
Workplace Health & Safety

Forestry
May 2001

Health and Safety Guideline for Silviculture Workers



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1.0 Introduction

This guideline is intended to establish minimum health and safety practices for workers involved in the following silviculture operations carried out in Alberta:

- tree planting
- stand tending
- site preparation
- forestry work camps

The tree planting season in Alberta is approximately six months long, beginning in May and continuing until October. The short tree planting season places high demands on planting crews which must perform efficiently and effectively. In contrast, stand tending can be a year-round activity that may include heavy thinning using mechanical equipment, hand-operated brush saws, or chemical applications. Following these minimum health and safety practices will help to make operations safe, providing employment on a continued and expanded basis.

Prior to beginning a job in silviculture, workers should ask their employer the following 10 questions:

(1) What are the dangers of my job?

Your new employer is required by law to tell you about any hazards at the workplace that they know about. This includes such things as exposure to chemicals, situations in which you have to work at a height, or work activities around potentially dangerous equipment.

If you don't know what the hazards or dangers are, how can you take steps to protect yourself?

(2) Are there any other hazards (wildlife, weather) I should know about?

In addition to obvious workplace hazards like falling from heights or unguarded machinery, the effect of some hazards take time to show up. Repeated exposures to high noise levels can cause hearing loss. Working repeatedly over a period of time with radiation, dusts and chemicals may increase your risk of diseases such as cancer.

Your employer is required by law to share this information with you and to tell you how to work safely with these materials. The law may also require that protective safety equipment be used.

(3) Will I receive job safety training? When?

Alberta's occupational health and safety regulations require your new employer to make sure you have the skills to safely do the work you're assigned. If you're still learning those skills and aren't quite "competent", then the law requires that you be under the direct supervision of someone who has those skills. If you're learning how to unload chemicals from a tanker truck and your skilled partner is

called away for some reason, stop everything until they come back if you don't know exactly what to do. Sure it's easy to finish the job on your own. And most times everything will go well. But stop everything this time, learn all the skills you need to do the job properly, and maybe the next time you can finish the job on your own.

Making sure you have the skills to safely do the work you're assigned means getting trained. In certain cases training must be provided before you begin work. If you'll be working with hazardous chemicals, you must first receive Workplace Hazardous Materials Information System (WHMIS) Training.

If you've been asked to do something that may endanger you or your co-workers and have not been given adequate training or supervision, the law requires you to refuse to do that work. The *Occupational Health and Safety Act*, the law that requires you to refuse that work, also protects you from disciplinary action by your employer

- (4) Is there any safety gear I'll be expected to wear? Will I receive training in how to use it? When?

Although the law doesn't require most workplaces to have regular safety meetings, the fact that your employer has them is a good indication of their commitment to safety.

- (5) Will I be trained in emergency procedures (fire, accidents, transportation of dangerous goods)? When?

The law requires your employer to make sure that you use appropriate safety equipment when and where it's necessary. Your employer is also required to make sure that you're trained in how to use this equipment properly.

The law requires employers to provide respiratory protective equipment where there is a breathing hazard and hearing protection where noise limits set by law are exceeded. Employers are not required by law to provide items such as safety boots, protective eyewear, hard hats and fire resistant clothing. However, if such equipment is necessary, your employer is responsible for making sure that you use it. One of the ways your employer can do this is to ask you to bring your own as a condition of employment. Ask if you're not sure.

- (6) Where are the fire extinguishers, first aid kits, and other emergency equipment located?

The law requires your employer to make sure that you're either competent – have the skills – to work safely or are under the direct supervision of someone who is competent. If you're not under the direct supervision of a competent person, your employer must tell you the emergency procedures before you start work.

WHMIS training is required *before* you begin working with any hazardous materials. WHMIS training must also include what to do in case of an emergency.

(7) What are my health and safety responsibilities?

The law requires your employer to control the hazards at your workplace. This includes providing fire extinguishers and specialized equipment required to control the hazards that may arise during emergencies.

At a minimum, all workplaces must have a first aid kit. The type of kit depends on the number of workers, how hazardous the work is, and the location of the workplace. Most workplaces are required to have individuals present who are trained in providing first aid.

(8) Who do I ask if I have a health and safety question?

The law requires your employer to provide first aid equipment and services at your workplace. This means that the right type of first aid kit must be on-site and an appropriate number of individuals must be trained in first aid and available at all times. Find out who the first aiders are in case you ever need their help. If you do get injured and require first aid, you are required by law to report the injury to your employer as soon as possible.

