

# NATIONAL OCCUPATIONAL ANALYSIS

## Agricultural Occupational Health and Safety Specialist

February 2012

This occupational analysis (also referred to as a national occupational standard) has been developed by the Canadian Agricultural Human Resources Council (CAHRC) and Canadian Agricultural Safety Association (CASA) in consultation with industry practitioners from across Canada. It describes the skills, knowledge and abilities required to perform the duties of an Agricultural Occupational Health and Safety Specialist. Occupational standards can be used for a variety of purposes, including: acting as the basis for training; curriculum development; accreditation of training programs; recruitment; performance improvement; career development and the certification of practitioners.

*The process of developing national occupational standards (NOS) is in fact a national occupational analysis (NOA). In Canada, the Red Seal program uses the term NOA (see link below for an example) on the other hand, the outcomes of the analysis when working with national or professional associations or sector council - is titled national occupational standards to demonstrate that they set the benchmark for the occupation / profession. There is a variation as to the various components – could include working environment, context etc. The common link is the identification of tasks, sub tasks. Using the term 'standards' is often understood as mandatory – so it is important to inform the reader of the intent... it might be the case if the driver is for the development of a licensure program or voluntary when to be adapted by a wide range of stakeholders such as an industry wide standard. ([http://publications.gc.ca/collections/collection\\_2013/rhdcc-hrsdc/HS42-1-24-2012-eng.pdf](http://publications.gc.ca/collections/collection_2013/rhdcc-hrsdc/HS42-1-24-2012-eng.pdf)) Suzanne Massie, Senior Consultant, Human Resource Systems Group*

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CASA also wishes to express sincere appreciation for the contribution of the government regulators, companies, associations, individual practitioners, and others who contributed, directly or indirectly, to this publication.

## **OBJECTIVES**

The primary objectives of this National Occupational Analysis project are:

- To develop a National Occupational Analysis for Agricultural Occupational Health and Safety (OH&S) Specialists that recognizes the needs of the industry;
- To integrate Essential Skills into the National Occupational Analysis;
- To communicate and market the National Occupational Analysis to the industry and other key stakeholders; and
- To gain industry buy-in and use of the National Occupational Analysis.

## **USE OF THE STANDARDS**

The National Occupational Analysis for Agricultural OH&S Specialists may be used to support the following activities:

- Developing or revising basic and advanced training programs;
- Developing transition training programs to assist existing practitioners in upgrading their skills;
- Establishing or improving certification or credentialing programs;
- Establishing or improving accreditation programs for institutions delivering training programs;
- Developing criteria for prior learning assessment and recognition (PLAR); and
- Providing guidance to employers for recruiting, selecting, training and retaining Agricultural OH&S Specialists.

# GUIDE TO THE NATIONAL OCCUPATIONAL ANALYSIS

## DEVELOPMENT OF THE NATIONAL OCCUPATIONAL ANALYSIS

This National Occupational Analysis was developed and validated by industry professionals with extensive knowledge and experience in all aspects of the occupation, including developing and managing Agricultural OH&S programs, enforcement of Agricultural OH&S regulations and policies, and training on Agricultural OH&S practices.

In December 2011 an Occupational Analysis development workshop was conducted in Toronto. A total of 8 industry stakeholders participated in these sessions.

Funds for this project were provided by the Government of Canada.

## METHODOLOGY

The method chosen for developing the NOA was the Canadian Vocational Association (CVA) DACUM methodology, where highly skilled and experienced job incumbents attend a facilitated DACUM session. The key components of this methodology are:

- the occupational and task analysis results from a structured consultation with seasoned practitioners designated by industry
- each competency statement reflects a consensus achieved by the committee of expert practitioners created to perform these analysis
- the occupational analysis contains 5 levels of analysis :
  - (1) the occupation's definition and the scope
  - (2) General Areas of Competencies, or GAC (Blocks)
  - (3) a series of tasks within each Block
  - (4) a series of subtasks or steps within each task
  - (5) technical knowledge and abilities needed to perform the subtasks
- at least one Block is dedicated to Personal Competencies (Block G)
- all Blocks and Task statements start with an action verb

In addition, opinions on performance and occupational contexts for each task were collected and Essential Skills information were developed based on the responses of workshop participants.

## VALIDATION PARTICIPANTS

The draft National Occupational Analysis (NOA) was validated by 21 agricultural health and safety specialists from across Canada, and one from the United States:

Last Name	First Name	Province Worked In
Bonneau	Andre	Saskatchewan
Briese	Amanda	Manitoba
Crooks	Charlotte	Prince Edward Island
Down	Rob	Manitoba
Erisman	Gary	USA
Granger	Francoise	Quebec
Huestis	Tara	Prince Edward Island
Hurst	Russel	National
Johnson	Bruce	British Columbia
Johnston	Dale	Alberta
Lindquist	Larry	Alberta
McLaughlin	Nicole	New Brunswick
Malenfant	Lise	New Brunswick
Marjerison	Morag	Manitoba
Mechor	Bonita	Saskatchewan
Powers	David	Nova Scotia
Sanderson	Lauranne	Nova Scotia
Stafford	Jilleen	Manitoba
Steward	Reg	National
Stewart	Larry	Nova Scotia
Waugh	Lisa	New Brunswick
Zronik	Steven	Ontario

All of the people in the validation group are currently working in agricultural occupational health and safety, or have recently worked in agricultural OH&S. The average time worked in agricultural OH&S is ten years.

The people in the validation group were identified and recruited by the Canadian Agricultural Safety Association or CAHRC. Twenty two completed surveys were returned before the deadline.

## VALIDATION METHODOLOGY

The people in the validation group were given a survey to complete. The survey consisted of four parts:

1. Background Information - survey participants were asked to provide their name, province worked in, years worked in Agricultural OH&S, and contact information (in case more questions arose).
2. The five MOST important Tasks. Of the tasks identified in this NOA, survey participants were asked to determine the 5 most important tasks.
3. The five LEAST important Tasks. Of the tasks identified in this NOA, survey participants were asked to determine the 5 least important tasks.

Where five or more Survey participants rated a task MOST important, the Task is considered 'MORE Important'.
--

Where five or more Survey participants rated a task LEAST important, the Task is considered 'LESS Important'.
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Remaining Tasks are considered 'Important'
--

4. The BEST place to learn how to perform each task. Participants were asked to identify the best place from the following four choices:
  - On the Job - from experienced Mentors
  - On the Job - self taught
  - Informal Training - Short courses and/or workshops
  - Formal Training - College or University

## SCOPE OF THE OCCUPATION

Agricultural Occupational Health and Safety (OH&S) Specialists may be involved in all aspects of workplace and worker OH&S programs for the Canadian agricultural industry. While responsibility for Agricultural OH&S activities often goes to Human Resources, for the purposes of this National Occupational Analysis the title refers to individuals with specialized education, training and experience in the development, management and/or enforcement of workplace OH&S activities in an agricultural environment. Numerous job titles may be used to describe individuals who hold these positions, but the general title '**Agricultural OH&S Specialist**' was deemed most suitable.

Agricultural OH&S Specialists apply experience in agricultural practices with detailed understanding of Agricultural OH&S regulations, policies and best practices to ensure that the agricultural workplace is safe for workers and the general public.

In addition to agricultural and OH&S skills and knowledge, Agricultural OH&S Specialists may use investigative and enforcement skills common to security and law enforcement occupations, laboratory and general science skills from the medical or scientific occupations, and teaching, coaching, instructional design and delivery skills common to the education/training occupations in the course of their work.

Agricultural OH&S Specialists may work as individuals, as part of a team, or they may supervise a team. Their ability to communicate and work with others is critical to their jobs.

The work of the Agricultural OH&S Specialist covers all four seasons, although certain activities may be concentrated at certain times of the year. Their work may vary from offices and indoor environments to extreme weather on farms and in the field.

Emerging trends in the industry include an ever increasing emphasis on farm safety, coupled with the increased complexity of Agricultural OH&S regulations and practices. In addition, the variety of different languages and cultures of people working in the Canadian agricultural industry, including large (and increasing) numbers of immigrant workers and temporary foreign workers, makes cultural awareness and keen verbal, non-verbal and written communication skills extremely important.

## SAFETY

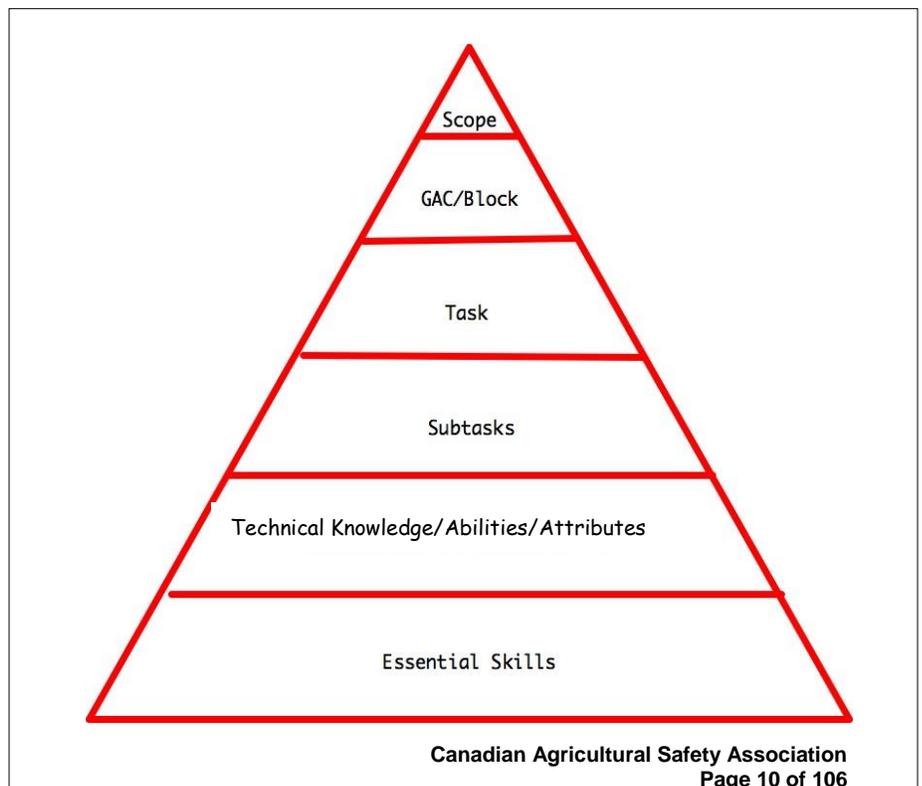
It is important that Agricultural OH&S Specialists be very familiar with and apply Agricultural OH&S rules and best practices as an integrated part of their job functions. As well, it is essential to that Agricultural OH&S Specialists identify hazards and take necessary measures to protect themselves, their coworkers, the public and the environment. This helps to promote a safety culture.

## STRUCTURE OF THE NOA

To help with the understanding of the nature of the occupation, the National Occupational Analysis is divided into the following elements:	
<b>BLOCK</b>	The largest element within the analysis, it defines a major function or responsibility of a particular occupation
<b>TASK</b>	A specific, observable unit of work complete in itself (having a definite start and end point), which can be broken down into two or more steps (sub-tasks); can be performed in a limited period of time; when completed, results in a product, service or decision; and is something a worker is normally paid to do
<b>Occupational Context</b>	Defines the parameters of the task, and provides additional information to amplify the nature of the task
<b>SUBTASK</b>	The smallest element into which it is practical to subdivide any work activity, and, combined with others, fully describes all duties constituting a task.
<b>Supporting Technical Knowledge and Abilities</b>	The elements of skill and knowledge an individual must acquire to adequately perform the subtask.

<p><b>Essential Skills</b></p>	<p>Essential Skills are foundation skills required for all types of work. They are not technical skills but the core skills people need to acquire knowledge and complete workplace tasks and daily activities. They are included in the NOA as guidance for training providers and instructional designers to identify potential academic upgrading needs and related training.</p> <p>Essential Skills are defined as Reading Text, Document Use, Writing, Numeracy, Oral Communication, Thinking Skills (includes Problem Solving, Decision Making, Critical Thinking, Job Task Planning and Organizing, Finding Information, Significant Use of Memory), Computer Use, Working With Others, and Continuous Learning</p> <p>Tasks within the NOA include a list of the key essential skills. Only the highest complexity level of use required to complete the particular task is shown</p> <p>See Appendix C for a detailed Essential Skills profile. See Appendix D for detailed descriptions of the nine Essential Skills.</p>
<p><b>Personal and Professional Attributes</b></p>	<p>Describes the generic personality attributes desirable for individuals in an occupation. They are useful for describing characteristics of the type of individual required for recruiting, retention and advancement in an occupation.</p>

All these elements combine to form a 'Pyramid of Competency'. Note that in this model, Essential Skills are not subordinate to the supporting technical skills and knowledge. Instead the two elements support each other and underpin an individual's ability to perform the subtasks that make up a task. Note also that the performance requirements of the task are derived from the abilities at the subtask level, when performed in the context of the overall task.



# OCCUPATIONAL ANALYSIS

*NOTE: The occupational analysis encompasses the entire scope of the Agricultural OH&S Specialist occupation. Not every task or subtask will be performed by every Agricultural OH&S Specialist, and some variation may exist across sectors of the industry or in particular regions.*

## Block A: Develop Agricultural OH&S Programs

### Task A1: Write OH&S Policies and Procedures

*Occupational Context: Agricultural OH&S Specialists are responsible for creating policies that govern the OH&S practices in agricultural operations. They must have a sound working knowledge of relevant legislation and accepted practices.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, policies and procedures will be created, disseminated, monitored and revised as required to ensure that local practice addresses legislated requirements and standards.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>1 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
A1.01	Review Agricultural OH&S regulations	A1.05	Brief crew/subcontractors on Agricultural OH&S regulations & workplace hazards
A1.02	Review industry code of practice	A1.06	Ensure crew compliance with Agricultural OH&S regulations, employer policies, and site specific procedures and rules
A1.03	Review common incidents/accidents	A1.07	Document safety infractions and incidents
A1.04	Identify common workplace hazards	A1.08	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>• Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>• Techniques for developing and delivering briefings to a mixed audience.</li> </ul>
Accident/incident trends	<ul style="list-style-type: none"> <li>• Ability to access and interpret accident or incident data, extract relevant information, and use it to craft specific Agricultural OH&amp;S policies and procedures.</li> </ul>
Hazard assessment	<ul style="list-style-type: none"> <li>• Knowledge of workplace hazards.</li> <li>• Ability to identify hazards and determine associated risk.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret accident and incident reporting forms to learn details about events and monitor for trends.</li> <li>• Agricultural OH&amp;S Specialists read agricultural and OH&amp;S magazines, articles and professional associations' newsletters to stay abreast of best practices, legislative changes and other matters affecting their work.</li> <li>• Agricultural OH&amp;S Specialists read and interpret manuals, standard operating procedures. During reviews and implementation of new practices and processes they assess policy and procedures for omissions and errors.</li> <li>• Agricultural OH&amp;S Specialists read and interpret legislation, regulations and subsequent bulletins and addenda to maintain current knowledge of regulations and to ensure that current policies and procedures meet regulatory requirements.</li> </ul>
Oral Communication 4 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists lead Agricultural OH&amp;S committees and safety groups and conduct OH&amp;S meetings with crews and contractors.</li> <li>• Agricultural OH&amp;S Specialists exchange information about regulations and workplace practices with co-workers, colleagues, suppliers and agriculture producers</li> <li>• Agricultural OH&amp;S Specialists discuss the technical aspects of their work with colleagues. For example, they ask colleagues for their observations on trends and prevention strategies for a range of Agricultural OH&amp;S topics and often seek their perspectives and opinions before writing policy directives, updating procedure manuals and implementing training activities.</li> </ul>
Writing	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare weekly and monthly Agricultural OH&amp;S reports</li> </ul>

5 point complexity scale		• Agricultural OH&S Specialists write Agricultural OH&S policies and procedures in which they describe the safety element and how to perform the activity.
Document Use 5 point complexity scale	3	• Agricultural OH&S Specialists complete Agricultural OH&S inspection, incidence and infraction forms.
Problem Solving 4 point complexity scale	3	• Agricultural OH&S Specialists find that workers are not following safety procedures. They meet with workers to discuss the safety infractions, review the standard work procedures and protocols and inform workers of next steps in the discipline process should further infractions occur.

