

**Government  
of Alberta ■**

## **Environmental Code of Practice for Pesticides**

**Effective May 12, 2010**

*Made under the Environmental Protection and Enhancement  
Act, RSA 2000, cE-12*

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# ***ENVIRONMENTAL CODE OF PRACTICE FOR PESTICIDES***

## **ALBERTA ENVIRONMENT**

### **Preface**

**1(1)** The *Environmental Code of Practice for Pesticides*, hereinafter referred to as the Code of Practice, is incorporated by the *Pesticide (Ministerial) Regulation* (A.R. 43/97) and the *Pesticide Sales, Handling, Use and Application Regulation* (A.R. 24/97), under the authority of section 38 of the *Environmental Protection and Enhancement Act*. Pesticide applicators or other described pesticide users in this Code of Practice, and pesticide services and pesticide vendors affected by this Code of Practice must meet all its requirements to ensure that their activities are in compliance with Alberta's environmental laws. In addition to the requirements of this Code of Practice, pesticide applicators and other described pesticide users, pesticide services and pesticide vendors must comply with all requirements of the *Environmental Protection and Enhancement Act*, its associated regulations, and all other applicable laws.

**(2)** Pesticide services, wholesale vendors selling pesticides described in Schedules 1, 2 or 3 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97), and retail vendors selling pesticides described in Schedules 1 or 2 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) must register with Alberta Environment. Section 4 of this Code of Practice deals with registration in greater detail.

### **Introduction**

**2(1)** The Code of Practice provides specific details regarding the safe sales, handling, use and application of pesticides to ensure environmental protection. Pesticide applicators and other described pesticide users, pesticide services and pesticide vendors within the Province of Alberta must comply with these requirements.

**(2)** Questions or concerns regarding the application or contents of this Code of Practice can be made to:

Alberta Environment  
Information Centre  
Main Floor, 9820 - 106 Street  
Edmonton, AB T5K 2J6  
Phone: (780) 427-2700  
Fax: (780) 422-4086  
Email: env.infocent@gov.ab.ca

or to any of the following Alberta Environment regional offices (to be connected toll-free, first call 310-0000):

Grande Prairie      phone: (780) 538-5460  
Edmonton            phone: (780) 427-7617

Spruce Grove	phone: (780) 960-8600
Red Deer	phone: (403) 340-7052
Calgary	phone: (403) 297-7602
Lethbridge	phone: (403) 381-5322

### **Definitions**

**3(1)** In this Code of Practice, “woody plant” means trees and shrubs.

**(2)** Terms that are defined in sections 1 and 154 of the *Environmental Protection and Enhancement Act* and in the *Pesticide (Ministerial) Regulation* (A.R. 43/97) and the *Pesticide Sales, Handling, Use and Application Regulation* (A.R. 24/97) are incorporated into and become part of this Code of Practice, unless otherwise defined or modified within this Code of Practice.

### **Registration**

**4(1)** In addition to any information required by the Director under the *Approvals and Registration Procedure Regulation* (A.R. 113/93), any person required to obtain a service registration under section 7 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) shall apply to the Director for registration in accordance with section 8 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97).

**(2)** In addition to any information required by the Director under the *Approvals and Registration Procedure Regulation* (A.R. 113/93), any person required to obtain a vendor registration under section 14 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) shall apply to the Director for registration in accordance with section 15 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97).

### **Procedural Requirements - Pesticide Applicator and Dispenser Assistants**

#### **Pesticide Applicator Assistants**

**5(1)** In the following subsections,

- (a) “applicator assistant” means an assistant that has been trained according to a training checklist only (Appendix A); and
- (b) “authorized assistant” means an assistant that has:
  - (i) received training from a certified applicator recognized as a trainer by the Director;
  - (ii) passed an examination and been issued a certificate valid for 5 years, both recognized by the Director; and
  - (iii) received supplementary training by a certified applicator that holds a valid certificate for the applications that will be

conducted and in accordance with a training checklist  
(Appendix A).

- (2) An applicator assistant or authorized assistant must be
  - (a) at least 16 years of age to handle pesticides described in Schedules 2 or 3 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97), and
  - (b) at least 18 years of age to handle pesticides described in Schedule 1 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97).
- (3) An applicator must
  - (a) for each applicator assistant, complete a training checklist in the format provided in Appendix “A”, or in a format acceptable to the Director, documenting
    - (i) the instruction of each assistant who is applying pesticides, and
    - (ii) the instruction of each assistant who is mixing or loading pesticides.

OR

- (b) for each authorized assistant, ensure that the authorized assistant has passed an examination recognized by the Director regarding pesticide application and complete a training checklist in the format provided in Appendix “A”, or in a format acceptable to the Director.
- (4) The applicator and service registration holder must
  - (a) keep the training checklists and copies of the authorized assistant certificates for a period of not less than 5 years; and
  - (b) make training checklists and copies of the authorized assistant certificates available to Alberta Environment upon request.
- (5) An applicator, other than an applicator that holds an Aerial class of applicator certificate, may supervise a maximum of 6 individuals who may be assistants or authorized assistants.
- (6) When the applicator is supervising
  - (a) authorized assistants, the applicator is not required to be physically present at the application site;
  - (b) applicator assistants, the applicator must be present at each application site at least once per day and each time the pesticide, application equipment, or calibration are changed.

