



STANDARD FOR
PESTICIDE EDUCATION,
TRAINING AND
CERTIFICATION
IN CANADA

NORME POUR
L'ÉDUCATION, LA FORMATION
ET LA CERTIFICATION
EN MATIÈRE DE PESTICIDES
AU CANADA

FRAMEWORK / SCHÉMA

CAPCO



Health
Canada

Santé
Canada

1995

FRAMEWORK

**STANDARD FOR PESTICIDE EDUCATION,
TRAINING AND CERTIFICATION IN CANADA**

AUSSI DISPONIBLE EN FRANÇAIS

**Prepared by the National Task Force on Pesticide Education
Training and Certification**

**If you would like additional information
on the Standard for Pesticide Education,
Training and Certification or to be on
our mailing list, contact;**

**The pesticide regulatory authority in your
province or territory, identified in Appendix B
or
The Pest Management Information Service at
1-800-267-6315
or
Health Canada
Standard for Pesticide Education,
Training and Certification
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SUMMARY

The "Standard for Pesticide Education, Training, and Certification in Canada, Framework" is an outline of the minimum requirements for pesticide applicator and vendor/dispenser education, training and certification programs throughout Canada. The details in the standard are supported by the Canadian Association of Pesticide Control Officials (CAPCO) and were established by consensus through extensive discussions with federal, provincial and territorial representatives.

Standard for Pesticide Education, Training and Certification in Canada

Framework

INTRODUCTION

The Standard for Pesticide Education, Training and Certification in Canada consists of a series of documents which outline a structure and criteria for pesticide certification programs. These documents contain: the basic knowledge requirements for pesticide education in Canada, terminology, certification categories, certification criteria, recertification criteria and reciprocity requirements. They were developed through extensive discussions and negotiations and represent a consensus. Throughout this document, the "Standard for Pesticide Education, Training, and Certification in Canada" shall be referred to as the Standard and the terms vendor and dispenser are interchangeable.

BACKGROUND

In the early 1980's the Canadian Association of Pesticide Control Officials (CAPCO) recognized that pesticide education programs across Canada were inconsistent and extremely variable with regard to terminology, licensing, training, regulations, and resources available to conduct pesticide education programs. A paper titled "Education and Licensing procedures for Pesticide Applicators and Vendors in Canada" by Franklin & Muir (1982) substantiated this. The variability between programs restricted communication, exchange of resources, consistent label statements, and movement of applicators and vendors between provinces and territories. Therefore, the National Task Force on

Pesticide Education, Training, and Certification was formed in 1987 to develop a standard for the education, training and certification of pesticide users and handlers by:

- ! developing minimum knowledge requirements for certification of pesticide applicators and vendors**
- ! developing certification criteria for consistent pesticide education programs**
- ! developing resource manuals to assist pesticide educators and trainers**

The Task Force reports to the CAPCO Standing committee on Education and Training. CAPCO and the Standing Committee are described in Appendix A. Representation on the Task Force includes ten provinces, Northwest Territories, Yukon and the federal Departments of Health Canada, Agriculture and Agri-Food Canada, Natural Resources Canada, National Defense and the United States Cooperative Extension Service. Task Force members and their affiliations are listed in Appendix B.

PURPOSE

The purpose of the "Standard for Pesticide Education, Training, and Certification in Canada" is to provide a basis from which provinces and territories can achieve uniformity for pesticide education, training and certification programs in Canada while still maintaining provincial, territorial and regional flexibility.

A consistent approach to pesticide applicator and vendor certification and training throughout Canada provides many benefits including:

- increasing the competency of certified pesticide applicators and vendors**

- providing a means for provinces and territories to achieve reciprocity with respect to pesticide applicator and vendor certification and licensing
- enhancing cooperation between provinces and territories and facilitate the sharing of educational materials
- providing federal regulators the ability to restrict the use of certain pesticides, on a national level, to certified individuals
- strengthening public confidence that pesticide applicators and vendors are handling pesticides responsibly and safely.