(9) Do you have safety meetings?

The law requires you to take reasonable care to protect the health and safety of you and your co-workers. This includes cooperating with your employer by following the employer's safety rules and taking required safety training.

Remember that if you've been asked to do something that may endanger you or your co-workers, and have not been given adequate training or supervision, the law requires you to refuse to do that work.

(10) What do I do if I get hurt? Who is the first aid person?

The first person to ask should always be your employer, usually a supervisor, since they know your workplace best. However, you can contact the Workplace Health and Safety Call Centre by dialling toll free 1-866-415-8690 and talk with one of our staff, or reach us on the Internet at www.whs.gov.ab.ca All calls are kept confidential.

If you're experiencing a serious problem, one of our Occupational Health and Safety Officers can drop by the workplace and check things out. All questions and complaints are kept confidential.

The answers to these questions can help workers decide which employer to work for. A copy of this guideline should be available to all workers at each work site where silviculture activities are performed.

2.0 Definitions

The following definitions apply in this Guideline:

- “Act”* means Alberta’s Occupational Health and Safety Act.
- “building”* means any permanent or temporary structure, tent, vehicle, or mobile unit used for recreation or accommodation of employees at a work camp or for the storage, preparation, or serving of food in a work camp.
- “competent”* means a worker who is adequately qualified, suitably trained, and with sufficient experience to perform work safely without, or with only a minimal degree of, supervision.
- “equipment”* means any man-made device or anything used to equip workers at a work site, including machinery and sanitary facilities.
- “hand tools”* means any hand held equipment that is dependent on the energy of the worker for its direct effect, and that does not have any hydraulic, pneumatic, electrical, or chemical energy source for its operation.
- “hazard”* means any existing or potential condition in the workplace which, by itself or by interacting with other variables, can result in deaths, injuries, property damage, or other losses.
- “imminent danger”* means a danger which is not normal for the occupation or a danger under which a person in that occupation would not normally carry out their work.
- “occupation”* means any employment, business calling, or pursuit over which the legislature has jurisdiction. This excludes farming, ranching, and work in, to, or around a private dwelling by the occupant or owner.
- “personal protective equipment”*
means any equipment or clothing worn to protect a worker from health and/or safety hazards associated with working conditions at a work site.
- “potable water”* means water that is safe for human consumption.
- “prime contractor”* means the contractor, employer, or other person, who enters into an agreement with the owner of the work site to be prime contractor, or if no agreement has been made or if no agreement is in force, the owner of the work site.

<i>“serious injury”</i>	means those injuries and accidents that have to be reported under section 13(1.1) of the Occupational Health and Safety Act which: <ul style="list-style-type: none"> (a) result in a death; (b) cause a worker to be admitted to hospital for more than 2 days; (c) involve an unplanned or uncontrolled explosion, fire, or flood that causes a serious injury (or has the potential of causing a serious injury); (d) involve the collapse or upset of a crane, derrick, or hoist; or (e) involve the collapse or failure of any component of a building or structure necessary for the structural integrity of the building or structure.
<i>“site preparation”</i>	means the mechanical, chemical, or hand treatment of a planting site to provide favourable conditions for natural or artificial reforestation.
<i>“stand-tending”</i>	means an activity that can occur throughout the year and may include heavy thinning using mechanical equipment, hand-operated brush saws, or chemical applications.
<i>“tree planting”</i>	means a designated occupation within the forest industry.
<i>“vehicle”</i>	means a device, including powered mobile equipment, in, on, or by which a person or thing may be transported or drawn.
<i>“work area”</i>	means a place on a work site where a worker is or may be during work activities or a work break.
<i>“work camp”</i>	means one or more buildings established on a temporary basis to accommodate persons who are employed in mining, lumbering, construction, drilling, resource exploration, or any other similar industry, and includes the land on which the work camp is situated.
<i>“work site”</i>	means a location where a worker is, or is likely to be, engaged in any occupation and includes any vehicle or mobile equipment used by a worker in an occupation.
<i>“worker”</i>	means a person engaged in an occupation.

3.0 Responsibilities

Workers need to understand their responsibilities, and those of their employer, as described in the Alberta Occupational Health and Safety Act and its Regulations.

3.1 Worker Responsibilities

Workers are responsible for cooperating with their employer in providing a safe workplace and for working safely so that they don't endanger themselves or their co-workers. Workers are also responsible for the safety of co-workers e.g. where the actions of a fellow worker may endanger that worker or others, those actions must be prevented.

