Dear Reader:

The report on the WorkSafeBC Roads Demonstration Project is contained in the following pages. The report has a necessarily legal tone in some areas and it speaks of responsibilities and obligations for workplace parties. Each of us can find ourselves in the report as industry stewards of the resources and environment, the harvester, suppliers, WorkSafeBC, and the Ministries involved with roads. Each page tells us of the safety obligations that are necessary on resource roads and what we should do.

In reflecting on the words and contents, I realized that we must look beyond the report itself to what has to be accomplished to make road travel safer and the parts each of us can play. In doing that, the well used poem, “I chose to look the other way” seems fitting. This poem was reflected in the reports of the original Task Force and the Forestry Ombudsman’s and the initiatives of FallSafe and Faller Certification.

The First Verse of the poem is the focal point,

I could have saved a life that day,
But I chose to look the other way.
It wasn't that I didn't care,
I had the time and I was there.

The verse speaks to individuals to take up their responsibilities to their fellow workers and point out risk and hazardous behavior, but it also speaks to organizations to step up and ‘do what is right’. As organizations, we are all there and we must take the time.

The report recognizes the efforts of two road safety committees, one in the Prince George District and the other in the South Peace District that are looking beyond simple legislative obligations to what needs to be done to have safer travel on resource roads for all individuals.

Following this lead and going forward with the report, we as WorkSafeBC, along with Ministries and industry stakeholders, can work together to put cooperative essential safety systems in place that will result in lowering the risk of accidents and injuries on resource roads in BC.

Diana Miles
Vice President, Worker and Employer Services Division
Acknowledgements

We especially wish to thank the Prince George Road Safety Management Committee and the South Peace Road Safety Management Committee without whose endorsement and support the success of this project would not have been possible. Below, these two committees share their perspectives on the Resource Roads Demonstration Project.

The Prince George Road Safety Management Committee

“The committee and myself are supportive of the concept of cooperation by all users to manage resource roads safety. During the project WorkSafeBC supported the committee but did not dictate what we should do. It was the committee that developed procedures and policies that will work for us. We were pleased to partner with WorkSafeBC through the project and felt a stronger cooperative relationship develop while keeping in perspective that WorkSafeBC still has an enforcement responsibility.”

Chuck Carter, Chair, on behalf of the committee members

The South Peace Road Safety Management Committee

“Getting people together to discuss common safety problems and issues and then to develop solutions to those same safety problems and issues isn’t that ground breaking of an idea. The reality is, we often don’t. Safety of our working people and the public on resource roads is too important not to engage in the challenges we all face”

Steve Amonson, Chair, on behalf of the committee members
**Definitions and Acronyms**

**BCFSC**
BC Forest Safety Council

**BCTS**
BC Timber Sales

**Enform**
This is the oil and gas safety association of British Columbia.

**FSR**
Forest Service Road

**MoFR**
Ministry of Forests and Range

**OHSR**
Occupational Health and Safety Regulation

**Owner**
Owner, as it applies to safety-related activities, includes: owner of the road, licensees, producers and other tenure holders. MoFR, BCTS and Oil and Gas Commission are examples of ministries/agencies that are considered road owners on much of the Crown Lands. The road owner is responsible for Section 118 of the WCAct of BC.

**PDR**
Petroleum Development Road

**Resource Roads**
Roads that are constructed for the purpose of access, egress and transport of materials, resources, equipment and people. Resource roads are also known as “industrial roads,” “forest service roads,” or “petroleum development roads.”
Resource Road Compliance Officer Guide (Infoflip)

The Field Officer’s Guide is a tiered pamphlet that assists WorkSafeBC Prevention Officers during inspections on resource roads. Available free online www.WorkSafeBC.com, it offers guidance on operational roles, responsibilities and accountabilities for different worksite situations found on resource roads. This document is often referred to as the “Infoflip”.

Resource Road Safety Practices Matrix (RRSP)

The RRSP provides detailed information and specific activities to develop, implement and maintain resource road safety management systems. (Refer to Appendix #2)

Road Owner Committee, Road Safety Management Committee (RSMC)

A committee made up of owners that establishes safe work procedures and gives direction for the contractors and workers who are using the road. This is an ongoing group of owners who share information on road use that is needed for everyone to operate safely.

Road Maintenance

The licensee is obliged to carry out road maintenance to a pre-determined standard.

Road User Committee/Group (RUG)

A committee that represents unrelated representatives from a range of road users, each of whom may have differing needs, but meets regularly to discuss safety issues that may impact other companies or workers on specific parts or portions of the road network. This group would normally be referred to as a “Road User Group/Committee” (RUG).

Safe Road Use Plan

SRUP

WorkSafeBC

Workers’ Compensation Board of British Columbia.

WC Act

British Columbia’s Workers Compensation Act
Executive Summary

WorkSafeBC works with industry stakeholders to improve health and safety responsibilities on resource roads

Travel on and use of resource roads in B.C. has resulted in an average of four industrial deaths and numerous serious injuries each year, over many years. Public users are also injured or killed travelling on resource roads each year.

WorkSafeBC’s mandate is to promote safe workplaces and reduce the risk of injury to workers. WorkSafeBC has undertaken the Resource Roads Demonstration Project to demonstrate how safety can be managed effectively on resource road networks throughout the province of B.C.

The Demonstration Project focused on responsibility for planning and developing a system that will effectively coordinate safety for all road users with a consistent approach that has started in several individual forest districts. It is our hope that the system will expand throughout all districts and their road networks.

The demonstration project’s three main goals were to:

1. Validate the guidance and tools provided to WorkSafeBC Field Officers. The guidance included any direction provided through WorkSafeBC strategies and written guidelines. The specific tools were the “Resource Roads Safety Practices Matrix” (RRSP) and the “Field Officer Guide”.

2. Review and help to establish RSMCs with a structure and membership that provides the due diligence and a reasonably practicable coordination and compliance protocol for all owners for managing safety on resource roads.

3. Appraise and report on new and existing equipment and technologies that could have a positive impact on injury reduction on resource roads.

Background

British Columbia’s vast network of resource roads can be considered amongst the most hazardous, high-risk workplaces in the province. As workplaces, resource roads present a number of unique safety challenges. Resource roads are constructed for the purpose of access, egress and transport of materials, resources, equipment and people. Other names for resource roads include “industrial roads,” “forest service roads,” and “petroleum development roads.”

“[The greatest risk to drivers of resource roads is unexpectedly meeting another vehicle coming towards them and not having enough space or time to avoid a collision or driving off the road.”

Chuck Carter, chair, Prince George Forest Road Safety Committee and Safety Coordinator for British Columbia and Alberta, Canfor
In the province of British Columbia, there are over 600,000 kilometres of resource roads. Resource roads lack the same diligence of enforcement and a consistent design, construction, maintenance and standard for use as public highways or municipal roads. Public use of resource roads adds to the challenge of planning and implementing safe use systems.

Fatalities on Resource Roads

The statistics below illustrate the extent of the safety challenge on resource roads:

- Over a ten year period, motor vehicles have claimed 68 lives in the forestry and oil and gas industries. Resource road fatalities accounted for 36 of these fatalities.

- Of the fatalities, 47% were log truck drivers, 42% involved a pick-up or crew transport vehicle and 22% were equipment operators.

The predominant contributing factors were road design and maintenance, speed, personal impairment and lack of radio communication. Failure to wear seat belts was noted in 58% of the resource road fatalities.

Project Description

It is recognized that the land base in British Columbia is very large, complex and diverse. The project was based on information gathered in two forest districts (Prince George and the South Peace Forest Districts) which are a representative subset of the 29 Forest Districts (and 12 BCTS Business Areas) that form the basis of administrative zones for the Ministry of Forests and Range. The project focused on the organization and implementation of a management structure that would provide a system of coordination and a process of compliance for the users of the defined road systems. The leadership role was demonstrated through a committee consisting of the actual owner of the road (i.e., the owner responsible for the prime contractor function) and other users. In the project demonstration areas, this became the MoFR and major licensees and/or producers.

These committees, which are known as Road Safety Management Committees (RSMCs), were implemented in two Forest Districts (Prince George and South Peace) for the purpose of providing the functional system for safe road administration. Each RSMC is supported by a subcommittee known as a Road User Group (RUG) that serves as the main mechanism to take the procedures and standards of the road administration to the operational level.
Many areas have user committees already in place that primarily deal with maintenance and cost sharing. The reasons for selecting the Prince George and southern portion of the Peace district were:

- The Prince George Forest District had an established owners’ committee, chaired by a major licensee that had already transitioned beyond the maintenance function and was addressing several safety concerns through standard use procedures.

- The South Peace Forest District had several long established traditional maintenance/safety committees, encompassing large geographical areas and involving more than one major industry.

**Activities**

The WorkSafeBC project group worked with the individual committees and members throughout the project to assist in developing structure and providing process documents to aid in administration and implementation of an effective road management system. This resulted in committees taking leadership and moving forward with document preparation involving little or no help from the project team. The committees now operate independently with some involvement from WorkSafeBC Field Officers.
Officers conducted field evaluations using checklists and surveys. Guidance was provided in a project-specific workbook. The evaluations focused on the implementation of standards and procedures put in place by the committees relating to roads, loads, trucks and drivers. The results were encouraging and more detail can be found in Section 5 of the report.

Project Findings

The foundation of a safe road use system is having effective road use procedures that become standard safety practices for all road users through diligent road administration.

The most efficient and effective means of creating and maintaining a diligent system is to form a RSMC. Its membership consists of those who have safety management responsibilities for the specific road. These committee members are the principal users of the road systems and contribute much of the information needed to ensure a system for safe road use is in place.

Diligent road administration is dependent on appropriate, sufficient and current contributions to safety from both the road owner and the licensee/producer owners.

Through discussions with field officers, licensees, producers and the MoFR, the “Field Officer Tools” (including the Guide and RRSP Matrix) were affirmed as being complete and valuable, however in some cases too complex. The RRSP Matrix and the Field Officer Guide are referred to in various parts of the report and the recommendations. (Refer to Appendix #2)

Diligence Model:

*Road Owner Contributions + Licensee Contributions = Diligent Road Administration

* Where the road owner is also the default prime contractor
Key Finding 1 – Coordination and Compliance

The resource road administration systems in most areas of the province are not designed to be compliant with section 118 of the WC Act or parts 26.2 or 23.4 of the OHSR. The administration systems do not provide for coordination of safety nor is there a process in place to ensure regulatory compliance. The ministries give licenses and permits to use road systems and do not coordinate the licensees and/or producers or other users to ensure “safe use” of the road network.

The two forest districts that were chosen for the project were diversified and displayed a willingness to improve upon the safety systems that were already in place. These districts are transitioning towards complete diligent systems for safe road administration.

Key Finding 2 – Application of Prime Contractor Function

Safe usage on resource roads can be effectively put in place and managed by applying existing WorkSafeBC legislation on prime contractors.