### BEST Place to Learn How to Perform this Task

Of 22 validation participants:

- 4 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 12 said ' Informal Training - Short courses and/or workshops'
- 6 said ' Formal Training - College or University'

## Task A2: Identify Agricultural OH&S Hazards

*Occupational Context: Agricultural OH&S Specialists must be able to detect situations and practices that could impact worker health and safety. They need to have an adequate knowledge of agricultural hazards for various farming activities and occupations.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly he/she will produce proper documentation of hazards, and ensure that inspection recommendations are properly implemented.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 15 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

### Subtasks

A2.01	Analyze relevant data	A2.06	Conduct an on-site JSA (JHA)
A2.02	Determine applicable legislation	A2.07	develop recommendations
A2.03	Review industry standards	A2.08	communicate recommendations

A2.04	Prioritize hazards – considering severity, to determine the types of Agricultural OH&S procedures and policies and identify tasks	A2.09	ensure implementation
A2.05	Consult with stakeholders about what they identify as hazards	A2.10	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>• Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Accident/incident trends	<ul style="list-style-type: none"> <li>• Ability to access and interpret accident data, extract relevant information, and use it to craft specific Agricultural OH&amp;S policies and procedures.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Root cause analysis	<ul style="list-style-type: none"> <li>• Ability to apply root cause analysis techniques to determine causality of incidents/accidents.</li> </ul>
Hazard recognition	<ul style="list-style-type: none"> <li>• Knowledge of workplace hazards.</li> <li>• Ability to identify hazards and determine associated risk.</li> </ul>
Job Safety Analysis (JSA) processes & procedures	<ul style="list-style-type: none"> <li>• Knowledge of process.</li> <li>• Ability to apply the process in the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists collect and analyze data for Agricultural OH&amp;S. They use their analysis to identify inconsistencies, trends and problem areas which deserve further investigation</li> </ul>
Reading 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret standard operating procedures.</li> <li>• Agricultural OH&amp;S Specialists read and interpret equipment and operating manuals. They scan operating manuals and vendor safety policies to identify operating procedures and potential hazard points to determine operating procedures and practices.</li> <li>• Agricultural OH&amp;S Specialists read articles from Agricultural OH&amp;S associations to learn about industries standards and best practices.</li> <li>• Agricultural OH&amp;S Specialists read and interpret Agricultural OH&amp;S regulations as they apply to safe work practices. For example, they review occupational hygienist regulations to learn about threshold limits.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Decision making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists select policies, procedures and programs and monitoring systems for Agricultural OH&amp;S considering regulations and standards of good practice.</li> </ul>
Critical thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists assess the effectiveness of policies and procedures in meeting Agricultural OH&amp;S standards.</li> <li>• Agricultural OH&amp;S Specialists assess the criticality of risks.</li> <li>• Agricultural OH&amp;S Specialists judge the conformity of work activities, practices and workstations to Occupational health and safety standards and specifications.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare job safety analysis, risk assessments and other related reports.</li> <li>• Agricultural OH&amp;S Specialists prepare Agricultural OH&amp;S recommendation reports.</li> <li>• Agricultural OH&amp;S Specialists prepare OH&amp;S policies and procedures in a clear and concise manner to minimize misinterpretation</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists give presentation to producers and their employees on a wide range of Agricultural OH&amp;S topics. For example, they present findings from safety inspection and audits at managers meetings and give presentations to launch safety programs and activities.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists locate data and description of events in forms such as accident reports, near misses and inspection forms.</li> <li>• Agricultural OH&amp;S Specialists complete job safety and hazard analysis forms and investigation checklists.</li> <li>• Agricultural OH&amp;S Specialists locate dimensions and other features on farm and work station layout drawings. They locate dimensions, angles and other features marked on floor plans to determine how to modify workstations to improve safety and workflow. They may use maps of farms and floor plans of processing facilities to determine dimensions and placement locations of machinery, equipment, crops, animal pens, food storage areas and buffer zones for chemical and hazardous products.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 8 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'
- 8 said ' Informal Training - Short courses and/or workshops'

- 4 said ' Formal Training - College or University'

### Task A3: Determine Program Resource Requirements

*Occupational Context: Agricultural OH&S Specialists control financial and other resources related to OH&S activities. They require working knowledge and experience in financial and resource management practices.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly programs stay within budgets, and resources are allocated properly to achieve program goals.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 3 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 5 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
A3.01	Estimate financial requirements	A3.05	Estimate other resource requirements
A3.02	Estimate personnel/labour requirements	A3.06	Document estimates
A3.03	Estimate equipment requirements	A3.07	Develop cost/benefit rationale
A3.04	Estimate material requirements		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies & procedures	<ul style="list-style-type: none"> <li>• Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, resource allocation, financial control for the organization.</li> </ul>
Accounting/budgeting	<ul style="list-style-type: none"> <li>• Knowledge of standard financial and accounting practices.</li> <li>• Ability to develop budgets.</li> </ul>
Estimating	<ul style="list-style-type: none"> <li>• Knowledge of estimation techniques and 'rules of thumb'.</li> <li>• Ability to produce estimates based on established principles, knowledge of project and resource constraints (time, people, materials, etc).</li> </ul>
Resource optimization	<ul style="list-style-type: none"> <li>• Knowledge of principles for resource optimization and constraint removal as it applies to project/program management.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete cost analysis. For example, they determine the best value among various options to modify work practices to meet regulatory requirements.</li> <li>• Agricultural OH&amp;S Specialists may develop and monitor overall program budgets and develop budgets for particular activities. They consider labour, material, equipment and sub-contractor costs using established costing rates.</li> <li>• Agricultural OH&amp;S Specialists calculate material quantities and personnel/labour requirements for OH&amp;S activities, training and other related practices.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare cost analysis reports.</li> </ul>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read quotes from sub contractors.</li> <li>• Agricultural OH&amp;S Specialists read training programs and packages to determine resource requirements.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 4 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'
- 10 said ' Informal Training - Short courses and/or workshops'
- 6 said ' Formal Training - College or University'

## Block B: Manage Agricultural OH&S Programs

### Task B1: Implement Agricultural OH&S Program

*Occupational Context: Agricultural OH&S Specialists need to conduct ongoing follow up with clients and stakeholders to ensure that the 'Internal Responsibility System' is functioning properly.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly the 'Internal Responsibility System' is functioning properly.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 14 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
B1.01	Assign responsibilities	B1.06	Send email
B1.02	Communicate with stakeholder	B1.07	Attend Joint Occupational Health and Safety Committee (JOHSC) meetings
B1.03	Monitor results	B1.08	Maintain regular contact with Safety Representatives
B1.04	Write memos	B1.09	Monitor and follow up
B1.05	Facilitate awareness meetings		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies & procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Time management	<ul style="list-style-type: none"> <li>Time management and organizational techniques and practices, development of personal schedules.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Knowledge of principles for effective presentations.</li> <li>Ability to create and deliver presentations to a varied audience.</li> </ul>
Leading change	<ul style="list-style-type: none"> <li>Understanding of principles of change management and leadership.</li> <li>Ability to formulate and implement a plan for initiating change in an organization.</li> </ul>
Enforcing policy	<ul style="list-style-type: none"> <li>Understanding of policy, discipline rules.</li> <li>Ability to identify policy breaches and take necessary corrective action.</li> </ul>
Meeting management	<ul style="list-style-type: none"> <li>Knowledge of principles for effective meeting management.</li> <li>Ability to plan and execute an effective meeting.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists select individuals for Agricultural OH&amp;S related tasks, considering their experience and OH&amp;S record.</li> <li>Agricultural OH&amp;S Specialists select methods for advising and informing producers and their employees about Agricultural OH&amp;S.</li> <li></li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists lead, attend and present at Occupational Health and Safety Committee (JOHSC) meetings.</li> <li>Agricultural OH&amp;S Specialists give presentations to producers and their employees on a wide range of Agricultural OH&amp;S topics.</li> </ul>
Reading 5 point complexity scale	2	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read short e-mail from agriculture producers, co-workers, colleagues, and clients responding to questions.</li> <li>Agricultural OH&amp;S Specialists scan brief e-mail from consultants to learn details about proposed training, costs and availability. The read e-mail from colleagues responding to request for details about procedures, training ideas and best practices for a range of agricultural occupational health and safety topics.</li> </ul>
Writing 5 point complexity scale	2	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists write notes regarding evidence of violations to health and safety procedures. They make written records of correspondence, telephone calls and conversations to document key discussion points and required follow-up actions.</li> <li>Agricultural OH&amp;S Specialists write e-mail to co-workers and colleagues. For example, they write messages to agriculture producers and supervisors informing them of noted deficiencies during inspections. They write e-mail to co-workers informing them</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		of changes to policies and procedures and implementation dates.
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists collect and analyze data for Agricultural OH&amp;S. They use their analysis to identify inconsistencies, trends and problem areas which deserve further investigation.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists enter and locate Agricultural OH&amp;S data in lists, tables and schedules.</li> </ul>

<b>BEST Place to Learn How to Perform this Task</b>
<p>Of 22 validation participants:</p> <ul style="list-style-type: none"> <li>• 8 said 'On the Job - from experienced Mentors'</li> <li>• 0 said 'On the Job - self taught'</li> <li>• 8 said ' Informal Training - Short courses and/or workshops'</li> <li>• 6 said ' Formal Training - College or University'</li> </ul>

## Task B2: Conduct Agricultural OH&S Orientation

*Occupational Context: Agricultural OH&S Specialists orient new and existing employees to policies and practices designed to ensure workplace safety.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, all workers are familiar with safety requirements, and new workers are oriented to safety practices and policies before they begin working.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 3 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
B2.01	Identify the scope of orientation	B2.04	Arrange for translation of the orientation if necessary
B2.02	Develop orientation methods and	B2.05	Evaluate orientation success

	materials		knowledge transfer
B2.03	Deliver orientation program	B2.06	Document that the training was completed in personnel files

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Knowledge of principles for effective presentations.</li> <li>Ability to create and deliver presentations to a varied audience.</li> </ul>
Cultural awareness	<ul style="list-style-type: none"> <li>Knowledge of different cultures and values.</li> <li>Ability to work in a culturally diverse environment.</li> </ul>
Hazard recognition	<ul style="list-style-type: none"> <li>Knowledge of workplace hazards.</li> <li>Ability to identify hazards and determine associated risk.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists determine training needs considering regulatory requirements as they relate to the workplace environment and activities.</li> <li>Select training methods.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists prepare orientation training materials on a variety of Agricultural OH&amp;S topics to a range of employees.</li> <li>Agricultural OH&amp;S Specialists create presentations for a range of Agricultural OH&amp;S topics.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists make presentations to producers and their employees on a wide range of Agricultural OH&amp;S topics.</li> <li>Agricultural OH&amp;S Specialists deliver orientation to different employee groups. They explain training objectives, assignments and participation expectations. They present materials, ask and answer questions and engage participants in discussions and activities.</li> </ul>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists assess the effectiveness of training. They use establish evaluation criteria such as inspections to monitor work practices and analyze health and safety data to monitor trends in incidences and deficiencies to modify program activities and make recommendations.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete tracking and other administrative forms to keep current records on employee Agricultural OH&amp;S training.</li> </ul>

<b>BEST Place to Learn How to Perform this Task</b>
<p>Of 22 validation participants:</p> <ul style="list-style-type: none"> <li>• 10 said 'On the Job - from experienced Mentors'</li> <li>• 1 said 'On the Job - self taught'</li> <li>• 7 said ' Informal Training - Short courses and/or workshops'</li> <li>• 4 said ' Formal Training - College or University'</li> </ul>

### **Task B3: Monitor Agricultural OH&S Programs**

*Occupational Context: Agricultural OH&S Specialists need to monitor ongoing Agriculture OH&S programs to ensure they reflect of regulatory requirements and best practices. They must also evaluate the effectiveness of programs and recommend improvements. In some provinces this is a legislative requirement.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly Agricultural OH&S programs are current, relevant, and help to keep the workplace safe.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 2 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
B3.01	Determine what needs to be measured	B3.05	Communicate with stakeholders
B3.02	Take appropriate measurements	B3.06	Measure effectiveness of changes
B3.03	Determine gaps	B3.07	Document actions and results
B3.04	Take action to close gaps	B3.08	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>• Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Evaluation processes	<ul style="list-style-type: none"> <li>• Knowledge of evaluation techniques, tying programs to results.</li> </ul>
Continuous improvement processes	<ul style="list-style-type: none"> <li>• Knowledge of techniques for improving methods, such as kaizen principles.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Working with Others No complexity scale		<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists provide guidance and oversee activities to ensure Agricultural OH&amp;S standards and targets are met. They coordinate and integrate job tasks when implementing new programs. They participate in safety and management meetings to coordinate Agricultural OH&amp;S training and other related program activities.</li> </ul>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists collect and analyze data to monitor the effectiveness of OH&amp;S programs. They use their analysis to identify inconsistencies, trends and problem areas which deserve further investigation and to adjust work processes and other program activities.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists present findings from safety audits and offer their opinions, evaluations and recommendations at managers meetings. They outline reasons for changes to procedures and policies and risks if changes are not implemented.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare brief reports such as corrective actions reports to describe incidents and findings, and outline changes to procedures and practices.</li> <li>• Agricultural OH&amp;S Specialists may write lengthy reports to describe outcomes of detailed assessments, inspections, audits and accident investigations. In the reports they outline findings, present analyses of causal factors and to offer conclusions and recommendations. They present justifications and recommendations clearly and accurately to ensure managers can make informed decisions.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists synthesize data from multiple forms, tables, charts, graphs and inspection and audit reports in analyzing health and safety performance of organizations and to diagnose and correct problems such as increased incidents, accidents, injuries and reported near misses.</li> </ul>
Digital Technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create and update spreadsheets for collecting data and preparing graphs of Agricultural OH&amp;S data.</li> <li>• Agricultural OH&amp;S Specialists create lengthy audit reports, business cases, procedures and contract specifications using word processing programs. They may supplement text with imported graphs, photographs and spreadsheet tables.</li> <li>• Agricultural OH&amp;S Specialists create slide shows using presentation software.</li> </ul>
Critical thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists evaluate the effectiveness of Agricultural OH&amp;S training, policies and procedures and programs and activities using established evaluation criteria.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 8 said 'On the Job - from experienced Mentors'
- 1 said 'On the Job - self taught'
- 5 said ' Informal Training - Short courses and/or workshops'
- 8 said ' Formal Training - College or University'

## Task B4: Manage Claims

*Occupational Context: Agricultural OH&S Specialists need to be able to manage claims efficiently and effectively.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly claims are handled properly and in a timely manner.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>0 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>13 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as LESS Important</b>

Subtasks			
B4.01	Review claims history	B4.05	Monitor return to work activities
B4.02	Generate appropriate documentation	B4.06	Maintain documentation
B4.03	Liaise with stakeholders (internal & external)	B4.07	Involve WCB or other insurance agencies in presentations on the cost of claims
B4.04	Establish return to work/rehab plan	B4.08	Monitor and follow up

Supporting Technical Knowledge	Details
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable administrative processes and procedures (claims, etc).</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Injury rehabilitation	<ul style="list-style-type: none"> <li>Knowledge of return to work principles, injury rehab protocols, modified work programs.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Knowledge of principles for effective presentations.</li> <li>Ability to create and deliver presentations to a varied audience.</li> </ul>
Financial acumen	<ul style="list-style-type: none"> <li>Understanding of accounting principles.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read work plans and incident reports, and WCB and medical reports for injured employees returning to work, and learn about the type and nature of restrictions.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists enter data and information about returning workers progress in tracking forms.</li> <li>• Agricultural OH&amp;S Specialists complete a wide range of forms for worker's compensation claims such as first report of injury, notice of action/change, return to work, etc.</li> <li>•</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists discuss work restrictions and work plans with supervisors of returning employees.</li> <li>• Agricultural OH&amp;S Specialists speak to medical professionals to seek clarification about diagnoses of injuries, treatment plans, types and length of time for physical restrictions for returning employees.</li> <li>•</li> </ul>
Digital Technology 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create and update work plans using word processing programs.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 8 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 10 said ' Informal Training - Short courses and/or workshops'
- 4 said ' Formal Training - College or University'

## Task B5: Manage Occupational Hygiene Activities

*Occupational Context: Agricultural OH&S Specialists need to be able to manage occupational hygiene activities.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, occupational hygiene activities are defined, conducted, and documented.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>0 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>5 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as LESS Important</b>

<b>Subtasks</b>			
B5.01	Define requirements for the operation	B5.05	Ensure required testing is performed
B5.02	Review prior hygiene results	B5.06	Document actions and results
B5.03	Identify regulatory requirements	B5.07	Monitor and follow up
B5.04	Identify appropriate resources	B5.08	Consult with occupational hygiene expert as required

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment, knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Occupational hygiene	<ul style="list-style-type: none"> <li>Knowledge of principles, practices for occupational hygiene, ergonomics, testing, etc.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading  5 point complexity scale	4	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read and interpret equipment and operating manuals. They scan operating manuals and vendor safety policies to identify operating procedures and potential hazard points to determine operating procedures and practices.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read industry standards of good practice for occupational hygiene.</li> <li>• Agricultural OH&amp;S Specialists review occupational hygienist regulations to learn about threshold limits.</li> </ul>
Numeracy 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists compare data from test results such as those performed on water, air, land and noise samples to standards to identify whether they are within acceptable limits.</li> </ul>
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists find information about occupational hygiene requirements and best practices. They search internet websites, review textbooks, articles, newsletters, reports and government publications, speak to co-workers, colleagues and attend association meetings, workshops and seminars.</li> </ul>
Document Use 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists locate data and test results for a range of occupational and occupational hygiene variables in test result reports.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists write procedures for a range of occupational hygiene components.</li> <li>• Agricultural OH&amp;S Specialists write reports to record the outcomes of test results and assessments of occupational hygiene. In the reports they outline findings, present analyses and offer recommendations. They present justifications and recommendations clearly and accurately to ensure managers can make informed decisions.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 3 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 9 said ' Informal Training - Short courses and/or workshops'
- 10 said ' Formal Training - College or University'

## Block C: Provide Agricultural OH&S Training

### Task C1: Conduct Needs Analysis

*Occupational Context: Agricultural OH&S Specialists conduct training needs analysis to determine Agricultural OH&S training requirements.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, Agricultural OH&S training requirements are well defined and documented.*

Importance of this Task	Of the Tasks in this NOA: <ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>1 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
C1.01	Define scope	C1.05	Make training recommendations
C1.02	Gather performance data	C1.06	Document actions
C1.03	Analyze data	C1.07	Monitor and follow up
C1.04	Identify training needs		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Instructional Design	<ul style="list-style-type: none"> <li>Principles and techniques for training needs analysis, defining performance standards for training,</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists evaluate workplace safety and work procedures to determine training requirements. They also assess the effectiveness of Agricultural OH&amp;S training.</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists determine training needs, considering workplace activities and tasks, materials, products and equipment used, workplace performance data and regulatory requirements for workplace Agricultural OH&amp;S.</li> </ul>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists collect and analyze data to describe Agricultural OH&amp;S variables. They use their analysis to identify inconsistencies, trends and problem areas which deserve further investigation, determine training needs, evaluate the effectiveness of training, adjust work processes, and other program activities.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret Material Safety Data Sheets (MSDS) and technical data sheets to obtain information on storage and usage and what to do in case of emergency.</li> <li>• Agricultural OH&amp;S Specialists identify processing stages, pieces of equipment and process flows in schematics of processing operations. They interpret schematics which illustrate the equipment and procedures for harvesting raw materials in order to identify safety hazards, alternative work procedures and training requirements.</li> <li>• Agricultural OH&amp;S Specialists scan graphs depicting accidents, injuries, near misses to identify trends and monitor the effectiveness training.</li> <li>• Agricultural OH&amp;S Specialists create matrices to track Agricultural OH&amp;S training requirements for workplace activities.</li> </ul>
Writing 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare reports to outline training requirements. They also prepare training and presentation materials.</li> </ul>
Digital Technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists use graphic, word processing, presentation and spreadsheet programs.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 3 said 'On the Job - from experienced Mentors'
- 1 said 'On the Job - self taught'
- 9 said ' Informal Training - Short courses and/or workshops'
- 9 said ' Formal Training - College or University'

## Task C2: Design Agricultural OH&S Training Program

*Occupational Context: Agricultural OH&S Specialists need to be able to design and/or develop OH&S training programs for delivery to internal and/or external stakeholders.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly relevant training programs are developed and delivered, and there are measureable results from the training (reduced incidents/accidents, behavioural change, etc).*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>9 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>2 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
C2.01	Review needs analysis report and other relevant materials	C2.06	Create evaluation tools
C2.02	Determine scope of training	C2.07	Pilot-test training program
C2.03	Determine appropriate training mechanism(s)	C2.08	Monitor and follow up
C2.04	Check availability of training resources		
C2.05	Develop training materials		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Adult learning	<ul style="list-style-type: none"> <li>Knowledge of principles of adult learning, learning styles, motivation of adult learners.</li> </ul>
Instructional design	<ul style="list-style-type: none"> <li>Knowledge of principles of design, "ADDIE" model, setting performance criteria, designing competency-based learning, designing learning activities, designing for different learning styles.</li> </ul>
Instructional delivery	<ul style="list-style-type: none"> <li>Knowledge of theory instruction, practical skills instruction, OJT instruction, and methods for confirming learning.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	4	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read and interpret findings and recommendations in training needs analysis. They also read articles and reports on Agricultural OH&amp;S training.</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists choose what, when, where, who and how for Agricultural OH&amp;S training.</li> <li>Agricultural OH&amp;S Specialists select training methods. They consider the training objectives, gaps in knowledge and performance and the audience for which the training is geared.</li> </ul>
Writing 5 point complexity scale	4	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists prepare presentation and training materials.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists deliver training programs to pilot test.</li> </ul>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists assess the effectiveness of training and related materials to meet training needs. They review existing training materials and seek input from colleagues and co-workers. They use their evaluation to modify training program.</li> <li>Agricultural OH&amp;S Specialists assess the suitability of assessment and evaluation tools.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Working with Others  No complexity scale		<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists participate in developing operational policies and practices. They take part in management and Agricultural OH&amp;S meetings to plan health and safety initiatives and programs.</li> </ul>
Finding information  4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists find information about Agricultural OH&amp;S and occupational hygiene requirements and best practices. They speak to colleagues, attend workshops and seminars and read articles and reports about training programs and standards of good practice.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 21 validation participants:

