the explicit duty to control weeds, all dispositions issued pursuant to *PLA* include Core Condition # 130 and 131 that requires disposition holders to promote native regeneration and undertake weed control. Currently, the Core Conditions state:

Revegetation (Non EFR)

130 Unless otherwise specified by a departmental officer, initial efforts at re-establishing a vegetative cover on disturbed surfaces must be accomplished by:

- (a) Seeding using only a native species seed mixture that shall be approved by a departmental officer. The holder shall provide a certificate of seed analysis for each species. (Refer to the Native Plan Re-Vegetation Guidelines for Alberta, February 2001).*
- (b) Seeding using only certified or Canada No. 1 seed mixture that must be approved by a departmental officer. A certificate of seed analysis for each species must be submitted.*
- (c) Seeding a temporary non-invasive cover crop using a certified seed mixture that must be approved by a departmental officer and allowing the land to revegetate through natural process. The holder shall provide a certificate of seed analysis for each species used.*
- (d) Seeding an annual non-invasive cover crop in conjunction with a native species seed mixture that must be approved by a departmental officer. The holder shall provide a certificate of seed analysis for each species on request. (Refer to the Native Plan Re-Vegetation Guidelines for Alberta, February 2001).*
- (e) Allowing the land to revegetate through natural processes without seeding.*
- (f) Planting native tree and shrub species.*

Noxious Weeds (Non EFR)

131 The holder shall cut, keep down and destroy all noxious weeds and restricted weeds as per the Public Lands Act.

Because the duty to control noxious and prohibitive noxious weeds is specifically outlined in the disposition agreement as a core condition, the failure to control the weeds is made an enforceable offense under s. 56 (1)(n), which states: a person who, as the holder of a disposition, contravenes a provision of the disposition, is guilty of an offence.

Enforcement

PLA enforcement actions, outlined in s. 56-59 of the Act, are undertaken by Land Officers and Forest Officers. The process for all enforcement activity generally starts with forest officers issuing an informal notice of “outstanding work” to disposition holders to which they generally adhere. In the rare case of a disposition holder not following the informal notice, forestry officers start the formal *PLA* enforcement process with an enforcement order, and if compliance is still not secured, a formal disciplinary process is launched which ends in either an administrative penalty or (in very rare circumstances) a court-sanctioned fine.

An enforcement order (EO) is a written directive issued to a person who has contravened a provision of an ALSA regional plan, the *PLA*, or *PLA*-associated regulations such as inadequate weed control (i.e. s 63 violations). An enforcement order can require a disposition holder to undertake a number of duties, including:

- Carry out the measures specified in the order to effect compliance (s) 53.1 (3)(a)(ii)
E.g., issuing an order to “cut and destroy the weeds”
- Suspend or cancel the disposition (53.1 (3)(d) and (e))
E.g., shut down a well site for improper weed management.

Of interest is that the *PLA* includes provisions that would allow ESRD to spray weeds, with service costs being a debt owed to the Crown. This is outlined in 59.1 (6) and (7):

59.1(6) Cost incurred by the director under this section are recoverable by the Crown as a debt owing to the Crown against the person to whom the enforcement order was directed.

59.1(7) For the purposes of this section the costs referred to in subsection (6) include, without limitation, any costs incurred in investigating and responding to

(a) any matter to which the enforcement order relates, or

(b) the failure to comply with the enforcement order

If the EO warns the disposition holder that the Crown will spray the weeds if the holder fails to manage them correctly in the disposition agreement, then they can spray the weeds and recover costs on their behalf.

Category I penalties: Category 1 penalties refer to the offenses outlined in s. 56 (1). These implicate the courts and are rarely administered.

Fines, s. 59: Offenders are subject to a general fine penalty outlined in s. 59 of the *PLA*. The maximum fine for an individual cannot exceed \$25 000, and the maximum fine for a corporation cannot exceed \$100 000. Fines can only be given if the alleged offender fails to establish on a balance of probabilities that he or she took all reasonable steps to prevent its commission, as per s. 59(3)(a). This is a high threshold to meet.

Court Orders, s 59.01 (1): In addition to issuing a penalty, the judge can establish additional court orders, or “add-ons” to the sentences, which are all outlined in s. 59 (01). Some can be made specifically applicable to weed management. For example, a court order could direct an offender to take an action that would remedy the omission of a duty that constituted the offense, such as s. 59.01(01)(c)). Another provision would allow the court to direct the offender to compensate the Minister for the cost of any remedial or preventative action that was carried out or cause to be carried out by the Crown and was made necessary by the act or omission of the constituted offense (59.01 (h)), such as weed management expenses.

Category II penalties: Category II Penalties can be administered by ESRD without having to go through the courts and are the most frequent formal enforcement tool used:

Administrative penalty, s. 59.3: Administrative Penalties can be issued by the director to individuals contravening provisions of an ALSA regional plan, the *PLA*, and *PLA* regulations, under s. 59 (3) (a). The penalty amount can be determined by the director but cannot exceed

\$5000 per day. A person who pays an administrative penalty in respect of a contravention by the person cannot be prosecuted under the *PLA* for an offence in respect of the same contravention. This means that an Administrative Penalty is not an add-on to a fine, but that it is given in lieu of one. However, an enforcement order or Court orders can be distributed to compel the person receiving a notice under section 59.4 to action, as per s. 59.8(12). So if the Administrative Penalty is not paid in time, the other and more punitive process can be evoked.

For enforcement purposes, the Administrative Penalty route is the best direction to take because it does not require a judicial intermediary and is comparatively easy to administer. However, the penalty section does not have a provision that allows the director to recover any weed-eradication costs as a debt owing to the Crown.

Other Thoughts

The weed provisions of the *PLA* generally go unenforced because they are not a priority and because officers are not necessarily up to speed with their knowledge of weed enforcement. A culture shift accompanied by explicit direction from executive would be needed to see an increase in the use of the *PLA* to enforce weed management.

Although the duties of the holder are clearly stated above, weed prevention and control activities are inconsistently undertaken by disposition holders. Based on invasive plant surveys carried out within the Green Area between 1998 and 2008, results showed that over 80 per cent of the infested sites were associated with industrial dispositions.

ESRD's attempt to increase enforcement actions relevant to this section of the *Public Lands Act* began in 2007. Under the authority of the act, notification letters were sent to all disposition holders occupying infested sites. The notifications required compliance with the act before a specified date, namely, control of weeds within approximately one year from initial detection. To monitor compliance with the notifications, 380 were resurveyed in 2008 in the Upper Hay, Peace, and Lac La Biche/Waterways areas. In total, an average of only four per cent of the sites complied with the notification.

Forests Act, RSA, c F-22

Overview

While most public land dispositions are governed via the *Public Lands Act (PLA)*, forest harvesting dispositions (Forest Management Agreements, Quotas, licences, and permits) are governed by the *Forests Act (FA)*.

Forest management agreements (FMA) are one type of forest tenure. The introduction of various forms of tenure provides companies with the assurance needed to begin planning and developing their operations over long timeframes. This has allowed for the development of permanent road systems, large and more efficient mills, and investment in state-of-the-art technology for processing wood chips into pulp, paper, and panel board products.

Duties and Prohibitions

Currently, there are 20 FMAs in Alberta. In each agreement, the following clause related to forest protection/pest management is included:

Forest Protection

29(4) In the event of an occurrence of insect damage of epidemic nature to forest growth or a disease epidemic affecting forest growth on the forest management area the parties hereto will cooperate in suppressing the epidemic.