These benefits should enhance environmental protection and human safety in addition to encouraging the use of integrated pest management and the judicious use of pesticides.

SCOPE

The Standard applies to pesticide applicators and vendors who are certified by provincial or territorial regulatory agencies. It is designed to be used by pesticide regulatory authorities, educational institutions, instructional designers, and trainers for the development and delivery of education programs, creation of examinations, production of training materials, and the development of regulations.

COMPONENTS OF THE STANDARD

The Standard includes:

Terminology associated with applicator and vendor certification

Pesticide certification categories

Basic knowledge requirements for pesticide applicator and vendor education

Certification criteria
Recertification criteria
Reciprocity Requirements

The following descriptions provide more details.

Terminology

Common terminology facilitates communication between government agencies and provides a basis for establishing reciprocal agreements between provinces and territories. Standardized terms and definitions for use in pesticide applicator and vendor certification are:

Approved examination: An examination, approved by a provincial or territorial regulatory agency, that verifies the applicator or vendor has met the knowledge requirements of the Standard.

Certificate: A document issued to an individual upon successful completion of an approved examination.

Certification: The recognition by a regulatory agency that an individual has met or exceeded the Standard to use or sell pesticides.

Certification Category: A specific pest management activity for which an individual can become certified.

Certified Applicator: An individual who has obtained a certificate for applying pesticides, which is recognized by a regulatory agency.

Certified Vendor or Dispenser: An individual who has obtained a certificate for selling pesticides, which is recognized by a regulatory agency.

Commercial Applicator: A certified applicator (whether or not the applicator is a private applicator with respect to some uses) who uses or supervises the use of any pesticide other than as provided by the definition of "private applicator".

License: A document issued by a regulatory agency authorizing a person to carry on the business of selling or applying pesticides.

Permit: A document issued in writing to a person or an institution authorizing the use of a specific quantity of a named pesticide at a specific location or a site for a specific purpose and time as identified on the permit.

Person: An individual, entity or institution.

Pesticide Use: Any activity involving pesticides after the manufacturer's seal is broken. This includes transporting, storage, and handling (e.g. application, mixing, loading, cleanup).

Private Applicator: An applicator who uses or supervises the use of any pesticide on property owned, leased or rented by them or their employer or on the property of another person if applied without compensation other than trading services.

Reciprocity: Acceptance by a provincial or territorial regulatory agency of a pesticide certificate approved by another provincial or territorial regulatory agency.

Vendor: A person authorized to sell pesticides under the terms and conditions stipulated by a license.

PESTICIDE APPLICATOR CERTIFICATION CATEGORIES

Using similar pesticide certification categories across Canada minimizes confusion between agencies, facilitates the development of reciprocal agreements, and allows for the establishment of common parameters (i.e. consistent knowledge requirements) for certification of applicators and vendors. Regional flexibility is accommodated by not making the applicator categories mutually exclusive; some types of pesticide application will be included in more than one category. For example pesticide use on conifer seedlings is included under agriculture and forestry.

Application Certification Categories

The pesticide applicator categories correspond closely to major pest management activities. The ten pesticide applicator categories are:

Aerial: Use of pesticides applied by aircraft. This includes forest land, non-agricultural land (i.e. industrial vegetation control), bodies of water for mosquito and biting fly control and agricultural land.

Agriculture: Use of pesticides by ground application (excluding the use of restricted fumigants which are gases at room temperature) for the production of agricultural crops and livestock, including but not limited to grains forages, pastures, rangelands, seed crops, tree fruits, berries, grapes, field vegetables, shelter belts, ornamentals and tree seedlings.

This category also includes control of noxious weeds, bird and rodent control, aquatic weed control in dugouts with no outflow, Christmas tree plantations, control of livestock and poultry pests, on-farm seed treating, soil fumigation and pest control around farm buildings associated with crop and livestock production. This category does not include the use of pesticides in greenhouses or commercial seed treating.