**(7)** An authorized assistant, provided that the authorized assistant is physically present at an application site and can directly observe each assistant's pesticide application activities, may supervise

- (a) a maximum of 6 applicator assistants for stem specific herbicide applications for Industrial or Forestry applications described in Schedule 5 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97); and
- (b) a maximum of 2 applicator assistants for all other pesticide applications.

**(8)** An applicator or authorized assistant must check the following at each application site for each assistant:

- (a) the amount of pesticide used corresponds with the area treated;
- (b) the application equipment is not leaking;
- (c) protective equipment is present, and in good operational condition available to be worn by the assistant in accordance with the pesticide label, the material safety data sheet, and occupational health and safety requirements;
- (d) application records are maintained in accordance with sections 11 and 12 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) and the applicable sections of this Code; and
- (e) application and handling practices comply with provincial environmental laws.

**(9)** An applicator must ensure for each authorized assistant that:

- (a) application records are maintained in accordance with sections 11 and 12 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) and the applicable sections of this Code; and
- (b) application and handling practices comply with provincial environmental laws.

**(10)** An applicator must be available to applicator assistants and authorized assistants through telephone or radio contact when the applicator is not physically present at an application site.

**(11)** Unless the pesticide label requirements specify that the pesticide shall only be applied by an authorized applicator, certified applicator, pest control operator, or other approved applicator, or any similar restriction, an applicator or an authorized assistant must be physically present throughout the following pesticide applications:

- (a) restricted uses identified on the federal label;
- (b) forest management;
- (c) spraying trees with any insecticide other than *Bacillus thuringiensis* or insecticidal soap;
- (d) mosquito adulticiding applications;
- (e) application of any nonselective residual herbicide containing any of the following active ingredients:
  - (i) atrazine;
  - (ii) bromacil;
  - (iii) diuron;
  - (iv) hexazinone;
  - (v) imazapyr;
  - (vi) simazine;
  - (vii) sodium chlorate; and
- (f) application along a right-of-way with any pesticide product containing the active ingredient picloram.

**Pesticide Dispenser Assistants**

**(12)** A “dispenser assistant” means an assistant that has been trained according to a training checklist only (Appendix B);

**(13)** A dispenser assistant must be

- (a) at least 16 years of age to handle pesticides described in Schedules 2 or 3 of the *Pesticide (Ministerial) Regulation*, and
- (b) at least 18 years of age to handle pesticides described in Schedule 1 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97).

**(14)** A dispenser must for each dispenser assistant, complete a training checklist in the format provided in Appendix “B”, or in a format acceptable to the Director, documenting

- (a) the instruction of each assistant who is selling pesticides, and
- (b) the instruction of each assistant who is handling pesticides and dealing with emergency responses involving pesticides.

(15) A dispenser must make the training checklists available to Alberta Environment upon request and must keep a copy of the training checklist for a period of not less than 5 years .

(16) A dispenser must ensure that each dispenser assistant is working in accordance with the vendor sales, storage, and display requirements identified in Sections 20, 22, 23, 24 and 25 of the *Pesticide Sales, Handling, Use and Application Regulation* and other industry standards and good practices.

(17) A dispenser must ensure for each dispenser assistant that:

- (a) sales records are maintained in accordance with sections 18 and 19 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97); and
- (b) sales, handling and storage practices comply with provincial environmental laws.

#### **Procedural Requirement - Aerial Pesticide Applications**

6(1) Aircraft performing aerial pesticide applications must be piloted by the holder of an Aerial class of applicator certificate.

(2) Prior to performing aerial pesticide application, each aircraft's pesticide application equipment must be checked and calibrated to standards that are recognized by the Director. Each aircraft's pesticide application equipment must be rechecked and re-calibrated to those standards every 20 months thereafter.

(3) An applicator must keep a record of the calibration of their aircraft that indicates the date the calibration was performed and the calibration auditor that performed the calibration and make it available on request by an inspector of the Department.

(4) An applicator must keep a copy of the calibration record for a period of not less than 5 years.

#### **Procedural Requirements - Insurance Coverage**

7(1) Every applicant for or holder of a pesticide service registration, other than a government department or agency (Note: applies to both provincial and municipal government), must provide the Director with a certificate of insurance in the format acceptable to the Director each time that an insurance policy is issued or renewed.

(2) A certificate of insurance will not be acceptable to the Director unless it has been issued by an authorized representative of the insurer or the insurance agent or broker, and states that the insurance covers pesticide application activities.

(3) A pesticide service registration holder, shall at its own expense and without limiting its liabilities herein, insure its operations under a contract of General

Liability Insurance, in accordance with the *Alberta Insurance Act*, in an amount not less than \$1,000,000 inclusive per occurrence, insuring against bodily injury, personal injury and property damage including loss of use thereof.