Workers have the right and legal responsibility to refuse work which they consider unsafe or unhealthy i.e. work that poses an imminent danger. Workers should first bring their concern(s) to the attention of their supervisor and/or employer and try to resolve the issue with them first. If a worker's concerns are not being addressed, the worker should contact their nearest Workplace Health and Safety office (listed at the back of this publication).

3.2 Employer Responsibilities

The employer is responsible for providing workers with a safe workplace. This responsibility includes properly training and educating workers to perform their jobs safely. Every worksite must have a prime contractor if there are 2 or more employers involved in work at a work site at the same time. The prime contractor then becomes responsible for health and safety at the work site.

4.0 General Safety

The employer responsible for a silviculture operation must meet the following minimum requirements:

(1) Training

Training, proper instruction, and safe procedures must be provided to all workers to ensure they can and will perform their duties in as safe and healthy a manner as possible. Training is required on topics such as:

- the *Occupational Health and Safety Act* and regulations;
- the safe use and handling of vehicles and equipment;
- the Workplace Hazardous Materials Information System (WHMIS);
- responsibilities involving the transportation of dangerous goods as described in the federal Transportation of Dangerous Goods (TDG) Act, where applicable; and
- problem wildlife.

(2) Safety Meetings

Safety meetings should be held before start-up of an operation and then on a regular basis as required. These meetings serve to review health and safety issues at the work site, review existing problems, and prevent recurrences of existing problems.

(3) Inspections

Work sites and camp areas must be inspected to ensure that conditions are both healthy and safe. Inspections also provide an opportunity for employers to monitor the actions of their workers.

(4) Availability of the Act and Regulations

A copy of the current Occupational Health and Safety Act and regulations must be available at the work site so that workers and supervisors have access to them.

5.0 Hazard Identification

Prior to work beginning, the employer is responsible for making sure that all workers are aware of and know what to do in the event that they are exposed to the following hazards:

- (1) getting lost (isolation);
- (2) winds;
- (3) electrical storms;
- (4) forest fires (prevention);
- (5) treacherous streams, rivers, and other water hazards;
- (6) infections, heat exhaustion, insects, etc.;
- (7) problem wildlife;
- (8) mechanical operations; and
- (9) dangerous trees (snags, etc.).

6.0 Problem Wildlife

The employer is responsible for:

- (1) ensuring that workers are aware of and know how to deal with problems common to the occupation e.g. nuisance animals, bear baiting, insects, etc.;
- (2) removing workers from any imminent danger situation;
- (3) knowing the appropriate authorities and/or government agencies to notify in the event that wildlife become a problem;
- (4) ensuring that only competent workers are permitted to handle firearms. A company policy should be prepared to deal with the care and use of firearms; and
- (5) establishing a clear policy between the prime contractor and employer on how wildlife problems will be handled.

7.0 Emergency Response

The employer is responsible for developing emergency response procedures and making all workers aware of them. The procedures should include the following:

- (1) An appropriate number of qualified first aiders at the work site. The number of first aiders required and their qualifications is based on the number of workers at the work site. The First Aid Regulation provides these details.
- (2) Proper first aid equipment at the work site as required by the First Aid Regulation. The type of equipment required is based on the number of workers, the remoteness of the site from the closest health care facility, and the hazardous nature of the work.
- (3) Effective emergency communications. In addition to 2-way radios, telephones, etc., this should also include workers having personal whistles so that they can summon help from nearby co-workers in case of an emergency.
- (4) Information on who to notify, the duties of those involved, and what actions need to be taken in the event of an emergency.
- (5) Area RCMP, government agency, ambulance, hospital, and other telephone numbers need to be readily available at the site (see Appendix A).
- (6) Locations of all active work sites (legal site description).

8.0 Personal Protective Equipment

The employer is responsible for making sure that workers wear personal protective equipment (PPE) appropriate to the job being performed. The required PPE may include head, eye, hearing, leg, and foot protection. Specific examples of PPE that may be required include chain saw pants, eye, hearing, and hand protection for chain saw operators, approved safety helmets for all terrain vehicle (ATV) operators, and appropriate footwear for tree planters.

Because of constant exposure to the sun, wind, changeable weather, rough terrain, and forestry materials, workers need to wear appropriate clothing. This usually includes long-sleeved shirts, pants rather than shorts, and some type of head covering.