Unlike the *PLA*, which explicitly delineates the requirement for disposition holders to manage weeds, the *Weed Control Act* is not referenced in the *FA* or accompanying regulations; the act does not outline an explicit duty to control, manage, or destroy noxious and prohibited noxious weeds on these areas.

That said, annual forestry plans present a possible avenue for weed control. The *FA* mandates timber disposition holders to engage in extensive planning before and after timber dispositions are issued, including a general development plan and then annual operating plans. These documents could be used to control weeds, and some do list *WCA* duties.

Forest and Prairie Protection Act RSA 2000, c F-19

Overview

The *Forest and Prairie Protection Act's* main focus is fire suppression and control. In addition, the Act outlines a provision that enables ESRD to minimize the spread of tree pests by allowing ESRD to take necessary actions to control forest pest infestations. While the wording does not create any specific duties, the intention is to be enabling and quite general.

Note: that the Act does not apply to land within the boundaries of a village, town, or city” (s.2), but is applicable in other types of municipalities.

Forest Pest Control

28 The Minister may carry out on any land any control measures that the Minister considers advisable for the prevention and control of injurious forest tree pest infestations.

The Act also allows cabinet to make regulations that respect the prevention and control of injurious forest tree pest infestations or non-indigenous invasive species infestations under s. 41 (d).

The Act also allows the Minister to make regulations that respect the rates of payment for persons, equipment or services hired temporarily for operations for controlling injurious forest tree pest infestations or non-indigenous invasive species infestations under s. 42 (g).

Duties and Prohibitions

The Act does not create any duties on disposition holders that relate to weed and pest management.

Enforcement

The act allows a forest officer to seize anything that s/he reasonably believes has an injurious forest tree pest infestation under s. 31.4. This fits into preventative and early rapid response portions of ESRD pest control. Further to this, the Act allows the Minister to order the destruction of diseased and infested products seized (s. 31.4(2)).

Timber Management Regulation, Alta Reg 60/1973

Overview

The *Timber Management Regulation (TMR)* is used to implement and administer the *Forests Act*. The *TMR* establishes an annual allowable cut in coniferous and deciduous forests. It prohibits persons from damaging the forest in any way and allows the ESRD Minister to construct and maintain forest recreation areas.

The TMR takes proactive steps to reduce the number of pests imported from forest to forest.

Duties and Prohibitions

The Act does not create any duties but does outline a few prohibitions:

164.1 (1) No person shall import into Alberta logs or other forest products cut from coniferous trees that have bark attached without obtaining the approval in writing of the Minister at least 3 months prior to importation.

(2) The Minister may withhold his approval if in his opinion the importation of the product referred to in subsection (1) could cause or increase the damage to forest growth by insect or disease.

(3) The Minister may restrict or prohibit the transportation within Alberta of logs or other forest products cut from coniferous trees that have bark attached if in the opinion of the Minister the movement of the products could cause or increase the damage to forest growth by insects or disease.

For more information on the application procedure to import conifer forest products with bark attached, refer to Forestry Policy Directive 2006-06 (Importation of Conifer Logs and Forest Products with Bark Attached).

Enforcement

The *TMR*, Schedule 2 outlines an administrative penalty for contravention of section 164.1 that ranges from \$300 to \$5000 for each offence.

Since 2002, at least 34 unauthorized shipments of conifer forest products with bark attached have been intercepted entering Alberta. Most often the unauthorized shipments were ordered out of the province. In some situations, where there was a low risk of the load being infested, shipments were allowed to proceed to the stated destination, where shipments were inspected by forest health staff, and importers informed of the regulations.

Enforcement activities related to this section of the act require the close cooperation of Alberta Transportation inspection officers. In the past, the large majority of unauthorized shipments have been intercepted by Alberta Transportation at various vehicle inspection stations.

Forest Reserves Act, RSA 2000, c F-20 and Regulations (Alta Reg 42/2005)

Overview

Under the Act, “All forest reserves are set aside and constituted for the conservation of the forests and other vegetation in the forests and for the maintenance of conditions favourable to an optimum water supply in those reserves.” (s. 4) With respect to weeds, the Act allows ESRD to make regulations respecting the control or destruction of weeds on forest reserves under s. 7 (c).

Duties and Prohibitions

S. 19 of the *Forest Reserves Regulation* link the *Weed Control Act* with the *Forest Reserves Act*, which mandates that a person takes all reasonable precautions to prevent the spread or introduction of “restricted or noxious” weeds from outside a forest reserve into a forest reserve from one part of a forest reserve to another (s. 19 (3)), and outlines a requirement for overlapping dispositions to deal with the weeds quickly and effectively. Note that the wording has not been changed to reflect the new *Weed Control Act* changes.

Weed control and destruction

19(1) The definitions contained in section 1(1) of the Weed Control Act (including the content of any applicable bylaw covering the forest reserve in question and designating a category of weeds) apply in interpreting this section.

(2) Nothing in this section limits any obligations that a person has under the Weed Control Act.

(3) A person shall take all reasonable precautions to prevent the spread or introduction from outside a forest reserve into a forest reserve or from one part of a forest reserve to another of a restricted or noxious weed.

(4) A person who contravenes subsection (3) or any provision of the Weed Control Act that adversely affects a forest reserve

(a) shall take immediate and appropriate steps to negate, as far as possible, the adverse effect of the contravention, and

(b) is liable for damages for the weed problems resulting from the activity to the owner or occupant (including the Crown in right of Alberta) adversely affected.

(5) *Where a person is taking any steps with respect to the destruction or control of any restricted or noxious weeds on a range allotment or on any land within the range allotment,*

(a) the permit holder, and

(b) every other person who holds any kind of disposition over the area so affected shall (regardless of the origin of the weed problem) cooperate fully with and give all reasonable assistance to that person's efforts in taking those steps.

Enforcement

It would potentially be an offence not to follow the provisions under s. 19 of the Act:

10 A person who contravenes this Act or the regulations or a term or condition of a permit issued under this Act is guilty of an offence against this Act and liable to a fine of not more than \$5000 or, in the case of an offence that continues beyond a single day, \$5000 for each day or part of a day on which the contravention first occurs and then continues.

Environmental Protection and Enhancement Act - Pesticide (Ministerial) Regulation, Alta Reg 43/97 (with amendments up to and including Alberta Regulation 315/2003)

This regulation creates four schedules of pesticides, each having different handling requirements. Each pesticide must have a label that provides the details on who can apply it, and where. Schedule 1 and 2 pesticides can only be applied by a person with a pesticide applicator certificate. Exemptions include commercial agriculturalist spraying on land s/he owns and a public officer using or applying pesticides under the authority of legislation including the *Agricultural Pests Act* and the *Weed Control Act* (s.3(2)).

This regulation specifically prohibits the use of pesticides in or on an open body of water s 9(1). It also establishes a horizontal distance of 30 m from an open body of water (9)(1)(b) which restricts use of pesticides. Should weed management be required in this zone, an individual can put in a request for a special use approval - note that these are very difficult to get and are not distributed too frequently.

Environmental Protection and Enhancement Act - Code of Practice for Pesticides

The Code of Practice for Pesticides details the safe handling, use and application of pesticides to ensure environmental protection. Pesticide applicators, pesticide service, and pesticide vendors in Alberta must comply with these requirements. The code does not require authorization to treat listed weeds. With respect to pesticide application within 30 horizontal metres of an open body of water, special conditions apply to restricted and noxious weeds, allowing applications within 1 to 5 m of a body of water, based on type of chemical used.