(4) Pesticide service registration holders offering agriculture pesticide application services as described in Schedule 5 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) must carry insurance covering pesticide drift liability in an amount not less than \$25,000 for any one occurrence.

(5) Pesticide service registration holders offering aerial pesticide application services as described in Schedule 5 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) must carry aircraft liability insurance in accordance with the *Alberta Insurance Act* including liability for deliberate low flying as required for the conduct of the operation, for any and all aircraft involved in the aerial application of pesticides, in an amount not less than \$1,000,000 per occurrence and pesticide drift liability in an amount not less than \$25,000 for any one occurrence.

(6) The service registration holder must make insurance policy verifications available to Alberta Environment upon request.

#### **Operational Requirements - Pesticide Mixing and Loading Sites**

**8(1)** In this section,

- (a) "field pesticide mixing and loading site" means a temporary site that is not routinely used for mixing or loading pesticides, and is any site other than a primary pesticide mixing and loading site;
- (b) "primary pesticide mixing and loading site" means a site that is routinely used for mixing or loading pesticides, and is associated with
  - (i) the permanent premises of a pesticide service;
  - (ii) a pesticide storage facility; or
  - (iii) any operation that involves the application of a pesticide by an applicator.

(2) An applicator must not locate outdoor field pesticide mixing and loading sites within 30 horizontal metres of an open body of water, unless at least one of the following requirements is met:

- (a) a closed system designed, constructed and maintained to eliminate spills is used for mixing and loading operations;
- (b) spray equipment of less than 20 litres total volume of pesticide solution is used, and secondary containment of the mixing and loading operation is used and is adequate to contain all of the

pesticide and water mixture that would result from a release during the mixing and loading operation; or

- (c) the pesticide is being applied directly to the water as part of an aquatic pest management program.

**(3) An applicator must**

- (a) make a sketch of the area within a 50 metre radius surrounding a primary pesticide mixing and loading site showing
  - (i) site drainage pattern, including the location and distance of the mixing and loading facility from drains that lead into wastewater systems and storm drainage systems,
  - (ii) watering points, wells and other water sources;
  - (iii) open bodies of water; and
  - (iv) surrounding land uses.
- (b) make the sketch readily accessible and available to personnel working at the primary pesticide mixing and loading site.

**(4)** For all pesticide mixing and loading sites, the applicator must ensure that a contingency plan for the containment and cleanup of pesticide releases is available and understood by any personnel working at a pesticide mixing and loading site.

**Operational Requirements - Emergency Response Equipment**

**9(1)** An applicator, a holder of a pesticide service registration, a holder of a wholesale or retail vendor registration, and a person who sells pesticides described in Schedule 3 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) must ensure that emergency response equipment is available and operational in accordance with section 22 of the *Pesticide Sales, Handling, Use and Application Regulation* (A.R. 24/97).

**(2)** Emergency response equipment referred to in section 9(1) must include

- (a) personal protective equipment, at minimum as specified on the label and material safety data sheets (MSDS) including
  - (i) chemical-resistant gloves,
  - (ii) a chemical-resistant apron as required for the pesticides being handled;
  - (iii) coveralls;
  - (iv) chemical-resistant boots;

- (v) eye protection;
  - (vi) respiratory protection, when indicated on material safety data sheets (MSDS) and that meets occupational health and safety requirements;
  - (vii) a first aid kit that meets occupational health and safety requirements, and
  - (viii) an emergency eyewash or emergency shower that meets occupational health and safety requirements.
- (b) emergency response information, including
- (i) current and readily available material safety data sheets (MSDS) and pesticide labels for all pesticides being used or stored;
  - (ii) emergency telephone numbers as required for the pesticides being handled and the location of handling, including:
    - (A) the Alberta Environmental Response Centre number (1-800-222-6514), and
    - (B) the provincial Poison Centre (1-800-332-1414).
  - (iii) a contingency plan for containment and clean up of pesticide releases that is available and understood by any personnel working at the operational or storage site.
- (c) spill clean-up materials, including, but not limited to
- (i) access to information to obtain and readily locate appropriate absorbent materials, as specified on material safety data sheets (MSDS) or by the pesticide product label or manufacturer;
  - (ii) access to information to obtain and readily locate appropriate neutralizing materials as specified on material safety data sheets (MSDS) or by the pesticide product label or manufacturer;
  - (iii) a broom and shovel;
  - (iv) containers with lids for waste material or leaking containers; and
  - (v) labeling materials to identify contents of waste containers.

**Operational Requirements - Disposal of Pesticide Rinsate and Pesticide Solution**

**10** Applicators must dispose of pesticide rinsate and pesticide solution in accordance with label directions and ensure that maximum label application rates are not exceeded:

- (a) as mix water in spraying operations;
- (b) by spraying over the treated area; or
- (c) in a manner as authorized in writing by the Director.

**Forest Management Pesticide Use**

**11(1)** In this section “owner” means a tenant or other person who is in lawful possession or occupation of the land including, but not limited to, the holder of a Forest Management Agreement, a Disposition Holder, or a quota holder.