The prime contractor mandate for a system for coordination and a process for compliance can be administered through a properly-structured operational owners’ committee, i.e., a Road Safety Management Committee.

Key Finding 3 – Standardized Driver Training and Supervision

A diligent road administration system will provide a platform for employers to apply their safety programs and standards and ensure their workers support the safe road use system. Through review of statistics, surveys and discussions with all levels of road users, it is evident that each employer needs to implement a standardized driver training process and a system of supervision and oversight. These program needs could be addressed and assessed through both the BC Forest Safety Council’s (BCFSC) Safe Companies Program and the “ENFORM” Certificate of Recognition Program.
Recommendations

Recommendations are made to WorkSafeBC, MoFR, BCFSC and general employers who require workers to travel on resource roads.

Recommendations focus on:

- RSMCs being established throughout the province as the administrative structure for safety on resource roads.
- WorkSafeBC taking a leadership role and ensuring any system put in place for road administration is compliant with the WC Act.
- New technology being reviewed and used as appropriate by all road users.
- Electronic Stability Control becoming a standard on light duty trucks and other vehicles when feasible.
- Driver training standards being identified, implemented and enforced.
- Subcommittees or Road User Groups (RUGs) are in place at an operational level where work is occurring within each unique road system or road network.

The project concluded that the road owner (i.e., MoFR, OGC, or others) must be a fully participating partner in any road safety management initiative. This was identified as a critical success factor.

Further findings and details of the project, RSMCs and RUGs are found in the body of the report.
## Table of Contents

**Definitions and Acronyms** ........................................ 4

### 1 – Executive Summary ........................................ 6
- WorkSafeBC and Resource Roads
- Background
- Fatalities on Resource Roads
- Project Description
- Project Findings
- Recommendations

### 2 – Introduction .................................................. 14
- History of BC’s Resource Road System
- Resource Road are Industrial Workplaces and Worksites
- Resource Road Fatality Statistics

### 3 – Demonstration Project ...................................... 19
- Project Leadership
- Scope
- Strategic Objectives
- Project Purpose
- Performance Objectives
- Project Communication
- Demonstration Areas
- Project Stages
4 – Project Fundamentals ........................................ 28
- Safe Use of Resource Roads for All Users
- WC Act and OHSR Require Road Safety Management and Due Diligence
- All Workplace Parties have a Responsibility for Road Safety Management
- There are Four Key Safety Elements to Ensure Each Workplace Party Carries Out Effective Resource Road Safety Management
- Effective Resource Road Safety can be Managed through a “Diligence Model”
- Demonstration Project Stakeholder Roles, Responsibilities and Organization

5 – Project Findings ................................................ 34
- Project Limitations
- Project Goals, Activities and Findings
- WorkSafeBC Field Officer Work

6 - Recommendations ........................................... 47
- Background
- Recommendation Assumptions
- Recommendations
- Critical Success Factors

7 – Response to Other Reports ................................. 51
- Background
- Response to Auditor General Report
- Response to Forest Safety Ombudsman Report

8 – Appendices ...................................................... 57
1. Determination of Workplace Roles
2. Resource Roads Matrix
3. Officer Workbook
4. Resource Road Safety Management Tool Kit
5. Prince George Road Safety Management Committee: Safe Road Use Procedures and Policies
6. FP Innovations – FERIC Report: Technologies to Improve Resource Road Safety
Introduction

History of BC’s Resource Road System

In BC’s past, resource roads were built to provide access to remote locations for a single industry user including forestry, mining, or oil and gas industries. During these times, a single industrial user had reasonable control over the road’s construction, maintenance, and operation.

Today, different industries with different truck configurations and the general public are sharing the same road. As the frequency and diversity of the users on existing resource roads increases, so does the number of roads being built to accommodate expanding industrial activities such as: tree harvesting and log-hauling as a result of the mountain pine beetle, oil and gas exploration and drilling, tourism and mining.

Serious safety issues for workers have developed as transportation needs and industrial activity continue to increase along resource roads. The length or amount of resource roads, their use, and frequency of use has increased dramatically over the last two decades. Use of resource roads is expected to grow significantly. In reality, there are multiple types of loads, truck types, range of driver skill sets and driver training, and an ever increasing number of recreational and general public drivers on resource roads. Drivers are now operating vehicles with loads that may not be designed, maintained and managed to reflect the new realities of resource road use. Regulatory compliance on resource roads has been an ongoing challenge. Stakeholders need guidance and assurance that solid operational processes will assist in coordination of activities, increase workplace safety and provide some semblance of diligence for all parties.

Resource Roads are Industrial Workplaces and Worksites

Resource roads are constructed for the purpose of access, egress and transport of materials, resources, equipment and people. They are not public highways or municipal roads and, therefore, may lack the same diligence in safety management.

Managing road systems is complex. Implementing health and safety roles and responsibilities only adds to operational requirements. Therefore, good management requires an understanding of safety fundamentals and regulatory requirements---resource roads are definable work places and safety must be managed.
To implement a legacy of workplace safety on the province’s resource roads, safe road management requires commitment and focused contributions from all road owners, users and workplace stakeholders.

The Workers Compensation Act (WC Act) and the Occupational Safety and Health Regulation (OHSR) outline responsibilities for each party. For owner responsibility, the WC Act accepts that the definition of an owner can apply to more than one party on a road system. To reflect this, WorkSafeBC policy identifies a hierarchy of owners. Therefore, there are two basic levels of owners: road owners and license owners.

All owners must plan for compliance by:

- **Identifying** the safe workplace (e.g., road system) and the expectations for employers and workers using the road. This includes participation in the coordination and compliance system
- **Planning** and **communicating** the maintenance standards
- **Identifying** and **communicating** hazards and information to coordinate use and mitigate hazards

WorkSafeBC acknowledges that effective road safety requires support from individual employers and workers. As a result, the WC Act and OHSR require the employer to have a safety program and provide workers with sufficient information and training to operate safely on road systems.

### Resource Road Fatality Statistics

On February 8, 2003, two trucks collided on a narrow logging road near Burns Lake, BC. Craig Payne, a veteran truck driver, was killed instantly, when a load of logs crashed through his cab. This tragic workplace incident is, unfortunately, one of many that have occurred on BC’s complex network of resource roads. Though every workplace accident is preventable, achieving an acceptable standard for safety on resource roads has been a complex and challenging process.

Over a 10-year period (1999 to 2009), motor vehicle incidents have claimed 68 lives in the Forestry and Oil/Gas industries. The most common types of vehicles involved in resource road fatalities are log trucks 47% and pickup trucks/crummy 41%. The most frequent type of collision was rollovers, accounting for nearly 64% of fatalities.

Failure to wear seatbelts resulted in ejection from the vehicle, drowning as the result of no seatbelt, and jumping from the truck. This was a contributing factor in many of the fatalities.
Figure 1. Number of Fatalities – Resource Roads vs Highway

WorkSafeBC 2009

Figure 1: From 1999-2009, 53% of fatalities occurred on resource roads as compared with paved highway systems.

Figure 2. Crash Causation Factors

WorkSafeBC 2009

Figure 2: From 1999-2009, major crash causation factors in resource fatalities included: road design and maintenance, speed, impairment and lack of communication.
“Truck rollovers are one the most frequent types of incident and serious injuries on resource roads and yet these types of incidents are preventable. Prevention takes three basic steps.

1. Road owners must ensure roads are planned and constructed to suit the types of trucks and traffic.

2. Road safety committees, contractors and maintenance contractors must implement rules of the road and must ensure there is a regular monitoring system of road use in place.

3. Drivers and road users must follow safe road procedures and drive to the conditions of the road (including weather, condition of the road, time of year, all users of the road to must use seat belts and speed).

Everyone has a responsibility for road safety.”

Dan Chapman, WorkSafeBC Field Officer (Prince George)

Figure 3: From 1999-2009, the top three types of workers killed on resource roads were log truck drivers 47%, equipment operators 22% and oil field and silviculture workers 11%.

Figure 4: From 1999-2009, the top three types of fatal collisions on resource roads were: rollovers 64%, collision with another vehicle 17% and single vehicle crash 17%.
Figure 5: From 1999-2009, the top three types of vehicles involved in fatal collisions on resource roads were: log trucks 47%, pick-up trucks/crummy 41% and gravel/tank trucks and service vehicles 6%.

Figure 6: From 1999-2009, the top three definable factors in fatal injuries on resource roads were: no seatbelt 47%, fire/drowning/hypothermia 8% and crushed by load 8%.
3 Demonstration Project

Project Leadership

The work of the Demonstration Project was completed under the sponsorship of the Vice-President of Worker and Employer Services, WorkSafeBC. The project premise was to work in partnership with key industrial road users and the Ministry of Forests and Range. The Project was managed by a team consisting of WorkSafeBC’s Industry and Labour Services Department and Regional Service Field staff with support from the MoFR and Canfor, Prince George.

Scope

The scope of the project was to implement RSMCs in manageable areas to effectively set standards, processes and procedures that will provide a system for safe coordination and compliance by all road users.

The Resource Roads Demonstration Project was to work within the framework of the WC Act and the OHSR and support Section 217.1 of the Canada Criminal Code (also known as Bill C-45). * Bill C-45 suggests parties with responsibilities can rely on provincial standards for diligence. At present, there is not a defined provincial standard for resource road safety management beyond the performance requirements in the WC Act and part 26 of the OHSR. The RRSP(Matrix) and the Field Officer Guide are intended to assist in providing safety information. They are guidance tools that could be utilized more by industry stakeholders.

Bill C45 reads: “Everyone who undertakes, or has the authority, to direct how another person does work or performs a task is under a legal duty to take reasonable steps to prevent bodily harm to that person, or any other person, arising from that work or task.” The bill established new legal duties for workplace health and safety, and imposes serious penalties for violations that result in injuries or death. It also establishes rules for attributing criminal liability to organizations, including corporations, for the acts of their representatives and also creates a legal duty for all persons directing work to take "reasonable steps" to ensure the safety of workers and the public.

*Bill C-45 is federal legislation that amends the Canadian Criminal Code. Bill C-45 became law on March 31, 2004 and is now the new Section 217.1 in the Criminal Code
Strategic Objectives

The Resource Road Demonstration Project operated with two strategic objectives to achieve:

1. Reduce the risk of accident or injury on resource roads through implementation of safe management and use plans directed specifically at resource roads with consideration of the necessary safety fundamentals for roads, loads, trucks and drivers.

2. Identify the fundamentals of a Regulatory Due Diligence Compliance System.

Project Purpose

The purpose of the Resource Roads Demonstration Project was to provide a practical model to facilitate safety through the requirement of coordination and provide a process to reasonably ensure compliance on BC’s resource road systems. The practical model is made up of four components:

Component 1: Implement Road Safety Management Committees made up of key workplace parties

Owners’ committees focused on resource road usage were already in place in Prince George and the South Peace. With some refocus and modifications these committees became RSMCs. The structures of the RSMCs included participation of the road owner, (default prime contractor), licensee owners and a WorkSafeBC field representative to assist as needed.