- 5 said 'On the Job - from experienced Mentors'
- 1 said 'On the Job - self taught'
- 5 said ' Informal Training - Short courses and/or workshops'
- 10 said ' Formal Training - College or University'

## **Task C3: Coordinate Training Logistics**

*Occupational Context: Agricultural OH&S Specialists need to make sure training events and activities are well planned and executed.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, training programs and sessions are well organized and effective.*

<b>Importance of this Task</b>	<b>Of the Tasks in this NOA:</b>
	<ul style="list-style-type: none"> <li>• 0 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 7 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as LESS Important</b>

<b>Subtasks</b>			
C3.01	Consult Stakeholders	C3.05	Structure the training session
C3.02	Establish training schedule	C3.06	Develop/create recording system(s)
C3.03	Confirm resources	C3.07	Maintain training records
C3.04	Acquire training materials		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>• Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Resource allocation	<ul style="list-style-type: none"> <li>• Knowledge of principles for identifying and tasking resources for projects.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Writing 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists write messages to potential trainers and curriculum developers to request price quotes, confirm availability and to seek additional information.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create training schedule and update training matrices.</li> </ul>
Digital Technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists use spreadsheet, word processing and communication software.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists negotiate training schedules with coworkers such as department and area supervisors.</li> <li>• Agricultural OH&amp;S Specialists negotiate subcontracting services with trainers and curriculum designers and training materials with suppliers.</li> </ul>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret consultant's quotes and contracts for training activities.</li> </ul>

<b>BEST Place to Learn How to Perform this Task</b>
<p>Of 22 validation participants:</p> <ul style="list-style-type: none"> <li>• 4 said 'On the Job - from experienced Mentors'</li> <li>• 5 said 'On the Job - self taught'</li> <li>• 9 said ' Informal Training - Short courses and/or workshops'</li> <li>• 4 said ' Formal Training - College or University'</li> </ul>

## Task C4: Deliver Training

*Occupational Context: Agricultural OH&S Specialists need to be able to deliver well structured, interesting, relevant training sessions.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly training sessions are interesting and relevant, and the training raises awareness around health and safety issues.*

Importance of this Task	Of the Tasks in this NOA: <ul style="list-style-type: none"> <li>• 5 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
C4.01	Verify availability of resources	C4.05	Monitor training participants
C4.02	Prepare back-up plan	C4.06	Conduct training evaluation
C4.03	Dry run training	C4.07	Document actions & results
C4.04	Complete training activities	C4.08	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>• Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>• Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Adult learning	<ul style="list-style-type: none"> <li>• Knowledge of principles of adult learning, learning styles, motivation of adult learners.</li> </ul>
Instructional delivery	<ul style="list-style-type: none"> <li>• Knowledge of theory instruction, practical skills instruction, OJT instruction, methods for confirming learning.</li> </ul>
Evaluation	<ul style="list-style-type: none"> <li>• Knowledge of formal and informal evaluation, and competency assessment principles.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists write emails to subcontractors and suppliers to verify availability.</li> <li>• Agricultural OH&amp;S Specialists prepare training evaluation reports.</li> <li>• Agricultural OH&amp;S Specialists prepare presentation and training materials.</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists select training resources such as guest speakers, trainers.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists may deliver training.</li> </ul>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists analyze performance data for Agricultural OH&amp;S and training evaluation to determine outcomes.</li> </ul>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists assess the effectiveness of training. They also assess training outcomes for participants.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete inspection forms. They also locate training participants responses in evaluation forms.</li> </ul>
Digital Technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists use data and spreadsheet software to record and track training and training outcomes. They use presentation software to review and deliver training.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 8 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 6 said ' Informal Training - Short courses and/or workshops'
- 8 said ' Formal Training - College or University'

## Task C5: Coach/Mentor Stakeholders

*Occupational Context: Agricultural OH&S Specialists need to be able to coach and/or mentor stakeholders.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, stakeholders work in a safe and efficient manner.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>3 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>3 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
C5.01	Observe deficiencies	C5.05	Document actions and results
C5.02	Demonstrate best practices	C5.06	Contact and provide updating information to stakeholders
C5.03	Monitor change	C5.07	Schedule regular individual follow up for all stakeholders
C5.04	Monitor and follow up		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Adult learning	<ul style="list-style-type: none"> <li>Knowledge of principles of adult learning, learning styles, motivation of adult learners.</li> </ul>
Coaching and mentoring	<ul style="list-style-type: none"> <li>Knowledge of principles and techniques, OJT methods, questioning learners, assessing learning transfer.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists evaluate co-workers and employees of organization's adherence to Agricultural OH&amp;S policies, procedures and practices.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists exchange information about regulations and workplace practices with co-workers, colleagues, suppliers and agriculture producers.</li> <li>• Agricultural OH&amp;S Specialists give feedback, instruct and provide mentoring to health and safety officers, representatives, coworkers and employees of organizations.</li> <li>• Agricultural OH&amp;S Specialists provide clear instructions, demonstrations and constructive feedback to teach new skills and demonstrate methods for assessing health and safety risks, documenting deficiencies and determining alternative work practices.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists enter data about Agricultural OH&amp;S incidents into administrative forms.</li> </ul>
Problem Solving 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists may find that co-workers and employees of agriculture producers are not completing Agricultural OH&amp;S forms correctly. They would then speak directly to individuals involved and organize meetings to review and outline the importance of Agricultural OH&amp;S practices and documenting. They would also point out negative effects of incomplete information. They would monitor reporting on documents and provide additional feedback to ensure the information is correct.</li> <li>• Agricultural OH&amp;S Specialists may find that workers are not following safety procedures. They would then meet with workers to discuss the safety infractions. They would review the standard work procedures and protocols and inform workers of next steps in the discipline process should further infractions occur. In some instances, they may require workers to retake specific Agricultural OH&amp;S training.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 10 said 'On the Job - from experienced Mentors'
- 5 said 'On the Job - self taught'
- 5 said ' Informal Training - Short courses and/or workshops'
- 2 said ' Formal Training - College or University'

## Task C6: Conduct Training Evaluations

*Occupational Context: Agricultural OH&S Specialists need to evaluate the impact of training sessions and programs.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly training sessions and programs are evaluated in a consistent, objective manner.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>0 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>8 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as LESS Important</b>

<b>Subtasks</b>			
C6.01	Plan evaluation process	C6.04	Communicate findings to stakeholders
C6.02	Gather training data	C6.05	Review verbal and written evaluations from training venues
C6.03	Prepare outcomes report/recommendations	C6.06	Revise training programs if and as necessary

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Evaluation	• Knowledge of Kirkpatrick's 4 levels for measuring Return on Investment (ROI).
Behavioural analysis	• Ability to use observation to determine training results and learning transfer.
Statistical analysis	• Ability to use stats to determine training results and learning transfer.

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Decision Making 4 point complexity scale	2	• Agricultural OH&S Specialists select evaluation and assessment tools
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists find information about incidents, accidents, near misses and noted deficiencies from daily inspection reports, logbooks and by speaking to supervisors, workers and managers.</li> <li>• Agricultural OH&amp;S Specialists synthesize data from multiple forms, tables, charts, graphs and inspection and audit reports in analyzing health and safety performance of organizations and to diagnose and correct problems, such as increased incidents, accidents,</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		injuries and reported near misses.
Critical Thinking 4 point complexity scale	3	• Agricultural OH&S Specialists evaluate the effectiveness of training.
Writing 5 point complexity scale	3	• Agricultural OH&S Specialists create training evaluation forms. They also prepare training reports to describe outcomes and make recommendations.
Reading 5 point complexity scale	2	• Agricultural OH&S Specialists read comments in feedback and evaluation forms. They also read and interpret Agricultural OH&S details in weekly and monthly reports and administrative forms.
Oral communication 4 point complexity scale	3	• Agricultural OH&S Specialists present findings from safety audits and training evaluations, and offer their opinions, evaluations and recommendations at managers meetings.

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 5 said 'On the Job - from experienced Mentors'
- 3 said 'On the Job - self taught'
- 6 said ' Informal Training - Short courses and/or workshops'
- 8 said ' Formal Training - College or University'

## Task C7: Modify Existing Training Programs

*Occupational Context: Agricultural OH&S Specialists need to be able to modify training programs if and as needed.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly training programs are reviewed regularly and modified as and when necessary.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>1 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>4 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
C7.01	Review training feedback	C7.05	Finalize materials
C7.02	Identify required changes	C7.06	Update stakeholders
C7.03	Update/modify materials	C7.07	Document actions
C7.04	Pilot-test changes	C7.08	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Adult learning principles	<ul style="list-style-type: none"> <li>Knowledge of principles of adult learning, learning styles, motivation of adult learners.</li> </ul>
Instructional design	<ul style="list-style-type: none"> <li>Knowledge of principles of design, "ADDIE" model, setting performance criteria, designing competency-based learning, designing learning activities, designing for different learning styles.</li> </ul>
Instructional delivery	<ul style="list-style-type: none"> <li>Knowledge of theory instruction, practical skills instruction, OJT instruction, methods for confirming learning.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret findings in training evaluation, safety inspection and audit reports. They also read existing policies and procedures to identify errors, omissions and opportunities for improvement.</li> <li>• Agricultural OH&amp;S Specialists read agriculture and Agricultural OH&amp;S articles to identify alternative training and related activities.</li> </ul>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists assess the effectiveness of Agricultural OH&amp;S training programs and activities to determine areas for improvement.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists modify existing training materials and policies and procedures.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists deliver Agricultural OH&amp;S training to pilot and modified training materials. They also present finding from training audits and offer their opinions, evaluations and recommendations at manager's meetings.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 4 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'
- 9 said ' Informal Training - Short courses and/or workshops'
- 7 said ' Formal Training - College or University'

## Block D: Facilitate Agricultural OH&S Compliance

### Task D1: Perform Agricultural OH&S Inspections

*Occupational Context: Agricultural OH&S Specialists need to ensure that Agriculture OH&S compliance actually happens.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, Agricultural OH&S compliance actually happens.*

Importance of this Task	Of the Tasks in this NOA: <ul style="list-style-type: none"> <li>7 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>2 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
D1.01	Review previous inspection results	D1.06	Conduct inspection
D1.02	Define inspection parameters & frequency	D1.07	Prepare report
D1.03	Develop inspection criteria	D1.08	Document actions
D1.04	Develop inspection tools	D1.09	Monitor and follow up
D1.05	Train stakeholders		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read and interpret details in past Agricultural OH&amp;S inspection forms and audit reports and minutes from safety meetings.</li> <li>• Agricultural OH&amp;S Specialists read notices, bulletins and factsheets from Agricultural OH&amp;S associations. They also read and interpret legislation, regulations and subsequent bulletins and addenda.</li> </ul>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists assess the suitability and effectiveness of inspection strategies and tools. They also assess the effectiveness of Agricultural OH&amp;S policies and practices.</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists select inspection criteria and tools. They also choose program, policy and procedures changes to ensure Agricultural OH&amp;S program elements and workplace activities meet compliance requirements.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare inspection and other related Agricultural OH&amp;S forms and reports, and write inspection reports.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists deliver presentations and training on Agricultural OH&amp;S policies and procedures for completing procedures and related reports.</li> </ul>
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists find information about incidents, accidents, near misses and noted deficiencies from daily inspection reports, logbooks and by speaking to supervisors, workers and managers.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete inspection forms. They also locate data and information in administrative forms.</li> <li>• They enter inspection data into tables and schedules.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 10 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'
- 6 said ' Informal Training - Short courses and/or workshops'
- 4 said ' Formal Training - College or University'

## Task D2: Perform Agricultural OH&S Audits

*Occupational Context: Agricultural OH&S Specialists need to perform Agricultural OH&S audits in order to determine the effectiveness of Agricultural OH&S programs and policies, and also to determine compliance.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, audits are performed properly and in a timely manner, issues are identified and corrective action is taken.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>9 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>0 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
D2.01	Review previous audit results	D2.06	Conduct audit
D2.02	Define audit parameters and frequency	D2.07	Prepare report
D2.03	Develop audit criteria	D2.08	Document Actions
D2.04	Develop audit tools	D2.09	Monitor and follow up
D2.05	Train stakeholders		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading  5 point complexity scale	4	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read details about Agricultural OH&amp;S activities and incidents in administrative and inspection forms.</li> <li>Agricultural OH&amp;S Specialists read and interpret findings in Agricultural OH&amp;S audit reports to identify previously noted</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		deficiencies in programs. They also read audit policies and procedures, and review Agricultural OH&S policies and procedures.
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists evaluate the suitability of audit criteria and tools. They also evaluate audit findings to make recommendations and to adjust existing policies, practices, programs and activities.</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists determine audit criteria and select tools. They also select individuals to participate in Agricultural OH&amp;S audit activities.</li> </ul>
Writing 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists modify existing and create new policies and procedures to ensure workplace activities are in compliance with requirements and follow best practices.</li> <li>• Agricultural OH&amp;S Specialists prepare detailed Agricultural OH&amp;S audit reports to outline what is working and what isn't, and recommend changes to program policies and practices to ensure managers have the necessary information to make informed decisions.</li> <li>• Agricultural OH&amp;S Specialists create presentations materials for managers and board members of organizations to outline findings from audits.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists train stakeholders on audit procedures and documentation requirements. They also present findings from Agricultural OH&amp;S audits and offer opinions, evaluations and recommendations at manager and board of director meetings.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 11 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 5 said ' Informal Training - Short courses and/or workshops'
- 6 said ' Formal Training - College or University'

## Task D3: Advise on Agricultural OH&S Issues

*Occupational Context: Agricultural OH&S Specialists need to establish formal and informal methods for advising management and other stakeholders on Agricultural OH&S issues in order to promote the safety culture within the organization.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly they are an ongoing resource and trusted advisor to stakeholders on Agricultural OH&S issues.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>3 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
D3.01	Listen actively to determine issues	D3.06	Document actions
D3.02	Brainstorm options for courses of action	D3.07	Monitor and follow up
D3.03	Collectively determine optimal course of action	D3.08	Involve stakeholders (workers, management, joint Agricultural OH&S committees, etc) in reporting and advising on OH&S issues in farming
D3.04	Present optimal course of action	D3.09	Establish formal Agricultural OH&S advisory processes (e.g., question and answer sessions, suggestion boxes, meeting attendance, etc.)
D3.05	Assist in implementation/compliance	D3.10	Establish informal Agricultural OH&S advisory processes (e.g., chats, walkabout, open door policy, 'bull' sessions, etc.)

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to workplace health and safety, standards, worker/management responsibilities, PPE, etc.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Decision-making	<ul style="list-style-type: none"> <li>Knowledge of techniques for making optimal decisions (decision trees, fishbone diagrams, weighting, etc.).</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Knowledge of techniques for developing and delivering briefings to a mixed audience.</li> </ul>
Engagement	<ul style="list-style-type: none"> <li>Knowledge of techniques for engaging workers in collective problem solving.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read short reports. For example, they read monthly safety reports and minutes from safety meetings to ensure that safety requirements are being met and to note follow-up action required.</li> <li>Agricultural OH&amp;S Specialists read agricultural and health and safety magazines and professional associations' newsletters to stay abreast of best practices, legislative changes and other matters affecting their work.</li> <li>Agricultural OH&amp;S Specialists read and interpret findings in reports. For example, they read and interpret health and safety audit reports to identify deficiencies in programs and to develop corrective action plans</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists give feedback, instruct and provide mentoring to health and safety officers and representatives.</li> <li>Agricultural OH&amp;S Specialists lead and participate in meetings to exchange information about regulations and workplace practices with co-workers, colleagues, suppliers and agriculture producers. They discuss corrective actions and changes to procedures with manager and supervisors and seek their input on implementation timelines and strategies.</li> <li>Agricultural OH&amp;S Specialists create presentations for a range of agricultural occupational health and safety topics. The ability to organize, and present ideas tailored to specific audiences is important.</li> </ul>
Writing 5 point complexity	3	<ul style="list-style-type: none"> <li>Prepare brief and lengthy reports to advise on OH&amp;S issues.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
scale		

<b>BEST Place to Learn How to Perform this Task</b>
<p>Of 22 validation participants:</p> <ul style="list-style-type: none"> <li>• 4 said 'On the Job - from experienced Mentors'</li> <li>• 0 said 'On the Job - self taught'</li> <li>• 10 said ' Informal Training - Short courses and/or workshops'</li> <li>• 8 said ' Formal Training - College or University'</li> </ul>

## Task D4: Manage Facility Licenses/Certifications

*Occupational Context: Agricultural OH&S Specialists need make sure the correct certifications and/or licenses are held by the right people or entities in order to maintain compliance with regulations.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, all licensing and certifications are in place and current.*

<b>Importance of this Task</b>	<b>Of the Tasks in this NOA:</b>
	<ul style="list-style-type: none"> <li>• 0 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 11 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
<b>Rating</b>	<b>This Task is rated as LESS Important</b>

<b>Subtasks</b>			
D4.01	Review existing records	D4.06	Conduct applicable training/inspection, etc
D4.02	Determine required permits/certifications	D4.07	Process required documentation
D4.03	Create matrix	D4.08	Update matrix
D4.04	Develop schedule for license/certification expiry	D4.09	Create and maintain rapport with government department responsible for licenses and certifications
D4.05	Develop plan for required actions	D4.10	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed.</li> <li>Knowledge of filing and renewing procedures and frequencies.</li> </ul>
Scheduling	<ul style="list-style-type: none"> <li>Ability to create and implement schedules and work plans.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>• Context</b>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists review permits, licenses and certifications to locate type and verify expiration dates.</li> <li>Agricultural OH&amp;S Specialists complete permit, licensing and certification forms, and create schedules for obtaining and maintaining required facility permits, licenses and certifications.</li> </ul>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists develop schedules for permit, licensing, and certification process for facilities. (SBA Math)</li> </ul>
Digital Technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists use database programs to manage data and run queries to access facility permit and certification data. They also use spreadsheet programs to create inspection and permit, licensing and certification schedules.</li> </ul>
Reading 5 point complexity scale	4	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read legislation, regulations and subsequent bulletins and addenda to determine permit, license and certification requirements of facilities.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists describe facility processes, procedures and activities in permit, licensing and certification forms. They also</li> <li>Agricultural OH&amp;S Specialists write plans and procedures for obtaining and maintaining facility permits, licenses and certifications.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists deliver training on permits, licensing, and certification requirements to managers and employees. They also give presentations and provide input about permits, licensing, and certification requirements during safety and management meetings.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 10 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'