- (2) A project proposal must be submitted to Alberta Sustainable Resource Development for any proposed application of pesticides in a forest.
  - (a) 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*.
  - (b) Proposals for herbicide use must be in accordance with the *Forest Management Herbicide Reference Manual*.
  - (c) Proposals for insecticide or fungicide use must be in accordance with Alberta Sustainable Resource Development’s policies and guidelines.
- (3) The application of pesticides in a forest is restricted to the location, target area, pesticide, pesticide application method, pesticide application rate, and application time authorized in writing by a designated employee of Alberta Sustainable Resource Development.
- (4) An applicator responsible for supervising the pesticide application must be in possession of the written authorization and the corresponding project proposal referred to in section 11(2) while pesticide treatments are being conducted and must ensure that these documents are available for inspection at the mixing and loading site. The written authorization (paper or electronic) must be retained as part of the application record.
- (5) An applicator must
  - (a) identify all open bodies of water within the application site on paper or electronic maps or aerial photographs;
  - (b) keep maps and photographs referred to in subsection (a) with or electronically linked to application records; and

- (c) ensure sufficient marking or flagging of all open bodies of water that will not be clearly visible to the applicator during the application.
- (6)** The following individuals or agencies must be notified a minimum of 72 hours prior to each pesticide application by the owner of the application site or the owner's agent:
  - (a) all private property owners and resident holders of a public land disposition immediately adjacent to the application site;
  - (b) all holders of a public land disposition on the application site; and
  - (c) any person who was offered notification through a public involvement program.
- (7)** The owner of the application site or the owner's agent must
  - (a) post signs immediately prior to a pesticide application advising that a pesticide application is in progress;
  - (b) ensure that the signs remain in place for 30 days or until evidence of a herbicide treatment is visible following the application; and
  - (c) ensure that the signs are removed after 30 days or until evidence of the herbicide treatment is visible.
- (8)** The owner of the application site must ensure that a mixing or loading site is located
  - (a) on land held by the owner of the herbicide treatment area;
  - (b) on land held by an owner other than the owner of the herbicide treatment area where the owner has given permission to conduct mixing and loading operations; or
  - (c) on land where a written authorization to conduct mixing or loading operations has been provided by a designated employee of Alberta Sustainable Resource Development.
- (9)** Pesticide mixing and loading sites must be planned and established by a certified applicator that holds a Forestry class of applicator certificate.
- (10)** Pesticide mixing and loading must be conducted or directly supervised by
  - (a) a certified applicator who holds a Forestry class of applicator certificate, or
  - (b) an authorized assistant.
- (11)** The owner of the application site or owner's agent must keep a record for a period of not less than 5 years of the:

- (a) individuals or agencies and date notified in subsection (6),
- (b) location, dates of posting and removal and a copy of the signs required in subsection (7), or
- (c) location of the mixing and loading site established in accordance with subsection (8).

**Industrial Vegetation Management (roadside, powerline, 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

- (a) notify Alberta Sustainable Resource Development's land management representative for the proposed application area at least 2 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, and
- (b) retain a copy of the written permission or waiving of requirement as part of the applicator record.

**(2)** Herbicide for woody plant control must not be applied in areas where the woody plants being controlled exceed the lesser of the height

- (a) specified on a pesticide label; or
- (b) specified as follows:
  - (i) 1.5 metres height on rights-of-way adjacent to a numbered highway;
  - (ii) 2.5 metres height on rights-of-way adjacent to a road; or
  - (iii) 4.0 metres on a cross-country right-of-way.

**(3)** Section 12(2)(b) does not apply where

- (a) less than 30 percent of the woody plants being controlled, based on distribution over a one kilometre span, exceed the heights specified in that section; and
- (b) any vegetation over 4 metres height on rights-of-way adjacent to a numbered highway or a road is removed within 1 calendar year after treatment.

**(4)** On rights-of-way where the woody plants that are being controlled cover less than 30 percent of the treatment area, the applicator must conduct herbicide applications on a selective, spot treatment basis.

(5) Prior to any pesticide application, the applicator must mark or flag all open bodies of water that will not be clearly visible during the application.

### **Structural Pest Control**

**13(1)** Prior to any structural pest control application conducted in a multiple-family dwelling, the applicator or pesticide service must notify and maintain a record of the owner of the building to be treated, or the owner's agent, of the proposed application.

(2) The building owner, or the owner's agent in section 13(1), must notify and maintain a record of all persons who could be directly affected by the pesticide application by providing each party with written information including the following:

- (a) name, address and telephone number of the pesticide service;
- (b) preparation procedures for each room in a dwelling;
- (c) date and time to vacate the premises;
- (d) name and *Pest Control Products Act* (Canada) registration number of each pesticide being used; and
- (e) re-entry periods for occupants and clean-up procedures.

(3) The written information in section 13(2) must be provided 24 hours prior to a structural pest control application unless persons who could be directly affected by the pesticide application agree to a shorter period.

### **Fumigation**

**14(1)** The applicator or pesticide service must complete a written site-specific fumigation management plan before the fumigation commences, have the plan readily available for inspection at the application site, and keep the plan as part of the application record.