Component 2: Focus Road Safety Management Committees on safe road usage

Each committee facilitated the development and implementation of a resource road safety management system. The purpose of the resource road management system is to address safe road usage between unrelated users whose only commonality is the need to use the same roads for work and travel purposes. The road management system also supports compliance with the WC Act, which requires the coordination of safety of all firms using the network of roads.

Implementation of resource road management systems will act as a viable and practical demonstration of how Ministries, road owners and key users can create fair and equitable systems and an environment
for safe use. Employers and all users fulfilling their safety responsibilities must support such a safe environment. This system of setting safety standards for use through communication, and coordination will provide a Tool Kit for other resource road networks. Use of the Tool Kit will result in a road-specific “Safe Road Use Plan” (SRUP). (Refer to Appendix #4 – Tool Kit)

Component 3: Emphasize support is required from owners

The RSMC facilitates safety through coordination of activities by the variety of users that affect safety and by having consistent processes that result in safety compliance by users.

In order for the RSMC to focus on coordination and a process for compliance, other fundamental owner responsibilities must have been addressed and be in place. These are described specifically for roads in the RRSP as providing and maintaining a safe work place and identifying known hazards to users. The resulting SRUP will be specific to safety on resource roads by considering four elements in each circumstance: the road, the load, the truck, and the driver.

Component 4: Use Fundamentals of a Basic Safety Program Framework

Effective safety plans/programs rely on fundamental principles of planning, training/communication, supervision/monitoring, and duty and care (or professionalism). These fundamental principles guided the project and the committees through development and implementation of all facets of the Road Safety Management System and basic creation of standards and procedures.

Performance Objectives

The Demonstration Project operated with 10 performance objectives. The report describes the objectives and the results achieved.

1. Leverage current stakeholder accomplishments in Prince George and the South Peace and WorkSafeBC’s resource road compliance achievements as the basis to develop a Road Safety Management System.

Results

Key stakeholders on road systems have through necessity developed processes that support safety. WorkSafeBC through the RRSP and Field Officer Guide have identified needed standards. Through the project, these were further developed and refined resulting in a system that can be applied in other areas of the province to support safe road management.
Two RSMCs were established and continue to develop and progress. Each committee has an established owner’s membership that operates within a “terms of reference” focused on safe road management. Each committee identifies process and system needs specific to their road systems. Policies and procedures are developed which result in a SRUP. A subcommittee mechanism, RUGs, is in place to take the processes to the operation level. The system has feedback mechanisms in place.

2. **Refine processes for establishing RSMCs.**

**Results**

The structure for a committee is refined to the point a Tool Kit has been developed with provisions for adjustments to meet regional or area needs (*refer to Appendix # 4 – Tool Kit*). Processes of establishing a new “committee startup” should be discussed and formalized into a checklist document.

3. **Define RSMC’s role as an owners’ committee and the committee’s relationship with stakeholders that do not sit at the table.**

**Results**

RSMCs are designed to fulfill the function of the prime contractor by providing a system for coordination and compliance. The prime contractor function is the responsibility of the road owner but also must be supported by all other owners. The RSMC is simply a forum with structure that fulfills owners’ contributions to the prime contractor function.

In most circumstances, there will be stakeholders and short term users that do not sit at the committee table. These users must be provided with sufficient information to operate safely. They should be represented by an accountable owner that sits at the table. For example, a BCTS representative would sit on the committee on behalf of the BC Timber Sale Users who in turn are accountable to BCTS.

4. **Create stakeholder buy-in by illustrating how improved safety on resource roads benefits each party and results in diligence.**

**Results**

There is a Provincial Tool Kit (*refer to Appendix # 4 – Tool Kit*) to enable committees to develop Terms of Reference. These terms of reference will include scope and role of the specific committee.

The committees, as they develop, will provide procedures and standards for safe road use. User groups, such as employers, will find it easier to develop their compliance inside this environment.
5. Identify foreseeable gaps between a RSMC’s Terms of Reference, operational accomplishments and owner obligations as defined in sections 119 and 118 of the WC Act.

Results

Committee Terms of Reference have been developed or modified to provide for expansion of procedures that support coordination under section 118 of the WC Act. Section 119 of the WC Act, including defining the limitations of the road system, providing maintenance and identifying known hazards, still remains the obligation of the responsible owner.

There still remain some issues with operational implementation not including all users, such as sale owners and salvage tenures. This is identified and will be resolved only with the involvement of owners, such as the MoFR.

6. Highlight for employer/contractors and workers how the use of information, standards and processes developed by the management systems further advance their safety contributions and diligence toward compliance (sections 115, 116 and 117 of the WC Act).

Results

The committee operates on the principles of planning, training/communication, supervision/monitoring and professionalism by all parties. The committee is focused on safety coordination and compliance, while owners provide a road safe to use, adequate maintenance, and continually identify inherent hazards. The systems established by the committee and the owners provide the platform upon which employers/contractors build their safety systems.

7. Provide each stakeholder with a clear understanding of what major parts of the WC Act and OHSR apply to their use of the road systems.

Results

Sections 115 to 119 are the key parts of the WC Act that must be applied. The OHSR requires planning, training, supervision and working safely by all parties. The demonstration model organizes road administration at the committee and owners’ level. This results in a proactive “Safe Road Use Plan” (SRUP).

The employer/contractor and workers are at the operational level and would normally receive information through the Road User Group. NOTE: These groups were in place before the project, but they did not have a “formal” safety component in their mandate.
Subsequent to the Demonstration Project the licensees, producers and other owners and WorkSafeBC will be challenged to bring employers/contractors into the system and into compliance with their own safety programs.

8. Create a Tool Kit or checklist for employers to use when planning for their safety on resource roads. Create an effective risk assessment system with criteria applicable to resource roads.

Results

The RRSP and Field Officer Guide provide pertinent information for all parties on the requirements of the WC Act and OHSR. The Resource Road Safety Management Tool Kit, which contains checklists, provides further information specific to compliance for roads. The Tool Kit identifies accountability and responsibility as required by 115 to section 119 (inclusive) of the WC Act and part 26.2 of the OHSR (planning for conducting forestry operations) and part 23.4 (oil and gas operations).

Specific procedures (produced by the committees involved in the Demonstration Project) outline requirements for risk assessments to determine inherent risks and road limitations. (Refer to Appendix #5 – Policy “D” – Communicating Known Hazards and Assessing Road Risk)

9. Review the Auditor General’s, the Ombudsman’s and the Coroner’s reports regarding resource road safety and comment on the findings of this project and support for the recommendations in those reports.

Results

Several recommendations in the noted reports are addressed or supported by the Demonstration Project. Specific comments on these recommendations are contained in this report in “Section 7”.

10. Review and report on new technology that may make resource roads safer and improve business practices for industry.

Results

New and innovative technology was reviewed by FP Innovations - FERIC and the report results can be found in the Appendices section. (Refer to Appendix #6 – Technologies to Improve Resource Road Safety.)
Project Communication

The RSMC worked with the road owners and other key stakeholders in the development and implementation of a localized SRUP, which in turn is put into operation at the user level.

Each RSMC is area-specific and should consist of local stakeholder representatives (e.g., MoFR, BCTS, licensees, producers or other owners and a WorkSafeBC Field Officer).

Communication between WorkSafeBC and the key players was effectively maintained throughout the project. The relationships built through this open communication and the involvement of key stakeholders in the decision-making processes has built independence and sustainability within the committees and a working model for other committees going forward.

Demonstration Areas

The Demonstration Project was restricted to two manageable areas of road networks within the province of BC. The objective in selecting specific road networks was to find a geographical location where the dominant industry was forestry and another location where the dominance of road users were from the oil and gas sector. WorkSafeBC defined the general project areas as the Prince George Forest District and the Peace Forest District (involving only the southern portion of the district – hence the term "South Peace Committee"). Working with the road stakeholders in each of these areas, specific road systems were evaluated and selected for the purpose of the project.

Project Stages

Project Phases

The Resource Road Demonstration Project was implemented through three phases.

Stage 1: September 1 – December 15, 2008

The initial stage of the Demonstration Project was to:

1. Implement an Awareness and Communication Program of the Resource Roads Demonstration Project by holding formal media events (Prince George and Fort St. John), conducting industry stakeholder meetings and selecting internal resources for the Demonstration Project team (WorkSafeBC).
2. Conduct a gap analysis between the types of safe management systems in place in the demonstration regions and the policies, tools or systems yet to be implemented, as required by the WC Act. In identifying the safe road management systems, the Demonstration Project Team worked with stakeholders to determine and implement effective and manageable systems to support coordination and compliance on complex road systems with unrelated owners and employers.

3. Work with the regional demonstration project areas to strengthen existing RMSCs or establish new committees for the purpose of implementing diligent Road Safety Management Systems to coordinate road safety on the network of roads.

**Stage 2: January – March 2009**

The second stage of the Demonstration Project was to:

1. Provide an interim report based on findings to date and measured accomplishments.

2. Monitor the regional RSMCs, working with committee members, owners, employers and others to put systems in place to fill any identified gaps in regulatory compliance.

3. Create a definitive model on safe road management based on the concept of RSMCs, RUGs and/or road maintenance committees, to ensure compliance with the WC Act and OHSR.

**Stage 3: March – April 2009**

The third stage of the Demonstration Project was to:

1. Evaluate the final project results, including: workplace surveys of road user groups, incident statistics and road safety management systems and mechanisms.

2. Document the project results in a final report, which will first be delivered internally to WorkSafeBC’s Senior Executive Committee and then release the results publicly through a formal media project-wrap up event.
Project Activities and Goals

The Demonstration Project demonstrated the application of the WC Act on resource road safety systems through its project activities and goals:

1. To investigate and review the comments and impressions of WorkSafeBC Field Officers and industry stakeholders with regard to the tools and guides provided in early 2008.

2. To involve WorkSafeBC Field Officers to evaluate, monitor and survey users and stakeholders on resource roads. The Field Officers used a prepared workbook to collect field data on the implementation of committee or owner programs for compliance and coordination. Officers also participated in performing safety surveys and conducting truck and road inspections.

3. To work with an existing RMSC in one area and assist with the structure of a multi-industry committee in a second area. The focus was to assist the RSMC owners in both areas to facilitate safe road management.

4. To demonstrate that a RSMC can facilitate acceptable coordination on resource roads with various industries and unrelated owners and employers.

5. To review and measure systems put in place by owners and the committees. Also, to compare the road committee’s management systems to the standards defined in the RRSP and the Field Officer Guide.

6. To review the practicality of the information and procedures provided to users by the committees.

7. To validate that systems and procedures put in place by owners’ committees were communicated and in use on the roads.

8. To validate the effectiveness of road safety management through committee. Effectively this is the “prime contractor function” being fulfilled without complete control over road usage.