Forest Management Pesticide Use

11(2) A project proposal must be submitted to Alberta Sustainable Resource Development for any proposed application of pesticides in a forest. A project proposal

and written authorization from Alberta Sustainable Resource Development is not required for the control of noxious weeds in accordance with the Weed Control Act.

Details of the application process and proposal development are located in Forestry Policy Directive 2013-02 (Pesticide, Bark Beetle Pheromone and Biological Control Use Guidelines for Forest Pest Management).

Industrial Vegetation Management (roadside, power line, pipeline, and utility rights-of-way)

12(1) Where a pesticide is to be applied on public land in the Green Area, the applicator must notify Alberta Sustainable Resource Development's land management representative for the proposed application area at least two working days prior to the proposed application date. The land management representative may waive this requirement on a site specific basis if the representative considers it appropriate to do so.

Federal Legislation

Canada Plant Protection Act (S.C. 1990, c.22)

Overview

This Act, administered by Agriculture and AgriFood Canada, is designed to prevent the importation, exportation and spread of pests injurious to plants and to provide for their control and eradication. The definition of pest is very broad and includes anything that is injurious or potentially injurious, directly or indirectly, to plants, and includes any plant prescribed as a pest. In this Act a pest is defined as anything that is injurious or potentially injurious, whether directly or indirectly, to plants or to products or by-products of plants (s. 3).

Under the *Plant Protection Regulations*, Inspectors are granted broad powers to take steps to eradicate a pest or prevent its spread if, following a pest risk assessment, the Minister or the Inspector have a reasonable belief that the thing is a pest or is infested with a pest.

Prohibitions and Duties

The Act establishes a duty for a person to immediately notify the Minister of any suspected pest and provide a sample of it (s. 5).

The Act places strict prohibitions on cultivating or moving around plants infested with pests.

Importation and Exportation

6 (1) Except as permitted under this Act or the regulations, no person shall move, grow, raise, culture or produce any thing that there are reasonable grounds to believe is a pest, that is or could be infested with a pest or that constitutes or could constitute a biological obstacle to the control of a pest.

7 (1) No person shall import or admit into Canada or export from Canada any thing that is a pest, that is or could be infested with a pest or that constitutes or could constitute a biological obstacle to the control of a pest, unless

(a) the thing is or has been presented to an inspector in accordance with subsection (2) at a place designated by the regulations or by an inspector;

(b) the person has produced to an inspector all permits, certificates and other documentation required by the regulations; and

(c) the thing is imported or exported in accordance with any other requirements of the regulations.

(2) A thing that is required to be inspected shall be presented in such manner and under such conditions as the inspector considers necessary to carry out the inspection.

Enforcement

Federal agents tasked with inspecting for invasives are members of the Canadian Border Services and any penalty granted is an Administrative Monetary Penalty. Additionally, the Minister of Agriculture and Agri-food Canada can appoint others to help enforcing the *Plant Protection Act*. Penalties include fines of less than 50 thousand dollars and a prison sentence not exceeding two years.

Schedule 1 of the *Plant Protection Act*, *Plant Protection Regulations* features a list of “regulated products” that require Movement Certificates before being transported across Canada from an area that has been designated as “infested” by either an inspector or by regulation. The regulations require all imports into Canada be accompanied by a Foreign Phytosanitary Certificate from the exporting country, and that all exports are accompanied by Federal-issued Phytosanitary Certificates.

Other Thoughts

This Act only applies following a determination of a pest risk assessment and the determination that the thing of concern is, indeed, a pest. This is a lengthy process that does not guarantee federal action. An additional concern is that the focus of the Act is on the import and export of “pests,” and not so much on the management and control of invasive alien species in Canada. The species in question must be injurious to plants, and the Act is focused only on protecting agriculture and the forestry sectors, not so much biodiversity in general.

Pest Control Products Act (S.C. 2002, c. 28)

Overview

The *Pest Control Products Act (PCPA)* is regulated by Health Canada’s Pest Management Regulatory Agency (PMRA). The PMRA has the mandate to protect human health, safety and the environment by minimizing risks associated with pesticides, while providing Canadians access to the pest management tools they require for agriculture, forestry, industry, and personal use.

Pesticides imported into, sold or used in Canada are regulated nationally under the *Pest*

Control Products Act and Regulations (*PCPA*). The PMRA is responsible for administering this legislation, registering pest control products, re-evaluating registered products and setting maximum residue limits under the *Food and Drugs Act*. The primary objective of the Act is to prevent unacceptable risks to people and the environment from the use of pest control products.

The term “pest” is broadly defined as an animal, plant or other organism that is injurious, noxious or troublesome, whether directly or indirectly, and an injurious, noxious or troublesome condition or organic function of an animal, a plant or other organism.

Prohibitions and Duties

Unregistered pest control products are prohibited in Canada and registered products are treated as per accompanying regulations. Applicators are required to abide by instructions and precautions identified on the pesticide label. Strict prohibitions are also placed on incorrect or misleading packaging and advertisement of pest control products.

Enforcement

Enforcement duties are carried out by Ministry-appointed Inspectors and Analysts. Maximum penalties under the *PCPA* are C\$1-million and/or three years’ imprisonment. A court may also order the offender to pay an additional fine in an amount equal to three times the monetary benefits accrued to the person as a result of the commission of the offence. Enforcement officers can shut down activities and require measures necessary to prevent health or environmental risks.

Canada Seeds Act (R.S.C., 1985, c S-8)

Overview

The *Canada Seeds Act* is administered by the CFIA and provides the Minister with the authority to regulate the import, export and sale of seeds and control noxious weed seeds as set out in these regulations.

This Act regulates the testing, inspection, quality and sale of seeds in Canada. It establishes a standard to which all imported seed packaging must conform. The Act allows the federal government to make regulations establishing grade names for seeds and has done so using via the Weed Seed Order.

The Weed Seed Order, which is appended to the *Canada Seeds Act*, categorizes weed seeds into six classes: Class 1 - prohibited noxious, Class 2 - primary noxious, Class 3 - secondary noxious, Class 4 - secondary noxious, Class 5 - noxious, and Class 6 - other. The amount of weed seeds from each class present in a seed lot determines the grade.

Policy

Provincial Policies/Directives

Forest Health General

Pesticide, Bark Beetle Pheromone and Biological Control Use Guidelines for Forest Pest Management (Forest Management Policy Directive 2013-02)

This directive guides the application and approval process for companies/individuals proposing the use of pesticides, bark beetle pheromones, or biological control agents for the purpose of forest pest management on public land managed by ESRD.

Authorization to control noxious and restricted weeds with herbicides is not required. By contrast, authorization to control noxious and restricted weeds with a biological control agent *is* required. For information related to the authorization to control other vegetation with herbicides for silviculture, see ESRD's *Forest Management Herbicide Reference Manual*.

Forest Pest Management Products Development Guidelines (Forest Management Policy Directive 2013-03)

The purpose of this directive is to provide information about the application and approval process for companies, researchers and/or individuals with new products, mechanisms, and processes for the purposes of forest pest management on public land that is managed by Environment and Sustainable Resource Development (ESRD).

As such, ESRD will not authorize the use of untested and/or unregistered forest pest control mechanisms or accept any chemical related project proposals without first receiving adequate documentation that proves the product has successfully retained full Pest Management Regulatory Agency (PMRA) registration. Products with incomplete PMRA registration are considered unregistered for all intents and purposes.