(2) The applicator or pesticide service carrying out a fumigation must notify emergency responders (for emergency preparedness), the owner or owners of adjacent structures, and the occupants of any structure where the fumigation may constitute a potential adverse effect by providing written notice at least 24 hours, but not more than 7 days, prior to the fumigation. In the event that the structure contains one or more dwelling units, at least one occupant of each unit over the age of 18 years, must be notified.

(3) The written notice must include the following information:

- (a) the address where the fumigation is to be performed;
- (b) name, address and emergency contact telephone number of the applicator or pesticide service carrying out the fumigation;

- (c) the pesticide being used and the *Pest Control Products Act* (Canada) registration number;
  - (d) the date when the fumigation is proposed to be conducted; and
  - (e) the importance of remaining outside the area to be fumigated while warning signs are posted (including every building physically attached to the fumigation area) until airing out is complete.
- (4) The applicator or pesticide service, prior to each fumigation, must:
- (a) ensure no person, domestic animal or pet is inside the structure;
  - (b) seal all openings in the structure or the portion of the structure where the fumigation is to be performed, including drains, ducts, vents and cracks, in a manner that will contain the gas; and
  - (c) remove all substances from the structure that are not compatible with the pesticide being used.
- (5) The applicator or pesticide service, during the fumigation and until completion of the airing out process, must:
- (a) ensure all warning signs remain posted and that no person enters the structure;
  - (b) in the event that entry is required prior to completion, ensure that the applicator entering uses respiratory protection according to the pesticide label or Material Safety Data Sheet (MSDS) and is accompanied by one other person who is using the same protection;
  - (c) ensure that the area around the structure, except those structures not normally occupied by any person, is patrolled in a manner sufficient to prevent any unauthorized person from entering the structure being fumigated or any other attached structure; and
  - (d) ensure there are sufficient buffer zones around treated buildings during the fumigation and decontamination process to reduce the chances of immediate harmful effects to bystanders (and persons patrolling the exterior of the building being fumigated) from fumigant concentrations escaping from the building into the air.
- (6) Following completion of the prescribed fumigation time, the applicator or pesticide service must:
- (a) circulate fresh air to every air space in the building where the fumigation was performed, and to every air space in each attached structure; and
  - (b) ensure airing out is complete prior to anyone being allowed to re-enter.

(7) The applicator must keep the following information as part of the application record:

- (a) the date and a list of persons notified as required in subsection (2);
- (b) a copy of the written information provided as required in subsection (3);
- (c) the name of the person and the start and end time that this person patrolled outside the structure being fumigated;
- (d) the extent of buffer zones provided around the treated buildings during the fumigation and decontamination process; and
- (e) the start and end date and time of the prescribed fumigation time and the airing out period.

### **Mosquito Control**

**15(1)** An applicator controlling mosquito populations in an area established through landowner and local authority agreement must provide notification to residents in areas to be treated

- (a) prior to commencement of each annual mosquito larval pesticide application program,
- (b) at least 24 hours, but not more than 7 days, prior to commencement of any wide-scale mosquito adult pesticide application.

### **Pesticide Application Within 30 Horizontal Metres of an Open Body of Water**

**16(1)** In this section “deposit” means depositing an amount that results in visible effects on vegetation or an amount that is likely to cause an adverse effect.

- (2) All applications must be conducted or supervised by
  - (a) the holder of a certificate of qualification for pesticide application, or
  - (b) the holder of a certificate recognized by the Director.
- (3) Subsection (2)(b) does not apply to pesticide applications made under the provisions of subsections 16(12).
- (4) The application must not result in the deposit of pesticides into or onto any open body of water except in accordance with subsection 16(12).
- (5) Applications must not be made within 250 metres upstream of any surface water intake of a waterworks system.

- (6) Aerial applications of pesticides to land must not be conducted while flying directly over an open body of water.

**Herbicide Applications - General**

- (7) Herbicides must not be deposited within 30 horizontal metres of an open body of water unless the herbicide application is conducted by ground application equipment only.
- (8) Herbicides must not be deposited on areas that have slumped, been washed out or are subject to soil erosion into the water body.
- (9) Unless otherwise specified in the manufacturer's product label, applicators may apply the herbicides listed in Table 1 provided that
- (a) herbicides are not deposited closer than 1 horizontal metre from an open body of water;
  - (b) applications are conducted for
    - (i) the control of herbaceous plants classified as weeds named under the *Weed Control Act*; or
    - (ii) control of woody plants less than 1.5 metres in height, to areas where the woody plants interfere with forest generation or the safe operation, functioning, or maintenance of man-made structures such as dams, canals, drainage ditches, roads, industrial facilities, or utility or pipeline rights-of-way;
  - (c) applications are made selectively using
    - (i) a backpack sprayer,
    - (ii) a pump-sprayer,
    - (iii) a hand-gun sprayer, or
    - (iv) an application method that targets individual plants; and
  - (d) no more than 10 percent of any 100 square metres in the zone 1 – 5 metres from an open body of water receives treatment in any calendar year.

