

PESTICIDE SERVICES

Spring 1998

Pesticide Certification Programs

There are a number of certificates now being offered to verify the qualifications of pesticide users or vendors across the Country.

Certified Pesticide Applicator

The certificate recognized by provincial pesticide regulatory agencies for commercial pesticide application. Also recognized in Alberta for **Pesticide Dispenser Certification**.

- 11 certification categories are available to recognize different pesticide use sectors: Aerial; Agricultural; Aquatic; Forestry; Fumigation; Greenhouse; Industrial; Landscape; Mosquito & Biting Fly Control; Structural; and Special (to address specific pesticide uses not covered by regular categories)
- Based on a national standard set by a Federal/Provincial/Territorial Government Working Group.
- Mandatory for anyone wishing to offer pesticide applications for hire or reward or on public property.
- Issued by Alberta Environmental Protection. Training and examinations offered through Lakeland College, Vermilion

Certified Pesticide Dispenser

The certificate recognized by provincial pesticide regulatory agencies for persons selling pesticides.

- A **Commercial** certificate is available for persons selling Restricted or Commercial Class pesticides and a **Domestic** certificate is available for persons selling Domestic Class pesticides. A **Commercial** certificate is recognized in Alberta for **Domestic** as well as **Commercial** Dispenser Certification.
- Based on a national standard
- Set by a Federal/Provincial/Territorial Government Working Group.
- Mandatory for anyone wishing to sell pesticides in Alberta schedules 1, 2 or 3.
- Commercial certificates are issued by Lakeland College, Vermilion.
- Domestic certificates are issued by Olds College, Olds.

Certified Crop Advisor (CCA)

A United States based certification program to recognize persons competent to provide farmers

<u>TABLE OF CONTENTS</u>	
Pesticide Certification Programs	1
Alberta Pesticide Service Registrations & Applicator Certifications	2
Pesticide Services Using Third Party Contractors	2
Pesticide Service Insurance Requirements	3
Record Keeping Reminder	3
Importance of Tank Rinsing and the Correct Disposal of Pesticide Rinsate	4
Adjuvants and Water Quality Enhancers	4
Environmental Enforcement Historical Search Service	5
Pesticide Incident Summary	5
Enforcement Action Concluded (April '97 to March '98)	6
Pesticide Containers-Take Them Back Clean	6
CAESA Monitoring	7
Smaller Budworm Spray Program In 1998	7
Suppliers of Beneficial Organisms in North America	7
Grass Carp Available	8
Pesticide Notification Survey	8
Pesticide Information Available Through the Pesticide Management Branch	9
Special Note	10
Pesticide Management Branch Offices	10

PESTICIDE SERVICES

with advice regarding all aspects of crop production. Candidates must pass an examination and meet the following criteria:

- have a Bachelor of Science Degree in Agriculture and 2 years of crop production experience, OR
- be a graduate from high school and have a minimum of 6 years post high school experience in crop production.

(In both cases documentation of experience is necessary).

The certification is not mandatory through current government regulations. It is possible that some businesses will require employees to obtain CCA status for business purposes.

Certified Crop Protection Consultant (CCPC)

A certificate recognized by the Crop Protection Institute (CPI) for pesticide manufacturer's sales representatives.

- The certification is not mandatory through current government regulations. The certification is mandatory for all sales representatives working for CPI manufacturers by January 1, 1999.
- The Federal/Provincial/Territorial Government Working Group is currently reviewing recognition of the CCPC with provincial **Commercial Pesticide Dispenser** certification.

Ground Applicator Certificate

A certificate issued by the Canadian Association of Agricultural Retailers (CAAR) in association with Olds College to recognize certified applicators who have completed four intensive classroom training sessions and a 320 hour practicum in addition to meeting provincial pesticide applicator certification requirements.

- This certification is not mandatory through current government regulations. The program is intended to enhance the agricultural industry through improved applicator training.

Farmer Certification

A certificate issued by Olds College to acknowledge the completion of a short course on pesticide safety that is available in a home study format (although some Agricultural Fieldmen may offer the course in a classroom setting).