- 8 said ' Informal Training - Short courses and/or workshops'
- 2 said ' Formal Training - College or University'

## Task D5: Maintain Personnel Licenses/Certifications

*Occupational Context: Agricultural OH&S Specialists need to maintain safety related licenses and certifications for personnel in order to ensure compliance with regulations.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, agricultural stakeholders receive education and training on a regular basis, and Agricultural OH&S specialists have a reputation for supporting their local farming community.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 1 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 11 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as LESS Important</b>

<b>Subtasks</b>			
D5.01	Review existing records	D5.06	Conduct applicable training/inspection etc
D5.02	Determine required permits/certifications	D5.07	Process required documentation
D5.03	Create matrix	D5.08	Update matrix
D5.04	Develop schedule for license/certification expiry		
D5.05	Develop plan for required actions		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>• Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to individual licences and certifications for the work being performed.</li> <li>• Knowledge of filing and renewing procedures and frequencies.</li> </ul>
Scheduling	<ul style="list-style-type: none"> <li>• Ability to create and implement schedules and work plans.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Document Use  5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists scan training certificates of employees to verify type, currency and compliance. They also scan equipment and machinery inspection forms and certifications</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		<p>to verify compliance with requirements.</p> <ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete inspection and training forms to verify employees and equipment meet requirements, and enter training and inspection data into tables and databases.</li> <li>• Agricultural OH&amp;S Specialists create training schedules; create tables and matrixes to track training and certification of employees and inspections, and certification of machinery and equipment.</li> </ul>
<p>Reading</p> <p>5 point complexity scale</p>	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists review training packages to ensure requirements are met. They read legislation, regulations and subsequent bulletins and addenda to determine licenses and certification requirements of employees, and inspection and certification requirements for equipment and machinery.</li> </ul>
<p>Critical Thinking</p> <p>4 point complexity scale</p>	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists evaluate the quality of training programs in meeting certification and licensing requirements..</li> </ul>
<p>Numeracy</p> <p>5 point complexity scale</p>	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create schedules for employee training and equipment and machinery inspections. (Scheduling or Budgeting &amp; Accounting)</li> </ul>
<p>Writing</p> <p>5 point complexity scale</p>	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists write descriptions about Agricultural OH&amp;S practices and activities in inspection forms.</li> <li>• Agricultural OH&amp;S Specialists write training plans for Agricultural OH&amp;S training and certification. They also write policies and procedures for Agricultural OH&amp;S training to ensure employees receive training and maintain valid certification in compliance with requirements.</li> </ul>
<p>Oral Communication</p> <p>4 point complexity scale</p>	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists deliver Agricultural OH&amp;S training.</li> </ul>
<p>Digital Technology</p> <p>5 point complexity scale</p>	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists use database programs to manage data and run queries to access employee training and certification data. They also use spreadsheet programs to create inspection, training, and certification schedules.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 11 said 'On the Job - from experienced Mentors'
- 2 said 'On the Job - self taught'
- 6 said ' Informal Training - Short courses and/or workshops'
- 3 said ' Formal Training - College or University'

## Block E: Promote Agricultural OH&S Culture

### Task E1: Communicate Best Practices

*Occupational Context: Agricultural OH&S Specialists need to communicate best practices for agricultural workplace safety in their communities in order to build a culture of agricultural health and safety practices.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly all stakeholders are aware of best practices for agricultural safety.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>1 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
E1.01	Deliver Agricultural OH&S presentations at meetings	E1.04	Document actions and results
E1.02	Develop communication media	E1.05	Research and review hazard alerts in agriculture from other jurisdictions
E1.03	Distribute/disseminate communication media	E1.06	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed, knowledge of filing and renewing procedures and frequencies.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Ability to develop and deliver briefings to a mixed audience.</li> </ul>
Engagement	<ul style="list-style-type: none"> <li>Ability to engage workers in collective problem solving.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists participate in conferences, seminars and workshops to stay abreast, and to acquire and share new knowledge about Agricultural OH&amp;S.</li> <li>• Agricultural OH&amp;S Specialists give presentations to launch Agricultural OH&amp;S programs and activities and to raise awareness of Agricultural OH&amp;S. They also deliver workshops on a wide range of Agricultural OH&amp;S topics.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create Agricultural OH&amp;S articles, newsletters and related materials to promote best practices and inform employees of upcoming events and activities. They also write presentation materials for Agricultural OH&amp;S presentations.</li> </ul>
Digital technology 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create slide shows using presentation software. They import graphs, scanned images, schematic drawings, word processing files and spreadsheet tables and use advanced formatting features.</li> <li>• Agricultural OH&amp;S Specialists use desktop publishing features in word processing programs to create newsletter and promotional materials.</li> </ul>
Document Use 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists enter data about Agricultural OH&amp;S promotions and communication activities into tables and databases.</li> </ul>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read promotional materials from government departments, associations and other agriculture organizations to determine applicability. They also read articles and newsletters to stay abreast of Agricultural OH&amp;S promotional activities.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 8 said 'On the Job - from experienced Mentors'
- 1 said 'On the Job - self taught'
- 9 said ' Informal Training - Short courses and/or workshops'
- 4 said ' Formal Training - College or University'

## Task E2: Engage Stakeholders in Agricultural OH&S Activities

*Occupational Context: Agricultural OH&S Specialists need engage stakeholders in Agricultural OH&S activities, including (in cooperation with stakeholders and local government) holding a farm safety conference at least once per year.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly stakeholders are engaged in Agricultural OH&S activities.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>2 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rated	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
E2.01	Establish budget	E2.06	Develop rewards/incentives programs
E2.02	Determine objectives	E2.07	Implement rewards/incentives programs
E2.03	Plan promotional activities	E2.08	Document actions & results
E2.04	Implement promotional activities	E2.09	Monitor and follow up
E2.05	Promote behavioural-based culture		

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed, knowledge of filing and renewing procedures and frequencies.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Engagement	<ul style="list-style-type: none"> <li>Ability to engage workers in collective problem solving.</li> </ul>
Presentation skills	<ul style="list-style-type: none"> <li>Ability to develop and deliver briefings to a mixed audience.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Numeracy 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create and monitor schedules for new initiatives. (SBA)</li> <li>• Agricultural OH&amp;S Specialists develop budgets for specific Agricultural OH&amp;S promotional activities such as rewards/incentive programs. (SBA)</li> <li>• Agricultural OH&amp;S Specialists collect and analyze data to describe outcomes from Agricultural OH&amp;S promotional activities. (DA)</li> </ul>
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists select the types of rewards and activities to promote Agricultural OH&amp;S practices. They also choose activities that promote brand recognition of safety.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists create promotional materials for rewards/incentive programs. They prepare plans to outline details about the implementation of specific Agricultural OH&amp;S promotional events. The plans describe the scope, activities and timeframe.</li> <li>• Agricultural OH&amp;S Specialists prepare reports for specific Agricultural OH&amp;S events and programs to describe outcomes and make recommendations.</li> </ul>
Oral communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists participate in conferences seminars and workshops, associations to stay abreast and acquire and share new knowledge. They give presentations to launch Agricultural OH&amp;S rewards/incentive programs.</li> </ul>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read Agricultural OH&amp;S magazines and professional associations' newsletters to stay current on best practices for promoting and communicating Agricultural OH&amp;S.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists scan graphs depicting Agricultural OH&amp;S incidents and participation in rewards and incentive programs.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 7 said 'On the Job - from experienced Mentors'
- 3 said 'On the Job - self taught'
- 7 said ' Informal Training - Short courses and/or workshops'
- 5 said ' Formal Training - College or University'

## Block F: Perform accident/incident investigations

### Task F1: Secure Incident Scene

*Occupational Context: Agricultural OH&S Specialists need to make sure that when incidents or accidents occur, hazards are assessed and controlled, and access to the incident scene is restricted.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly hazards are assessed and controlled, and access to incident scenes is restricted.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>1 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>3 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
F1.01	Assess scene for hazards	F1.03	Ensure access is restricted
F1.02	Control hazards	F1.04	Document actions

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed.</li> <li>Knowledge of filing and renewing procedures and frequencies.</li> </ul>
Investigative techniques	<ul style="list-style-type: none"> <li>Protecting and cataloguing evidence, taking statements, dealing with witnesses, dealing with victims, documenting investigations, managing investigative teams.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>
Access control	<ul style="list-style-type: none"> <li>Ability to use techniques for securing scene and controlling access and managing traffic.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Critical Thinking 4 point complexity scale	3	• Agricultural OH&S Specialists assess Agricultural OH&S hazards at the incident site.
Decision Making 4 point complexity scale	3	• Agricultural OH&S Specialists select methods to control hazards.
Writing 5 point complexity scale	3	• Agricultural OH&S Specialists prepare incident reports.
Document Use 5 point complexity scale	3	• Agricultural OH&S Specialists complete incident reporting forms.
Oral communication 4 point complexity scale	3	• Agricultural OH&S Specialists interact with a range of officials, agriculture producers, supervisors and co-workers as the first-line response person during emergency situations such as chemical spills and injuries to workers. They assign tasks, provide information, coordinate activities and discuss safety procedures and requirements.

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 3 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 12 said ' Informal Training - Short courses and/or workshops'
- 7 said ' Formal Training - College or University'

## Task F2: Collect Evidence

*Occupational Context: Agricultural OH&S Specialists need to gather evidence, verify that all evidence is collected, and catalogue evidence (including the use of audio records, photo camera, and video cameras). Evidence for serious incidents must not be disturbed or moved except to tend to injured persons.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly all evidence is gathered and catalogued.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>• 1 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>• 2 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
F2.01	Gather witness info	F2.04	Verify to see that all evidence has been collected
F2.02	Record incident site evidence	F2.05	Catalogue evidence
F2.03	Consult with experts/outside resources	F2.06	Document actions

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>• Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>• Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed.</li> <li>• Knowledge of filing and renewing procedures and frequencies.</li> </ul>
Investigative techniques	<ul style="list-style-type: none"> <li>• Ability to protect and catalogue evidence, take statements, deal with witnesses, deal with victims, document investigations, and manage investigative teams.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>• Knowledge of health and safety issues specific to the agricultural environment.</li> <li>• Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists find information about incidents, accidents, near misses and noted deficiencies by reviewing daily inspection reports, logbooks, previous audits and inspections reports and by speaking to supervisors, workers and managers and witnesses.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists exchange technical information about Agricultural OH&amp;S incidents with representatives from regulatory bodies, medical professions and colleagues.</li> <li>• Agricultural OH&amp;S Specialists interview witnesses to incidence such as accidents and near misses to establish facts and help determine probable causes.</li> </ul>
Document Use 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists enter a number and a brief description for each piece of evidence into a table of evidence.</li> <li>• Agricultural OH&amp;S Specialists complete incident inspection forms.</li> </ul>
Critical Thinking 4 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists assess the validity of evidence. They also assess the completeness of evidence collected.</li> </ul>
Problem Solving 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists may encounter agricultural producers and eyewitnesses involved in incidents who refuse to participate in investigations. When this happens Agricultural OH&amp;S Specialists explain their roles, stress that investigations help prevent similar incidents from occurring in the future, and outline the consequences for failing to provide information.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 2 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 12 said ' Informal Training - Short courses and/or workshops'
- 8 said ' Formal Training - College or University'

## Task F3: Conduct Root Cause Analysis

*Occupational Context: Agricultural OH&S Specialists need to conduct root cause analysis to determine the cause of an incident or accident.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly the actual cause(s) of incidents or accidents are determined, and procedures are modified as necessary to minimize the risk of recurrences.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>6 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>1 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as MORE Important</b>

<b>Subtasks</b>			
F3.01	Review evidence	F3.06	Establish causal priorities
F3.02	Develop hypothesis	F3.07	Determine causes
F3.03	Determine contributing factors	F3.08	Document actions
F3.04	Categorize contributing factors	F3.09	Avoid finding personal fault if possible
F3.05	Test hypothesis	F3.10	Monitor and follow up

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Root Cause Analysis	<ul style="list-style-type: none"> <li>Knowledge of root cause analysis techniques.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment.</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Critical Thinking 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists compare the conformity of work activities and workstations to Agricultural OH&amp;S policies, procedures, standards and specifications. They use established Agricultural OH&amp;S criteria such as ergonomics and occupational hygiene requirements.</li> <li>Agricultural OH&amp;S Specialists assess the causal factors of a</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
		Agricultural OH&S incident.
Decision Making 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists determine the categories of causal factors, and select causal priorities.</li> </ul>
Writing 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists record details of root cause analysis and investigation procedures.</li> </ul>
Reading 5 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists read incident reports and written reports of interviews with witnesses to learn about incidents.</li> <li>• Agricultural OH&amp;S Specialists read and interpret previous inspection reports and audits to learn about previous incidents.</li> <li>• Agricultural OH&amp;S Specialists read investigation procedures to ensure steps are correctly followed. They also read articles about related incidence and causal factors.</li> </ul>
Document Use 5 point complexity scale	2	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists complete investigation checklists.</li> </ul>

#### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 2 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 10 said ' Informal Training - Short courses and/or workshops'
- 10 said ' Formal Training - College or University'

## Task F4: Prepare Investigation Reports

*Occupational Context: Agricultural OH&S Specialists need to be able to create organized, coherent, logical investigation reports.*

*Performance Context: When an Agricultural OH&S Specialist is performing this task correctly, readers of investigation reports will understand what happened and why.*

Importance of this Task	Of the Tasks in this NOA:
	<ul style="list-style-type: none"> <li>1 out of 22 validation participants considered this task to be one of the MOST Important</li> <li>3 out of 22 validation participants considered this task to be one of the LEAST Important</li> </ul>
Rating	<b>This Task is rated as Important</b>

<b>Subtasks</b>			
F4.01	Gather information	F4.05	Report casual factors
F4.02	Review history	F4.06	Develop recommendations
F4.03	Describe circumstances of incident	F4.07	Document recommendations
F4.04	Report injuries and severity	F4.08	Communicate to stakeholders

<b>Supporting Technical Knowledge</b>	<b>Details</b>
Organization policies and procedures	<ul style="list-style-type: none"> <li>Detailed understanding of processes, policies, procedures, responsibilities related to Agricultural OH&amp;S, progressive discipline, supervisory responsibilities, etc.</li> </ul>
Agricultural OH&S legislation	<ul style="list-style-type: none"> <li>Knowledge of applicable provincial legislation/regulation related to facility licences and certifications for the work being performed.</li> <li>Knowledge of filing and renewing procedures and frequencies.</li> </ul>
Agricultural OH&S best practices	<ul style="list-style-type: none"> <li>Knowledge of established practices for workplace health and safety, including policies, programs, program management, incident reporting/tracking, training, etc.</li> </ul>
Agricultural operations	<ul style="list-style-type: none"> <li>Knowledge of health and safety issues specific to the agricultural environment</li> <li>Knowledge of the prevailing culture and attitudes within the agricultural environment.</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
Finding Information 4 point complexity scale	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists find information about similar incidents. They review previous Agricultural OH&amp;S investigation and audit reports, speak to co-workers and colleagues, and read articles, newsletters and reports.</li> </ul>
Reading	3	<ul style="list-style-type: none"> <li>Agricultural OH&amp;S Specialists read and interpret findings in root</li> </ul>

<b>Essential Skills</b>	<b>Level</b>	<b>Context</b>
5 point complexity scale		cause analysis reports. They read articles about similar incidents to learn about the causal factors, recommendations, actions taken and outcomes.
Writing 5 point complexity scale	4	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists prepare investigation reports to describe the circumstances of an incident and the extent of injuries and damages. They detail the causal factors and reasons for these conclusions. They make recommendations that include priorities.</li> </ul>
Oral Communication 4 point complexity scale	3	<ul style="list-style-type: none"> <li>• Agricultural OH&amp;S Specialists present findings and recommendations from investigations to agricultural producers, managers and boards of directors.</li> </ul>

### **BEST Place to Learn How to Perform this Task**

Of 22 validation participants:

- 1 said 'On the Job - from experienced Mentors'
- 0 said 'On the Job - self taught'
- 13 said ' Informal Training - Short courses and/or workshops'
- 8 said ' Formal Training - College or University'

## Block G: Personal and Professional Attributes

*Context: Personal and Professional Attributes are those individual characteristics that lead to success in an occupation. They are “attitude” or “life skills” attributes that apply to many different tasks and subtasks.*

*Personal attributes are useful for recruiting the “right kind” of people into an occupation. They are not listed in any particular order of priority.*

**Setting an Example:** Modeling appropriate behaviours in order to encourage others to emulate them. An example would be for the Agricultural OH&S Specialist to rigidly adhere to safety rules in their own lives.

**People Skills:** also known as “soft skills” or “interpersonal skills”; the ability to communicate effectively with people in a friendly way, that fosters collaboration. Individuals with this attribute have concern for others points of view and opinions

**Empathy:** the capacity to recognize and, to some extent, share feelings (such as sadness or happiness) that are being experienced by another person.

**Conflict Management:** the practice of identifying and handling conflict in a sensible, fair, and efficient manner. Conflict management requires such skills as *effective communication, problem solving, and negotiating* with a focus on *interests*.

**Negotiating:** A process used to reach agreement with another in a way that satisfies your self-interest

**Tact & Diplomacy:** A specialized communication skill that allows an individual to respond to difficult, stressful or sensitive interpersonal situations in ways that reduce or minimize potential conflict and maintains good working relationships

**Analytical skills:** the ability to visualize, articulate, and solve problems, and make decisions that make sense based on available information.

**Tenacity:** a quality that enables an individual to carry on toward a goal despite obstacles and difficulties.

**Time management & personal organization:** ability to organize oneself, prioritize actions, create and execute personal plans and schedules.

**Self-confidence:** Having a belief in oneself and one’s abilities

**Problem solving:** the ability to gather facts, weigh their importance, derive and study alternatives and determine the best solution based on logic, empirical data and reasoning

**Ambition:** A psychological need to progress personally and professionally. Persons with this attribute seek opportunities for promotion, increased responsibility and career advancement.

**Desire for self-improvement:** A psychological need to see personal skill sets grow and develop. Persons with this attribute seek training and development opportunities and seek to learn new things.

**Concern for order and quality:** A need for things to be done in a prescribed manner, and a concern that finished work meets specifications and craftsmanship expectations. Persons with this attribute will not accept behaviour, productivity or craftsmanship that is below the recognized standard.

**Focus on results:** A desire to see jobs completed. Persons with this attribute are never satisfied until the job is completed satisfactorily.