**Table 1**

- aminopyralid (when used up to a maximum application rate of 0.12 kg/ha)
- chlorsulfuron
- clopyralid

- glyphosate
- metsulfuron-methyl (when used up to a maximum application rate of 0.09 kg/ha)
- triclopyr (when used up to a maximum application rate of 1.92 kg ai/ha)

(10) Unless otherwise specified in the manufacturer's product label, applicators may apply the herbicides listed in Table 1 or Table 2 provided that

- (a) herbicides in Table 2 are not deposited closer than 5 horizontal metres from an open body of water;
- (b) applications are conducted for:
  - (i) the control of herbaceous plants classified as weeds named under the *Weed Control Act*; or
  - (ii) the control of woody plants to areas where the woody plants interfere with forest regeneration or the safe operation, functioning, or maintenance of man-made structures such as dams, canals, drainage ditches, roads, industrial facilities, or utility or pipeline rights-of-way; and
- (c) applications are made selectively using a backpack sprayer, a pump-sprayer, a hand-gun sprayer, a boom or boomless sprayer, or an application method that targets individual plants;
- (d) no more than 30 percent of any 100 square metres in the zone 5-30 metres from an open body of water receives treatment in any calendar year.

**Table 2**

- 2,4-D (when used up to a maximum application rate of 1.4 kg active ingredient per hectare).
- aminopyralid (when used up to a maximum application rate of 0.12 kg active ingredient per hectare)
- dicamba (when used up to a maximum application rate of 1.2 kg active ingredient per hectare)
- dichlorprop (when used up to a maximum application rate of 1.2 kg active ingredient per hectare)

- MCPA (when used up to a maximum application rate of 0.675 kg active ingredient per hectare)
- triclopyr

(11) Unless otherwise specified in the manufacturer's product label, applicators may apply herbicides for specific vegetation management situations as follows:

- (a) **Purple Loosestrife** (*Lythrum salicaria*) may be treated with glyphosate or triclopyr, applied selectively by backpack or hand-pump sprayer to purple loosestrife growing on dry land provided that:
  - (i) no herbicide is deposited closer than 1 horizontal metre from standing water; and
  - (ii) no more than 10 percent of any 100 square metres of land closer than 1 metre from an open body of water receives treatment in any calendar year.
- (b) **Forest Regeneration Sites** may be treated with glyphosate applied selectively or non-selectively by aircraft or ground equipment provided that glyphosate is not deposited within 5 horizontal metres from an open body of water.
- (c) **Non-Vegetated Developed Areas** such as maintained trails, roads, vehicle parking lots, railway ballasts, shoreline rip-rap or armour, water management structures and industrial sites such as flare stacks, pump sites, equipment yards, and electrical substations may be treated with glyphosate selectively or non-selectively by ground application equipment over the entire area that is to be maintained non-vegetated.
- (d) **Railway Ballasts** may be treated with imazapyr provided that no herbicide is deposited within 15 horizontal metres of an open body of water.

#### **Herbicide Application for Aquatic Vegetation Control**

(12) A product that contains the active ingredient diquat registered for aquatic vegetation management may be used within a private man-made recreational lake that is under the control of a homeowner's or resident's association in a residential development provided that:

- (a) there is no discharge from the lake beyond the property limits of the development;

- (b) applications must be conducted by the holder of an Aquatic class applicator certificate;
- (c) public notification of each application must be provided between 2 and 14 days prior to the commencement of the application as follows:
  - (i) a notice identifiable to the public must be posted at all public access points to the lake;
  - (ii) a written notice of each application must be provided to all residents of property adjoining the lake; and
  - (iii) following the application, signs must be posted at each application site and at all public access points to the lake indicating the application has taken place. The signs must remain in place for a minimum of 48 hours after the application; and
- (d) during any application, the lake must be closed to public use; and no swimming or wading occurs in areas treated for a period of at least 48 hours from the completion of the application.

**Insecticide Application - General**

(13) Unless otherwise specified in the manufacturer’s product label, insecticides listed in Table 3 may be deposited up to the bed and shore of an open body of water provided the insecticide does not enter into or onto an open body of water.

<p><b>Table 3</b></p> <ul style="list-style-type: none"> <li>• <i>Bacillus thuringiensis</i>,</li> <li>• insecticidal soap,</li> <li>• insecticides or insect growth regulators applied by direct injection, banding, or basal spray.</li> </ul>
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(14) Insecticides may be used for structural pest control purposes on the interior and the exterior of buildings located up to the bed and shore of an open body of water in accordance with label directions.

**Rodenticide Application - General**

(15) Unless otherwise specified in the manufacturer’s product label, rodenticides may be applied up to the bed and shore of an open body of water provided:

- (a) the rodenticide does not enter into or onto an open body of water;  
and
- (b) non-target organisms are not effected.