9. To confirm a committee’s contributions and limitations to assure diligence.

10. To validate a committee’s effectiveness to manage road safety considering the anomalies of unrelated industries and public use.

11. To identify and validate structures and sub-committees that can assist the owners and the committee with road management at the operational level.
12. To identify systems for various players with different mandates to work together and operate safely on the same road systems.

13. To demonstrate the importance of employers/contractors applying their safety programs’ fundamentals to their use of the roads.

14. To validate diligence levels of all parties observed during the project.

15. To identify new, innovative technologies that have the potential of reducing accidents and injuries on resource roads.
4 Project Fundamentals

The Demonstration Project was operated according to a set of project fundamentals. These fundamentals provide the logic and organization to plan and complete the project, ensuring timely and quality completion.

The Demonstration Project operated under five project fundamentals.

1. Safe Use of Resource Roads for All Users

The underlying principle of the Demonstration Project was the safe use of resource roads for all users, including the public. Resource roads are considered workplaces. Since workers from a range of employers may use the same roads, resource roads must be managed under the principle of a multiple-employer workplace, requiring safe coordination of work activities. Resource roads are located on Crown land; access to these roads is not restricted.

2. WC Act and OHSR Require Road Safety Management and Due Diligence

Though resource road systems are complex to manage, responsible parties have been outlined in sections 115 to 119 of the WC Act, and parts 26.2 and 23.4 of the OHSR. For the purposes of the Demonstration Project, regulatory compliance was limited to these specific portions of the WC Act and the OHSR.

Under the WC Act, a default Prime Contractor owner or road owner must be identified for each road system. To ensure road safety management, all owners must fulfill their responsibilities as required by section 119 of the WC Act and parts 26.2 and 23.4 of the OHSR.

3. All Workplace Parties have a Responsibility for Road Safety Management

Responsibilities for road safety management and road safe use cascade from owners through employers to workers. Road safety management is a coordination system, which depends on effective, shared communication by all workplace parties of road hazards, issues and safe work policies and procedures. In the Demonstration Project, workplace parties implemented a system of shared and supporting responsibilities to ensure a consistent approach and application of safe road use.
A description of the key workplace parties involved in resource roads can be found in the Project Stakeholder Roles, Responsibilities and Organization Section below.

4. There are Four Key Safety Elements to Ensure Each Workplace Party Carries Out Effective Resource Road Safety Management

The Demonstration Project promotes four key elements to ensure effective resource road safety management:

1. Planning – required maintenance, identification of road use hazards, use within road limitations, traffic management, resulting in safe use standards and work procedures

2. Training/Communication – instruction and direction in safe use standards and work procedures and shared communication by all workplace parties of safety issues

3. Supervision/Monitoring - ensuring safe use standards and work procedures are followed

4. Professionalism/Due Care – all workplace parties taking responsibility for road safety management.

When implemented by the road owner or through a RSMC (with owner participation), this system of coordinated workplace activities contributes to effective and diligent road safety management. These elements have been outlined for each workplace party in the RRSP and the Field Officer Guide.

5. Effective Resource Road Safety can be Managed through a “Diligence Model”

Road safety starts with the road owner, who has an ultimate responsibility for workplace safety. Diligent road safety management builds upon the key elements: planning, training/communication, supervision/monitoring and professionalism (duty of care) and applies these elements to road safety management operations. The application of these key elements forms the Diligence Model and involves the key workplace parties: road owners and licensees/producers.
Please refer to “Determining Workplace Roles and Responsibilities” for additional guidance (Refer to Appendix #1). A workplace party can be responsible for more than one role and a range of required contributions to workplace safety. For example, an owner, such as the MoFR, has the obligations of an owner but is also an employer with those corresponding obligations.

A road owner can elect to create and implement a road safety management committee and use the contributions of other parties to collectively put in place a system to administrate safe road usage. Any proposed committee structure and operation requires all owners to fulfill their duties under section 119 of the WC Act and parts 26.2 or 23.4 of the OHSR.

**Demonstration Project Stakeholder Roles, Responsibilities and Organization**

Project stakeholders included groups that use resource roads or agencies that have jurisdiction over resource roads within the province.

This initial project focused on processes for the development of committees, activities, fundamental procedures and supporting documentation that would result in a system for coordination and process for compliance.

The WC Act and the OHSR outline responsibilities for each party. For owner responsibility, the WC Act accepts that the definition of an owner can apply to more than one party on a road system. To reflect this, WorkSafeBC policy identifies a hierarchy of owners. For road administration purposes, there are two levels of owners: road owners and license owners.

Specific players, such as the MoFR or other responsible Ministries, and BCTS are subsets of the broader class of road owner or license owner as circumstances dictate.

**Road Owner**

The road owner allows road usage either actively through a “permitting system” or passively by not restricting access, such as to the public.

The road owner, who is the default prime contractor, has the additional responsibility of ensuring there is a system for safety coordination and a process for compliance that go beyond the basic owner responsibilities.
The road owner’s challenge is to demonstrate effective compliance with sections 118 – 119 of the WC Act and parts 26.2 or 23.4 of the OHSR.

Some owner diligence is provided by planning for safe road usage and implementing effective transfer of information and implementing and maintaining safe use systems.

The road owner’s challenge is to effect compliance in a changing environment where they believe they have little control. The project is primarily focused on the committee being a management tool and the committee being used as infrastructure that will assist in providing diligent systems for communication, coordination and compliance.

One of the project fundamentals is that the road owner, through this committee structure, manages safety systems using licensees, producers or other owners and others that represent unrelated road users. The road owner may be left to manage some special entities such as salvage contracts or other small tenures that are directly related to them and rely on them for information and direction.

**Licensee Owners**

Licensees or tenure holders are accountable to coordinate the usage of contractors including service providers that are directly related to them. This would mean transfer of all safety-related information provided to them to their related employers/contractors.

Major licensees, producers or other owners were represented on the committees. Each major owner has a system to effect road safety through information, coordination and compliance for all of those contractors and persons that they cause to be on their road systems.

In the demonstration areas, the licensees, producers or owners have met the challenge of operating safe use systems on common roads amongst themselves. They have implemented standard road use safety procedures endorsed by all members of the RSMC for the particular network of roads they represent.

Their current challenge is the need for better communication and information sharing between the licensees/ producers on the committee and other non-committee users. The licensees/producers have partially corrected this challenge by using a subcommittee focused directly at road maintenance and RUGs, as well as road monitoring systems. Active participation by the MoFR will support the committee’s efforts.
Road Permit Holder
The road permit holder is responsible for road maintenance to a predetermined standard that is generally for “Industrial Use”. The permit holders function and exposure to all users requires they be an integral part of the RSMC.

MoFR
The MoFR is considered by WorkSafeBC Field Services to be the road owner of FSRs and certain other resource roads on public land, and has responsibilities outlined in sections 118 - 119 of the WC Act. In the South Peace district, a representative of the MoFR chairs the road management committee. In Prince George district, a representative from CANFOR chairs the committee wherein the MoFR has attended committee meetings and provides feedback on proposed procedures. Participation by the MoFR is critical as they have safety related information and significant influence or control over road safety systems. Buy-in by all parties is essential as failure of any party to participate as a committee member would weaken the committee’s effectiveness.

BCTS
BCTS sits at the committee table but at the onset of the project did not fully represent “sale” users. The challenge will be to use BCTS or some other party to represent the interests and needs of these users, and work with “sale” users to communicate with them throughout the “sale” usage period.

Other Road Users
There are other road users such as salvage users, wood lots, etc. These groups are not represented on the committee and information shared with these users has not been implemented consistently or effectively.

As well as the implementation of communication systems, monitoring and enforcement are necessary parts of any road safety management system. This would include dealing with anomalies such as license or other tenure holders that do not willingly support or follow the SRUP.
Road Safety Management Committee
The committee membership is responsible owners who collectively put in place a system to administrate safe road usage. The committee is not responsible under the WC Act, but their contributions as defined in the Committee’s Term of Reference, the endorsed Road Procedures, and the SRUP support diligence of the owners.

Road User Groups
The RUG is normally comprised of licensees/owners, contractors, workers/drivers and other users who are actively working on a common road network. The RUG provides the venue where the principles of the SRUP are shared and implemented at the operational level. The RUG is normally in place when work activities are occurring on a specific road network. The RUG itself is not responsible under the WC Act however their contributions through scheduled safety meetings, information transfer support all parties. The RUG is an essential component in enabling safety communication and provides opportunity for communication and understanding.
5 Project Findings

Key Finding: Current Resource Road Administration

In many areas of BC, the current resource road administration system is not designed to be compliant with section 118 of the WC Act or parts 26.2 and 23.4 of the OHSR. The administration system does not provide a coordination system or a compliance process for road usage. The critical flaw is that the non-compliant systems do not coordinate safety management among all road users. For example, the MoFR gives licensees and permits to use road systems, but they do not take responsibility or accept accountability to coordinate safe use of resource road systems.

Statement of Fact

Safe usage on resource roads can be effectively put in place and managed through application of existing WorkSafeBC legislation.

Key Recommendation

A system for coordination and a process for compliance can be administered through a properly-structured and operational owners committee, i.e., a Road Safety Management Committee.

The ultimate goal of WorkSafeBC and industry is to reduce and, where possible, eliminate the risk of accidents and resulting injuries on resource roads.

To do this, the Resource Roads Demonstration Project focused on the responsibilities and accountabilities of resource road owners and, to some degree, users and the effects of systems put in place on safe road administration and usage. “Road, load, truck and driver” were the key focal points of the Demonstration Project. Safety management and administration were achieved through the elements of planning, training/communication, monitoring/supervision and user professionalism. The Project used a committee structure to demonstrate that a shared responsibility system of safe administration and usage could be applied to resource road systems in two areas of the province. Although all parties have responsibilities to contribute, support and use systems for road safety, the road owner and license owners are ultimately responsible and accountable for putting the basic road safety management system in place.

Project Limitations

The roads considered by the committees were primarily the FSRs and the PDRs. The administration put in place is also applied by the responsible licensee for other roads such as Road Permit Roads and cut block roads. This may result in a gap when other non-related employers use such roads. But such gaps can be identified and managed. Safety systems of employers, contractors and workers, except through driver surveys and truck inspections, were not directly addressed or impacted during this project. The project focused on road management and administration, which is primarily the responsibility of road owners and licensee owners. Once in place, the administration or committee system would create the platform for other players to build their safety systems on. The parties see the WorkSafeBC information tools provided previously, (RRSP and Field Officer Guide), as being complete but too complex.
Project Goals, Activities and Findings

Requirement 1
WorkSafeBC Field Officers must be diligent and consistent in the application of the WC Act as it applies to responsibilities of resource safety management.

Goal
Validate the guidance and tools, i.e. “RRSP*” and the “Field Officer Guide**” provided to WorkSafeBC Field Officers.

Activity 1
The activity was a discussion about the tools and their value with owners, officers and committees.