**Attention to detail:** An ingrained focus on the small things that lead to success. Persons with this attribute are fastidious and will spot the “little things” that add together to make or break a project.

**Honesty:** telling the truth, honouring the truth.

**Integrity:** doing what you say you will do; following through on your commitments. Persons with this attribute go out of their way to keep their promises and will always make contact if something comes up that prevents their doing so.

**Sense of responsibility:** A desire to do the right things, the right way. Persons with this attribute don't cut corners, bend rules or look for loopholes to excuse unacceptable or sub-standard behaviour or performance.

## APPENDICES

### APPENDIX A: Competency Matrix Chart

The following chart is a graphical representation of the National Occupational Analysis. It shows the Blocks, Tasks, and associated Essential skills components

Legend: the following Essential Skills terms are used in this diagram:

<b>ESSENTIAL SKILLS</b>	<b>Nomenclature</b>
Reading Text	READ
Document Use	DOC
Writing	WRITE
Oral Communication	ORAL
Numeracy	NUM
Thinking Skills: Problem Solving	PROB
Thinking Skills: Decision Making	DM
Thinking Skills: Finding Information	INFO
Thinking Skills: Critical Thinking	CRIT
Working With Others	WWO
Digital Technology	DIGITAL

Full details related to the Essential Skills components can be found in Appendix C and D.

Full details of tasks, subtasks and learning levels may be found in the body of the document.

## National Occupational Analysis for Agricultural Occupational Health and Safety (OH&S) Specialist

Block A: Develop Agricultural OH&S Program	<p>A1: Write OH&amp;S policies and procedures</p> <p>READ: 4 ORAL: 2 WRITE: 1 DOC: 3 PROB: 3</p>	<p>A2: Identify OH&amp;S Hazards</p> <p>NUM: 3 READ: 4 DM: 3 CRI: 3 WRITE: 3 ORAL: 3 DOC: 3</p>	<p>A3: Determine program resource requirements</p> <p>NUM: 3 WRITE: 3 READ: 3</p>					
Block B: Manage Agricultural OH&S Program	<p>B1: Implement agricultural OH&amp;S programs</p> <p>DM: 3 ORAL: 3 READ: 2 WRITE: 2 NUM: 3 DOC: 3</p>	<p>B2: Conduct agricultural OH&amp;S orientation</p> <p>DM: 3 WRITE: 3 ORAL: 3 CRIT: 3 DOC: 3</p>	<p>B3: Monitor agricultural OH&amp;S program(s)</p> <p>WVO: 3 NUM: 3 ORAL: 3 WRITE: 3 INFO: 3 DIGITAL: 3 CRIT: 3</p>	<p>B4: Manage OH&amp;S claims</p> <p>READ: 3 DOC: 3 ORAL: 3 DIGITAL: 2</p>	<p>B5: Manage occupational hygiene activities</p> <p>READ: 4 NUM: 2 INFO: 3 DOC: 2 WRITE: 3</p>			
Block C: Provide Agricultural OH&S Training	<p>C1: Conduct needs analysis</p> <p>CRIT: 3 DM: 3 NUM: 3 DOC: 3 WRITE: 4 DIGITAL: 3</p>	<p>C2: Design agricultural OH&amp;S training program</p> <p>READ: 4 DM: 3 WRITE: 4 ORAL: 3 CRIT: 3 WVO: 3 INFO: 3</p>	<p>C3: Coordinate training logistics</p> <p>WRITE: 2 DOC: 3 DIGITAL: 3 ORAL: 3 READ: 3</p>	<p>C4: Deliver training</p> <p>WRITE: 3 DM: 3 ORAL: 3 NUM: 3 CRIT: 3 DOC: 3 DIGITAL: 3</p>	<p>C5: Coach/Mentor stakeholders</p> <p>CRIT: 3 ORAL: 3 DOC: 3 PROB: 3</p>	<p>C6: Conduct training evaluations</p> <p>DM: 2 INFO: 3 CRIT: 3 WRITE: 3 READ: 2 ORAL: 3</p>	<p>C7: Modify existing training programs</p> <p>READ: 3 CRIT: 3 WRITE: 3 ORAL: 3</p>	
Block D: Facilitate Agricultural OH&S Compliance	<p>D1: Perform agricultural OH&amp;S inspection</p> <p>READ: 4 CRIT: 3 DM: 3 WRITE: 3 ORAL: 3 INFO: 3 DOC: 3</p>	<p>D2: Perform agricultural OH&amp;S audits</p> <p>READ: 4 CRIT: 3 DM: 3 WRITE: 4 ORAL: 3</p>	<p>D3: Advise on agricultural OH&amp;S issues</p> <p>READ: 3 ORAL: 3 WRITE: 3</p>	<p>D4: Manage facility licences/certifications</p> <p>DOC: 3 NUM: 3 DIGITAL: 3 READ: 4 WRITE: 3 ORAL: 3</p>	<p>D5: Manage individual licences/certifications</p> <p>DOC: 3 READ: 4 CRIT: 2 NUM: 3 WRITE: 3 ORAL: 3 DIGITAL: 3</p>			
Block E: Promote Agricultural OH&S Culture	<p>E1: Communicate best practices</p> <p>ORAL: 3 WRITE: 3 DIGITAL: 3 DOC: 2 READ: 3</p>	<p>E2: Engage stakeholders in agricultural OH&amp;S activities</p> <p>NUM: 3 DM: 3 WRITE: 3 ORAL: 3 READ: 3 DOC: 3</p>						
Block F: Perform Accident/Incident Investigations	<p>F1: Secure incident scene</p> <p>CRIT: 3 DM: 3 WRITE: 3 DOC: 3 ORAL: 3</p>	<p>F2: Collect evidences</p> <p>INFO: 3 ORAL: 3 DOC: 3 CRIT: 2 PROB: 3</p>	<p>F3: Conduct root cause analysis</p> <p>CRIT: 3 DM: 3 WRITE: 3 READ: 3 DOC: 2</p>	<p>F4: Prepare investigation reports</p> <p>INFO: 3 READ: 3 WRITE: 4 ORAL: 3</p>				

## APPENDIX B: Tools and Equipment List

The following is a typical assortment of tools and equipment that an Agricultural OH&S Specialist could be expected to use in the course of their duties. It is not intended to be exhaustive, and certain tools or equipment in the list will only be used by individuals in particular specialties within the occupation.

- Noise decimeter
- Gas monitor/ testing equipment e.g. – Dragger Tubes
- Personal Protective Equipment (PPE)
- Computer technology
- GPS
- Digital camera (still/video)
- Bio security - knowledge of protocol
- Anti-contamination practices and gear
- General office software, MS Word and MS Excel
- Presentation hardware and software - MS Power Point, projector, etc

# APPENDIX C: Essential Skills Profile Agricultural OH&S Specialist

## Essential Skills Background<sup>1</sup>

Essential Skills are foundation skills required for all types of work. They are not technical skills but the core skills people need to acquire knowledge and complete workplace tasks and daily activities. These skills are considered essential for learning and completing workplace tasks. Therefore, the term “Essential Skills” has been adopted.

Understanding what Essential Skills are required for different occupations and training programs:

- allows individuals to compare their skills to those required
- assist training bodies in developing appropriate academic upgrading materials and programs.

Training can be either stand-alone or embedded in other training to ensure individuals have the foundation skills necessary to be successful in training and as supervisors.

Human Resources and Skills Development Canada have defined Essential Skills. They are:

### Reading

Document Use

Numeracy

Writing

Oral Communication

Computer Use

Working With Others

Continuous Learning

### Thinking Skills:

- Problem Solving
- Decision Making
- Critical Thinking
- Job Task Planning and Organizing
- Finding Information
- Significant Use of Memory

### Definition of an "Example":

Example tasks are tasks generally performed by **most Agricultural OH&S Specialists**. Each Essential Skill area includes a list of Examples to illustrate the use of that skill. While the Examples are not a comprehensive listing of the duties performed in that occupational group, they do provide a picture of the nature and range of tasks performed.

### The qualifier – "may":

Some Examples use the qualifier "may". This indicates that the task **may not relate to all Agricultural OH&S Specialists or relate to only certain job functions**.

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<sup>1</sup> Please see Essential Skills definition and complexity rating examples in Appendix A. Complexity rating will be attached to examples after Essential Skills Profile is validated.

## A. Reading

The typical reading tasks of a Agricultural OH&S Specialists are at complexity 2 to 4. Their most complex text reading tasks are at complexity level 4.

### Examples of Reading Tasks

1. read short e-mail from agriculture producers, co-workers, colleagues, and clients. For example, they read messages from co-workers on matters such as updates on follow-up actions for near miss events and observed unsafe work practices. They scan brief e-mail from consultants to learn details about proposed training, costs and availability. They read e-mail from colleagues responding to request for details about procedures, training ideas and best practices for a range of agricultural occupational health and safety topics. (2)
2. read memos from organizations and government departments. For example, they read memos from Department of Agriculture outlining policy changes and implementation dates. They read memos from municipal governments about by-law changes and the potential affect on agriculture activities. Inspectors scan summonses for upcoming court appearances for details about the time, date, case number and a brief overview of the case. (2)
3. read short reports. For example, they read monthly safety reports and minutes from safety meetings to ensure that safety requirements are being met and to note follow-up action required. They may read brief medical reports and work plans for injured employees returning to work to learn about the type and nature of restrictions. (3)
4. read notices, bulletins and factsheets. For example, they read bulletins issued by agricultural associations such as the Canadian agricultural Safety Association to learn about new farm, field worker and crop protection guidelines. They read factsheets on safe handling for a wide range of agricultural products and materials. They scan bulletins from regulatory agencies which outline new programs and official statements on topics such as hazardous products and worker protection guidelines. (3)
5. read agricultural and health and safety magazines and professional associations' newsletters to stay abreast of best practices, legislative changes and other matters affecting their work. For example, they read articles in health and safety magazines to learn about assembly modifications which will minimize repetitive motion injuries. (3)
6. read and interpret consultants quotes and contracts for projects. Correct interpretation of these documents requires thorough knowledge of projects and programs within their area of expertise. They review quotes to determine what work and materials are included and excluded. (3)
7. read and interpret manuals, standard operating procedures. For example, read and interpret equipment and operating manuals. They scan operating manuals and vendor safety policies to identify operating procedures and potential hazard points to determine operating procedures and practices. They read investigation procedures to ensure they are properly conducted. They review industry best practices and procedures for use of chemicals such as pesticides. During reviews and implementation of new practices and processes they assess policy and procedures for omissions and errors. (3)
8. read and interpret findings in reports. For example, they read and interpret health and safety audit reports to identify deficiencies in programs and to develop corrective action plans and recommendations to management teams. They read and interpret reports for agriculture agricultural occupational health and safety and occupational hygiene and other related topics such biological

affects, transition modes and physiology of chemicals. They read to gain knowledge to better assess situations and identify risks and to stay abreast of emerging trends and best practices. (4)

9. read and interpret legislation, regulations and subsequent bulletins and addenda. For example, they read the National Safety Code and occupational health and safety Acts to maintain current knowledge of regulation and to ensure that agriculture procedures on meet regulatory requirements. They read and interpret Occupational Health and Safety Regulations as they apply to safe work practices. They review to occupational hygienist regulations to learn about threshold limits. (4)

## **B. Document Use**

The typical document use tasks of a Agricultural OH&S Specialists are at complexity 1 to 3. Their most complex document use tasks are at Complexity Level 3.

### **Examples of Document Use Tasks**

1. observe safety, warning and regulatory symbols and signs at agricultural worksites. They observe signs, which indicate speed limits, bio-security procedures before entering sites and requirements for personal protective equipment such as hard hats and safety gear. Additionally, they observe signs and symbols to ensure health and safety practices for signage are being met. (1)
2. enter data in lists, tables and schedules. For example, they enter data about accidents, incidence and near misses into tables. They enter training and certification dates into schedules and update training records. They enter evaluation ratings into tables. (2)
3. read and interpret Material Safety Data Sheets (MSDS) and technical data sheets to obtain information on storage and usage and what to do in case of emergency. (2)
4. locate data in lists, tables and schedules. For example, they scan tables in ministry guidelines to locate data for threshold levels such as maximum concentration of chemicals in the air, water and ground and noise and vibration levels. They locate expiry dates for certification of employees and equipment to determine training schedules and inspections. They locate data about incidences, injuries and near misses in performance tables. (3)
5. locate data in tracking and other administrative forms. For example, they locate safety control data in inspection sheets and corrective action chronology reports. They locate data such as downtime, lost time, near misses and injuries in incident report forms and weekly and monthly safety and production audits. They verify training currency of workers in training certificates and verify equipment is safety certified in inspection and certification reports. They locate details about deficiencies in inspection checklists. They locate data and test results for a range of agricultural environmental and occupational hygiene variables in test result reports. They locate data about trainee satisfaction and recommendations in evaluation forms for training. (3)
6. complete tracking and other administrative forms. For example, they complete inspection reports and investigation checklists to note that inspections were performed, highlight safety deficiencies and describe temporary and permanent countermeasures which were implemented. They complete corrective action forms to note defects, immediate corrective action applied and follow-up actions required such as replacement and modification to protection devises. They may complete a wide range of forms for worker's compensation claims such as first report of injury, notice of action/change, return to work, etc. They complete budget summaries for programs and create training budgets. (3)
7. locate data and identify trends in graphical displays such as graphs and charts. For example, they scan graphs depicting accidents, injuries, near misses to identify trends and monitor the effectiveness

of agricultural occupational health and safety training, procedures and practices within organizations. (3)

8. locate dimensions and other features on farm and work station layout drawings. They locate dimensions, angles and other features marked on floor plans to determine how to modify workstations to improve safety and workflow. They may use maps of farms and floor plans of processing facilities to determine dimensions and placement locations of machinery, equipment, crops, animal pens, food storage areas and buffer zones for chemical and hazardous products. (3)
9. may identify processing stages, pieces of equipment and process flows in schematics of processing operations. For example, they interpret schematics which illustrate the equipment and procedures for harvesting raw materials in order to identify safety hazards and alternative work procedures. (3)

### **Creating Documents Examples**

10. create lists and tables. For example, they may create training schedules. They create tables to track training and certification of employees, machinery and equipment. They create tables to track agricultural occupational health and safety incidences.
11. may sketch facility layouts to explain to clients, co-workers and agriculture operators why their operations do not meet regulatory standards and demonstrate how to make improvements.
12. may create diagnostic and safety work practice flowcharts. For example, they create schematics to outline procedures for handling job-site injuries.
13. may draw process and audit flow schematic diagrams that illustrate changes to processes. They draw these diagrams to support their written observations in inspection reports.

#### **Document Use Summary**

- Reads signs, labels or lists
- Reads completed forms
- Completes forms by marking check boxes, recording numerical information or entering words, phrases, sentences or texts of a paragraph or more
- Read completed forms containing check boxes, numerical entries, phrases, addresses, sentences or texts of a paragraph or more.
- Read tables, schedules or other table-like text.
- Enter information on tables, schedules or other table-like text.
- Obtain specific information from graphs or charts.
- Draw, sketch or form common shapes such as circles, triangles, spheres, rectangles, squares, etc.
- Interpret scale drawings (e.g., blueprints or maps).
- Take measurements from scale drawings.
- Draw to scale
- Read assembly drawings
- Read schematic drawings (e.g., electrical schematics).
- Make sketches.
- Obtain information from sketches, pictures or icons

## C. Writing

The typical writing tasks of Agricultural OH&S Specialists are at complexity 1 to 4. Their most complex writing tasks are at complexity level 4.

### Examples of Writing Tasks

#### *Agricultural OH&S Specialists:*

1. write reminder notes to themselves. For example, they write notes concerning tasks to complete or instructions to provide to others. They write notes regarding evidence of violations to health and safety procedures and governmental regulations. They make written records of correspondence, telephone calls and conversations to document key discussion points and required follow-up actions. (1)
2. write e-mail to co-workers and colleagues. For example, they write messages to agriculture producers and supervisors informing them of noted deficiencies during inspections. They describe concerns about processes and outline work station modifications to improve safety. They write e-mail to co-workers informing them of changes to policies and procedures and implementation dates. They write e-mail to colleagues requesting information about best practices for various agricultural occupational health and safety topics. (2)
3. write descriptions and explanations in disciplinary, inspection and health and safety forms. For example, they describe safety concerns such as surface damage on work platforms, repairs completed and corrective actions required in safety checklists. They note modification suggestions in job observation forms. They write notes to describe changes to production processes in job allocation change notices and worker awareness forms. (2)
4. write memos and letters. For example, they write memos to notify co-workers and colleagues about upcoming meetings and workshops. (2)
5. prepare brief reports. For example, they write corrective actions reports in which they describe incidence(s) and findings and outline changes to procedures and practices. They write warning and orders to outline requirements, actions and repercussions to ensure employees and workplace elements follow regulatory requirements and policies and procedures of organizations. (3)
6. prepare agricultural health and safety newsletters and promotional materials to promote health and safety practices and inform employees of upcoming events and activities. (3)
7. write standard operating procedures and practices. For example, they write safe work procedures for a range of safety components such as confined spaces, fall protection, walk out/ tag out and equipment. They must be explicit and precise to reduce ambiguity and the possibility of misinterpretation. (3)
8. prepare training materials for a variety of agricultural occupational health and safety topics. The ability to organize, interpret and present ideas and activities tailored to specific audiences and learning objectives is important to ensure a clear understanding of issues and requirements. (4)
9. create presentations for a range of agricultural occupational health and safety topics. The ability to organize, and present ideas tailored to specific audiences is important. For example, they create presentations for managers and board members of organizations on matters such as findings from audits, and investigation reports and to make recommendations for program policies and procedures. They create presentations for safety awareness and to introduce new procedures and practices. (4)
10. prepare detailed reports. For example, they may write lengthy reports to record the outcomes of detailed assessments, inspections, audits and accident investigations. In the reports they outline findings, present analyses of causal factors and to offer conclusions and recommendations. They present justifications and recommendations clearly and accurately to ensure managers can make informed decisions. (4)

## **D. Numeracy Tasks**

The numerical calculation tasks of a Agricultural OH&S Specialists involve:

- Money Math at complexity level 2.
- Scheduling or Budgeting and Accounting Math at complexity levels 2 to 3.
- Measurement and Calculation Math at complexity levels 1 to 3.
- Data Analysis at complexity levels 1 to 3.
- Numerical Estimation at complexity levels 2.