#### **Pesticide Vendors - Sales for Acreage and Hobby Greenhouse Use**

**17** Vendors authorized to sell pesticides at retail in Alberta may sell the following pesticides described in Schedule 2 of the *Pesticide (Ministerial) Regulation* (A.R. 43/97) for the following purposes to the owner of an acreage or an operator of a hobby greenhouse:

- (a) acetic acid (EcoClear<sup>®</sup>) for the management of vegetation in shelterbelts and non-cropland areas such as fencerows, parking areas, sidewalks, patios, and driveways;
- (b) glyphosate for the management of vegetation in shelterbelts and non-cropland areas such as fencerows, parking areas, and driveways;
- (c) 2,4-D alone or in combination with either dicamba or mecoprop, or both, for the management of broadleaf weeds in turf;
- (d) chlorophacinone for the management of ground squirrels in livestock pastures;
- (e) oxine benzoate (No-Damp) for the management of fungal diseases on plants in greenhouses;
- (f) *Bacillus thuringiensis* var. *kurstaki* (Btk) for the management of caterpillar insect pests;
- (g) products for aquatic weed or algae control in dugouts;
- (h) dichlobenil (Casoron<sup>®</sup> or Stryke<sup>®</sup>) for the management of vegetation in woody ornamentals, shelterbelts and small fruits such as saskatoons, blueberries, and raspberries;
- (i) mustard seed powder (Rocon<sup>®</sup> Concentrate Rodenticide) for the control of Richardson's Ground Squirrels, or
- (j) a pesticide for a purpose authorized in writing by the Director.

#### **Code Amendment**

**18** This Code of Practice will be reviewed as changes in technology or standards warrant.

#### **Effective Date**

**19** This Code of Practice is effective May 12, 2010.

APPENDIX "A"

TRAINING CHECKLIST  
FOR AUTHORIZED AND NON-CERTIFIED PESTICIDE  
APPLICATOR ASSISTANTS

**THE TRAINING CHECKLIST MUST BE COMPLETED YEARLY FOR ALL ASSISTANTS, KEPT BY THE PLACE OF EMPLOYMENT (WITH COPIES OF THE AUTHORIZED ASSISTANT CERTIFICATE), AND BE MADE AVAILABLE TO ALBERTA ENVIRONMENT UPON REQUEST.**

**THE TRAINING CHECKLIST IS SPECIFIC TO THE PLACE OF EMPLOYMENT SPECIFIED.**

**A NEW TRAINING CHECKLIST MUST BE COMPLETED:**

- **WHEN THE ASSISTANT CHANGES EMPLOYMENT, OR**
- **PRIOR TO USING A NEW TYPE OF TREATMENT (e.g. pesticide or equipment change).**

ASSISTANT'S NAME: \_\_\_\_\_

AUTHORIZED ASSISTANT CERTIFICATE NUMBER: \_\_\_\_\_  
(indicate not applicable if the assistant is a non-certified assistant)

CERTIFICATION CLASS (please check all that apply):

\_\_\_\_ AERIAL      \_\_\_\_ AGRICULTURE      \_\_\_\_ AQUATIC  
\_\_\_\_ FORESTRY      \_\_\_\_ STRUCTURAL      \_\_\_\_ FUMIGATION  
\_\_\_\_ GREENHOUSE      \_\_\_\_ INDUSTRIAL      \_\_\_\_ LANDSCAPE  
\_\_\_\_ BITING FLY      \_\_\_\_ OTHER (please specify) \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

NAME OF EMPLOYER: \_\_\_\_\_

ADDRESS OF EMPLOYER: \_\_\_\_\_

I, \_\_\_\_\_, Pesticide Applicator Certificate # \_\_\_\_\_,  
(name of certified applicator)

have thoroughly reviewed with the above "Assistant", the following subject areas (directly related to the certification class(es) indicated above) and find this person

competent to perform supervised pesticide applications in this (these) certification class(es):

- (a) \_\_\_\_\_ Demonstrated the proper fitting, use and maintenance of the protective equipment;
- (b) \_\_\_\_\_ Reviewed all labels and MSDS for pesticide products that will be used;
- (c) \_\_\_\_\_ Can correctly identify the pest(s) to be controlled;
- (d) Can use the application equipment specific to this operation, including:
  - (i) \_\_\_\_\_ daily calibration procedures to ensure accurate and even distribution of pesticide,
  - (ii) \_\_\_\_\_ proper mixing and loading procedures as specified by the applicator,
  - (iii) \_\_\_\_\_ familiarity with all mechanical / operating parts of the equipment,
  - (iv) \_\_\_\_\_ proper use and maintenance procedures,
  - (v) \_\_\_\_\_ drift control measures, and
  - (vi) \_\_\_\_\_ clean-up of equipment when changing pesticides or at the end of the day.
  - (vii) List the types of equipment for which the use has been reviewed:  

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- (e) Understands the employer's pesticide application policies, including:
  - (i) \_\_\_\_\_ environmental conditions (wind, temperature, probability of rain) that would stop or modify a pesticide application, and
  - (ii) \_\_\_\_\_ proximity to non-target areas that may require them to stop or modify a pesticide application.
- (f) Understands the legislative requirements (including the *Environmental Code of Practice for Pesticides* and the *Pesticide Storage Guidelines* published by Alberta Environment) and employer's procedures, including:
  - (i) \_\_\_\_\_ restrictions for pesticide applications near water,