- This certification is intended for agricultural producers applying pesticides on their own land. The certification is not mandatory through current government regulations.
-

Alberta Pesticide Service Registrations & Applicator Certifications	Sector	Registered Services		Certifications*	
	Agricultural	216	(27%)	1367	(23%)
	Aerial	51	(6%)	177	(3%)
	Landscape	202	(25%)	1615	(27%)
	Industrial	216	(27%)	1492	(25%)
	Structural	28	(4%)	111	(2%)
	Other	82	(11%)	1244	(21%)
	Total	798	(100%)	5895	(100%)

- There are 3702 certified pesticide applicators – many applicators hold more than one class of certification for multiple pesticide use sectors. There are 422 applicators that reside outside of Alberta.
-

Pesticide Services using Third Party Contractors	Any operation that is providing pesticide application services for hire or reward should ensure that they have a Pesticide Service Registration issued from Alberta Environmental Protection. One of the requirements to obtain registration is to have a certified pesticide applicator. The certified applicator may be in their employ or under contract.
---	--

Some agricultural and landscape operations have been determined to be offering pesticide services by

PESTICIDE SERVICES

subcontracting a third party who have a pesticide service registration to perform the work on their behalf. If:

- the operation is offering or advertising the service under their own name they must have their own service registration, even if the third party contract is registered.
- the operation already has a service registration, they must amend their registration by notifying the Department of each change in third party contract.
- the operation is not offering the service but recommending the pesticide applications to another registered service, a service registration is not required by the operation.

Please be advised that if there are any changes to the individuals who are certified applicators working for your service since your registration was first issued or changes in your insurance companies, you must notify the Department. Applicators who have not been verified by the Department to be providing the proper certification class for your service, or insurance policies that have not been renewed may mean that your service registration is considered suspended by the Department.

As required by regulation, certified applicators must notify the Department of any changes in their address.

Pesticide Service Insurance Requirements

All registered pesticide services are required, in accordance with Section 14 of the Pesticide, Sales, Use and Handling Regulation to carry general liability insurance in an amount not less than \$1 million for any one occurrence. This requirement is not intended to cover pesticide services purely from a pesticide point of view. It is intended to protect third parties from as much injury/damage as can be provided. Some insurance companies take a different view with respect to what is covered and the mere mention of the word "pesticide" will trigger a pollution exclusion clause. Although the coverage required for "pollution" may result in significant cost increases, this is not a regulatory requirement. However, successful bids on contracts have been based on having this coverage in place.

Please be advised that the mandatory insurance requirement for pesticide drift liability in an amount not less than \$25,000 for any one occurrence is still in place for *agricultural* and *aerial* class pesticide services. Any incidents that are investigated and determine that this insurance was not in place will result in the Pesticide Service Registration being considered cancelled and the service will be subject to enforcement action.

Record Keeping Reminder

Commercial pesticide applicators are reminded of the importance of keeping accurate, thorough records of each pesticide application conducted. Any pesticide applications conducted within 30 horizontal metres of an open body of water should be flagged. This would include pesticide applications conducted in accordance with the Environmental Code of Practice for Pesticides or in accordance with a Special Use Approval. Record keeping requirements are summarized below:

- the name and address of the person for whom the pesticide was applied;
 - the date and time at which the pesticide was applied;
 - the location where the pesticide was applied;
 - the name of the pest and purpose for which the pesticide was applied;
 - the approved common name or trade name of the pesticide and the *Pest Control Products Act* (Canada) registration number;
 - the application rate and total quantity of the pesticide applied;
 - the method of application;
 - if the pesticide was applied outside an enclosed structure, the meteorological conditions prevailing at the time of application (temperature, humidity, precipitation & approximate wind speed & direction);
-
- the location & distance of any pesticide used or applied within 30 horizontal metres of an open body of water;
 - records must be kept for a period of not less than five years from the date of application.
-

PESTICIDE SERVICES

Importance of Tank Rinsing and the Correct Disposal of Pesticide Rinsate

Any tank cleaning or rinsate disposal must follow the label directions. Proper tank cleaning (including lines and nozzles) is very important to ensure that any pesticide residues are removed that may result in damage during a subsequent application. Some products, which are active at very low rates, will cause an adverse effect on a target site (for which it wasn't intended) and the applicator or service will be responsible to compensate for any damages/losses.