### **Examples of Numerical Calculation Tasks**

#### **Money Math**

*Agricultural OH&S Specialists:*

1. calculate expense claims for travel to meetings and training events. They calculate expenses using per diem amounts for meals and per kilometre rates for use of personal vehicles. (Money Math) (2)
2. calculate and verify invoice amounts. For example, they approve consultant invoices for curriculum and training sessions. They verify that invoices reflect contract prices for equipment, materials and per diem rates. (Money Math) (2)

#### **Scheduling, Budgeting and Accounting Math**

*Agricultural OH&S Specialists:*

3. may record and categorize money issued for program costs. (Scheduling, Budgeting & Accounting Math) (2)
4. create and monitor program schedules such as inspection, worker training and equipment certification schedules. They create and monitor schedules for new initiatives. They may prepare and monitor overall schedules for agricultural occupational health and safety programs. When preparing schedules they need to consider a wide range of factors and consult with supervisors and managers. (Scheduling, Budgeting & Accounting Math) (3)
5. may determine the best value among various options to modify work practices to meet regulatory requirements. They perform comparative analyses of cost data for various options such as using pre assembled packing boxes versus job rotations to minimize repetitive strain injuries. (Scheduling, Budgeting & Accounting Math) (3)
6. may develop and monitor overall program budgets and develop budgets for particular activities. They consider labour, material, equipment and consultant costs using established costing rates. They monitor expenses to ensure projects are within budget, and adjust budget lines as required. In addition, they may prepare financial summaries to monitor return on training and program investments. (Scheduling, Budgeting & Accounting Math) (3)

#### **Measurement and Calculation Math**

*Agricultural OH&S Specialists:*

7. take measurements using measuring tools such as rulers and tapes. For example, they use rulers to confirm dimensions of holding tanks, heights of work areas and distances between structures. (Measurement and Calculation Math) (1)
8. calculate and verify the dimensions and location of structures using measurements from scale drawings and on-site measurements. They calculate depths, heights and widths. For example, they

calculate measurements of work stations to verify ergonomic principles and safety guarding requirements are met. (Measurement and Calculation Math) (3)

9. use specialized instruments to take precise measurements. For example, they measure the air quality in buildings and noise levels in buildings and during equipment operations. (Measurement and Calculation Math) (3)

### **Data Analysis**

*Agricultural OH&S Specialists:*

10. compare data from test results, such as those performed on water samples, to standards to identify whether they are within acceptable limits. (Data Analysis Math) (1)
11. calculate averages of sets of data and test readings to identify trends and draw conclusions to make adjustments to training, safety awareness activities and agriculture work activities and procedures. (Data Analysis Math) (2)
12. collect and analyze data to describe agricultural occupational health and safety variables. For example, they analyze data for a wide range of variables such as medical requirements and loss time in production and labour hours per incident; incident type including location, facility, food groups and activity; training evaluations and outcomes. They use their analysis to identify inconsistencies, trends and problem areas which deserve further investigation; evaluate the effectiveness of training; adjust work processes and other program activities; and to depict trends over time for health, safety and the environment to justify spending to management. (Data Analysis Math) (3)

### **Numerical Estimation**

*Agricultural OH&S Specialists:*

13. they estimate training time required for different health and safety activities. They consider factors such as the complexity of the training, required outcomes and training audiences and take into account data from similar training activities. (Numerical Estimation) (2)

## **Math Skills Summary**

### **a. Mathematical Foundations Used**

#### **Number Concepts**

Whole Numbers	Reading and writing product codes and material quantities; calculating quantities of materials; calculating days and hours of missed and lost time; ordering quantities of materials.
Integers	Monitoring budget deviations.
Rational numbers - Fractions	Reading, writing and calculating dimensions in fractions of inches; calculating distances in fractions of inches and times in fractions of hours.
Rational numbers - Decimals	Measuring dimensions using metres, centimetres and millimetres; carrying out calculations using dollar amounts; calculating dimensions in fractions of inches and weights in fractions of pounds.
Rational numbers - Percentages	Expressing safety and injury rates as percentages.
Convert between fractions, decimals and percentages	Reading and writing decimal equivalents for materials sized in fractions of inches and to simplify calculations; expressing training costs as fractions or percentages of total project budgets and return on training rates; converting federal and provincial sales taxes from percentages and decimals to perform calculations.
Other Real Numbers	Using roots and powers to calculate areas and volumes; measuring distances to the second significant digit.

#### **Patterns and Relations**

Equations and Formulae	Using equations to calculate the dissipation rate of chemicals in the air; inserting lengths, widths and heights into formulae to calculate overall dimensions, volumes of structures and readings for environmental factors.
Use of Rate, Ratio, and Proportion	Using scaling ratios to review and interpret structural elements on drawings; using proportional calculations to determine actual dimensions using measurements on scaled construction drawings.

#### **Shape and Spatial Sense**

Measurement Conversions	Converting measurements from inches to metres, centimetres and millimetres; converting square inches to square centimetres and square metres; converting cubic inches to cubic feet and metres.
Areas, Perimeters and Volumes	Calculating areas and perimeters of structures and farm footprints; calculating volumes
Geometry	Analyzing structures into squares, rectangles and circles; using geometric construction methods to layout proposed location of structures and workstations to ensure regulatory requirements are met.

## **Statistics and Probabilities**

Summary Calculations – calculate averages, rates, proportions and ratios

Calculating average incidences, medical visits and injuries per shift, week and month per location, type and work activity.

Statistics and Probabilities

Collecting and analyzing data for agricultural occupational health and safety control such as the number of near misses, noted deficiencies and work related injuries to draw conclusions about trends. For example, they use statistics to determine whether injuries are related to specific repetitive movements and to determine process inefficiencies.

## **Measurement Instruments Used**

- Time. For example, using a watch or clock.
- Weight or mass. For example, using portable or platform scales.
- Distance or dimension. For example, using a ruler, tape measure.
- Liquid volume. For example, using a calibrated glass.
- Temperature. For example, using a thermometer or thermostat.
- Pressure. For example, using a pressure gauge.
- Angles. For example, using a carpenter's square.
- Sound levels. For example, using a decibel meter.
- Gas levels. For example, using dragger tubes.
- Use the SI (metric) measurement system.
- Using the imperial measurement system.

## E. Oral Communication

The typical oral communication tasks of a Agricultural OH&S Specialists are at complexity 2 to 3. Their most complex oral communication tasks are at complexity level 3.

### Examples of Oral Communication Tasks

#### *Agricultural OH&S Specialists:*

1. exchange information about regulations and workplace practices with co-workers, colleagues, suppliers and agriculture producers. For example, they provide producers with detailed descriptions of deficiencies uncovered during inspections. They seek additional technical details from equipment and product suppliers. They discuss employees return to work plans with supervisors and managers to ensure they understand restrictions. They discuss corrective actions and changes to procedures with manager and supervisors and seek their input on implementation timelines and strategies. They talk with workplace supervisors to negotiate training for workers and inspection of equipment. (2)
2. lead committees and safety groups. For example, they may lead daily and weekly safety meetings with supervisors and workers to recap and review safety hazards, reinforce safety alerts and outline upcoming training. In addition, they review procedure changes such as additional safety steps for work activities. (3)
3. exchange technical information with representatives from regulatory bodies, medical professions and regulatory officers. For example, they exchange ideas for best practices, training programs and interpretation of regulations. They seek clarification about diagnoses of injuries, treatment plans, types and length of time for physical restrictions for returning employees. (3)
4. discuss the technical aspects of their work with colleagues. For example, they ask colleagues for their observations on trends and prevention strategies for a range of agricultural occupational health and safety topics and often seek their perspectives and opinions before writing policy directives, updating procedure manuals and implementing training activities. (3)
5. participate in conferences, seminars and workshops to stay abreast and to acquire and share new knowledge. (3)
6. interview witnesses to incidence such as accidents and near misses to establish facts and help determine probable causes. They use a wide range of communication techniques and listen carefully to adjust questions to probe for more details. (3)
7. give feedback, Instruct and provide mentoring to health and safety officers and representatives. They provide clear instructions, demonstrations and constructive feedback to teach new skills and demonstrate methods for assessing health and safety risks, documenting deficiencies and determining alternative work practices. They use language and communication techniques appropriate to the circumstance, criticality and technical knowledge of the audience. (3)
8. give presentation to producers and their employees on a wide range of occupational health and safety topics. They use language and communication techniques appropriate to the circumstance, criticality and technical knowledge of the audience. For example, they present finding from safety audits and offer their opinions, evaluations and recommendations at managers meetings. They give presentations to launch safety programs and activities. They outline reasons for changes to procedures and policies, outline expectations, requirements and timelines for implementation and review. (3)
9. interact with a range of officials, supervisors, and agriculture producers as the first-line response person during emergency situations such as chemical spills and injuries to workers. They assign tasks, provide information, coordinate activities and discuss safety procedures and requirements using various communication tools such as cell phones, hand radios, dispatch radios, and hand

signals. Clear, calm and directive communication is critical during emergency responses to emergencies to keep situations safe and provide support care. (3)

10. may deliver training. They instruct participants in their areas of expertise. They explain training objectives, assignments and participation expectations. They present theory, ask questions of participants and engage them in discussions and activities. They challenge participants' viewpoints and concepts to further their understanding of training content. They modify their content delivery as appropriate to various audiences. (3)

## **F. Thinking Skills**

### **I. Problem Solving**

The typical problem solving tasks of a Agricultural OH&S Specialists are at complexity levels 2 to 3. Their most complex problem solving tasks are at complexity level 3.

#### **Examples of Problem Solving Tasks**

*Agricultural OH&S Specialists:*

1. may encounter agriculture producers and eyewitnesses involved in incidents who refuse to participate in investigations. They explain their roles, stress that investigations help prevent similar incidents from occurring in the future and outline the repercussions for failing to providing information. (2)
2. find that co-workers and employees of agriculture producers are not completing incident and inspection forms correctly. They speak directly to individuals involved and organize meetings to review data recording and reporting procedures and the importance of the data. They may point out the negative effects of incomplete information such as compromising safety and risk management control. They monitor reporting on documents and provide additional feedback to ensure the information is correct. (2)
3. encounter uncooperative and none understanding of producers and their employees. They explain reasons for health and safety policies and procedures, regulatory requirements and repercussions for noncompliance such as safety risks and the costs resulting from accidents. They work with the producers and their employees overtime trying different strategies to increase their awareness and understanding of health and safety. They may issue corrective action items and seek support from regulatory officers in extreme situations. (3)
4. find that workers are not following safety procedures. They meet with workers to discuss the safety infractions such as failing to lock out a machine's power supply prior to leaving the workstation. They review the standard work procedures and protocols and inform workers of next steps in the discipline process should further infractions occur. In some instances, they may require workers to retake specific safety training such as fall arrest or confined space. (3)

### **II. Decision Making**

The typical decision-making tasks of a Agricultural OH&S Specialists are at complexity levels 2 to 3. Their most complex decision making tasks are at complexity level 3.

#### **Examples of Decision-Making Tasks**

*Agricultural OH&S Specialists:*

1. select methods for advising and informing producers and their employees. They consider the times available and the complexity and urgency of concerns to be addressed. They may choose among advising by telephone, visiting in person and holding information sessions and seminars. (2)

2. choose the timing, topics and speakers to invite for seminars and workshops. They consider the emerging trends in agriculture, interests of producers, types of agricultural production in their regions and other events farmers may wish to attend. They determine speakers' availabilities and areas of expertise. (2)
3. choose safety topics for daily and weekly safety meetings. They consider current safety concerns, requirements for upcoming workplace tasks and workers' requests. (2)
4. may select policies, procedures and programs and monitoring systems for health, safety and environment. This also includes types of rewards and activities to promote awareness and good practices. They consider workplace environment, activities and hazards. They review regulations and best practices for health and safety and occupational hygiene and consult with colleagues to inform their decisions about what constitutes safe work practices. They monitor performance trends for agriculture occupational health and safety to determine continuous improvement activities. (3)
5. determine training needs considering regulatory requirements as they relate to the workplace environment and activities. They review existing best practices and consult with colleagues. They review performance records for agricultural occupational health and safety to adjust and modify training. For example, they determine the need for a particular training program when statistics indicate an upward trend in incidents such as damaged property and left handed injuries during particular activities. After training, they monitor outcomes such as incidence rates. (3)
6. select training methods. They consider the training objectives, gaps in knowledge and performance and the audience for which the training is geared. (3)

### **III. Critical Thinking**

The typical critical thinking tasks of a Agricultural OH&S Specialists are at complexity levels 2 to 3. Their most complex critical thinking tasks are at complexity levels 3.

#### **Examples of Critical Thinking Tasks**

##### *Agricultural OH&S Specialists:*

1. assess the effectiveness of training. They use established evaluation criteria such as inspections to monitor work practices and analyze health and safety data to monitor trends in incidences and deficiencies to modify program activities and make recommendations. (2)
2. evaluate workplace safety and work procedures. For example, they observe the uses of personal protective equipment, the placement and expiry dates of fire extinguishers and the locations and storage of chemical products. They evaluate the risks associated with operating various pieces of equipment and machinery, and check for emergency stop switches and protective guards and rails. They observe workers completing tasks to ensure adherence to written operating procedures, and review incident and accident reports. (3)
3. assess incidents to determine causal factors. They used established assessment criteria such as root cause analysis. They use their assessment to make recommendations and establish priorities. (3)
4. evaluate the suitability policies and procedures for agricultural occupational health and safety using established criteria from rules, regulations and best practices. They evaluate risks posed by work activities, machines and the effectiveness of safety systems such as gates, guards and automatic switches. They assess the risks of work practices and processes. They assess the safety of tools, equipment, materials and machinery and consider the risks posed by slippery work surfaces, toxic chemicals, standing water and compressed gases. They continue monitoring effectiveness through safety inspection and audits and analysis of data. They use their evaluation to recommend system and process improvements. (3)
5. judge the conformity of work activities and workstations to agricultural occupational health and safety standards and specifications. They use established safety, ergonomic and occupational hygiene

efficiency criteria. For example, they inspect workstations using criteria such as proper clearance from machinery, proper placement and condition of work surfaces, equipment and tools to minimize movements and hazards. They complete job observations to assess work cycles. They use criteria such as body positions and the types, numbers and repetitions of movements per job task and distances between tasks. They review notes in logbooks, currency of certification for workers and equipment and analyze health and safety data. They identify deficiencies, maintenance and supply requirements and recommend modifications as required. Their judgment is critical for reducing job related injuries and agricultural occupational incidents. (3)

#### **IV. Job Task Planning and Organizing**

Agricultural OH&S Specialists plan and organize their job tasks at complexity level 3.

##### **Description**

Health Safety and Environment specialists are responsible for planning and organizing their tasks to meet health and safety requirements and goals of agriculture producers. They schedule time to review daily, weekly and monthly health and safety data, prepare and monitor training and certification schedules, coordinate training activities, deliver training, conduct safety inspections and audits, attend safety and management meetings, deliver presentations and respond to questions and provide program oversight. They may need to adjust their schedules to attend to pressing concerns such as safety deficiencies and incidences.

##### **Planning and organizing for others**

Health Safety and Environment specialists participate in developing operational policies and practices. They take part in management meetings to plan health and safety initiatives and programs. Those who are supervisors and team leaders coordinate and monitor the work of other health and safety staff and oversee the work of those hired and contracted for specific projects. For example, they may assign tasks to health and safety staff during audits of large producers, oversee work of training consultants and coordinate the activities of summer students assigned to their department.

#### **V. Finding Information**

Agricultural OH&S Specialists tasks that involve finding information are at complexity levels 3.

##### **Examples of Tasks Involving Finding Information**

*Agricultural OH&S Specialists:*

1. find information about incidents, accidents, near misses and noted deficiencies from daily inspection reports, logbooks and by speaking to supervisors, workers and managers. (2)
2. synthesize data from multiple forms, tables, charts, graphs and inspection and audit reports in analyzing health and safety performance of organizations and to diagnose and correct problems, such as increased incidents, accidents, injuries and reported near misses. (3)
3. find information about health, safety, environment and occupational hygiene requirements and best practices. They search Internet websites, review textbooks, articles, newsletters, reports and government publications, speak to co-workers, colleagues and attend association meetings, workshops and seminars. (3)

## **G. Working with Others**

### **Description**

Agricultural OH&S Specialists integrate their own schedules and tasks carried out by their teams, if applicable and with managers and supervisors of other areas or departments of agriculture production. They provide guidance and oversee activities to ensure agricultural occupational health and safety standards and targets are met. They coordinate and integrate job tasks when implementing new programs. They participate in safety and management meetings to coordinate agricultural occupational health and safety training and other related program activities.

## **H. Digital Technology**

The Computer Use tasks of Agricultural OH&S Specialists are at complexity level 3.

### **Examples of Computer Use Tasks**

#### *Agricultural OH&S Specialists:*

1. use the Internet. For example, they may access on-line regulations, manuals and bulletins using Internet browsers. They may also perform keyword searches to get information about codes, standards, materials, equipment and suppliers from websites. (2)
2. use word processing. For example, they may create lengthy audit reports, business cases, procedures and contract specifications using word processing programs. They may supplement text with imported graphs, photographs and spreadsheet tables. (3)
3. use databases. They create and modify databases to manage data for agricultural occupational health and safety by capturing and collecting information from workplace documents such as incidence, accident and near miss reports, training certificates, inspection checklists and safety audits. They manage data and run queries to access health and safety data. (3)
4. use spreadsheets. For example, they use spreadsheet programs to create training and equipment inspections and certification schedules. They create spreadsheets for collecting data and preparing graphs of agricultural occupational health and safety data. They embed formulas to perform calculations. They generate graphical displays using the data from spreadsheets. (3)
5. use communication software. For example, they use e-mail software to create and maintain distribution lists, receive correspondence and send e-mail and attachments to colleagues, co-workers, sub-contractors and clients. (2)
6. use graphics software. For example, they produce schematic drawings using diagramming and drawing programs. They create slide shows using presentation software. In order to develop effective presentations for managers, co-workers, colleagues and clients, they import graphs, scanned images, schematic drawings, word processing files and spreadsheet tables. (3)
7. use computer-assisted design, manufacturing and machining. For example, they may use computer-assisted design software review two-dimensional and three-dimensional drawings of workplace and work station layouts. (2)
8. may use other computer and software applications such as specialized safety monitoring and facility management software to gather, input and monitor data and to generate training and inspection schedules. (3)

## **I. Continuous Learning**

### **Description**

Agricultural OH&S Specialists direct their own learning in response to changes and new developments in their areas of expertise. They learn through their day-to-day activities, reviewing and researching regulations and best practices and interactions with co-workers, colleagues and agricultural producers. They participate in conferences, seminars and workshops and maintain memberships in relevant associations to acquire and share new knowledge. Additionally, they may also take college and university courses.

## **J. Other Information**

In addition to collecting information for this Essential Skills Profile, data was also collected for the following topics.

### **Physical**

Agricultural OH&S Specialists sit when completing office duties. They walk on farms and ranches. They require limited strength to lift audiovisual equipment. They may bend, crouch, stoop or stretch when assessing equipment, work stations and overall work environments.

### **Attitudes**

Agricultural OH&S Specialists must be diplomatic when dealing with representatives of regulatory agencies and farm owners and operators. They should be observant, patient, sincere and tactful when informing about deficiencies and required changes to practices. They should be assertive, with a strong ability to negotiate and diffuse possible confrontational situations. Analytical, common sense and a sense of humour are essential.