Aquatic Vegetation: Use of herbicides by ground application for the control of aquatic weeds in standing or running water or in areas left exposed during periods of low water. This category also includes herbicide applications in lakes, rivers, irrigation canals, ditches and dugouts.

Forestry: Use of pesticides by ground application in forest management operations including site preparation, brushing, conifer release, thinning, insect control, disease control and vertebrate control. This category also includes pesticide use in forest seed orchards, outdoor nurseries and plantations.

Fumigation: Use of fumigants for soil fumigation, within enclosed structures or under sheets. This category also includes fumigation in grain bins and elevators, building, rail cars, truck and closed vaults.

Greenhouse: Use of pesticides (excluding the use of restricted fumigants which are gasses at room temperature) during the storage display and/or production of agricultural crops including vegetables, ornamentals, mushrooms, as well as forest tree seedlings. This category also includes associated pesticide use on areas immediately surrounding the greenhouses.

Industrial Vegetation: Use of herbicides by ground application for controlling weeds on industrial areas including roadsides, power lines, pipelines, rights-of-way, railways, well sites, equipment yards, and non-crop land. This category also includes herbicide applications to parking lots, side walk cracks, and road beds during road construction.

Landscape: Use of pesticides (excluding the use of restricted fumigants which are gases at room temperature) by ground application for the maintenance of ornamental trees, shrubs, flowers and turf, on outdoor residential, commercial (e.g. golf courses and cemeteries) and public land. This category also includes pesticide use in outdoor nurseries for propagation of landscape and garden plants.

Mosquito and Biting Flies: Use of insecticides by ground application for control of mosquito or biting fly larvae or adults.

Structural: Use of pesticides other than herbicides or fumigants for the prevention or control of pests in or around structures (excluding plant pests in greenhouses).

When pesticide application activities do not fit into one of these categories, limited sub-categories or special categories can be established by provinces or territories.

Limited sub-category: A category where application of pesticides would be restricted to a limited number of activities within one of the national certification categories. Applicators would not need the broad knowledge required for certification, however, their certification would be limited to only a portion of the national certification category. Certification in a national category would permit use of pesticides in all the limited sub-categories within that category.

Special Category: A special category can be defined by individual provinces or territories for miscellaneous pesticide uses which are not covered by the national certification categories.

Basic Knowledge Requirements for Pesticide Education

Certified pesticide applicators and vendors/dispensers are responsible for knowing about the safe and proper use of pesticides. Consistent knowledge requirements between jurisdictions establishes a basic level of competence, provides a basis for establishing reciprocal agreements, facilitates the sharing of resources, enhances the competency of pesticide applicators and vendors, and provides federal pesticide regulators with the opportunity to restrict the use of pesticides to certified individuals. The minimum information individuals need to know to be certified is contained in a set of 13 documents called, "BASIC

KNOWLEDGE REQUIREMENTS FOR PESTICIDE EDUCATION IN CANADA". Titles of the individual documents are:

Applicator Core
Aerial Module
Agriculture Module
Aquatic Vegetation Module
Forestry Module
Fumigation Module
Greenhouse Module
Industrial Vegetation Module
Landscape Module
Mosquito and Biting Flies Module
Structural Module
Vendor/Dispenser Core
Vendor/Dispenser Module for Commercial & Restricted Products

Certified applicators are responsible for knowing the information in the Applicator Core plus the information in the specific applicator module associated with their certification category. These category specific modules contain additional knowledge requirements relating to the category of use. For example, an applicator certified for structural pest control must know the information in the Applicator Core and the Structural module.

The knowledge requirements for certified vendors are separated into two documents, the Vendor/Dispenser Core and the Vendor/Dispenser Module. All certified vendors selling pesticides are responsible for knowing the information in the Vendor/Dispenser Core. Certified vendors selling pesticides federally classified as Commercial or Restricted are responsible for knowing the information in the Vendor/Dispenser Core and in the Vendor/Dispenser Module.