- (ii) \_\_\_\_\_ pesticide transportation,
  - (iii) \_\_\_\_\_ temporary and permanent pesticide storage,
  - (iv) \_\_\_\_\_ pesticide container disposal, and
  - (v) \_\_\_\_\_ record-keeping related to all pesticide applications.
- (g) Understands the employer's Emergency Response Plan procedures and equipment available for:
- (i) \_\_\_\_\_ spill clean-up and reporting,
  - (ii) \_\_\_\_\_ fire and theft,
  - (iii) \_\_\_\_\_ first aid.
- (h) \_\_\_\_\_ Is able to operate the communication equipment and understands the proper communication procedures;
- (i) \_\_\_\_\_ Understands how to handle complaints.
- (j) \_\_\_\_\_ (for forestry applications only -) Understands the Risk Management Section of the *Forest Management Herbicide Reference Manual*.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of certified applicator

I have reviewed and understood the information as noted above, and believe that I am competent to perform pesticide applications in the certification classes noted above.

\_\_\_\_\_

\_\_\_\_\_  
Date                      Signature of Assistant

APPENDIX "B"

TRAINING CHECKLIST  
FOR NON-CERTIFIED PESTICIDE DISPENSER ASSISTANTS

**THE TRAINING CHECKLIST MUST BE COMPLETED YEARLY FOR ALL ASSISTANTS, KEPT BY THE PLACE OF EMPLOYMENT, AND BE MADE AVAILABLE TO ALBERTA ENVIRONMENT UPON REQUEST.**

**THE TRAINING CHECKLIST IS SPECIFIC TO THE PLACE OF EMPLOYMENT SPECIFIED.**

ASSISTANT'S NAME: \_\_\_\_\_

RETAIL OUTLET NAME: \_\_\_\_\_

RETAIL OUTLET ADDRESS: \_\_\_\_\_

\_\_\_\_\_

I, \_\_\_\_\_, with certificate \_\_\_\_\_  
(name of certified dispenser) (certificate #)

have thoroughly covered with the assistant, the subject areas listed below and believe that the assistant is competent to dispense pesticides in accordance with provincial regulatory requirements and with respect to the following health and environmental safety considerations :

- (a) personal protection, including:
  - (i) \_\_\_\_\_ potential sources of exposure,
  - (ii) \_\_\_\_\_ how pesticides enter into the body,
  - (iii) \_\_\_\_\_ pesticide poisoning symptoms, and
  - (iv) \_\_\_\_\_ protective equipment use and maintenance;
- (b) pesticide labels, including:

- (i) \_\_\_\_\_ purchaser/user certification requirements,
  - (ii) \_\_\_\_\_ toxicity of the pesticides and precautionary symbols and wording,
  - (iii) \_\_\_\_\_ precautions for safe handling and use,
  - (iv) \_\_\_\_\_ directions for use,
  - (v) \_\_\_\_\_ limitations (e.g., pests controlled, use restrictions, preharvest intervals, re-entry intervals, etc.),
  - (vi) \_\_\_\_\_ first aid instructions, and
  - (vii) \_\_\_\_\_ storage;
- (c) Material Safety Data Sheets, including:
- (i) \_\_\_\_\_ hazardous ingredients,
  - (ii) \_\_\_\_\_ transportation classifications,
  - (iii) \_\_\_\_\_ procedures/preventative measures for safe handling and storage,
  - (iv) \_\_\_\_\_ First aid and emergency procedures,
  - (v) \_\_\_\_\_ Fire and explosion hazards,
  - (vi) \_\_\_\_\_ Toxicity and health effects, and
  - (vii) \_\_\_\_\_ Reactivity data (e.g., temperature for storage);
- (d) \_\_\_\_\_ pest identification sources of information;
- (e) legislation, including:

- (i) \_\_\_\_\_ who can purchase and use the pesticides,
  - (ii) \_\_\_\_\_ certification requirement prior to purchasing,
  - (iii) \_\_\_\_\_ sales requirements,
  - (iv) \_\_\_\_\_ display restrictions,
  - (v) \_\_\_\_\_ record keeping requirements,
  - (vi) \_\_\_\_\_ transportation requirements,
  - (vii) \_\_\_\_\_ waste and container disposal, and
  - (viii) \_\_\_\_\_ storage requirements;
- (f) emergency response, including:
- (i) \_\_\_\_\_ reviewing emergency response plans,
  - (ii) \_\_\_\_\_ use and maintenance of spill cleanup and personal protective equipment,
  - (iii) \_\_\_\_\_ spill clean-up procedures and reporting,
  - (iv) \_\_\_\_\_ responding to fire and theft, and
  - (v) \_\_\_\_\_ first aid procedures; and
- (g) \_\_\_\_\_ consumer concerns and questions.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of certified dispenser

I have reviewed and understood the information as noted above, and believe that I am competent to perform pesticide dispensing at the retail pesticide outlet identified below.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of dispenser assistant

\_\_\_\_\_  
Name of Retail Outlet

NOTE: The Dispenser must complete a Training Checklist for each outlet that the dispenser assistant is performing pesticide dispensing.