ESRD support for pesticide research - ESRD will only consider supporting chemical, pheromone, and /or biocontrol projects that have received a PMRA Research Authorization Certification. ESRD will not support projects without adequate PMRA documentation. For more information about the research certification process, contact the PMRA directly.

Emergency registration of pest control products - Section 18 of the federal Pest Control Products Regulations allows the federal Minister of Health to temporarily register a control product, for a period not exceeding one year for the emergency control of pest infestations that are seriously detrimental to public health, domestic animals, natural resources or other things. An emergency is generally deemed to exist when the following criteria are met:

1. There exists a pest outbreak or pest situation that can cause significant economic environmental or health problems.

2. There is no effective product or application method registered in Canada for the control of the pest.
3. No effective alternative control method available.

PMRA only accepts emergency registration proposals sponsored by a provincial governing authority, and only PMRA can authorize the actual registration. In Alberta, emergency registration of pest control products will not be considered for sponsorship unless these three criteria are met.

Alberta Forest Management Planning Standard (April 2006)

Although this is not a Forest Health specific policy document, it is important to note the following sections where forest health is mentioned:

Appendix B Definitions

Forest health - A condition of the forest; a forest is considered healthy if it can sustain itself to meet the specific forest land management objectives of today or in the future.

Forest health damaging agents - Biological, physiological, and environmental agents that cause an adverse effect on the health of the forest. These damaging agents may be biotic or abiotic, native or exotic, and include entities such as insects, fungi, nematodes, mites, bacteria, viruses, plants, mammals, birds, climatic conditions, weather events and chemicals. The impacts of a specific damaging agent may be realized or assessed at various levels (i.e.: individual tree, stand or landscape).

Section 5.7 – The Spatial Harvest Sequence (SHS) has been selected considering Key issues
(iv) (g) Insects and Disease

Section 5.8 Mandatory assumptions have been applied in the preferred scenario

(B) Uneven Flow Scenario Assumptions

(i) An accelerated harvest may be needed to avoid future losses to insects and diseases

Appendix C,

Section 2.2 - Thinning plans have been submitted as a component of AOP (Reforestation program), to Alberta for approval

(vi) Preventative measures to be implemented to mitigate treatment-induced mortality due to windthrow, root injuries, insects and disease

Section 3.1 - Stand level (Crop Plans) contain the required information

(iv) Preventative measures to be implemented to mitigate treatment-induced mortality due to windthrow, root injuries, insects and disease

Alberta Timber Harvest Planning and Operating Ground Rules Framework for Renewal (Dec 2016)

Ground rules are the practices used in planning and conducting timber harvesting operations which constitute the methods used to implement decisions made in the FMP and other higher level plans such as Integrated Resource Plans (IRP).

10.1.1 - Harvest plans and operations shall be prioritized in stands with insect and disease issues. Variance from the SHS to address insect or disease issues may be acceptable if approved by Alberta. Infected and infested stands shall be ranked based on the type and intensity of insect and disease present, or the presence of dead trees. Stands or trees shall be ranked for treatment or harvest as follows:

Rank 1: Stands or trees with the presence of mountain pine beetles or spruce beetles.

Rank 2: Stands with a significant number of dead or dying trees resulting from fire, insects or disease, and windthrow.

Rank 3: Stands infected with mistletoe, spruce budworm, forest tent caterpillar, root disease (Tomentosis, Armillaria) or jack pine budworm.

Rank 4: Stands infected with needle cast, Western gall rust, root collar weevils, Atropellis or other miscellaneous forest health agents.

10.1.2 - Management tactics are based on the Forest Protection ranking as follows:

Rank 1 stands or trees: Control Measures must be undertaken before adult beetles take flight, either through harvest or single tree treatment. Alberta and forest operators shall work co-operatively to prevent spread through aggressive action.

Rank 2 stands: Shall be addressed through salvage planning process (see section 3.6, Salvage Planning). Highly unpredictable spread therefore, salvage planning is initiated.

Rank 3 stands: To manage dwarf mistletoe operators shall:

- create a 20 m wide mistletoe-free zone adjacent to the harvest area;
- create a 20 m wide non-host buffer beside the harvest area perimeter; or
- reforest the harvest area to a non-host species.

Any wildlife tree patches shall consist of non-pine species where possible. For other pests, contact Alberta.

Rank 4 stands: Generally, no control is required for mature stands. Regenerated stands affected by Western gall rust or root collar weevils may require site treatments. Contact Alberta.

10.1.3 - Insect and disease assessment information shall be utilized in the CA. Where a CA is not required, the assessment information will be used to develop the GDP. Where new infestations are found, or for known infestations already sequenced through the SHS, they shall be addressed in the FHP.

10.1.4 - Any infestation of Rank 1 agents and all data must be reported to Alberta immediately.

10.1.5 - Where dues relief is requested, mistletoe infected stands must be surveyed using an acceptable rating system (e.g. Hawksworth system).

Mountain Pine Beetle

Alberta's MPB Management Strategy, Action Plan, & Infestation Management Responsibilities

In 2007, following the first major in-flight of mountain pine beetle (MPB) into Alberta, the Province solidified its direction in the fight against MPB with the development of the MPB Management Strategy, Action Plan, and Infestation Management Responsibilities.

The MPB Management Strategy identified 2 prime objectives: 1) Contain infestations and minimize spread of MPB north and south along the eastern slopes of Alberta, and 2) Prevent the spread of MPB eastward into the boreal forest of lodgepole-jack pine hybrid and jack pine. The Strategy also identified the values at risk, introduced the concept of MPB management zonation, and listed the tactics that would be used for control and prevention.

The MPB Action Plan further described the short term (beetle focussed) strategy, the long-term (pine focussed) strategy, and implementation issues related to forest management planning, harvest operations, reforestation, stumpage fees, and infested log transport . It also outlined the Province's commitment to communication and liaison, partnerships, and research.

The MPB Infestation Management Responsibilities document established a common understanding of the roles and responsibilities of the Province, the forest industry, Municipalities, Provincial Parks, and the Federal government.

Importation of Conifer Logs and Forest Products with Bark Attached (Forest Management Policy Directive 2011-01)

This directive is intended to protect Alberta's forests and forestry economy from pests that may be introduced by importing pest-infested logs and forest products into Alberta. The Timber Management Regulation controls the importation of logs and other forest products cut from coniferous trees that have bark attached. The directive provides details related to Section 164.1 of the regulation. Included, too, are specifics on the application and approval process for importation, required documentation for transportation, and enforcement procedures.

Regulated coniferous forest products that require import approval include:

- Logs, cants, rough-sawed lumber, slabs, roundwood, hoopwood, split poles, pickets, stakes, staves, squared timber, lath, butts, tops, and firewood of any conifer species, with > 2 per cent outer bark attached; and
- Shipments of hog fuel or any other wood residue or debris, containing > 2 per cent conifer bark by mass.

Unregulated coniferous forest products that *do not* require import approval include:

- Any regulated coniferous forest product, as listed above, that has been kiln-dried, heat-treated, treated with a wood preservative, or fumigated with an insecticide; and

- Christmas trees, seedlings, saplings, branches, or live horticultural material of any conifer species with outer bark attached. Note: Depending on origin, destination, and species, these products may be subject to federal movement restrictions and would require a movement certificate issued by the Canadian Food Inspection Agency. Refer to the Plant Protection Regulations for details on restricted movements within Canada.