Findings and Suggestions for Improvement
The officer’s tools set a high standard for road management but the documents are seen to be complex. If simplified they have would have broader acceptance and use. There should be an emphasis on providing information in a simplified form.

The RRSP is an excellent multi-faceted foundation document used as a guide to assess safety responsibility for all parties involved in the use of resource roads. The document could, however, be simplified by providing bullet points to further clarify each specific responsibility, such as coordination or maintenance. The value of the RRSP could be better communicated to officers and stakeholders by re-organizing it into simplified handbooks specific to road user types. These stakeholder-specific handbooks would cover the “need-to-know” information on how to implement systems to meet regulatory compliance. These handbooks could also include a diligence checklist specific to the stakeholder.

Activity 2
During the activity officers used a prepared workbook to collect field data on the implementation of committee or owner programs for compliance and coordination.

Findings and Suggestions for Improvement
The prime contractor function on resource road systems, as required by the WC Act, is not in place in most areas of the province. This circumstance is not being addressed proactively by WorkSafeBC but officers do address the circumstance when there is a reported incident.

Having a system in place for compliance and coordination of safety is essential to preventing accidents and fatalities.
Non-compliance of road owners by failure to provide the function of a prime contractor has been ongoing. It would be reasonable for WorkSafeBC to address this issue through a compliance strategy that was staged through consultation, education and enforcement as required.

**Requirement 2**
The Road Owner or the designated Prime Contractor is required to ensure a “system or process is in place for compliance” and that “occupational health and safety related activities are coordinated on resources roads”.

**Goal**
Facilitate the establishment of RSMCs with a structure and membership that provides the due diligence or a reasonably practicable coordination and compliance protocol for all owners.

**Activity 1**
The activity was to work with an existing committee in one area and structure a multi industry committee in a second area that can assist owners in safe road management.

**Findings and Suggestions for Improvement**
The prime contractor function on resource road systems as required by the WC Act is not in place in most areas of the province. This circumstance is not being addressed proactively by WorkSafeBC but officers do address it when there is a reported incident. The committees were effective with their mandate but the Prince George committee was not structured or supported to provide full compliance with section 118 of the WC Act. Both committees have a positive effect on road safety by providing information and procedures to road users.

**Note**: To provide diligence for owners, a RSMC’s system must be structured to cover all industrial users.

A RSMC will not consistently provide more diligence than it is designed or structured to give. RSMCs are an owner’s venue so the owners must ensure the committee’s Terms of Reference* are structured to support compliance. Then RSMCs can identify and articulate what diligence they can provide and what limitations to diligence there may be. This will help manage the committee’s, licensee’s, MoFR’s and WorkSafeBC’s expectations of a specific committee.
Activity 2  
The activity was to demonstrate that the committee can facilitate acceptable coordination on resource roads with various industries and unrelated owners and employers.

Findings and Suggestions for Improvement  
The information and structures were in place to provide safe road management for all users but the systems fail when owners do not provide sufficient information to users who are not related to any specific licensee. Diligence must start with the owners that make up the committee and provide input to the committee. This concept was not fully understood or accepted by some owners. For guidance on determining roles, refer to the “Determining Workplace Roles” document (see the Road Safety Took Kit in the Appendices for an example).

A key and important factor involves the MoFR’s acceptance that they are, in many situations, the road owner responsible for putting in place a prime contractor function. The Ministry itself is divided on their acceptance of this responsibility with some districts fully participating in the committee system and others being reluctant. The contribution of the road owner is critical to the success of Road Safety Management Committees.

Activity 3  
The activity measured systems put in place by owners and the committees and compared the road management systems to the standards defined in the RRSP and the Field Officer Guide.

Findings and Suggestions for Improvement  
The owners and RSMC found the RRSP and Field Officer Guide too complex but they did monitor road usage against their own standards and procedures. RSMCs are working toward compliance with the officer tools with exception of road design and construction. There appears to be reluctance by all parties to address the design and construction limitations of the roads in relation to anticipated usage.

Road owners must clearly identify the limitations of the road system and not issue “permits” in which usage will exceed the limitations of design, construction and condition of the road. WorkSafeBC in their review of the performance requirements of the tools provided to officers should reaffirm that they represent the expected performance standard for all parties.
Activity 4
The activity reviewed the practicality of the information and procedures provided to users by the RSMCs.

Findings and Suggestion for Improvement
The procedures were practical and provided good guidance. This process is underdevelopment and more needed procedures and standards are being developed.

WorkSafeBC should work with the committees to provide input and support into the development of needed procedures. This would result in a consistency between committees and regions. The core procedures would have provincial application.

Activity 5
The activity validated that systems and procedures put in place by owners’ committees were in use on the roads.

Findings and Suggestion for Improvement
Procedures were in place and used by all persons to whom they were provided. Procedures may not be provided to users that are unknown to the committee or member licensees/producers or to users that refuse to get a Road Use Agreement from the maintainer.

In some instances procedures are provided with the Road Use Agreement. This method of providing information to unrelated users fails if the user does not get a Road Use Agreement. The required information and procedures could be handled through a subcommittee or RUG, or through the licensee or owner that has a relationship with the user. This would include BCTS and sale users, the MoFR and small tenure holders and licensees, or employers requiring service providers to travel the roads.

Activity 6
The activity was to validate the effectiveness of road safety management through committee. Effectively, this is the prime contractor function being fulfilled without complete control over road usage.

Findings and Suggestion for Improvement
The effectiveness was directly dependent on each party providing information and coordinating the usage of the license holders or contractors directly related to them in the responsibility chain. Not all owners met this test of diligence. The OHSR requires coordination of all parties directly below you in the line of responsibility. This would mean the MoFR would coordinate anyone they gave a license to and subsequently the license holder must coordinate any contractor they hire.
Owners must be educated and made aware of their obligations for coordination and compliance. Each owner must then assure that they provide the committee with sufficient information and support to fulfill the obligation of a system for coordination and compliance on the road systems. Owners should be made aware that if the committee falls short in coordination or compliance, the owner with the most control or influence has the responsibility to fill the gap. Committees should review their operating systems on a regular basis to identify and articulate what diligence they do provide and what limitations there may be.

**Activity 7**
The activity confirmed committee limitations to assure diligence.

**Findings and Suggestions for Improvement**
The committee is not accountable for effective road management but the members in their role as owners are accountable. All committees are limited by their terms of reference and the diligence of the individual owners that make up the committee.

Committees should consider an audit process focused on their operations and effectiveness. The audit would identify operational, membership and any perceived limitations that restrict the committee from fulfilling requirements of coordination and compliance.

WorkSafeBC should assist in identifying areas where operations or Terms of Reference may not provide for regulatory diligence. Issues should be communicated to the committee and the responsible party. Fundamental compliance with road safety should be assured.

**Activity 8**
The activity validated committee’s effectiveness to manage road safety considering the anomalies of unrelated industries and public use.

**Findings and Suggestions for Improvement**
If given sufficient support from the road owner, unrelated industries would be a manageable circumstance at the committee level. Public usage is a challenge but is being managed through awareness and good information systems.

Both unrelated industries and public usage are provincial issues. WorkSafeBC, Ministries and selected stakeholders should discuss what processes should be followed to effectively engage these groups at a regional committee level. The strategy could involve the “permitting” systems, mailings, media campaigns and enforcement. Regardless of provincial strategies, unrelated industries and public use of road systems should be discussed at the appropriate
committee level and methods to involve these groups should be implemented.

**Activity 9**
The activity identified and validated structures and sub committees that can assist the owners and the RSMC with road management at the operational level.

**Findings and Suggestion for Improvement**
The RUGs and maintenance committees are two structures that work as operational partners. Both these committees and systems can be effective as an operational venue.

Traditionally RUGs or maintenance committees are focused on traffic flow, maintenance and cost sharing primarily for production purposes. In the committee-based road management system, the RUG must be reminded to focus on user safety as well as production and cost issues. RUGs should have specific operating principles that result in fair and effective safe road use. Monitoring and proportioning of use may be functions delegated to this operational level.

**Activity 10**
The activity identified systems for various players with different mandates to work together and operate safely on the same road systems.

**Findings and Suggestions for Improvement**
A variety of user needs is accommodated through discussions at the owners’ committee and subsequently at the RUGS. This system fails when usage by any party is not identified prior to that party’s use of the road. During the Demonstration Project such a failure was identified in the MoFR’s “permitting” information system. Facilitating road safety for users with different needs and mandates may require scheduling, proportioning or limiting use. Needs of all users must be considered at both the main administrative and the operational levels. In order to consider user needs, committees must be informed of who is going to use the road, when, and for what purposes. Such information could come from a revamped permitting system and other sources.

**Activity 11**
The activity demonstrated the importance of employers/contractors applying their safety programs’ fundamentals to their use of the roads.

**Findings and Suggestions for Improvement**
The contractors under the direct control of a licensee represented on the RSMC were found to have safety programs and followed the safe
use systems in place. Other contractors who were not directly related through a licensee to the RSMC were not all compliant in their road usage.

The requirement for all employers including WorkSafeBC to have an effective health and safety program should be emphasized with respect to road usage. The road use programs should extend to all forms of road usage including personal travel and an emphasis on new or young workers. All programs should have a component on supervision as it applies to road use. The BCFSC Safe Companies Program should address some specifics on road usage.

Activity 12
The activity identified diligence levels of all parties observed during the project.

Findings and Suggestions for Improvement
To be diligent, both the road owner and license holders must provide information required to structure and administrate a system that leads to safety on the roads. They then must participate in the administration of the system. Diligence of the committee will be compromised if other industries are excluded or if all users do not have access to the road procedures. The road owner or MoFR was found not to be diligent in one committee studied. Orders were written by officers when violations were observed during truck inspections. A road use complaint was also investigated and orders written.

Diligence of the road and license owners must be in place to set a base or platform for other users to build on and contribute to safe road usage. It would assist all levels of owners and contractors if WorkSafeBC would articulate and reaffirm the specific activities or information required for the parties to be diligent on road administration and use. A checklist form would be best.
Requirement 3
Technology continues to advance in the area of trucking and truck and driver-related equipment. It is critical that all players in the industry are kept current in new innovations that can positively affect safety.

Goal
Appraise and report on new and existing equipment and technologies that could have a positive impact on injury reduction on resource roads.

Activity
As part of the project review, new or innovative technologies that may have a positive effect on safety. FP Innovations - FERIC was commissioned to do a review of new or innovative technology.

Findings and Suggestions for Improvement
The complete report by FP Innovations - FERIC on innovations is attached in the Appendices. Of significance, was Electronic Stability Control for light trucks.

Results should be made available to all interested persons. During WorkSafeBC investigation processes, contributing factors should be reviewed to determine if technology or innovations could assist in prevention.
WorkSafeBC Field Officer Work

WorkSafeBC (Prevention) Field Officers in the demonstration project areas were responsible for field collection of information on road user activities.