The disposal of rinsate from tank cleaning must be disposed in the appropriate manner.

The methods are identified in the *Environmental Code of Practice for Pesticides*. These must also follow label directions. Pesticide rinsate from a water rinse may be used as mix water in your next application of a similar product or approved mix, it may be sprayed over the area you have just treated as long as the application rate is not exceeded, or it may also be disposed in other manners that are acceptable to the Department. For proposals directed to the Department, consideration can be given to spraying over a fallow field, if the landowner has agreed and application rates are not exceeded.

Where detergents, oxidants, or cleaning agents other than water have been required to ensure proper tank cleaning before changing herbicides, rinsate can be disposed of at field edges or beneath fencelines with the landowner's permission. Where special cleaning instructions are included on product labels, be sure to follow these instructions carefully to ensure against crop damage from tank residues.

Although not required by provincial regulations, it is advisable to record product batch numbers in the event of poor performance. Reference samples can be taken to ensure that a particular batch met or exceeded active ingredient analysis guarantees.

Adjuvants and Water Quality Enhancers

There is some confusion in the field about what products can/can not be mixed with pesticides (particularly herbicides) and whether these products require registration under the federal *Pest Control Products Act*.

The following information is summarized from the federal Pest Management Regulatory Agency's (PMRA) document Regulatory Directive 93-15 "Registration Requirements for Adjuvant Products" dated October 28, 1993. It is available for viewing and printing through the PMRA website {<http://www.hc-sc.gc.ca/pmra/>}.

The requirement for registration depends largely on the intended use or label claim.

Products that are intended to directly improve the efficacy or to enhance biological performance of the control product (pesticide) by modifying or enhancing physical or chemical characteristics are subject to registration. Examples include:

Emulsifiers	Spreader stickers	Penetrants
Wetting agents	Oil carriers	Drift control agents

Products that do not directly improve efficacy, but widen the conditions under which a control product is useful or maintain the integrity of the spray diluent are not subject to registration. Examples include:

Ammonium sulphate	pH adjusters (for water)
Defoamers	Marker dyes
Diluents	

PESTICIDE SERVICES

The above are general statements and exceptions may apply. If in doubt about a product, check with the PMRA by calling their toll free number at 1-800-267-6315. For example, some diluents may be considered an additive (ie. mineral oil).

Surplus Adjuvant

Surplus adjuvant should be returned to product dealers for pick-up by pesticide manufacturers. Please do not leave surplus adjuvant at pesticide container collection sites where it interferes with container collection operations.

Environmental Enforcement Historical Search Service

The Environmental Law Centre offers a computer search of enforcement action history of a company or individual under the *Environmental Protection & Enhancement Act* and its predecessor legislation back to 1971.

The service may be a valuable source of information for anyone involved in an environmental audit or assessment, the purchase or sale of land with environmental concerns, and a defense of an environmental prosecution.

A search can be initiated upon written request with searches usually being completed within a day of the request. Payment (cheque, VISA, MasterCard or cash) must accompany request. For more information on the Environmental Enforcement Historical Search Service contact the Environmental Law Centre (phone 403/424-5099 or fax 403/424-5133).

Pesticide Incident Summary

Reported Incidents by Different Use Sectors (1996)

Sector	Agricultural	Aerial	Landscape	Industrial
Property Damage	27 (64%)	13 (65%)	11 (26%)	10 (56%)
Regulatory*	8 (19%)	1 (5%)	17 (40%)	5 (28%)
Health	1 (2%)	1 (5%)	4 (9%)	0
Spill	1 (2%)	1 (5%)	1 (2%)	3 (17%)
Waste Management	4 (10%)	1 (5%)	0	0
Miscellaneous	1 (2%)	3 (15%)	9 (21%)	0
Total	42 (100%)	20 (100%)	42 (100%)	18 (100%)

* Regulatory includes operating without appropriate certification or registration.