Mountain Pine Beetle Log Management (Forest Management Policy Directive 2011-04)

This directive sets standards to protect Alberta’s forest resources by reducing the risk of spreading mountain pine beetles when using timber harvesting as a control treatment. It applies to MPB-infested pine with bark attached, resulting from Level II control treatments, industrial salvage, or other harvest operations. This directive also applies to MPB-infested pine transported on public highways/roadways, including any public roadway governed by the *Public Lands Act*, whether originating from Crown, private or federal lands.

Operators or individuals transporting MPB-infested pine volumes on public highways must either:

- Follow the protocols described in the directive to ensure effective MPB control, or
- Propose operator-specific management plans to fulfill the intent of this directive. Such plans must propose strategies that will be used to mitigate risk. For alternative tactics, refer to the information letter titled *Best Management Practices for Hauling and Milling MPB-Infested Pine*.

The eight management protocols listed in the directive are as follows:

Hauling

- Unless otherwise directed by ESRD, timing restrictions for the hauling of MPB-infested pine are as follows:

	To:				
From:	Inactive Holding Zone	Active Holding Zone	Leading Edge Zone	Area Not Designated	
Inactive Holding Zone	No restrictions	No haul July 1 - Aug 31	No haul July 1 - Sept 15	No haul July 1 - Sept 15	No haul July 1 - Sept 15
Active Holding Zone	No restrictions	No haul July 1 - Aug 31	No haul July 1 - Sept 15	No haul July 1 - Sept 15	No haul July 1 - Sept 15
Leading Edge Zone	No restrictions	No haul July 1 - Aug 31	No haul July 1 - Sept 15	No haul July 1 - Sept 15	No haul July 1 - Sept 15
Area Not Designated	No restrictions	No restrictions	No restrictions	No restrictions	No restrictions

- In specific situations, if the operator can demonstrate to the department that there is a minimal risk of hauling (e.g., large beetle populations at the destination, lack of host tree presence), then the Area forestry manager may alter the no-haul dates.

- c. The location of any spills of MPB-infested pine during transport must immediately be reported to the department and completely cleaned up. Residue and debris resulting from the spill must be disposed of, to the satisfaction of the department, by July 1.

Storage

- a. In all areas other than an inactive holding zone, MPB-infested pine must be decked separately from all other wood at the processing, manufacturing, or temporary storage sites. A map or description of the storage location(s) must be provided to the department upon request.

Transfer/sale of MPB-infested logs or lumber with bark attached

- a. When transferring or selling MPB-infested pine harvested from Crown, private or federal land, the seller/distributor must treat all infested wood adequately to kill live beetles under the bark by July 1. Approved treatments include debarking, heating to a temperature of 56.1°C for a minimum of 30 minutes, fumigating with a registered insecticide, or treating with a wood preservative.
- b. If the owner of the MPB-infested pine decides to sell the wood without treating before July 1, then the owner must:
 - Obtain written approval from the Area forestry manager. This process would facilitate follow-up compliance checks with known receivers; and
 - Disclose to the receiver/purchaser that the wood is MPB-infested, and make known to them the requirements of this directive.
- b. When MPB-infested pine is transferred or sold, the receiver/purchaser is bound by this directive while the wood is in their possession.

Processing and manufacturing

- a. Unless otherwise directed by the department, all MPB-infested pine must be debarked by July 1 in the leading edge zone, active holding zone, and in areas not designated.
- b. There is no debarking requirement/deadline in the inactive holding zone.
- c. ESRD will consider alternative strategies should the mill foresee an inability to comply with this debarking timeline. The operator is required to inform the department at least 30 days prior to the debarking deadline if the ability to comply with this protocol is uncertain.

Residue disposal

- a. Bark or other residue with bark attached (e.g., tops and butts) resulting from the processing or manufacturing of MPB-infested pine away from the harvest location must be disposed of prior to July 1 in the leading edge zone, active holding zone, and in areas not designated.
- b. There is no disposal requirement/deadline in the inactive holding zone.

- c. Approved residue disposal methods include burning, processing with a wood waste grinder (hogger), heating to a temperature of 56.1°C for a minimum of 30 minutes, fumigating with a registered insecticide, or burying to a depth of 1 m.
- d. If the chosen disposal method requires that residue be hauled to another location, then the department must be notified of the planned disposal method and location. Loads must be tarped or sealed during transport to prevent any beetle spread.

Scaling and harvest accounting

- a. The insect designation will apply to all Level II pine logs originating from cutblocks containing naturally occurring MPB-infested pine, as approved in the Annual Operating Plan (AOP). In cutblocks baited with bark beetle aggregation pheromones, MPB-infested pine is not considered natural unless there are more than a total of five spill-over attacked trees within 50 m of any pheromone. A MPB-attacked tree occurring more than 50 m from pheromone bait is considered natural.
- b. MPB survey information indicating beetle presence in the cutblock(s), and confirmed or endorsed by a forest health officer or registered forestry professional, must accompany the AOP submission. Timber dues will be payable as set in the Timber Management Regulation.
- c. MPB-infested pine logs are to be further segregated through separate volume accounting using independent timber scaling populations.

Pheromone monitoring and trapping

- a. MPB pheromone trap-based monitoring or mass-trapping programs may be required at manufacturing/processing and temporary log storage sites. This requirement is based on risk as determined by the Area forestry manager. The department will notify operators of this requirement in writing.
- b. Approved pheromone monitoring and trapping procedures are documented in the ESRD Logyard Management Standards.

Record keeping and compliance

- a. In all areas other than the inactive holding zone, the operator must have procedures to track hauling and milling volumes of MPB-infested pine logs, and to enable status reporting of storage volumes at the manufacturing site and temporary storage areas.
- b. To ensure compliance, the operator's processing or manufacturing records and site are subject to inspection by a forest officer.

Mountain Pine Beetle Level 2 Harvest Priorities and Approval Process (Forest Management Policy Directive 2013-01)

This Directive defines high beetle risk areas, provides direction regarding the priorities for level 2 harvest, and also clarifies the approval process and conditions for harvest approval.

Companies are directed to continue to plan using their approved Spatial Harvest Sequence (SHS) under the Healthy Pine Strategy. If high beetle risk areas can be harvested and are already part of the SHS, companies should make adjustments to the year of harvest to log high beetle risk SHS blocks preferentially over low risk SHS blocks. If high beetle risk areas outside of the approved SHS are deemed feasible for harvest by industry, the Department will consider approval of variance from the SHS.

The Annual Operating Plans are normally submitted to the Department in the spring (March to May). It is recognized that the lifecycle of the MPB does not match the timing of Alberta's harvest approval process and that more information regarding MPB population numbers and survival will become available after the AOP has been submitted and approved. To accommodate this difference, the following process will be used:

1. In March to May, companies will consider the most current data available when preparing AOPs. This includes aerial surveys, green to red ratio surveys, beetle risk assessments (DSS results) from the previous fall, the previous winter's Level 1 and Level 2 control program, and any overwintering success surveys from the current spring
2. The Department MPB Risk Decision Support System DSS results, red tree locations, and green:red survey results are provided to industry as soon as they are available and usually no later than October 15.
3. The forest tenure holders and the Department will meet each fall once the aerial surveys, green:red surveys, and the DSS analysis are completed.
4. An Annual Action Plan prepared jointly by the Department and the management unit tenure holder(s) should identify any high beetle risk locations and identify opportunities for Level 2 harvest in the high beetle risk areas. The Annual Action Plan will integrate Level 2 harvesting, all other harvesting, and the Level 1 control activities. Where feasible, existing AOPs may be amended to facilitate the latest survey information. At this time companies will identify:
 - a. Level 2 blocks in the AOP that it will harvest before break up (no need for level 1)
 - b. Level 2 blocks in the AOP that it will not harvest before break up (level 1 control required)
 - c. Level 2 blocks in the AOP are still uncertain.
5. By March 1, the company must notify the Forestry Program Manager in writing if any approved Level 2 harvest areas will not meet the July 1 deadline, identifying the cause (e.g., weather, roads etc.).