The basic knowledge requirements in the core and category modules focuses on human and environmental protection and is organized into the following ten concepts:

1. **General information**
2. **Regulations**
3. **Labelling**
4. **Human Health**
5. **Pesticide Safety**
6. **Environment**
7. **Pest Management**
8. **Application Technology**
9. **Emergency Response**
10. **Professionalism**

Within each of these concepts the information is further divided into 3 columns: course outline, instructional objectives, and learning outcomes. Course outline contains the information an individual must know in order to obtain certification; the instructional objectives are what the instructor must ensure the certified individual learns; and learning outcomes are what the certified individual must be able to do.

The manuals are designed to be used by regulators, trainers, and people developing courses, curriculums, training materials and pesticide certification examinations. They are not designed as student manuals.

Certification Criteria

Certification criteria provide consistency between jurisdictions for pesticide certification and ensure pesticide applicators and vendors meet the basic knowledge requirements for pesticide application and sales. The criteria are:

- ! **Pesticide Applicators and vendors must pass an approved examination to become certified.**

- ! **Approved examinations must:**

- cover the **Basic Knowledge Requirements for Pesticide Education in Canada**
- test knowledge from all 10 concepts
- be proportional to the material in the **Basic Knowledge Requirements for Pesticide Education in Canada**
- have the federally registered pesticide label as a key component

Approved examinations may also:

- be open book
- be written or oral; however an oral examination should test the same concepts as a written examination
- test any topic within a concept

Approved examinations need be in English or French only.

- ! **Certificates are valid for a maximum of five (5) years.**

Recertification Criteria

Recertification ensures continued competency of applicators and vendors. Pesticide applicators and vendors must become recertified. Recertification criteria are:

- ! **Recertification must occur at least every five (5) years.**
- ! **The Recertification method is the responsibility of the regulatory agency and could consist of courses, course credits, examinations, or a combination of these.**

Reciprocity

Provinces and territories which recognize certification obtained in other provinces or territories facilitate the movement of applicators and vendors between jurisdictions. This reciprocity allows for rapid access to applicators in times of emergency pest outbreaks and reduces the duplication of certification activities.

Individuals must apply to the Provincial or Territorial Regulatory agency to obtain recognition of a pesticide certificate obtained in another province or territory. A regulatory agency which accepts certification from another jurisdiction will make available to the applicator, as a minimum, the current provincial legislation governing pesticide use.

IMPLEMENTATION

The Standard has been endorsed by CAPCO. In 1991 CAPCO unanimously adopted the first phase of The Standard, "The Basic Knowledge Requirements for Pesticide Education, Applicator CORE". During 1994 CAPCO members provided written approval for the framework for pesticide applicator education, training and certification outlined in this document. The letters of agreement along with the original Framework Document are kept by the CAPCO secretary.

The Standard is intended to be implemented in those provinces and territories which require pesticide applicator or vendor/dispenser certification. It is intended to be implemented as provinces and territories abilities and resources permit. At the time of this printing, several provinces had already incorporated the definitions and applicator categories into provincial legislation and modified educational programs and materials to include the basic knowledge requirements.

APPENDIX A

CANADIAN ASSOCIATION OF PESTICIDE CONTROL OFFICIALS (CAPCO)

The Canadian Association of Pesticide Control Officials also known as CAPCO is a national corporation which fosters federal, provincial and multistakeholder cooperative programs aimed at the regulatory control of pesticides while protecting human health and the environment.

Members are official representatives of Federal, Provincial or Territorial agencies in Canada which are responsible for the management or regulation of the manufacture, importation, sale, distribution, storage, display, use, disposal, or residues of pest control products in Canada. Membership consist of two representatives from each province, two from Agriculture and Agri-Food Canada, three from Health Canada and one from each of Fisheries and Oceans Canada, Natural Resources Canada, the Northwest Territories, and the Yukon Territory.