Information Collection

Field Officers collected essential road safety management information using checklists. The purpose was to obtain input on concerns and suggestions to make roads safer. Field Officers contacted licensees, producers, or other owners, contractors, drivers, occasional users, and equipment operators.

Road Use Monitor

A contract Road Use Monitor validated the results of the Prevention Officer Surveys and effectiveness of road safety management systems.

Field Officers

- Visited key licensees and producers throughout the province to discuss the project and concerns over resource road management and use.
- Reviewed parts of licensees/producers and contractor safety programs for compliance within the demonstration areas.
- Provided feedback to licensees/producers and contractors on inspection reports, contact records, memos, or verbal communication.
- Worked with RSMCs to review or implement procedures on safe road use.
- Contacted known resource road and truck service providers to assess service providers’ level of resource road safety awareness and their level of preparedness to safely operate on resource roads.

Road System Inspections

Field Officers inspected road systems for hazards and expected communication systems (such as signage and radio protocol, etc.) The inspections provided feedback to the permit holder and to the Demonstration Project. Field Officers also carried out truck inspections, in partnership with the RCMP and regulatory bodies. Licensee owners and RSMC members were invited to be a part of the
road system and truck inspection process. Field Officers were asked to complete a minimum number of road system and truck inspections.

**Figure 1a. Log Truck Inspections**

Results from Field Officer Inspections indicated that only 44% of log trucks were compliant with the WC Act and OHSR requirements.

**Figure 1b. Oil & Gas Truck Inspections**

Results from Field Officer Inspections indicated that only 14% of log trucks were compliant with the WC Act and OHSR requirements.
Results from Field Officer Inspections indicated that top three safety violations of log trucks included: bull board/bulkhead violations 26%, cab safety and back-up alarm violations 22% (each type).

**Figure 2a. Log Truck Violations**

Results from Field Officer Inspections indicated that the top three safety violations of oil and gas vehicles were training violations 42%, and cab safety and back-up alarm violations 19% (each type).

**Figure 2b. Oil & Gas Truck Violations**
**Stakeholder Surveys**

Field Officers collected data and information through the use of driver surveys. Surveys were distributed through truck inspections. Field Officers were required to collect a minimum number of surveys in the demonstration area.

**Figure 3. Driver Perspective – Road Factors**

Results from truck driver surveys indicated that top three road safety issues were road design 44%, speed 24% and road maintenance 22%.
Results from truck driver surveys indicated that top three safety issues were driving conditions (including weather) 30%, lack of commitment by the employer or lack of OHS Program or supervision, 24% and time of the year 19%.
6 Recommendations

Background

The current method of resource road administration is not compliant with section 118 of the WC Act or parts 26.2 and 23.4 of the OHSR in many areas of the province because it does not provide an effective method of safety coordination and a system for compliance on road usage.

The critical flaw is that the current systems do not coordinate safety management among all road users. For example, currently the MoFR gives licenses and permits to use road systems, but they do not take responsibility or accept accountability for the coordination of resource road system safety. The outcome of the method of operation used in the Demonstration Project is safer road use for everyone.

Recommendation Assumptions

Recommendations for consideration by industry stakeholders, the MoFR, the BCFSC, Enform and WorkSafeBC, which are intended to improve the current resource road administration system and ensure safe resource road usage, are presented in this section of the report. They are based on the following premises:

- The MoFR’s and road owners’ participation as full partners in resource road management is a critical success factor.
- Safe usage on resource roads can be put in place and managed effectively through application of existing WorkSafeBC legislation.
- A system for coordination and a process for compliance can be administered through a properly structured and operational owners’ committee, i.e., a RSMC.
Recommendations

Recommendation 1 – Review of Legislation
For consideration by the MoFR, with the assistance of WorkSafeBC, BCFSC and Enform

1a. Review applicable Ministry legislation to identify concerns that prevent full participation in road management by MoFR and mitigate the concerns.

Recommendation 2 – Implementation of Road Safety Management Committees
For consideration by the MoFR, with the assistance of WorkSafeBC, BCFSC and Enform

2a. Review the road use characteristics and industrial make up of BC’s 29 forest districts to determine which ones would benefit from the implementation of a RSMC.

2b. Work with selected forest districts and local licensees, producers or other owners to develop and implement RSMCs in forest districts that would benefit from the implementation of these structures.

Recommendation 3 – Tools for implementing RSMCs
For consideration by the MoFR, with the assistance of WorkSafeBC, BCFSC and Enform

3a. Use the Resource Road Safety Management Tool Kit (see Appendices) as the standard when developing the RSMCs.

3b. Review the required standards and procedures to identify which of these can be developed and implemented province-wide.

Recommendation 4 -- Implementing RUGs
For consideration by the MoFR, with the assistance of WorkSafeBC, BCFSC and Enform

4a. Implement RUGs according to standards developed through the Resource Road Safety Management Tool Kit (see Appendices).
Recommendation 5 -- New Technology
For consideration by all industry stakeholders, including WorkSafeBC

5a. Review potential uses of new technology for resource road vehicles.

5b. Consider Electronic Stability Control technology as standard equipment for all light duty vehicles used on resource roads.

Recommendation 6 – Driver Training
For consideration by all stakeholders, including WorkSafeBC

6a. Implement a minimum standard for resource road driver training resulting in an acceptable qualification to hauling on resource roads.

6b. Require validation of acceptable training for all industrial users on the road systems, including operators of equipment, haul trucks, service vehicles, crew transport vehicles and personal vehicles.

Recommendation 7 -- Compliance Standards and Field Officer Tools
For consideration by WorkSafeBC

7a. Identify, communicate and enforce compliance standards for resource road administration and usage, which clarify the responsibilities of owners, employers, contractors and workers.

7b. Enforce the requirement for all employers to develop and implement resource road supervision systems. Require the RSMC to implement effective road use monitoring to provide feedback to employers.

7c. Revise Field Officer tools (RRSP and Field Officer Guide) to make them user-friendly for contractors and other stakeholders to use.

7d. Ensure that Field Officer Tools state that the RSMC is an option for providing a system of coordination for resource road safety and compliance with regulatory requirements. They should also provide support and direction for the operational infrastructure of the RUGs. The tools should also clearly state that the committee is a method for the responsible parties to be diligent
with road safety, but establishing a committee does not relieve any party of their individual responsibilities.

Recommendation 8 -- COR and Safe Companies Program

For consideration by WorkSafeBC, BCFSC and Enform

8a. Revise the standards of the Certificate of Recognition and Safe Companies programs to ensure a direct link between safe resource road use and each employer’s safety program.

Recommendation 9 -- Critical Success Factors

For consideration by WorkSafeBC, MoFR, BCFSC and Enform

9a. Ensure the critical success factors outlined in the section below are considered for RSMCs and RUGs implementation.

Critical Success Factors

Factor 1: Leadership by a Key Partner

- Implementing resource “Road Safety Management Committees” will require leadership and accountability of a single party to see the project through to successful implementation of committees. The party that takes on the leadership role to initiate and develop committees should be supported by WorkSafeBC.

Factor 2: Work Plan based on the Resource Road Project Report

- Produce a project plan, which involves participants at all levels and ensures the system is transparent, understood and accepted by all affected parties.

- Provide ongoing support and administration at the provincial level.

Factor 3: Communication to Stakeholders on Regulatory Compliance

- Communicate to all stakeholders that RSMCs have limitations even when fully implemented and that to be functional; they must have the support of the owners, particularly the “road owner”. (This support consists of the activities and information contained in the Resource Road Safety Management Tool Kit (see Appendices). The RMSCs are dependent upon owners’ support for effective coordination and compliance.)
Response to Other Reports

Background

The office of the Auditor General of British Columbia (A.G.) issued their Report #5 on “Preventing Fatalities and Serious Injuries in B.C. Forests”, dated January 2008. An important outcome of the report was to establish how the provincial government and its agencies’ efforts affect the core activities of forest harvesting and, more importantly, the transporting of timber by truck to a sorting area or mill.

Although the Resource Roads Demonstration Project was not intended to be the official response to the A.G. Report, there were areas of discovery and actions that in fact addressed a number of the key road safety comments and recommendations brought forward by the Auditor General.

Response to Auditor General Report

The Auditor General Recommendations and WorkSafeBC’s project responses are listed below.

**Recommendation 2** - We recommend that the Ministry of Labour and Citizens Services consider how best to ensure that a robust safety infrastructure is directly supporting all forestry work sites.

**Response:** The Demonstration Project put in place an infrastructure that supports safe administration and use on resource roads. The concept is that shared safety responsibilities and contributions from road users can be effectively organized. This will result in a road safety system that is planned, communicated, monitored and used by road users. The infrastructure is based on a committee system that organizes the road administration and uses road user groups to fulfill the operational function.
Recommendation 6 - We recommend that existing health and safety regulations be more vigorously enforced by WorkSafeBC through inspections, follow up on infractions and punishment of non-compliance.

Response: Resource road administration and use has been identified by WorkSafeBC as an issue in forestry that must be addressed. Resource roads are a definable work place and safety systems for roads must consider these roads as multiple employer work places. Present WorkSafeBC legislation applies to each industrial user and requirements for planning, training/communication, supervision and personal care apply during use. The Demonstration Project provides focus for WorkSafeBC Field Officers for owner and prime contractor responsibilities. Subsequent to an administrative platform being put in place by the owners, WorkSafeBC Field Officers can then be directed to focus on employers and workers’ contributions to road safety.

Recommendation 7 - We recommend that government leadership on safety seek direct input from other natural resource-based industries with better safety records, such as mining.

Response: The Lower Peace (part of the Dawson Creek forest district) was chosen for the Demonstration Project because resource roads were being used by forestry, oil and gas and mining. Safety systems for road use were brought together from each of the industries. This resulted in common procedures being developed that contained the best safety principles from each contributor. These safety procedures will be used as examples for subsequent committees to build upon.

Recommendation 8 - We recommend that robust safety planning in all aspects of forest operations should be made mandatory by the Ministry of Forests and Range

Response: Safety planning for resource road use is a requirement identified in the OHSR. Planning by all users and specifically the road owner (MoFR) and the licensees was one of the key principles the Demonstration Project focused on. The planning then formed the basis for training/communication, supervision/monitoring and competent use of the roads. WorkSafeBC will continue to emphasize planning with all parties.

Recommendation 10 – We recommend that WorkSafeBC enforce the requirement that supervision be in place for all forest workers, including fallers and truckers.

Response: Supervision and monitoring was one of the key principles of the Demonstration Project. Subsequent to the project completion WorkSafeBC Field Officers will be addressing employer/contractor
and worker responsibilities on the road systems. Supervision will be emphasized.

WorkSafeBC will be bringing forward to the BCFSC concerns about supervision systems and programs, such as Safe Companies, that are designed to support safe road use by their members.

**Recommendation 11** – We recommend that the Ministry of Forests and Range use its powers to enforce safe use of resource roads. The Ministry should establish and participate actively in resource road user committees.