Any Level 2 Harvest approval outside of the Inactive Holding Zone shall be conditional on the milling and/or debarking of resulting pine volume before July 1, or transportation to an area protected by an approved log management plan before July 1, or transportation to an area with a relatively low risk of beetle damage or spread before July 1, to the satisfaction of the Forestry Program Manager.

By March 1, the company must notify the Forestry Program Manager in writing if any approved Level 2 harvest areas will not meet the July 1 deadline, identifying the cause (e.g., weather, roads etc.).

Invasive Species

Weed Management on Industrial Sites (Alberta Environment: R&R/12-01)

This document reviews the legislated responsibilities of operators with regard to weeds on industrial dispositions (*Weed Control Act, Public Lands Act, Environmental Protection and Enhancement Act*) and provides operational principles and guidelines for all stages of the disposition lifecycle (Reclamation certification criteria require the use of compatible species, which is assessed by comparing reclamation site vegetation with the vegetation on adjacent or surrounding land).

Guidelines for operators to prevent the introduction and spread of weeds include tactics such as, communication, surveying, clean (weed free) equipment and materials, timely revegetation, active control.

This directive also includes a list of useful resources and links to departments involved in IAS management. It also includes a weed survey form to be used by the disposition holder.

Weed Control on Public Land (Public Lands Staff Directive: GEN 1988.2)

This policy was last updated in 1990 and outlines procedures and guidelines on how the *Weed Control Act* is implemented for dispositions. Restricted and noxious weeds must be eradicated or controlled on vacant public land managed by the PLA, and weed notices are to be avoided by proactive management. The document has not been updated to reflect the 2010 Weed Control Act changes.

In general the procedures and guidelines attempt to achieve the above statement include:

- communication and cooperation with the Agricultural Fieldman
- appropriate treatment options (registered products, effective, cooperative)
- regional budgets for control on grazing reserves or vacant land
- staff training
- annual reporting

2010 Reclamation Criteria for Wellsites and Associated Facilities

Each PLA well site disposition and associated facilities must undergo environmental assessment before the holder can apply for a reclamation certificate. These reclamation guidelines, updated in July 2011, discuss the process of what must be done before certification is granted.

There are four types of land use categories: forested, cultivated, grass lands and peatlands. Weed control requirements for each land use category are the same.

The Criteria requires an assessment of the prohibited noxious, noxious and volunteer weeds to determine reclamation certification pass or fail. There also needs to be at minimum one full growing season (including an overwintering period) after the application of herbicide before reassessing the weed control program and submitting a reclamation certificate application. This is not a requirement for the reclamation process on cultivated lands or native grass lands.

Weed data is collected and recorded based on percent cover and patchiness/distribution to provide a rank from 1 - 7. Also surveyed are the surrounding area weeds.

The certification criteria assigns a pass or fail based on weed category and comparison of on-site to off-site weed survey ranks:

Prohibited Noxious Weeds: These must be "destroyed" onsite (i.e., the assessment points on the lease cannot have a rating greater than 1, if so, the site fails)

Noxious Weeds: These must be "controlled" onsite (i.e., the average rating onsite cannot be greater than the average rating offsite, and the difference in the average ratings between onsite and offsite must be <0 . Example, if one assessment point offsite has noxious weeds, i.e., rating of 4, there could be noxious weeds present onsite but these must have ratings <4)

Undesirable/Problem Weeds: These should be "controlled" onsite but not require change in management practice onsite compared to that applied offsite. There cannot be a difference >2 ratings categories between the lowest control rating and the lowest rating at any assessment point on the lease. The difference in average ratings of 0.30 (or, 0.15 depending on sample intensity) still apply.

Weed Management in Forestry Operations (Forest Management Policy Directive 2001-06)

The purpose of this directive is to implement effective weed management programs administered by holders of *Forests Act* dispositions engaged in forestry operations. This policy applies only to *Forests Act* dispositions. As a result of the directive, the following condition is usually included in a company's AOP or timber disposition: "[Disposition holder] shall, with respect to the land contained in this timber disposition, prevent the establishment of and control all noxious and restricted weeds to which the Weed Control Act applies, in a manner acceptable to the Minister."

The ESRD Minister will consider the "Recommended Standards of Good Practice for Prevention," described in the guidelines section of the directive, to be the minimum level of performance for all disposition holders.

Responsibility for Weed Control on Provincial Grazing Reserves (PGR 2006.2)

This directive was last updated in 2006 and provides guidance for determining responsibility for weed control on Provincial Grazing Reserves (PGR).

Where the department made commitments to share in the responsibility for weed control on certain areas (that have not been formalized in the grazing agreement contracts) these commitments need to be defined and formalized. Once these commitments have been fulfilled, they can be removed from the contracts.

Where weeds are becoming established or are spreading as a result of industrial activities, every effort must be made to ensure these problems are addressed by the company(ies) responsible. Such efforts may include:

- Working with the companies, land use staff, and Municipalities to ensure compliance with the conditions of the industrial dispositions and the Weed Control Act.
- Cost-sharing arrangement between companies and PGR association. Weed control agreements between the association and the companies (e.g. the association agrees to conduct the control activities and invoices the companies for weed control on and around the areas under industrial disposition).
- Enforcement of conditions of the industrial disposition(s) (e.g. fines, invoicing for work done).

Where weeds are introduced due to the activities of the livestock operations, or are spreading due to improper management practices, these are the responsibility of the PGR association.

Where weeds and invasives are increasing as a result of declining pasture health, changes in the pasture management may be required. The PGR agronomist should work with the PGR association to gain compliance and adjust stocking rates, pasture rotations etc. to improve the health of the pasture.

Where weeds are introduced or spread as a result of high third party use (e.g. recreation, hunting) and cannot be attributed to a specific user, the department can exercise the option of cost-sharing weed control with the association.

Where pasture health is declining in part due to increasing third party activities (including spread of weeds), and renovation of an entire pasture is warranted, the association may qualify for cost sharing of these renovations.

ESRD Enhanced Approval Process, Integrated Standards and Guidelines Manual (July 2012)

ESRD is leading the effort to streamline the approval process for certain disposition applications to enhance Alberta's economic competitiveness. To achieve this, ESRD is partnering with other ministries to streamline the regulatory framework for dispositions, reduce red tape, and make it easier for Albertans and investors to work with government.

The Integrated Standards and Guidelines delineate desired outcomes of best management practices and the responsibility of operators that will help the Province meet these goals. In the Vegetation section, desired outcome number 6 and 7 read: "minimize the spread of vegetation disease and insect pests" and "minimize the introduction of noxious and restricted invasive

plants.” There are a number of weed-related operating conditions that hope to lead to the desired outcome:

- 200.2.1 Manage all weeds as per the Weed Control Act (LOC, MSL, PIL and PLA dispositions)
- 200.2.6: All equipment shall be cleaned to be free of weeds (LOC, MSL, PIL and PLA)
- 200.2.7: seed mixes for all natural recovery on forested and peatland sites must be free of WCA weeds (LOC, MSL, PIL and PLA)
- 200.2.8: when seeding pastures or cultivated lands, the agronomic or forage seed shall meet or exceed Certified #1 as outlined in the Canada Seeds Act and Seeds Regulations. Seed mixes are to be free of species listed in the Weed Control Act. A seed certificate (under the rules and regulation of the Canada Seeds Act) for each species shall be provided to ESRD, upon request. (LOC, MSL, PIL and PLA)

Invasive species are also covered in the wildlife section, where a desired outcome is to reduce or decrease the introduction of invasive species and noxious weeds, thus incorporating a proactive weed management focus into the reactive framework. The outcome states: “reduce or decrease the introduction of invasive species and noxious weeds.” There are no accompanying approval standards.