The objectives of CAPCO are:

- (a) To provide for the exchange of technical and regulatory information among Federal and Provincial agencies responsible for managing the manufacture, importation, sale, distribution, storage, display, use, disposal, or residues of pest control products in Canada, taking into account the various disciplinary and other regulatory interests relating to public and environments safety and the utility of pesticides.**

- (b) To provide for the cooperative study of problems in respect of pest control products, and their use in Canada, and to make recommendations for their resolution.
- (c) To identify information deficiencies which require research and investigatory programs on pest control products and their effects.
- (d) To make recommendations on standards and guidelines, including guidelines on monitoring and post-registration evaluation, to facilitate the management of pest control products and their uses in a manner that is consistent among agencies.
- (e) To make recommendations in respect of new or revised regulations, when required, in order to cope with changing conditions in the marketing and use of pest control products.
- (f) To maintain liaison with similar Associations in other countries.
- (g) To disseminate information to user groups and interest groups and to the public at large.

Standing Committees

CAPCO has the three following standing committees:

Standing Committee on Health, Occupational Safety and Environment
Standing Committee on Regulatory Affairs
Standing Committee on Education and Training

The terms of reference for the Standing committees are:

Standing committee on Health, Occupational Safety and Environment

- a) end-product decontamination and disposal;**
- b) safety equipment;**
- c) post registration environmental monitoring protocols;**
- d) coordination of environmental monitoring activities;**
- e) the check sample program;**
- f) development of information on risk-benefit management;**
- g) other related matters.**

Standing Committee on Regulatory Affairs

- a) working towards uniformity across Canada of approaches, guidelines, regulations and standards for such matters as buffer zones, permits (including research permits) and sale-use-storage activities;**
- b) developing consistency in the administration of the approaches and regulations indicated above;**
- c) identifying issues in the above-mentioned areas;**
- d) facilitating the regular exchange of technical information on regulatory affairs;**
- e) other related matters.**

Standing Committee on Education and Training

- a) developing national standards for training programs for certification and licensing, including (i) curricula, teaching materials and examinations; (ii) specifications of minimal training levels;**
- b) advising on reciprocal licensing/certification agreements among provinces;**
- c) other related matters.**

APPENDIX B

Members of the National Task Force on Pesticide Education, Training and Certification

Federal Chairpersons	Newfoundland and Labrador Environment
Health Canada	Karen Ryan
Lynn Skillings	
British Columbia, Ministry of the Environment, Lands and Parks	Provincial Chairperson
Rob Adams	Ontario Ministry of Environment and Energy
	Wanda Michalowicz
British Columbia, Ministry of Agriculture, Fisheries and Food	Ontario Ministry of Agriculture, Food and Rural Affairs
Madeline Waring	Larry Litschko
Alberta Environment	Prince Edward Island Department of Agriculture, Fisheries and Forestry
Vivianne Servant	Ken Lingley/Richard Veinot
Saskatchewan Agriculture and Food	New Brunswick Department of the Environment
Lloyd Harris	Kathy Stapleton
Saskatchewan Institute of Applied Science and Technology, Wascana Institute	Nova Scotia Environment
Sandra Shiels	Don Burns
Manitoba Environment	Department of Renewable Resources
Ken Plews	Northwest Territories
Manitoba Agriculture	Emery Paquin
Andy Kolach	Yukon Renewable Resources
Quebec Ministry of Environment and Wildlife	Bengt Pettersson
Yolande Laurin	Natural Resources Canada
	Craig Howard

**Agriculture and Agrifood Canada
Plant Industry Directorate
Terry James**

**Pennsylvania
Cooperative Extension Service
Winand Hock**

**South Carolina
Cooperative Extension Service
Paul (Mac) Horton**

**United States Department of Agriculture
Co-operative State Research, Education and
Extension Service
John Impson**