**Response:** The Demonstration Project concluded RSMCs should be considered in all forest districts and active participation by the Ministry is essential for success. The committee would assist in identifying, establishing and communicating safe road use standards. Enforcement of safe use standards becomes a shared responsibility with the Ministry and other parties.

**Recommendation 12** – We recommend that training relative to known risks should be made mandatory. For example, drivers who lack specific experience and training in driving large loads off-highway would be required by ICBC to demonstrate competency before being given independent control of such a vehicle. Fallers should be required by WorkSafeBC to demonstrate competency in danger-tree recognition, non-destructive tree evaluation, and blasting, so that they have a wider range of tool and techniques available when specific risks are present.

**Response:** Training is identified as one of the key principles of the project necessary to affect resource road safety. The project endorses a minimum standard for resource road use training. Specific training for operators of all equipment, haul trucks, service vehicles, crew transport vehicles and personal vehicles is essential.

**Recommendation 13** – We recommend that the Ministry of Labour and Citizens Services identify, through credible third party research, safe work hour limits for high-risk forestry occupations and then regulate and enforce those limits accordingly. These limits should be made applicable to self-employed forest workers as well as those employed in the industry.

**Response:** The Demonstration Project included a report from FP Innovations - FERIC on new technology that would support safety on resource roads. A key piece of the report focused on Electronic Stability Control which in effect assists to “right” a vehicle when control of the vehicle is lost. This system has proven to be effective on light vehicles and should be considered for vehicles used for travel on resource roads. Further developments for heavy vehicles, such as haul trucks with trailers, should be put in place when available.
**Recommendation 14** – We recommend that the Ministry of Labour and Citizens Services consider ways to better protect all forest workers during work-time travel.

**Response:** The procedures put in place by the committee and the resulting SRUP covers resource road travel and use at all times. This is specifically addressed in the RRSP (see Appendices) which serves as a base for use procedures content.

**Response to Forest Safety Ombudsman Report**

The Office of the Forest Safety Ombudsman (Roger Harris) issued his report titled “No longer the road less travelled”, in February of 2008. The Ombudsman’s report brought focus to many safety challenges workers who drive and work on resource roads face on a daily basis.

In the report the Ombudsman stated, “As the term logging road has evolved, it now seems appropriate and timely to modernize the management model of our resource road network as well.”

As with the Auditor General’s report, the Resource Roads Demonstration Project was not intended to be the official response document to the “The Ombudsman Report”. However, in establishing a WorkSafeBC compliance strategy for resource roads and establishing a model for due diligence when assessing the safety responsibilities of the involved owners, many of the recommendations of the Ombudsman’s report were encountered and addressed through the project. Those are listed below.

**Recommendation 5** – The Province, through the Ministry of Forests and Range, should establish regional RSMCs with the responsibility to manage all activities on the resource roads in the province.

**Response:** The Demonstration Project concluded that RSMCs could effectively provide a system of safe coordination and a process for compliance for resource road usage. The success of the committees would be dependent upon membership, organization and leadership. The committees would need a clearly defined mandate and supporting Terms of Reference. A committee’s authority would rest with its membership. A Resource Road Safety Management Tool Kit for committee structure and operation is included (see Appendices).

**Recommendation 6** – The Ministry of Forests and Range should identify the regional resource road networks that would logically be contained within any specific RSMC district.
Response: The project report concluded that the 29 forest districts in the province should be considered as a logical starting point for RSMCs’ boundaries. Industry make-up and road use characteristics should also be considered in determining which districts would benefit from the implementation of an effective committee to provide leadership in road administration.

Recommendation 8 – RSMCs should take an active role in supporting and assisting Industry Canada, BC Timber Sales, BCFSC and the Ministry of Forests and Range to implement province-wide common signage, radio frequencies and radio protocols.

Response: If districts became the initial consideration for RSMC boundaries, then some road systems may extend into more than one RSMC’s management system. The extent of road systems expanding through more than one RSMC’s control would logically be mitigated by fundamental procedures, radio protocols and signage being a provincial standard. Anomalies would need to be identified and addressed and area-specific procedures may be required.

Recommendation 16 – The BC Forest Safety Council should include in the SAFE Companies Certification a requirement that companies identify and demonstrate a management process to track operational decisions from a safety prospective.

Response: The project identified that contractors must use the procedures and information provided to plan their safe use of the road. This system and resulting documentation should be included in their safety program. Validation would come through the SAFE Companies Certification.

Recommendation 9 – Until there is a formal network of RSMCs across the province, regulatory agencies working with the industry should develop clear communication plans for local first responders.

Recommendation 10 – All RSMCs should be required to put in place an Emergency Response Plan with protocols and procedures to facilitate the quickest response to any accident on resource roads in their management area.

Response: An Emergency Response Plan (ERP) specific to the resource roads is required in each area administered by the RSMCs. The intention of a road ERP is to supplement the contractor’s or licensee’s site specific ERPs and provide some consistent response and communication in the case of an emergency on the road system. The Demonstration Project identified this requirement and included a document of “considerations for an ERP” in this report.
Recommendation 12 – The BC Forest Safety Council should develop an industrial Drivers Endorsement Program for operators of light/service industrial vehicles operating on resource roads.

Response: Training is identified as one of the key principles of the project necessary to affect resource road safety. The project endorses a minimum standard for resource road use training. Specific training for operations of all equipment including haul trucks, service vehicles, crew transport vehicles and personal vehicles, is essential. Training is essential for all road users.

Recommendation 13 – Responsibilities for enforcing safety standards on resource roads should remain with government agencies currently charged with the responsibility - Ministry of Forest and Range, Ministry of Transportation, RCMP, and WorkSafeBC regardless of any changes in jurisdiction for resource road maintenance or operation.

Response: The Demonstration Project recognized WorkSafeBC’s mandate to enforce safety standards on resource roads. Regular truck inspections have been carried out in partnership with the CVSE and the RCMP. This will continue. The project also reviewed documents provided to WorkSafeBC officers and industry that identified standards for compliance of owners, prime contractors, employers, supervisors and workers with respect to roads and road use. The content of these tools was found to be valuable and complete. The format of the documents will be revisited to ensure they are usable by all parties.

Recommendation 17 – The Province should take the lead in advocating for Electronic Stability Control systems for all new industrial, commercial and private vehicles.

Response: The Demonstration Project included a report from FP Innovations - FERIC on new technology that would support safety on resource roads. A key piece of the report focused on Electronic Stability Control*. This system has proven to be effective on light vehicles and should be considered for vehicles used for travel on resource roads. This recommendation is going forward to WorkSafeBC to be considered when purchasing vehicles for any employee travel (as ESC cannot be retrofitted to existing non-esc vehicles).

*ESC is a safety technology that helps drivers avoid crashes by reducing the likelihood of skidding.
8 Appendices – Table of Contents

1. Determination of Workplace Roles
2. Resource Roads Matrix
3. Officer Workbook
4. Resource Road Safety Management Tool Kit
5. Prince George Road Safety Management Committee: Safe Road Use Procedures and Policies
6. FP Innovations – FERIC Report: Technologies to Improve Resource Road Safety
Appendix 1: Determination of Roles
Identification of Roles

Determining a party’s role or multitude of roles

This document is provided to simplify the determination of roles for the various parties involved in Resource Road administration and use. The “table format” defines the parties and determining questions.

The owners’ roles appear to be complex because there may be multiple owners that may have different key parties with distinct roles for health and safety purposes are named in the Workers’ Compensation Act (WCAct). Depending on their involvement with the work place individual parties may have more than one role and set of accountabilities with respect to health and safety at a given workplace.

Parties’ roles and responsibilities may vary between different road systems depending on their involvement.

The questions on the following pages will help determine a party’s or individual’s role with respect to the WCAct and resource road management and use.

Owners

Defining Owners

Policy that defines application of the Act clarifies that there can be more than one party which has the obligations of an owner at a defined work place. Therefore owners as referenced in the WCAct are to apply the obligations of 119 as they apply to circumstances under their control, to their related contractors and other parties.

In the case of resource roads this requires there be a controlling owner or road owner identified. This owner(s) will have broad obligations that must be fulfilled for the safety of all users.

Other owners' obligations are mainly to contractors directly related to them as well as how their use affects other owners, contractors, public and the overall road safety.
**Determining Owners**

Are you the owner of the land the road is constructed on?

Do you act as an agent of the owner for the land the road is constructed on or an agent of the owner for the road itself?

**Note:** An agent of the owner may have been given by the owner the authority to:

- Issue permits or allow access
- Determine maintenance standards
- Put maintenance systems in place
- Specify road layout, design and construction

If you answer **yes to either** of the above questions you are considered to be the road owner for safety purposes under the **WCAct 119** and have some obligations as that owner.

Are you a licensee, producer or other tenure holder that requires use of the road system?

If you answer yes to the above question you are considered an owner for safety purposes under the **WCAct 119** and have some obligations as an owner. In addition you have an obligation for planning safe use (of yours and others related to you) **under part 26.2 of the OH&S Regulation**

**Prime Contractor**

**Determining Prime Contractor Function**

Are you the owner of the land or agent of the owner of the road and you have not entered into a specific written prime contractor agreement with a qualified party?

Are you a licensee, producer or other tenure holder or employer or person that is qualified and has entered into a specific written prime contractor agreement?

Are you an owner with a written contract with the road owner that gives you the authority to manage the road and road use for safety purposes including the right to limit or proportionate use.

**Note:** A road permit does not constitute a written agreement or contract for the purposes of setting up a prime contractor.

If the answer to any of the three above questions is yes then you have the responsibilities of the Prime Contractor for the road system as specified in the written agreement/contract and under 118 or the
Prime Contractor Responsibilities

(limited to 118 of the WCAct only)

• Coordination

• Plan for a safe use with consideration to all known factors and variables.

• Provide a SRUP to all users (this will include rules of the road, radio use, allowable speeds, etc).

• Ensure systems address anomalies and potential for anomalies.

• Communicate all necessary information for safe use to users (signage and other methods).

• Monitor usage to the SRUP and conditions as they change.

• Compliance

• Require each owner or employer to have and to follow a system for their compliance with the SRUP.

• Require each owner or employer to provide the name of a person responsible for supervision of their workers’ as they relate to road use.

• Maintain an incident and hazard reporting system.

• Monitor usage to the SRUP and conditions as they change.

Employer

Determining Employer

Do you have workers that use the road systems for any work related purposes such as transportation of materials, equipment or product or personal transportation? This would include workers being transported over the road systems.

Are you directing sub contractors who use the roads for work related purposes?

If the answer is yes to either of the questions you have employer responsibilities as referenced in 115 Of the WC Act and parts of the regulation.

If you have young or new workers you are required to make special provisions for their training and supervision.
**Employer Responsibilities**

*(as they apply to 115 of the WCAct only)*

- Carry out risk assessment to ensure trucks and drivers are compatible with needs.
- Plan road usage to support the PC’s and/or owners’ SRUP.
- Communicate all necessary information to operate safely to users.
- Ensure training is provided.
- Provide an effective supervision system.
- Ensure young and new workers are given extra consideration for training and supervision.
- Provide an incident and hazard system including investigation and follow-up.
- Follow up on monitoring reports and issues raised through supervision.