ESRD Grazing and Timber Integration Manual (Staff Directive 2011.03)

This manual provide direction to government and industry regarding the integration of grazing and timber disposition activities on Green area public land, and White area public lands managed for sustained yield of timber and forage. Policy direction applies to both existing and new dispositions and outlines the requirements for planning, operations, agreements, monitoring, and dispute resolution. For existing dispositions, a transition period that considers the significance of present agreements is defined.

Reference to weed control is made throughout the document. On page 34 it states that the “disposition holder must conduct weed control, as required by the department and/or the local municipality.” On page 39, which states that “strategies from both proponents of how invasive species will be monitored and controlled in a cooperative manner.” On page 40, a weed survey is a component of the Level 1 Status Assessment of a cut block. The document needs to be updated to include changes to WCA wording.

Problem Introduced Forages on Prairie & Parkland Reclamation Sites (Alberta Environment: R&R/03-5)

This document recognizes the ecological and economic impacts of invasive or persistent introduced forages. Crested wheatgrass and sweet clover are identified as problem species in the southeastern mixed grass prairie, while the problem species of the central parkland and foothills region include timothy, smooth brome, and reed canary grass.

Native Plant Re-Vegetation Guidelines for Alberta

In 2001, Alberta Environment and Agriculture developed guidelines relative to the use of native species in the re-vegetation of disturbed sites, establishment of native plant communities, and the site-specific role of non-native species to meet short-term re-vegetation goals.

With respect to invasive plants, the guidelines advocate the planting of contaminant-free seed. Contaminants are identified as prohibited, primary, and secondary noxious weeds as defined by the *Canada Seeds Act*, and restricted and noxious weeds as designated by the *Weed Control Act*. Also contained in the document are tips related to the management of non-native species in re-vegetated areas.

Purity of Native Seed Used For Revegetation of Natural Landscapes (ESRD Public Lands Update: IND 2002-1)

This 2002 update outlines the expectations of Public Lands about weed species and invasive agronomic species that are not acceptable in native seed being used on public land. Unacceptable seeds are those belonging to restricted and noxious weeds as defined by the Weed Control Act (note: has not been changed to reflect WCA 2010 changes). On weed-free public land, downy brome, Japanese brome and rattail fescue may not be seeded. Other problem agronomic species are also listed, and their use in seed mixes is dependent on site-specific conditions.

Additional information on the topic of native seed and natural recovery is found in Conservation and Reclamation Information Letter 02-2: Assessing Sites Reclaimed Using Natural Recovery Methods.

Federal Government Policies

Comprehensive Policy to Control the Spread of North American Gypsy Moth, *Lymantria dispar* in Canada and the United States (Canadian Food Inspection Agency D-98-9 - Revised April 2011)

This directive contains the plant protection requirements governing the movement within Canada, export from Canada to the United States (U.S.), and import from U.S. Items under this policy include; nursery stock, Christmas trees, forestry products with bark attached, and all outdoor household articles; military, recreational, and personal vehicles, and equipment which can harbor any life stage of the North American gypsy moth (i.e., North American strain of gypsy moth), *Lymantria dispar*.

Plant Protection Import Requirements for Rooted, or Un-rooted, Plants, Plant Parts, and Plants *in Vitro* for Planting (Canadian Food Inspection Agency D-02-02)

This directive contains the general import requirements for plants and plant parts for planting from all countries to prevent the entry and spread of quarantine pests of plants into Canada. Additional requirements specific to certain genera and species may apply. Refer to pest- or

genera-specific policies whenever detailed information is required. The CFIA is moving to prior approval for all off-continent material in the future. Contact the local office of the CFIA for further information.

This directive was developed to consolidate, clarify, and summarize the general plant health import requirements. Previously, the requirements in this directive were found in a number of other directives and documents making it difficult for importers, CFIA staff, and other stakeholders to understand all of the requirements. In addition, this directive clarifies a number of requirements previously undocumented and adds a number of new requirements as well.

Import Requirements of Non-manufactured Wood and Other Non-propagative Wood Products, Except Solid Wood Packaging Material, from All Areas Other than the Continental United States (Canadian Food Inspection Agency D-02-12)

This directive describes the phytosanitary import requirements for logs, tropical lumber, wood with bark attached, lumber, wood chips, bark chips, bamboo products, decorative wood items, and cones without seed from areas of the world other than the Continental United States.

Phytosanitary Requirements for the Importation and Domestic Movement of Firewood (Canadian Food Inspection Agency D-01-12)

This directive contains the phytosanitary requirements for the import of firewood to prevent entry into Canada by quarantine pests from all other areas of the world. It also provides information regarding current domestic controls that manage the spread of regulated pests within Canada.

Appendix 1 - Legislation & Policy Quick Facts

Provincial Legislation

Weed Control Act, SA 2008, c W-5.1

The *Weed Control Act* is the provincial legislation for invasive plant control and is administered by the Ministry of Agriculture and Rural Development. Noxious weeds must be *controlled* by the landowner or by the person who occupies the land. Prohibited noxious must be *destroyed* by the landowner or by the person who occupies the land.

Weed Control Act, Weed Regulation 19/2010

The Weed Regulation provides additional information about the processes outlined in the Weed Control Act, including the appeal process, the designation of weeds, and regulations specific to seed cleaning facility licenses. It also includes a schedule of plants that are formally designated as noxious or prohibited noxious in Alberta.

Agricultural Pests Act, RSA 2000, c A-8

This Act allows the Minister of Agriculture to declare an animal, bird, insect, plant or disease a “pest” or a “nuisance,” and to take active measures to prevent its spread. Designating a species as a “pest” is only triggered if the Minister determines that the pest is harming, destroying or likely to destroy or harm the land, livestock or property in Alberta.

Agricultural Pest Act Regulation: Pest and Nuisance Control-184-2001

The Pest and Nuisance Control Regulations enumerate species declared as pests and nuisances; clarify pest management prohibitions in s. 4(1); and allow the Minister to declare a quarantine in all or any part of Alberta in case of wide-spread infestation.

Public Lands Act, RSA 2000, cP-40

This Act deals with the selling and transferring of public land, as well as the management of rangeland and activities permitted on designated land. The Act outlines the process to obtain land dispositions and the rules associated with occupying public land. With regard to invasive plant prevention and control, the *PLA* details the duties of a holder of a disposition issued pursuant to this Act.

Forests Act, RSA, c F-22

This act governs forest harvesting dispositions (Forest Management Agreements, Quotas, licenses and permits). Forest management agreements (FMA) are one type of forest tenure. The introduction of various forms of tenure provides companies with the assurance needed to begin planning and developing their operations over long timeframes.

Forest and Prairie Protection Act RSA 2000, c F-19

The *Forest and Prairie Protection Act* main focus is fire suppression and control. That said, the Act outlines a provision that enables ESRD to minimize the spread of tree pests by allowing ESRD to do whatever needs to be done to control forest pest infestations.