### **Future Trends Affecting Essential Skills**

In the future, Agricultural OH&S Specialists will require strong reading and continuous learning skills to keep abreast of changing regulations, technology and agriculture production processes. They will also require enhanced computer use skills to benefit from the increasing use of technology in information management, process control and design as it relates to management of health and safety programs.

## APPENDIX D: Essential Skills Definitions<sup>2</sup>

### A. Reading Text Definition - 5 point complexity scale

**Reading Text** refers to reading material that is in the form of sentences and paragraphs. It generally involves reading notes, letters, memos, manuals, regulations and reports

**Reading text** also includes:

- information on forms and labels (if it is at least one sentence in length)
- print and non-print material such as text on computer screens
- sentence length or more in tables, graphs and documents

**Complexity levels are determined considering:**

- complexity of the reading process
- number of pieces of information
- required inferences
- required choosing of relevant information
- the need to integrate information to understand and complete tasks
- use of specialized knowledge.

Lower level reading tasks involve locating single sources of information in short text.

Higher level reading tasks involve learning and applying specialized information from multiple sources.

### B. Document Use Definition<sup>3</sup> - 5 point complexity scale

**Document Use:** generally involves locating and entering information and data in graphs, lists, tables, blueprints, schematics, drawings, signs and maps

- matrix documents with clearly defined rows and columns;
- graphic documents, which provide a visual summary - pie charts, bar charts and line graphs;
- locative documents or maps provide a visual summary of persons, places or things in space
- entry documents require the reader to provide information.

Some documents are a combination of documents, which require the use of other documents for their interpretation. For example, maps and graphs use legends that provide information that must be read and understood to use the map.

**Complexity levels are determined considering:**

- complexity of the document
- complexity of finding and entering information
- complexity of information use

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<sup>2</sup> Please refer to the HRSDC User guide at URL: [http://srv108.services.gc.ca/awm/main/c\\_toc\\_e.shtml](http://srv108.services.gc.ca/awm/main/c_toc_e.shtml) for an overview of essential skills levels and complexities.

<sup>3</sup> HRSDC Profilers Workshop, Document Use Discussion - Draft, July 2006.

Lower level document use tasks involve limited locating and entering information and data with little knowledge and analysis of content

Higher level document use tasks require multiple searches and entries within dense text which requires specialized knowledge

### **Document use**

If a document includes a paragraph of text such as on a label or a completed form, it is also included in *Reading Text*. Documents requiring the entry of words, phrases, sentences and paragraphs are also included in *Writing*.

### **C. Writing Definition - 5 point complexity scale**

**Writing** is generally text in the form of sentences and paragraphs and writing in documents (for example, filling in forms) and non-paper-based writing (for example, typing on a computer) It generally involves writing notes, letters, memos, manuals, regulations and reports

#### **Complexity levels are determined considering:**

- purpose of writing
- length of writing
- the effectiveness of the writing where appropriate tone and mood are important
- originality

Lower level writing tasks are generally about day-to-day matters and are done to organize information and remind or inform others.

Higher level writing tasks require originality and effectiveness and are done to provide explanations, comparisons and analysis.

### **D. Numeracy Definition - 5 point complexity scale**

**Numeracy** refers to workers' use of numbers and thinking in quantitative terms.

Numerical calculation is rated within **four application settings**.

- 1. Money Math** - financial transactions, such as handling cash, preparing bills or making payments.
- 2. Scheduling or Budgeting and Accounting** - managing time and money as resources, planning and monitoring their use, assessing best value, and reducing waste. (The difference between handling money and carrying out accounting tasks is not always clear. The definition of money math indicates the need for a *transaction*).
- 3. Measurement and Calculation** - measuring and describing the physical world; and
- 4. Data Analysis** - analysis of numerical data such as an extrapolation of information, and determination of trends or statistically significant effects.

#### **Complexity levels are determined considering:**

- the type and number of operations required

- the amount of translation and number of formulae and calculations required to complete a task

Lower level numeracy tasks involve simple math operations where the numbers are provided.

Higher level numeracy tasks involve multiple steps of calculations using advance math techniques and complex formulae, equations and functions. Numbers often need to be derived or estimated.

### **E. Oral Communication - 4 point complexity scale**

Oral communication pertains primarily to the use of speech to give and exchange thoughts and information.

Complexity levels are determined considering:

- the range and complexity of communication functions
- the range and complexity of the information about which one communicates;
- the range and complexity of the communication context,
- the risk level in failing communication intent

Lower level oral communication tasks are generally about day-to-day matters to exchange information.

Higher level oral communication tasks require the use of various communication methods to explain, make comparisons and analysis information.

### **F. Thinking Skills - 4 point complexity scale**

Thinking Skills differentiates between six different types of cognitive functions. However, these functions are interconnected. The thinking skills section of the Profile has six components.

#### **1. Problem Solving**

Problem solving involves situations and events that require solutions. Most problems concern mechanical challenges, people or situations.

Complexity levels are determined considering:

- the complexity of the problem;
- the complexity of identifying the problem;
- the complexity of identifying the solution steps; and
- the complexity of assessing the solution

#### **2. Decision Making**

Decision making refers to making selections among a range of options.

Complexity levels are determined considering:

- the consequence of error;
- the reversibility of the decision;
- the adequacy of the information available;
- whether there is a set procedure or decision tree to follow;
- whether there is a body of similar, past decisions to compare to; and
- the extent to which judgement is required to make an appropriate decision.

### **3. Critical Thinking**

Critical thinking refers to making rational judgments through logical thought process of evaluating ideas or information, and using objective criteria to make a judgment about value, or to identify strengths and weaknesses.

Complexity levels are determined considering:

- assessment criteria considered
- assessment process
- effects of critical thinking

### **4. Job Task Planning and Organizing**

Job Task Planning and Organizing refers to the extent to which the workers plan and organize their own tasks. It does not refer to involvement in the planning function for the organization in which they work.

Complexity levels are determined considering:

- the extent of variety in work activities;
- whether the task sequence is provided to the worker or determined by the worker;
- whether priorities are provided to the worker or determined by the worker;
- the extent to which the day's work plan is disrupted;
- the extent to which the worker's own work plan must be integrated with the work plans of others;
- the number of sources for work assignments; and
- the extent to which the order of those tasks sequenced by the worker makes a difference to total efficiency.

### **5. Significant Use of Memory**

Significant Use of Memory includes any significant or unusual use of memory for workers in the occupational group. It does not include normal memory use that is a requirement for every occupation. There are no complexity ratings attached to use of memory.

### **6. Finding Information**

Finding Information involves using any of a variety of sources including text, people, computerized databases or information systems.

Although finding information is listed as an essential skills , workers' use of various information sources may be referred to in other sections such as *A. Reading Text*, *B. Document Use*, *E. Oral Communication* and *H. Computer Use*.

Complexity levels are determined considering:

- the complexity of locating the desired information; and
- the complexity of extracting and processing the information.

## **G. Working with Others-**

Working with Others section outlines the ways in which workers interact with one another to carry out their tasks. This section covers four types of work contexts. Knowing whether workers work alone, independently, with partners or as team members will help readers understand the

skills workers use in their jobs. There are no complexity ratings attached to Working with Others.

Working with Others is described considering:

- the extent to which they integrate task and coordination activities with others
- the extent to which they are responsible for ensuring coordination occurs
- the types of leadership and supervisory activities

## **H. Digital Technology - 5 point complexity scale**

Computer Use indicates the variety and complexity of computer use within the occupational group.

Complexity levels are determined considering:

- the number of features and options used
- the number of operations performed
- variation in tasks performed
- whether they use software as is or adapt it for specific purposes

## **I. Continuous Learning-**

Continuous Learning examines the requirement for workers in an occupational group to participate in an ongoing process of acquiring skills and knowledge.

Continuous Learning tests the hypothesis that more and more jobs require continuous upgrading, and that all workers must continue learning in order to keep or to grow with their jobs. If this is true, then continuous learning will become essential skills. There are no complexity ratings attached to continuous learning.

Continuous learning is described considering:

- responsibility for setting and achieving learning goals
- complexity of learning process
- extent of inference needed to apply learning to the job

## **J. Other Information**

**Other Information** summarizes additional information collected during the interviews.

Other Information consists of three main sections.

1. Physical Aspects
2. Attitudes
3. Future Trends Affecting Essential Skills

## APPENDIX E - Glossary of OH&S Terms

The following terms are commonly used in this occupation, and are provided here as an aid to comprehension.

**Absorption** – The entry of a substance into the body through broken or unbroken skin.

**Accident** – An unplanned event that results in harm to people, damage to property or loss to process.

**Accident Causation** – The many factors that act together to cause accidents. They include: personal factors, job factors, and lack of management control factors.

*Personal factors:*

- inadequate capability
- lack of knowledge/skill
- improper motivation
- stress

*Job factors:*

- inadequate leadership or supervision
- inadequate engineering
- inadequate purchasing
- inadequate maintenance
- inadequate work standards/procedures
- inadequate hazard controls

*Lack of management control factors:*

- inadequate program
- inadequate program standards
- inadequate compliance with standards
- inadequate hazard controls

**Accident Investigation** – The process of systematically gathering and analyzing information about an accident. This is done for the purposes of identifying causes and making recommendations to prevent the accident from happening again.

**Accident Prevention** – The systematic application of recognized principles to reduce incidents, accidents, or the accident potential of a system or organization.

**Acute Effect** – A change that occurs in the body within a relatively short time (minutes, hours, days) following exposure to a substance.

**Acute Exposure** – A single exposure to a hazardous agent.

**Additive Effects** – The health effects of a mixture which are equal to the sum of the effects of the components of the mixture.

**Administrative Controls** – A category of hazard control that uses administrative/management involvement in order to minimize employee exposure to the hazard. Some examples are:

□ job enrichment □ job rotation □ work/rest schedules □ work rates □ periods of adjustment

**Agenda** – A plan or list of items to be considered at a meeting. It is usually circulated to members in advance of the meeting so that they are aware of what will be discussed.

**Agent** – Any substance, force, organism or influence that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

**American Conference of Governmental Industrial Hygienists (ACGIH)** – An organization of industrial hygiene professionals that develops occupational health and safety programs. ACGIH develops and publishes recommended occupational exposure limits for hundreds of chemical substances and physical agents (see **Threshold Limit Value**).

**Area Sampling** – Collection and analysis of representative samples of air in general work areas in order to determine the concentrations of any contaminants that are present.

**Asphyxiate** – A vapour or gas that can either reduce the oxygen content in the air or interfere with the body's ability to use oxygen. Exposure to an asphyxiate can result in unconsciousness or death due to being unable to breathe.

**Audiometric Testing** – Tests that are conducted to determine the hearing ability of a person. These tests may be used to establish an employee's baseline hearing, to identify any subsequent hearing loss, and to monitor the effectiveness of noise controls.

**Barrier Cream** – A cream designed to protect the hands and other parts of the skin from exposure to harmful agents. Barrier cream is also known as protective hand cream.

**Bilateral Work Stoppage** – Stoppage of work under the direction of the worker certified member and the management certified member when both members have reason to believe that dangerous circumstances exist.

**Biological Agent** – Any living organism (for example, virus or bacteria) that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

**Biological Monitoring** – The use of medical tests (for example, blood, urine, exhaled air) to determine whether a person has been or is being exposed to a substance.

**Boiling Point** – The temperature at which a liquid changes to a vapour.

**Bonding** – The use of low-resistance material to connect two or more conductive objects that would likely undergo a build-up of static electricity. Bonding prevents the unwanted release of electrical energy, such as sparks. E.g., transferring of one flammable liquid from one container to another can release electrical energy if it is not bonded.

**Breathing Zone** – The area surrounding the worker's head. The make-up of air in this area is thought to be representative of the air that is actually breathed in by the worker.

**By-Product** – The product formed or released by a material during use in a process. This is produced in addition to the principle product. A by-product may be toxic, flammable or explosive.

**Cancer** – A disease characterized by an abnormal growth of cells.

**Carcinogen** – A chemical, physical or biological agent that can cause cancer in humans or animals.

**Chemical Agent** – A chemical substance that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

**Chronic Effect** – A change that occurs in the body over a relatively long time (weeks, months, years) following repeated exposure or a single over-exposure to a substance.

**Chronic Exposure** – Repeated exposure to a hazardous agent.

**Combustible** – Capable of catching fire and burning, usually a material that has a flash point above 37.8°C. See also *flammable*.

**Compensable Injury** – An injury for which a provincial workers compensation program will provide compensation because it arose out of and in the course of work.

**Compensation Claim** – A claim filed with a provincial workers compensation program by or on behalf of an employee who has suffered a disabling injury or illness, or death, arising out of and in the course of work.

**Competent Person** – provincial OH&S legislation generally define a “competent person” as a person who:

- is qualified because of his or her knowledge, training and experience to organize the work and its performance;
- is familiar with the provisions of this Act and the regulations that apply to the

work; and

- has knowledge of any potential or actual danger to health or safety in the workplace.

**Confined Space** – A space in which a hazardous gas, vapour, dust or fume may collect or in which oxygen may be used up because of the construction of the space, its location, contents, or the work activity carried out in it. It is an area which is not designed for continuous human occupancy and has limited opening for entry, exits or ventilation.

**Contaminant** – An unwanted material (for example, radioactive, biological or chemical) that is likely to harm the quality of the working environment. The most common workplace contaminants are chemicals that may be present in the form of dusts, fumes, gases or vapours.

**Controlled Product** – Any product or ingredient that meets the criteria for one or more of the classes of hazards established by the Workplace Hazardous Materials Information System (WHMIS). The classes are:

- compressed gas □ flammable and combustible materials □ oxidizing materials □ poisonous and infectious materials □ corrosive materials □ dangerously reactive materials

Use of these materials in the workplace is regulated under provincial workplace health and safety laws.

**Controls** – Measures designed to eliminate or reduce hazards or hazardous exposures. Examples include: engineering controls, administrative controls, personal protective equipment. Hazards can be controlled at the source, along the path to the worker, or at the worker.

**Corrosive** – A substance that will burn the skin or eyes on contact.

**Critical Injury** – The *Occupational Health and Safety Act of Ontario* defines critical injury as serious injury that:

- is life-threatening □ produces unconsciousness □ results in a substantial loss of blood □ involves the fracture of a leg or arm (but not a finger or toe) □ involves the amputation of a leg, arm, hand or foot (but not a finger or toe) □ consists of burns to a major portion of the body □ causes the loss of sight in an eye

**Critical Parts or Items** – The parts of machinery, equipment, materials, structures or other areas that are more likely than other components to result in a major problem or loss when worn, damaged, abused, misused, or improperly applied.

**Cumulative Trauma Disorder** – See *repetitive strain injury*.

**Danger Zone** – An area or location where the probability of injury is high (for example, in the vicinity of saw blades).

**Decomposition** – The breakdown of a material or substance (by heat, chemical reaction, rotting or other process) into parts or elements.

**Dermal** – Relating to the skin.

**Dermatitis** – Inflammation of the skin. Symptoms of dermatitis may include: redness, blisters, and cracks in the skin.

**Designated Substance** – A biological, chemical, or physical agent specified as a designated substance by a regulation made under a provincial Occupational Health and Safety Act. Designated substances are substances that are known to be particularly hazardous. The use of a designated substance in the workplace may either be not allowed or strictly controlled by law.

**Dilution Ventilation** – See *ventilation*.

**Disabling Injury** – An injury that prevents a person from coming to work or doing his or her usual job duties.

**Due Diligence** – The taking of every precaution reasonable in the circumstances for the protection of the health and safety of workers.

**Dust** – Fine particles of a solid that can remain suspended in air. The particle size of a dust is larger than that of a fume. Dusts are produced by mechanical action, such as grinding. Some dusts may be harmful to an employee's health. See *respirable particles*.

**Embryo toxin** – An agent that is harmful or poisonous to unborn children up to the end of the eighth week of development. See also *teratogen*.

**Emergency Plan** – Detailed procedures for responding to an emergency, such as a fire or explosion, a chemical spill, or an uncontrolled release of energy. An emergency plan is necessary to keep order, and minimize the effects of the disaster.

**Engineering Controls** – A category of hazard control that uses physical/engineering methods to eliminate or minimize the hazard. Examples of engineering controls include: ventilation, isolation, elimination, enclosure, substitution and design of the workplace or equipment.

**Environment** – The surrounding conditions, influences, and forces to which an employee is exposed in the workplace.

**Epidemiology** – The science that deals with the study of disease in a general population. The rate of occurrence and distribution of a particular disease (by age, gender or occupation) may provide information about the causes of disease.

**Ergonomics** – An applied science that studies the interaction between people and the work environment. It focuses on matching the job to the worker.

**Evaporation** – The process by which a liquid, without reaching its boiling point, changes into a vapour and mixes with the air.

**Explosive** – A substance, mixture or compound that is capable of producing an explosion.

**Exposure Records** – The records kept by an employer, or company doctor or nurse of an employee's exposure to a hazardous material or physical agent in the workplace. These records show the time, level and length of exposure for each substance or agent involved.

**Exposure Values** – The airborne concentrations of a biological, chemical, or physical agent to which it is believed nearly all workers may be exposed without experiencing any harmful effects.

1. **Time Weighted Average Exposure Value (TWAEV)** – The time weighted average concentration or levels of a chemical or biological agent for an 8-hour day or a 40- hour week to which it is believed nearly all workers may be exposed, day after day, without experiencing harmful effects.

2. **Short-Term Exposure Value (STEV)** – The maximum airborne concentration of a chemical, biological or physical agent to which workers may be exposed from time to time, provided that the exposure is for not more than 15 minutes, is not more often than four times in a work day, and at least 60 minutes have elapsed from the time of the last exposure.

3. **Ceiling Exposure Value (CEV)** – The maximum exposure to an airborne concentration of a chemical, biological or physical agent that is not to be exceeded for any length of time.

**Note:** Recommended exposure values established by ACGIH are known as Threshold Exposure Values. See **Threshold Limit Values**.

**Fatality** – Death resulting from an accident.

**First Aid** – The immediate care given to a person who is injured or who suddenly becomes ill. It can range from disinfecting a cut and applying a bandage to helping someone who is choking or having a heart attack.

**Flammable** – Capable of easily catching fire and of burning, usually a material that has a flash point below 37.8°C. See also **combustible**.

**Flash Point** – The lowest temperature at which a liquid will give off enough vapours to form a mixture that will burn if ignited. The lower the flash point, the higher the risk of fire.

**Fog** – Suspended droplets of a liquid that are produced by condensation or by the breaking up of a liquid (for example, by splashing or foaming).

**Frequency** – See *injury frequency rate*.

**Fugitive Emission** – A gas, liquid, solid, vapour, fume, mist, fog or dust that escapes from process equipment, emission control equipment or a product.

**Fume** – Finely divided solid particles that are formed when a hot metal vapour cools and condenses. Fumes are usually associated with molten metals (for example, copper, lead or zinc) and are often accompanied by a chemical reaction such as oxidation. See *oxidizing agent*.

**Gas** – A formless substance that expands to occupy the space of its container (for example, methane, acetylene).

**General Exhaust** – See *ventilation*.

**General Ventilation** – See *ventilation*.

**Glare** – Bright light that interferes with a person's ability to see. Glare causes discomfort and can lead to eyestrain and headaches.