9.0 First Aid

Employers are required to provide first aid supplies and services that comply with the First Aid Regulation. As mentioned earlier, this includes an appropriate number of qualified first aiders and appropriate supplies.

The employer is also responsible for making sure that first aid services, equipment, and supplies are located at or near the work site that they are intended to service and are available and accessible at all times.

First aid equipment and supplies must be kept clean, dry, and in operating condition. They must also be clearly identified and workers must know where the equipment, supplies, and first aid services are located. The employer is also responsible for providing an appropriate means of transporting injured or ill workers to a health care facility and for maintaining a written record of all injuries and illnesses reported by

workers. First aiders need to be easy to contact and workers are responsible for reporting their illness or injury as soon as possible.

Employers are required to report serious accidents and injuries to Alberta Human Resources and Employment, Workplace Health and Safety. Appendix B summarizes what must be done and when.

10.0 Transportation

Only drivers designated by the employer are permitted to operate company vehicles. Designated drivers must have a valid licence appropriate to the type of vehicle being operated. It is suggested that a written list of designated drivers be maintained by the employer and that only the employer decides which workers are on that list.

All company vehicles used for transporting workers must have a current mechanical/road worthiness certificate. The employer is responsible for making sure that all company vehicles and equipment are maintained in a safe operating condition. Up-to-date maintenance records should be kept for each vehicle. It is suggested that vehicles subject to abnormal or severe use be checked more frequently than others.

Before a designated driver begins driving a vehicle, the following points should be considered:

- (1) Has the driver performed a visual check of the vehicle?
- (2) Is the driver adequately rested?
- (3) Is the driver prepared physically and mentally for the drive ahead?
- (4) Do weather and/or road conditions permit safe travel?
- (5) Is appropriate PPE such as a helmet available for the driver (and passengers, if any)?
- (6) Are workers and tools/equipment being transported in separate compartments of the vehicle?
- (7) If it is an open vehicle, is every passenger provided with a means of being secured so they don't fall from the vehicle? The employer is responsible for making sure that the vehicle is properly equipped.

Workers being transported by helicopter need to receive training in helicopter safety. Procedures need to be understood and the pilot's instructions must be followed at all times.

11.0 Campsite

The employer is responsible for making sure that the campsite and its operations meet the requirements of the Public Health Act. The following headings touch on issues involving the campsite.

11.1 Locating the Camp

Issues to consider when setting up a camp include:

- (1) overhead hazards — snags, leaning trees, broken branches, power lines etc.;
- (2) drainage — locate the camp where it will not be subjected to flooding ;
- (3) insects — wasp or hornet nests;
- (4) safe entry and exit;
- (5) problem wildlife — avoid wildlife runways or problem areas; and
- (6) erect the camp well away from travelled roads.

11.2 Water

An adequate quantity of potable drinking water has to be on site and available to all workers at both the campsite and where workers are working. Sufficient water also has to be available on site for all workers to wash daily (morning and evening) and shower or bathe every couple of days.

11.3 Personal Hygiene

To help prevent the spread of Giardiasis (beaver fever) and Gastroenteritis (severe stomach upset and diarrhea), everyone at the campsite must wash before eating. Both diseases are easily transmitted among people using a common eating area and in a location where personal hygiene practices may lapse.

11.4 Outhouses

Outhouses must be located away from the camp itself, particularly the cooking area and water supply. The pit should be deep enough to accommodate the number of users expected over the entire period of time that the camp is active. The pit should be treated daily to ensure proper sanitary conditions and be disinfected regularly. Reasonable care should be taken to prevent insects from flying into or out of the pit.

11.5 Garbage/Waste Disposal

Garbage needs to be removed daily from the campsite and hauled to the nearest landfill facility. This is especially important in areas frequented by bears and/or wildlife scavengers. Keeping the camp clean is very important.

11.6 Food Storage and Preparation

Food must be prepared in a clean area to prevent the spread of illnesses or diseases that could affect all workers at the camp. Food must also be stored properly, preventing it from spoiling. Pets are not allowed in kitchen or eating areas.