Timber Management Regulation, Alta Reg 60/1973

The *Timber Management Regulation (TMR)* is used to implement and administer the *Forests Act*. The *Forests Act* establishes an annual allowable cut in coniferous and deciduous forests. It prohibits persons from damaging the forest in any way, and takes proactive steps to reduce the number of pests imported from forest to forest.

Forest Reserves Act, RSA 2000, c F-20 and Regulations (Alta Reg 42/2005)

Under the Act, “All forest reserves are set aside and constituted for the conservation of the forests and other vegetation in the forests and for the maintenance of conditions favourable to an optimum water supply in those reserves.” (s. 4) With respect to weeds, the Act allows ESRD to make regulations respecting the control or destruction of weeds on forest reserves under s. 7 (c).

Environmental Protection and Enhancement Act - Pesticide (Ministerial) Regulation, Alta Reg 43/97 (with amendments up to and including Alberta Regulation 315/2003)

This regulation creates four schedules of pesticides, each having different handling requirements. Each pesticide must have a label that provides the details on who can apply it, and where.

Environmental Protection and Enhancement Act - Code of Practice for Pesticides

The Code of Practice for Pesticides details the safe handling, use and application of pesticides to ensure environmental protection. Pesticide applicators, pesticide service, and pesticide vendors in Alberta must comply with these requirements.

Federal Legislation

Canada Plant Protection Act (S.C. 1990, c.22)

This Act, administered by Agriculture and AgriFood Canada, is designed to prevent the importation, exportation and spread of pests injurious to plants and to provide for their control and eradication. The definition of pest is very broad and includes anything that is injurious or potentially injurious, directly or indirectly, to plants, and includes any plant prescribed as a pest.

Pest Control Products Act (S.C. 2002, c. 28)

The *Pest Control Products Act (PCPA)* is regulated by Health Canada’s Pest Management Regulatory Agency (PMRA). The primary objective of the Act is to prevent unacceptable risks to people and the environment from the use of pest control products. Unregistered pest control

products are prohibited in Canada and registered products are treated as per accompanying regulations.

Canada Seeds Act (R.S.C., 1985, c S-8)

The *Canada Seeds Act* is administered by the CFIA and provides the Minister with the authority to regulate the import, export and sale of seeds and control noxious weed seeds as set out in these regulations.

Provincial Policies/Directives

Pesticide, Bark Beetle Pheromone and Biological Control Use Guidelines for Forest Pest Management (Forest Management Policy Directive 2013-02)

This directive guides the application and approval process for companies/individuals proposing the use of pesticides, bark beetle pheromones, or biological control agents for the purpose of forest pest management on public land managed by ESRD.

Forest Pest Management Products Development Guidelines (Forest Management Policy Directive 2013-03)

The purpose of this directive is to provide information about the application and approval process for companies, researchers and/or individuals with new products, mechanisms, and processes for the purposes of forest pest management on public land that is managed by Environment and Sustainable Resource Development (ESRD).

Importation of Conifer Logs and Forest Products with Bark Attached (Forest Management Policy Directive 2011-01)

This directive is intended to protect Alberta's forests and forestry economy from pests that may be introduced by importing pest-infested logs and forest products into Alberta. The directive includes specifics on the application and approval process for importation, required documentation for transportation, and enforcement procedures.

Mountain Pine Beetle Log Management (Forest Management Policy Directive 2011-04)

This directive sets standards to protect Alberta's forest resources by reducing the risk of spreading mountain pine beetles when using timber harvesting as a control treatment. It applies to MPB-infested pine with bark attached, resulting from Level II control treatments, industrial salvage, or other harvest operations. This directive also applies to MPB-infested pine transported on public highways/roadways, including any public roadway governed by the *Public Lands Act*, whether originating from Crown, private or federal lands.

Mountain Pine Beetle Level 2 Harvest Priorities and Approval Process (Forest Management Policy Directive 2013-01)

This Directive defines high beetle risk areas, provides direction regarding the priorities for level 2 harvest, and also clarifies the approval process and conditions for harvest approval.

Weed Management on Industrial Sites (Alberta Environment: R&R/12-01)

This document reviews the legislated responsibilities of operators with regard to weeds on industrial dispositions (*Weed Control Act*, *Public Lands Act*, *Environmental Protection and Enhancement Act*) and provides operational principles and guidelines for all stages of the disposition lifecycle.

Weed Control on Public Land (Public Lands Staff Directive: GEN 1988.2)

This policy was last updated in 1990 and outlines procedures and guidelines on how the *Weed Control Act* is implemented for dispositions. Restricted and noxious weeds must be eradicated or controlled on vacant public land managed by the PLA, and weed notices are to be avoided by proactive management.

2010 Reclamation Criteria for Wellsites and Associated Facilities

Each PLA well site disposition and associated facilities must undergo environmental assessment before the holder can apply for a reclamation certificate. These reclamation guidelines, updated in July 2011, discuss the process of what must be done before certification is granted.

Weed Management in Forestry Operations (Forest Management Policy Directive 2001-06)

The purpose of this directive is to implement effective weed management programs administered by holders of *Forests Act* dispositions engaged in forestry operations.

Responsibility for Weed Control on Provincial Grazing Reserves (PGR 2006.2)

This directive was past updated in 2006 and provides guidance for determining responsibility for weed control on Provincial Grazing Reserves.

ESRD Enhanced Approval Process, Integrated Standards and Guidelines

Manual (July 2012)

ESRD is leading the effort to streamline the approval process for certain disposition applications to enhance Alberta's economic competitiveness. The Integrated Standards and Guidelines delineate desired outcomes of best management practices and the responsibility of operators that will help the Province meet these goals.

ESRD Grazing and Timber Integration Manual (Staff Directive 2011.03)

This manual provide direction to government and industry regarding the integration of grazing and timber disposition activities on Green area public land, and White area public lands managed for sustained yield of timber and forage..

Problem Introduced Forages on Prairie and Parkland Reclamation Sites (Alberta Environment: R&R/03-5)

This document recognizes the ecological and economic impacts of invasive or persistent introduced forages. Crested wheatgrass and sweet clover are identified as problem species in the southeastern mixed grass prairie, while the problem species of the central parkland and foothills region include timothy, smooth brome, and reed canary grass.

Native Plant Re-Vegetation Guidelines for Alberta

In 2001, Alberta Environment and Agriculture developed guidelines relative to the use of native species in the re-vegetation of disturbed sites, establishment of native plant communities, and the site-specific role of non-native species to meet short-term re-vegetation goals.

Purity of Native Seed Used For Revegetation of Natural Landscapes (ESRD Public Lands Update: IND 2002-1)

This 2002 update outlines the expectations of Public Lands about weed species and invasive agronomic species that are not acceptable in native seed being used on public land.

Federal Government Policies

Comprehensive Policy to Control the Spread of North American Gypsy Moth, *Lymantria dispar* in Canada and the United States (Canadian Food Inspection Agency D-98-9 - Revised April 2011)

This directive contains the plant protection requirements governing the movement of material within Canada, export from Canada to the United States (U.S.), and import from U.S.

Plant Protection Import Requirements for Rooted, or Un-rooted, Plants, Plant Parts, and Plants in Vitro for Planting (Canadian Food Inspection Agency D-02-02)

This directive contains the general import requirements for plants and plant parts for planting from all countries to prevent the entry and spread of quarantine pests of plants into Canada.

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