



PROJECT COMPLETION SHEET

SUBCOMMITTEE: Risk Reduction

PROJECT TITLE: Pesticide Applicator Examination Development

PROJECT ID: RR05-99-1105

PROJECT TEAM: Canada: Lynn Skillings / Vivianne Servant
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INITIATION: October 1999

UPDATE: November 12, 2004

GOAL: To use a standard, officially recognized process in the development of a core exam that is statistically reliable and valid in measuring the competency of a pesticide applicator. A uniform approach will provide consistency, increase program credibility and make effective use of resources.

PROJECT DESCRIPTION:

To develop a core exam that will be used by both pesticide regulatory agencies, Health Canada's Pest Management Regulatory Agency (PMRA) and the United States Environmental Protection Agency (EPA), in measuring the competency of pesticide applicators.

In the United States, core exam principles are outlined in the EPA's Code of Federal Regulations, 40 Part 71.4 as the General standards for all categories of certified commercial applicators. They include: label and labelling comprehension, safety, environment, pests, pesticides, equipment, application techniques as well as laws and regulations.

In Canada, within the Framework document of the National Standard for Pesticide Education, Training and Certification, the Certification Criteria state that an approved examination must:

- have the label as a key component,
- cover the information contained in the Applicator Core; and
- cover the following ten concepts-general information, regulations, labelling, human health, pesticide safety, environment, pest management, application technology, emergency response and professionalism.

Using an exam development process that is standard and officially recognized by national licensing organizations in the United States will increase the credibility of the pesticide applicator certification and training programs by ensuring that all core exams are statistically reliable and valid. The process to be used assesses job tasks of a pesticide applicator to determine the knowledge needed to perform the job.

From this knowledge base, examination questions are developed, field tested and rated according to difficulty of question and appropriate weighting of concepts.

BACKGROUND/RATIONALE:

The pesticide applicator certification and training (C&T) program is the first line of risk mitigation in a program whose goal is to protect human health and the environment. To that end, the program aims to provide pesticide users with the knowledge needed to use products safely and effectively. The examination process verifies that the applicator has achieved competency so that products can be used in a safe and effective manner. The EPA has delegated the responsibilities of determining user competency to the pesticide program with the lead in each state or territory. In Canada, the PMRA relies heavily on the certification and training programs that are within the mandate of the provincial regulatory agencies. To sustain the credibility of the program, to make effective use of resources and to provide consistency in examinations used across the United States and Canada, the EPA and the PMRA are embarking on an effort to develop a core examination using a reliable and valid method for examination development.

WORK PLAN

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GOAL	ACTIVITIES	TIME FRAME
To participate in the development of a core exam utilizing a standard, officially recognized process that is statistically reliable and valid in measuring the competency of a pesticide applicator	Meeting to review draft task list and develop survey	Completed May 2000
	Send survey to pesticide applicators in Canada and the United States	Completed Summer 2000
	Participate in review of results of survey, and development of final task list and test content outline (blueprint)	Completed November 2000
	Participate in the development of exam questions	Completed February 2001
	Participate in review and edit of exam questions	Completed April 2001
	Complete the database of questions	Completed June 2001
	Field test the two versions of the exam	Completed February 2002
	Participate in review field testing results and finalize exam questions	Completed April 2002
	Develop cutscores for each version	Completed September 2002
	Develop criteria for use of the exams to support implementation	Completed June 2003
	Meet with participating provinces/states to discuss implementation (pilot project) and provide final exams	Completed June 2003 (Alberta only participant in pilot)

GOAL	ACTIVITIES	TIME FRAME
	Pilot the exam	Started July 2003 in Alberta Expected to begin in January 2004 in several locations in the United States
	Review pilot project results and make necessary adjustments	December 2003—Alberta July 2004—United States
	Full implementation: a) Canada—provinces will participate on a voluntary basis b) United States—states also will participate on a voluntary basis	a) Ongoing—Alberta and Manitoba are currently using the exam. b) Ongoing—Ohio and the District of Columbia are currently using the exam. The U.S. Army and Navy will begin to use the exam soon
Maintain the exam	Co-ordinate on steps to refresh the exam	Initial contact with subcommittee has been made
Ongoing use and maintenance of the exam	Continue to promote the use of the exam, and co-operate in exam refreshment activities	Ongoing