Reported Incidents Involving Property Damage or Health Concerns by Product Type (1996)

Herbicide	70%	Insecticide	15%
Rodenticide	9%	Fungicide	6%

Enforcement Action Concluded (April / 97 to March / 98)

Two administrative penalties were issued for the following offences:

- Illegal disposal of pesticide rinsate (\$1,000).
- Failure to rinse a tank in accordance with label directions (\$2,000).

PESTICIDE SERVICES

One prosecution was concluded as follows:

- A Pesticide Service was fined \$2,000 for using a pesticide contrary to label directions and \$3,000 for causing an adverse effect using the pesticide; and the certified applicator for the service was fined \$2,500 for both counts and another \$2,500 for failing to keep accurate application records (a total of \$12,500).

Four warning letters were issued for various offences.

Pesticide Containers – Take Them Back Clean

“Take Them Back Clean” is the theme of the 1998 Crop Protection Institute (CPI) campaign to remind farmers and custom applicators to thoroughly rinse and safely dispose of their used pesticide containers.

The CPI’s container management program is an industry program funded by the crop protection product manufacturers. But it is the combined support of farmers, custom applicators, dealers, contractors, provincial committees, governments and manufacturers that has made it a success. The program, which operates in nine provinces, led the world in 1995 with a return rate of 64% of the pesticide containers supplied to the market place. Germany, at 41%, ranked second and the USA, at 28%, ranked third.

In Alberta, over 1,079,000 pesticide containers were collected from 93 municipally operated container sites in 1997 (an increase of 90,000 over 1996). It is the first year over a million containers were collected.

Cleanliness of containers is a key issue in recycling containers. An Alberta Environmental Protection survey at container sites in 1997 indicated only 75% of the containers were rinsed. The Alberta Container Management Committee is asking pesticide dealers to “**take the time to do the right thing**” by encouraging customers to rinse empty containers before depositing at a container site, by posting the location and operating hours of the local container site, and by informing customers of any return policy for excess adjuvant.

Container collection sites are not designed to safely handle waste pesticide. Waste pesticide (concentrate or solution) or other refuse should not be disposed of at container collection sites. This includes containers of spray adjuvant which, if released, could compromise the integrity of the container site. Over 3,400 litres of adjuvant were reported at five container sites in 1997 (Wainwright, Vimy, Claresholm, Flagstaff and Clairmont) during the container rinsing survey. This adjuvant was either returned to the manufacturer or sent to Swan Hills for disposal. Please advise customers of the return policy for adjuvant at the time of sale. Empty granular bags, cardboard containers, or plastic liners should be disposed of at a Class II landfill.

We all have a role in protecting our environment, please promote triple/pressure rinsing of pesticide containers and depositing clean, drained containers at one of the municipally operated container sites around the province.

CAESA Monitoring

The Canada-Alberta Environmentally Sustainable Agriculture (CAESA) initiative report **Agricultural Impacts on Water Quality in Alberta: An Initial Assessment** released in January, 1998 concluded that pesticides from agricultural sources were not found to be a significant contaminant for human and livestock drinking water, or for the protection of aquatic life. Very low level herbicide detections were frequently found in many surface

PESTICIDE SERVICES

waters and some groundwater. Herbicide concentrations were generally higher in irrigation canals than for other water sources in the province. Herbicide levels in canals generally increased from upstream to downstream, with maximum levels found at return flow locations.

The Pesticide Management Branch collected provincial pesticide sales information and conducted a risk assessment in 1993 to determine which pesticides should be included in provincial pesticide monitoring

programs. Sales data is being collected again in 1998 to ensure that the provincial monitoring list is kept up to date. 39 pesticide active ingredients are currently monitored. The PMB will also be working with water quality experts to ensure that appropriate threshold limits are available for each of the pesticides included on provincial monitoring lists. The PMB will also be working with cooperating laboratories to ensure that detection limits for pesticides are below critical threshold limit values.