**Grounding** – Electrical connection of one or more conductive objects to the earth through the use of metal grounding rods or other devices.

**Guarding** – Use of any device or combination of devices designed to keep any part of a worker's body out of the danger zone of a machine during its operating cycle. This usually involves guarding the point of operation, guarding power transmission components by fixed enclosures, and/or protecting the operator and nearby workers from flying fragments.

**Hazard** – The potential of any machine, equipment, process, material (including biological and chemical) or physical factor that may cause harm to people, or damage to property or the environment.

**Hazardous Material** – Any substance that may produce adverse health and/or safety effects to people or the environment.

**Health** – The World Health Organization has defined health as more than just the absence of disease. Rather, it is a state of complete physical, mental and social well-being.

**Health and Safety Policy** – A policy is a statement of intent, and a commitment to plan for coordinated management action. A policy should provide a clear indication of a company's health and safety objectives. This, in turn, will provide direction for the health and safety program. See also *health and safety program*.

**Health and Safety Program** – A systematic combination of activities, procedures, and facilities designed to ensure and maintain a safe and healthy workplace.

**Health and Safety Representative** – A representative selected under provisions of a provincial Occupational Health and Safety Act. A representative is usually required in a workplace with more than five but fewer than 20 employees. In such a workplace, workers must select one employee as a representative. Generally speaking, a health and safety representative has the same responsibilities and powers as a joint health and safety committee. See *joint health and safety committee*.

**Health Care** – Under the *Workplace Safety and Insurance Act of Ontario*, health care means:

- the aid of doctors and dentists
- the aid of professionals who practice without drugs
- hospital and nursing services
- artificial body parts and devices which may be necessary as a result of any work-related injury and
- the replacement or repair of such parts and devices when found necessary by the Board

**Heat Exhaustion** – Overheating of the body. Heat exhaustion can happen when the body loses too much fluid (because of excessive sweating) or when conditions, such as physical activity in a hot environment, prevent sweat from evaporating into the air.

**Heat Stroke** – A potentially deadly condition in which over-exposure to a very hot environment breaks down the body's ability to control its temperature and cool itself sufficiently. The body temperature rises to a very high (deadly) level.

**Housekeeping** – A way of controlling hazards along the path between the source and the worker. Good housekeeping means having no unnecessary items in the workplace and keeping all necessary items in their proper places. It includes proper cleaning, control of dust, disposal of wastes, clean-up of spills and maintaining clear aisles, exits, and work areas.

**Human Error** – This term is used today to include not just workers' errors, but engineering deficiencies and lack of adequate organizational controls which together account for the majority of accidents.

**Hygiene Practices** – A broad term for personal health habits that may reduce or prevent the exposure of a worker to chemical or biological substances. Hygiene practices include:

- not smoking, eating or drinking in the work area
- washing up before breaks and meals
- removing contaminated clothing before leaving work
- keeping street clothes separate from contaminated work clothing.

**Hypersensitive** – The condition of being reactive to substances that normally would not affect most people.

**Hypothermia** – A condition in which body temperature drops below normal (36°C or 96.8°F). It most frequently develops from being exposed to very low temperatures. Hypothermia can cause death.

**Ignition Source** – A source of energy, such as heat, flame, sparks or static electricity, that is capable of causing a fuel mixture to burn.

**Incident** – An unwanted event which, in different circumstances, could have resulted in harm to people, damage to property or loss to a process. Also known as a ***near miss***.

**Incident Investigation** – The process of systematically gathering and analyzing information about an incident. This is done for the purposes of identifying causes and making recommendations to prevent the incident from happening again.

**Incompatible** – A term used to describe materials that could cause dangerous reactions if they come in direct contact with one another.

**Industrial Hygiene** – A science that deals with the anticipation, recognition, evaluation, and control of hazards in the workplace. These hazards may cause sickness, harm to employee health, discomfort, and inefficient performance on the job. Also known as ***occupational hygiene***.

**Ingestion** – The swallowing of a substance.

**Inhalation** – The breathing in of an airborne gas, vapour, fume, mist or dust.

**Injection** – To force or drive liquid or gas into the body.

**Injury Analysis** – The process of systematically evaluating injury statistics to identify trends in such areas as:

- age, gender, occupation of those getting injured on the job
- part of body involved
- machinery involved
- process or work activity involved
- time of day
- location
- frequency (see injury frequency rate)
- severity (see injury severity rate)

**Injury Frequency Rate** – The number of compensable injuries per 200,000 employee-hours of exposure. The following formula is used to calculate the injury frequency rate:  
*Number of Compensable Injuries X 200,000 Hours Total Hours Worked*

**Injury Severity Rate** – A number that relates total days lost due to compensable injuries to the total hours worked during a specific period. The following formula is used to calculate the injury severity rate: *Number of Days Lost X 200,000 Hours Total Hours Worked*

**Inspection** – See *workplace inspection*.

**Irritant** – A substance which, in sufficient quantities, can inflame or irritate the eyes, skin or respiratory system (lungs, etc.). Symptoms include pain and reddening.

**Job** – The sum of all tasks carried out by a person toward the completion of some goal.

**Job Design** – The planning of a job and the establishment of procedures for performing that job so that the potential for injury and illness is reduced or eliminated. See also *ergonomics*.

**Job Enrichment** – Adding one or more related tasks or functions to an existing job. These may include some managerial functions (for example, planning, organizing, controlling).

**Job Hazard Analysis** – See *task analysis*.

**Job Rotation** – Moving an employee to one or more related jobs during a work shift.

**Joint Health and Safety Committee** – A committee established under provisions of the *Occupational Health and Safety Act of Ontario*. Joint health and safety committees are generally required in workplaces with 20 or more workers. At least half the members of the committee must be workers who do not exercise managerial functions; the worker members must be selected by the workers or, where there is one, the trade union. Management must appoint the remaining members from among persons who exercise managerial functions. The responsibilities and powers of joint committees include: obtaining information on workplace hazards, identifying workplace hazards, and recommending how to make the workplace safer and healthier. See also *health and safety representative*.

**Latent Period** – The time that passes between exposure to a harmful substance or agent and the first sign(s) of damage or illness. Also known as *incubation period*.

**Legal Requirement** – Anything that is demanded of a person or organization by statute, regulation, common law, or by-law.

**Liquid** – A formless fluid that takes the shape of its container, but does not necessarily fill it.

**Local Exhaust Ventilation** – See *ventilation*.

**Localized** – Restricted to one spot or area in the body and not spread throughout it. Compare with *systemic*.

**Lockout** – A specific set of procedures for ensuring that a machine, once shut down for maintenance, repair or other reason, is secured against accidental start-up or movement of any of its parts for the length of the shutdown.

**Loss Control** – Measures taken to prevent and reduce loss. Loss may occur through injury and illness, property damage, poor work quality, etc.

**Material Safety Data Sheet (MSDS)** – A form that contains detailed information about the possible health and safety hazards of a product and how to safely store, use and handle the product. Under the federal Hazardous Products Act, suppliers are required to provide MSDSs for all hazardous materials, as a condition of sale.

**Medical Surveillance** – The systematic approach to monitoring health changes in workers to identify and determine which effects may be work-related.

**Melting Point** – The temperature at which a solid changes to a liquid. For mixtures, a range of temperatures may be given.

**Minutes** – A written record of the outcome of a meeting. Minutes of joint health and safety committee meetings are required, by law, to be kept and made available to a government inspector for review.

**Mist** – Small droplets of a liquid that can remain suspended in air. Mists can form when a vapour condenses back to its liquid state, or when a liquid breaks up (for example, by splashing or atomizing).

**Monitoring** – The systematic measurement of health hazards to which workers are exposed. There are two types of measurements that can be taken: biological (worker) and Occupational (workplace air).

**Musculoskeletal Injuries** – Injuries to the system of muscles, tendons, ligaments, joints, bones and related structures of the human body. Also known as ***musculoskeletal disorders (MSDs)***.

**Mutagen** – An agent that causes sudden and permanent changes in one or more hereditary features, generally by modifying one or more genes (changes to genetic material). The changes may or may not be passed on to offspring.

**Nature of Injury or Illness** – The main physical characteristics of a workplace injury or illness (for example, burn, cut, sprain, dermatitis, hearing loss).

**Noise** – Unwanted sound that can lead to hearing loss or stress, or interfere with the ability to hear other sounds or to communicate.

**Nuisance Dust or Particle** – Dust that does not cause disease or harmful effects when exposures are kept at reasonable levels.

**Occupational Health** – The development, promotion, and maintenance of workplace policies and programs that ensure the physical, mental, and emotional well-being of

employees. These policies and programs strive to:

- prevent harmful health effects because of the work environment
- protect employees from health hazards while on the job
- place employees in work environments that are suitable to their physical and mental make-up
- address other factors that may affect an employee's health and well-being

**Occupational Hygiene** – See *industrial hygiene*.

**Occupational Illness** – A harmful condition or sickness that results from exposure in the workplace to a biological, chemical, or physical agent or an ergonomic hazard. See *ergonomics*.

**Occupational Safety** – The maintenance of a work environment that is relatively free from actual or potential hazards that can injure employees.

**Oxidizing Agent** – A substance that gives up oxygen easily (this oxygen can fuel a fire) or reduces the hydrogen in other compounds. Some examples of oxidizing agents are peroxides, chlorates, per chlorates, nitrates and permanganates. Oxidation and reduction reactions always occur at the same time. See *reducing agent*.

**Part of Body** – The part of the person's body that is directly affected by a workplace injury or illness (for example, head, ears, arm, wrist, back, leg, foot).

**Parts Per Million (PPM)** – Parts of gas or vapour per million parts of air by volume at room temperature. For example, 1 cubic centimetre of gas in 1 million cubic centimetres of air has a concentration of 1 PPM.

**Personal Monitoring** – A technique used to determine an individual's personal exposure to a chemical, physical or biological agent. This is done by means of a sampling device worn on the worker's body (e.g., personal monitor). The monitoring of hazardous chemicals is done at the breathing zone; the monitoring of noise is done at the ears.

**Personal Protective Equipment (PPE)** – Any device worn by a worker to protect against hazards. Some examples are: respirators, gloves, ear plugs, hard hats, safety goggles and safety shoes.

**Physical Agent** – A source of energy (for example, noise, radiation, vibration, heat) that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.

**Policy** – See *health and safety policy*.

**Practice** – A set of guidelines that are helpful in carrying out a specific type of work.

**Prescribed** – As set out in the regulations under any Act.

**Preventive Maintenance** – A system for preventing machinery and equipment failure through:

- scheduled regular maintenance
- knowledge of reliability of parts
- maintenance of service records
- scheduled replacement of parts
- maintenance of inventories of the least reliable parts and parts scheduled for replacement

**Procedure** – A step-by-step description of how to do a task, job, or activity properly.

**Program** – See *health and safety program*.

**Protective Hand Cream** – See *barrier cream*.

**Quorum** – The minimum number of management and worker members that the joint health and safety committee determines must be present in order to carry out its business.

**Radiation** – The energy transmitted by waves through space or some medium. There are two types of radiation: ionizing (for example, X-Rays or radiation from a radioactive device), and non-ionizing radiation (for example, infra-red radiation, ultra- violet radiation).

**Reactivity** – The capability of a substance to undergo a chemical reaction with the release of energy. Unwanted effects include: pressure build-up, temperature increase, and formation of harmful by-products. These effects may occur because of the reactivity of a substance to heat, an ignition source, or direct contact with other chemicals in use or in storage.

**Reason to Believe** – A conviction or belief that does not require empirical support or evidence.

**Reasonable Grounds to Believe** – A conviction or belief that requires empirical support or evidence.

**Reducing Agent** – A substance that accepts oxygen or gives up hydrogen during a chemical reaction. Oxidation and reduction always occur at the same time. See *oxidizing agent*.

**Repetitive Strain Injury** – A problem with the muscles, tendons or nerves that happens over time due to overuse. Examples of repetitive strain injuries include: carpal tunnel syndrome and tendonitis.

**Reproductive Hazards** – Any material that can affect the development of sperm and egg cells. This can lead to an inability to have children, birth defects and other harmful changes.

**Respirable Particles** – Small particles that can be breathed in and reach parts of the respiratory system where they may have a harmful effect (for example, the lungs).

**Risk** – The probability of a worker suffering an injury or health problem, or of damage occurring to property or the environment as a result of exposure to or contact with a hazard.

**Root Cause** – The real or underlying cause(s) of an event. Distinguished from immediate cause(s) which are usually quite apparent.

**Route of Entry** – The method by which a contaminant can enter the body. There are four main routes of entry. Contaminants can be breathed in, swallowed, absorbed through the skin, or injected into the bloodstream.

**Safety** – See *occupational safety*.

**Sampling** – The process of taking small representative quantities of a gas, liquid, or solid for the purpose of analysis.

**Sensitizer** – A substance which on first exposure causes little or no reaction in humans or test animals. However, on repeated exposure, it may cause a marked response not necessarily limited to the contact site. Skin sensitization (for example, to a metal such as nickel) is the most common form of sensitization in the workplace. Respiratory sensitization to a few chemicals (for example, isocyanates) is also known to occur.

**Severity** – See *injury severity rate*.

**Short Term Exposure Value (STEV)** – See *exposure values*.

**Skin** – A notation sometimes used with Threshold Limit Value (TLV) or Time-Weighted Average Exposure Value (TWAEV) exposure data. It indicates that the substance may be absorbed by the skin, mucous membranes and eyes. This additional exposure must be considered part of the total exposure to avoid exceeding the TLV or TWAEV for that substance.

**Solvent** – A substance that dissolves other substances. Many solvents are flammable.

**Source of Injury or Illness** – The object, substance, exposure, or body motion that directly caused a workplace injury or illness (for example, boxes, powered hand tools, acids, lead, cold, running, walking).

**Stable** – The tendency of a material to remain in the same form under reasonable conditions of storage or use. Compare with *unstable*.

**Standard** – A guideline, rule, principle, or model that is used as a means to compare, measure or judge performance, quality, quantity, etc.

**Static Electricity** – An electrical charge that cannot move. This charge will eventually develop enough energy to jump as a spark to a nearby grounded or less highly charged object. If sparks occur in an ignitable vapour or dust mixture, it can cause an explosion or fire.

**Stress** – A set of physical reactions that take place in the body in response to demands that are placed on it. These reactions prepare the body for action.

**Stressor** – A source of stress.

**Substitution** – The replacement of toxic or hazardous materials, equipment or processes with those that are less harmful.

**Synergistic Effects** – The health effects of two or more substances or agents that are greater than the sum of their separate effects.

**Synonym** – Another name or names by which a material is known. For example, methyl alcohol is also known as methanol or wood alcohol.

**Systemic** – Spread throughout the body; affecting one or more body parts or systems. Compare with *localized*.

**Task** – A set of related steps that make up a discrete part of a job. Every job is made up of a collection of tasks. For example, answering a phone or entering data into a computer are tasks of a secretary's job.

**Task Analysis** – A technique used to identify, evaluate, and control health and safety hazards linked to particular tasks. A task analysis systematically breaks tasks down into their basic components. This allows each step of the process to be thoroughly evaluated. Also known as *job task analysis*.

**Teratogen** – An agent that causes birth defects by harming the unborn child. See also *embryo toxin*.

**Terms of Reference** – A written statement of the functions and operating procedures of a committee.

**Thinner** – A liquid (usually solvent-based) that is used to dilute paint, varnish, cement or other material to a desired consistency. Most thinners are flammable.

**Threshold Limit Value (TLV)** – A threshold limit value refers to the airborne concentration of a substance to which it is believed that nearly all workers may be repeatedly exposed day after day (for 8 hours per day) without harmful effect. Because of individual susceptibility, however, a small percentage of workers may experience discomfort from substances in concentrations at or below the threshold limit. A smaller

percentage may be affected more seriously by aggravation of a pre-existing condition or by the development of an occupational illness.

**Time-Weighted Average Exposure Value (TWAEV)** – See *exposure values*.

**Toxic** – Harmful or poisonous.

**Toxic Substance** – Any substance that can cause acute or chronic effects to a person or is suspected to cause disease or injury under certain conditions.

**Trade Name** – The trademark name or commercial name for a material.

**Type of Injury/Illness** – The event that directly resulted in a workplace injury or illness (for example, struck against, caught in, over-exertion).

**Unilateral Work Stoppage** – Stoppage of work under the direction of either the worker certified member or the management certified member when the member has reason to believe that dangerous circumstances exist.

**Unstable** – The tendency of a material to break down or to undergo other unwanted chemical changes during normal handling or storage. Compare with *stable*.

**Vapour** – The form that a gas or liquid takes when it evaporates into the air.

**Ventilation** – The supplying and exhausting of air at the same time to an enclosed machine, room, or an entire building. There are two types of ventilation:

- **General or Dilution:** The air contaminants are diluted by natural or mechanical air exchange in the plant. This method is not appropriate for highly toxic contaminants.
- **Local Exhaust:** The contaminant is captured at its source, usually by the use of hoods, ducts or vents located near or directly over the source. This is the preferred method where toxic contaminants are released and there is the potential for worker exposure.

**Vibration** – The back and forth motion of an object (for example, tool, machinery or other piece of equipment) that occurs in a predictable pattern or manner. Over-exposure to vibration can harm a part of the body (for example, the fingers) or it can affect the whole body.

**Volatility** – The tendency or ability of a liquid to quickly vaporize into the air. Examples of volatile liquids include alcohol and gasoline. Liquids that are volatile must be carefully dispensed and stored. This includes paying special attention to temperature.

**Work Practices** – Procedures for carrying out specific tasks which, when followed, will ensure that a worker's exposure to hazardous situations, substances or physical agents is controlled by the manner in which the work is carried out.

**Work Refusal** – The right of a worker to refuse to work when the worker has reason to believe that he or she would be endangered by performing that work.

**Working Surface** – A surface or plane on which an employee walks or works.

**Workplace Design** – The planning of workplace environments, structures and equipment so that the potential for injury and illness is reduced or eliminated. See also *ergonomics*.

**Workplace Hazardous Materials Information System (WHMIS)** – An information system implemented under the federal Hazardous Products Act and provincial occupational health and safety laws to ensure communication of information on hazardous materials. The information delivery system under WHMIS requires 1) labels, 2) material safety data sheets (MSDSs), and 3) worker education and training programs.

**Workplace Inspection** – A regular and careful check of a workplace or part of a workplace in order to identify health and safety hazards and to recommend corrective action. Workplace factors that have the potential to cause injury or illness to employees include: equipment, materials, processes or work activities, and the environment.

**Zero Energy State** – The state in which a machine has been made temporarily incapable of accidental start-up or movement. This state is achieved by shutting off or disconnecting all power sources, and draining, bleeding or blocking all residual energy sources such as: gravity, hydraulics, compressed air, springs, and capacitors.

**Zero Exposure** – Exposure that is restricted to so low a level that it requires little or no attention.