Appendix A Emergency Information/Communication Plan
(Sample)

Prime Contractor: _____
(Company Name)

Contact Person: _____
(Name and Phone Number)

Contractor: _____
(Company Name)

Supervisor/Foreman on Location: _____

Location/Job Site: _____
(Latitude and longitude for aircraft)

First Aid Personnel on Location: _____

Emergency Phone Number: _____
(Suggest that the Agencies below be contacted)

Nearest Hospital: _____ **Phone Number:** _____
(Town/City)

Nearest Ambulance: _____ **Phone Number:** _____
(Town/City)

Air Ambulance: _____ **Phone Number:** _____
(Town/City)

R.C.M.P. _____ **Phone Number:** _____
(Town/City)

Alberta Forest Service: _____
(Town/City)

Phone Number: _____

Alberta Human Resources and Employment,
Workplace Health and Safety Field Office _____
(Town/City)

Phone Number: _____

Additional Information:

Contractor Company Representative

Date

Appendix B Reporting Injuries and Accidents – Employer Responsibilities

What types of injuries and accidents have to be reported?

According to Section 13(1.1) of the Occupational Health and Safety Act, injuries and accidents have to be reported if they

- (a) result in a death;
- (b) cause a worker to be admitted to hospital for more than 2 days;
- (c) involve an unplanned or uncontrolled explosion, fire or flood that causes a serious injury (or has the potential of causing a serious injury);
- (d) involve the collapse or upset of a crane, derrick or hoist; or
- (e) involve the collapse or failure of any component of a building or structure necessary for the structural integrity of the building or structure.

Who's responsible for reporting the injury or accident?

It's the responsibility of the prime contractor, or if there is no prime contractor, then the contractor or employer responsible for the work site.

How soon after the injury or accident must it be reported?

Immediately, or at the first opportunity given the circumstances. Be prepared to provide information indicating the time, place, and nature of the injury or accident.

To whom do I report the accident or injury?

Notify the nearest Workplace Health and Safety regional office. The telephone number for each office is listed at the end of this publication. Each office is able to handle calls outside of normal business hours.

And what about other types of accidents?

The Act doesn't require the reporting of other types of injuries and accidents. If you're unsure about whether to report the injury or accident, call it in to the nearest Workplace Health and Safety regional office.

What's this business about an incident investigation report ?

Remember that telephone call to the regional office? When one of those injuries or accidents happens, an investigation report has to be completed. An investigation report also has to be completed for other serious injuries or accidents, including ones that had the potential to cause a serious injury or accident.

Do I have to call Workplace Health and Safety about these other “serious” injuries or accidents?

No. But they do have to be documented in an investigation report.

Who’s responsible for preparing the investigation report?

It’s the responsibility of the prime contractor, or if there is no prime contractor, then the contractor or employer responsible for the work site.

Why bother with an investigation report?

Finding out what happened and why can help to prevent a recurrence of the same or similar injury or accident.

What do I do with the investigation report when it’s completed?

The investigation report is an internal company document and should be kept on file. You’re not required to send a copy to Workplace Health and Safety. However, the report has to be readily available to occupational health and safety officers when they come to the work site.

For how long must the investigation report be kept on file?

When a report is prepared, you’re required to keep it for a period of 2 years following the injury or accident. When requested, the report must be available for inspection by an occupational health and safety officer.

Can the investigation report be used in court as evidence?

The investigation report can’t be used in a trial arising out of the serious injury or accident except in a prosecution for perjury (giving false evidence or testimony) or for the giving of contradictory evidence.

I was told that I can’t touch or move anything at the scene of the accident. Is this true?

You can’t disturb the scene of an accident involving one of the reportable injuries or accidents unless:

- (a) you’re permitted to do so by an occupational health and safety officer or a peace officer; or
- (b) you have to attend to someone who has been injured or killed; or
- (c) you have to prevent further injuries; or
- (d) you have to protect property that is endangered as a result of the accident.

What does an investigation report look like?

For an example of what an investigation report should look like, refer to Human Resources and Employment, Workplace Health and Safety's Publication number LI016, "Reporting Injuries and Accidents".

Note: *The Workers' Compensation Board (WCB) injury report form is not an investigation report. A separate investigation report must be completed.*

The assistance of the Alberta Forest Products Association and its member companies in preparing this Guideline is gratefully acknowledged.

For more information about workplace safety or safe work practices, contact the Alberta Human Resources and Employment, Workplace Health and Safety Call Centre by dialling toll-free:



1-866-415-8690

Deaf or hearing impaired call:

- Edmonton (780) 427-9999 Other locations 1-800-232-7215

For more publications, visit our web site at: www.whs.gov.ab.ca

To obtain copies of the Alberta Occupational Health and Safety Act and Regulations, view and download them from our web site or contact the Queen's Printer by dialling toll-free 310-0000 and one of the numbers listed below:

- Edmonton.....(780) 427-4952 Calgary.....(403) 297-6251