The 1998 CAESA report will serve as baseline data for evaluating changes in water quality based on changes in pesticide use patterns. Cooperation among several agencies and the agricultural sector is intended to ensure that management practices are adjusted as required to maintain or improve provincial water quality. Copies of the CAESA report are available from:

Information Centre

Alberta Environmental Protection
Main Floor, 9920 - 108 Street
Edmonton, AB T5K 2M4

Phone: (780) 427-2700 Fax: (780) 427-4407

Publications Office

Alberta Agriculture, Food & Rural Development
7000 - 113 Street
Edmonton, AB T6H 5T6

Phone: (780) 427-0391 Fax: (780) 422-8835

Smaller Budworm Spray Program In 1998

In the Northwest Boreal Region approximately 6800 hectares of spruce budworm infested white spruce stands have been targeted for spraying in 1998. These stands, located in the Cameron Hills west of Steen River, will be sprayed with two applications of *B.t.* in early June. Results of the second instar surveys indicate moderate to severe budworm defoliation within this area for 1998.

This year's spray program will be the smallest program since 1993 due to the significant decrease in budworm populations over the last three years. This decrease is directly attributed to the success of large scale spray programs in the last three years.

(Reprinted from Bugs & Diseases April, 1998)

Suppliers of Beneficial Organisms in North America

The California Environmental Protection Agency (Department of Pesticide Regulation) has on their website a 1997 edition of "Suppliers of Beneficial Organisms in North America". The 35 page document lists 143 suppliers of 130 beneficial organisms throughout North America. The document can be viewed or downloaded from the following site:

<http://www.cdpr.ca.gov/docs/ipminov/bensuppl.htm>

Grass Carp Available

FYI, beginning in the spring of 1998, triploid grass carp will be available for sale to the public for use in water bodies to control aquatic weeds. The Eastern Irrigation District (EID) and Lethbridge Community College have signed a 5-year joint venture agreement to raise and market the fish. Types of water bodies which can utilize grass carp include: farm dugouts supplying; domestic water, dairy operations, greenhouses, etc., as well as municipal water reservoirs, golf course water hazards, acreage ponds and small recreational lakes (parks). To purchase the fish, the water

PESTICIDE SERVICES

body must be ready to receive them and be certified by Alberta Agriculture, Food & Rural Development (AAFRD). Certification involves an inspection by a qualified biologist or engineer. AAFRD must be assured that fish escape is not possible. The water body can not be located in a 1/100 year flood zone and all water inlets and outlets must be screened. Once certified, EID can be contacted to arrange for a delivery date. For more information on pond licencing, pond management and triploid grass carp, contact Jack Stewart, head of licencing and inspection, Aquaculture Section, Animal Industry Division, AAFRD, Lethbridge, Alberta; phone 403-381-5164. Orders for triploid grass carp can be made by contacting Terry Schroeder, grass carp business manager, EID, Brooks, Alberta; phone 403-362-1453.

Excerpted from "The Water Haulers Bulletin".

Pesticide Notification Survey

A survey was sent to a number of rural and urban municipalities last spring to determine the current pesticide notification practices in urban and rural municipalities. A total of 63 municipalities completed the survey out of 85 municipalities contacted (74% return rate). A summary of the survey findings follows.

General

76% of the responding municipalities perform their own pest control work. 24% use their own staff in combination with private services. Only 38% of respondents have any written policy or bylaw regarding notification.

Pest Management Activities

95% of municipalities perform weed and/or brush control on roadsides.

49% perform weed control in parks, vacant lots, etc.

22% perform outdoor rodent control

21% perform insect control in public parks

16% perform insect control on boulevard trees

40% perform other types including weed control on private land, aquatic weed control, vertebrate pest control, insect control on shelterbelts and some custom application.

Notification Practices

Weed control in parks:

- 49% posting
- 25% newspaper advertisement
- 26% other (including radio, handbills, telephone hot line, municipal newsletters, talking to park users)
- 6% do not undertake any type of notification program

Roadside vegetation management:

- 75% newspaper advertisement
- 19% posting
- 17% other (including radio, handbills, hotline, municipal newsletters, and open houses)
- 5% do not undertake any type of notification program.

Designation of "no spray" zones

- 83% of respondents have mechanisms for citizens to designate "no application zones"
- 60% of respondents commented that landowners can enter into agreements annually. The landowner assumes all responsibility for vegetation management. 15% of respondents commented that landowners can obtain no spray signs without having to enter into an agreement.
- 76% of respondents indicated that they have a registry system where residents concerned about pesticide

PESTICIDE SERVICES

application can register names and locations. 59% allow access to this information by pesticide applicators who may be working in municipality. 25% of respondents do not provide access.

Public concerns:

- 30% Pesticide drift
- 6% Removal of desirable vegetation (habitat, berry patches)
- 6% Philosophical opposition to pesticides
- 5% Unsightliness of dead brush
- 5% Residues in hay from ditches and monoculture in ditches
- 5% Lack of adequate weed control

Evaluation of public concern level over the past 5 years:

- Same 52%
 - Greater 21%
 - Less 22%
-

**Pesticide
Information
Available
Through the
Pesticide
Management
Branch**

The following pesticide information Fact Sheets will be available through the Pesticide Management Branch's Internet Home Page after July 1, 1998. Persons without internet connections can request the Fact Sheets through any of the Regional offices listed at the end of this newsletter.

- Pesticide Poisoning Calls Logged by the Poison Information Line
- Pesticide Use in Alberta
- Pesticide Incident Summary (1994-1996)
- Golf Course Pesticide Use and Monitoring
- Pesticide Container Collection Program
- Pesticide Waste Disposal for: Commercial Pesticide Applicators, Services and Vendors
- Disposal of Treated Seed
- Waste Management Guidelines for Commercial Seed Protectant Services

The following pesticide program and information Fact Sheets will also be available through the Pesticide Management Branch's Internet Home Page after July 1, 1998. Persons without internet connections can request the Fact Sheets through any of the Regional offices listed at the end of this newsletter.

- Pesticide Services
 - Special Use Approval
 - Commercial Wholesale Vendor Requirements
 - Commercial Retail Vendor Requirements
 - Domestic Pesticides: Wholesale/Retail Vendor Requirements
 - Retail Vendor Requirements: Acreage Owners and Hobby Greenhouse Operators
 - Schedule 1 Pesticide: Notice to Purchasers

 - Procedures for Greenhouse Fumigation
 - Procedures for Grain Bin Fumigation
 - Killing Honey Bees with Calcium Cyanide
 - Toxic Baits for Richardson's Ground Squirrel and Northern Pocket Gopher
-

SPECIAL NOTE

It is with sadness that the Pesticide Management Branch announces the sudden passing of our friend and colleague Dave Pledger on March 22, 1998. Dave served with the provincial government for the past 25

PESTICIDE SERVICES

If you require further information on any of the topics in this newsletter, please contact Alberta Environment:

Grande Prairie (780) 538-5460 / Fax: (780)538-5336
Room 1701, Provincial Building
10320 - 99 Street
Grande Prairie, Alberta T8V 6J4

Edmonton (780) 427-7617 / Fax: (780) 427-3178
5th Floor, Oxbridge Place
9820 - 106 Street
Edmonton, Alberta T5K 2J6

Red Deer (403) 340-5310 / Fax: (403)340-5022
3rd Floor, Provincial Building
4920 - 51 Street
Red Deer, Alberta T4N 6K8

Calgary (403) 297-7602 / Fax: (403) 297-8232
2nd Floor, Deerfoot Square
2938 - 11 Street NE
Calgary, Alberta T2E 7L7

Lethbridge (403) 381-5511 / Fax: (403) 382-4428
2nd Floor, Provincial Building
200 - 5th Avenue South
Lethbridge, Alberta T1J 4C7

To be connected toll free, first dial 310-0000 from anywhere in Alberta.