**Determining Supervisor**

- Have you been trained, given direction or considered qualified by experience on how to carry out supervision?
- Have you been given authority and methods for supervision of workers with respect to the way the carry out their activities on resource roads?
- If the answer is yes to both these questions **you have the responsibilities for supervision as referenced in 117 of the WC Act.**

**Supervisor Responsibilities**

*(as per 117 of the WCAct only)*

- Support all employer/owner and PC safety systems
- Supervise to the SRUP and good practices
- Provide current necessary information to operate safely
- Ensure training as needed
- Ensure planned supervision that fits the trucking or road operating circumstances
- Ensure there is a method of supervision in place to monitor/validate safe driving,
- Be aware of personal factors that can affect safe driving performance,
• Communicate directly to individuals on a regular basis on safety issues,
• Document supervision activities

Worker

Determining Worker

Do you work directly for an employer?

Are you an independent contractor that works exclusively for one employer?

If the answer is yes to either of these questions you have responsibilities as a worker reference in 116 of the WC Act and parts of the regulation.

Worker Responsibilities

(as per 116 of the WCAct only)

Carry out personal risk assessment to ensure road usage is within personal comfort and limitations.

Follow road SRUP and employers safety program.

• Support hazard reporting and supervision systems.
• Demonstrate professionalism and operate within safe limits at all times.
Appendix 2:
Resource Road Safety Matrix
<table>
<thead>
<tr>
<th>Owners</th>
<th>Must ensure all obligations are fulfilled. An Owner may use the stakeholders in 1(b), 1(c) and 1(d) to accomplish this.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope</td>
<td>Roads intended for use by workers and equipment will be designed and constructed to a predetermined acceptable standard that will support safe use.</td>
</tr>
<tr>
<td>Scope</td>
<td>Roads intended for use by workers and equipment will be maintained to an acceptable standard that will support safe use.</td>
</tr>
<tr>
<td>Scope</td>
<td>All known and foreseeable hazards will be identified to all users. These include physical hazards as well as those that may be created by other’s use. Consideration should be given to providing safe road information to the public.</td>
</tr>
<tr>
<td>Scope</td>
<td>The Owner requires a system to reasonably assure compliance by all parties using the road system.</td>
</tr>
<tr>
<td>Scope</td>
<td>This column relates to the supply and care of appropriate trucks and other equipment for use by workers. Owners will supply and update road information so users can make informed selections.</td>
</tr>
<tr>
<td>Scope</td>
<td>This column relates to the supply and care of appropriate trucks and other equipment for use by workers. Owners will supply and update road information so users can make informed selections.</td>
</tr>
<tr>
<td>Scope</td>
<td>This column relates to the supply and care of appropriate trucks and other equipment for use by workers. Owners will supply and update road information so users can make informed selections.</td>
</tr>
<tr>
<td>Scope</td>
<td>This column relates to the supply and care of appropriate trucks and other equipment for use by workers. Owners will supply and update road information so users can make informed selections.</td>
</tr>
<tr>
<td>Intent</td>
<td>Provide or require adequate design and construction standards for roads. These road standards must meet good engineering practices.</td>
</tr>
<tr>
<td>Intent</td>
<td>Road maintenance must fit the anticipated use of the roads.</td>
</tr>
<tr>
<td>Intent</td>
<td>Ensure that a system is in place to identify and communicate all hazards to users. Such hazards would include those associated with current users and their anticipated use as well as other tenures as they are let. Roadside hazards are identified and mitigated on a regular planned schedule and include issues such as excessive grades, dangerous trees, rocks or other loose material, vision restricting brush, etc. This is an on-going obligation of the Owner or party that permits road use.</td>
</tr>
<tr>
<td>Intent</td>
<td>Provide a coordination system for each road system that ensures safety-related activities are appropriately addressed.</td>
</tr>
<tr>
<td>Intent</td>
<td>Ensure a system for compliance on resource roads is in place. Ensure operational rules/protocols of the road system are established and communicated. Require all travel-related accidents/incidents to be reported and analyzed to identify causes as well as any necessary changes to the road system, maintenance, or administration of road use.</td>
</tr>
<tr>
<td>Intent</td>
<td>Provide all required safe use information to Employees that will allow them to make appropriate decisions on truck, trailer, and equipment for the specific road systems.</td>
</tr>
<tr>
<td>Intent</td>
<td>Ensure all parties are aware of loading restraints as conditions change, such as in road or bridge limitations.</td>
</tr>
<tr>
<td>Intent</td>
<td>Ensure that road information provided to Employers for workers is complete and current. This includes changes in allowable speeds or other limitations as seasonal changes and conditions dictate.</td>
</tr>
<tr>
<td>Intent</td>
<td>Help ensure pertinent, related information from other incidents or circumstances is made available.</td>
</tr>
<tr>
<td>Intent</td>
<td>Identify where the fundamentals of the safety program can be employed by Owners to support other stakeholders in their supervision duties.</td>
</tr>
</tbody>
</table>

**Owner**—The Owner with the most control and knowledge will be the default Prime Contractor if necessary.
<table>
<thead>
<tr>
<th><strong>Planning</strong></th>
<th><strong>Application and Care</strong></th>
<th><strong>Training and Communication</strong></th>
<th><strong>Supervision and Direction</strong></th>
<th><strong>Sample Documents</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Future roads must be designed and constructed to an acceptable standard.</td>
<td>Ensure roads currently in use meet the required design and construction standards in relation to their permitted use.</td>
<td>Staff responsible for road design and construction are trained and must ensure the safety carry standards are met.</td>
<td>When traveling resource roads field staff are directed to be observant to road design and construction standards. An Owner will provide an effective reporting system for any observations or concerns.</td>
<td>Road Standards Inventory of roads.</td>
</tr>
<tr>
<td>Ensure standards of maintenance are identified for regular and special requested use.</td>
<td>Ensure maintenance is carried out. Note: If a Maintenance Contractor is used, they must have sufficient information and authority to carry out their functions.</td>
<td>Requested maintenance is carried out or affected Employers are informed of outstanding maintenance issues.</td>
<td>Ensure staff are observant to the application of maintenance standards.</td>
<td>Maintenance Contract</td>
</tr>
<tr>
<td>Ensure there is a system in place where all known and created hazards will be reported to the appropriate parties. Created hazards include other Tenure Holders, roadside work, etc.</td>
<td>Communicate known issues on road use, which include but are not limited to limitations created by design, construction, maintenance, traffic flow, traffic volumes, loads, and truck configurations.</td>
<td>Specific, inherent hazards are identified on a road system map or other effective means.</td>
<td>Ensure a reporting system is in place to assist traveling staff, who must look for and report on new or created hazards.</td>
<td>Document that identifies known hazards</td>
</tr>
<tr>
<td>Coordinate/provide a safe road use plan including criteria such as rules of the road, radio use requirements, and allowable speeds.</td>
<td>Provide to each user a contact person who will promote coordination of safety and health-related activities.</td>
<td>Communicate the safe road use plan to all users. Create and provide appropriate information to the public, as well as informing other road users of any hazards created by public use.</td>
<td>Ensure that a reporting system is in place to assist traveling staff, who must look for and report on new or created hazards.</td>
<td>Meeting minutes</td>
</tr>
<tr>
<td>Ensure a plan is in place for compliance. The plan should include setting expectations for users, communicating issues to and from users, and enforcement of the standards.</td>
<td>Provide methods for all Employers or persons to identify and report road hazards (i.e., user groups). The compliance system should be based on involvement of all users and should include a system to identify deviations from the safe road use plan.</td>
<td>Ensure effective communication is maintained through appropriate signage, including radio frequencies and contact phone numbers. Develop and keep in place a system to communicate changes that will affect safety or emergency response situations. Maintain documentation of road issues, road use systems, and compliance systems.</td>
<td>Provide a system for enforcing road use standards. The system should ensure roads are only used as designated. Ensure roads are inspected for hazards and other issues (including bridges) on a regular basis.</td>
<td>Specific Road safe road use plan</td>
</tr>
<tr>
<td>Ensure there is a plan to provide pertinent information in a timely manner.</td>
<td>Provide sufficient and relevant information for Employers to assist them in making appropriate equipment decisions.</td>
<td>Provide a hazard reporting system for Employers and other persons to identify issues related to trucks and equipment that could be a hazard to any persons. The system would include resolutions to reported issues, feedback to the persons reporting, tracking and documentation.</td>
<td>Provide a system to enforce limitations of road use as they relate to trucks, trailers, and other mobile equipment.</td>
<td>Document that identifies road limitations</td>
</tr>
<tr>
<td>Ensure there is a plan in place to identify and communicate load restrictions and loading issues to all persons.</td>
<td>Review all load-related investigations to ensure load limitations have not been exceeded.</td>
<td>Ensure all persons are aware of the system used to obtain current information.</td>
<td>Ensure the enforcement system for safe road use protocols considers changes in road conditions such as seasonal changes.</td>
<td>Document that identifies load limitations</td>
</tr>
<tr>
<td>Ensure a planned system is in place to assess active roads and provide pertinent information.</td>
<td>Ensure regular road reports on conditions that could affect driving or operating equipment are made available to users.</td>
<td>Provide related information to Tenure Holders, Employers, and users. This may be carried out through information boards, bulletins, drivers/ operator meetings, and/or direct communication.</td>
<td>Encourage all persons to identify how information on safety and hazards might relate to their specific road systems and circumstances.</td>
<td>Document that identifies safe work procedures for drivers.</td>
</tr>
<tr>
<td>Information that must be communicated to drivers includes accident and incident investigation results. Support network opportunities that would be beneficial to the drivers/operators.</td>
<td>Use of network or associations to identify and bring forward related information on all aspects of road use that would be beneficial to drivers/ operators. Such a network could include Forest Safety Council, TruckSafeBC related enforcement agencies, and other less formal venues</td>
<td>Drivers must report to appropriate Tenure Holder or Employer all unsafe loads, trucks, and operational procedures on the road system.</td>
<td>Require feedback from the affected parties on the action or changes made as a result of unsafe reports.</td>
<td></td>
</tr>
<tr>
<td>Owners must ensure a system is in place that will identify areas of support for supervision, such as identifying bad driving habits and reporting to employers. Employers can then take action or revisit their supervision.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OBLIGATIONS</strong></td>
<td><strong>Owners Remaining obligations and support involvement if a Prime Contractor and Maintenance Contractor are in place.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide the land and premises in a safe condition.</td>
<td>Provide a functioning maintenance system is in place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure a functioning maintenance system is in place.</td>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For multiple-Employer workplaces, ensure that the activities relating to occupational safety and health are coordinated.</td>
<td>For each MEWP, establish and maintain a system to ensure compliance with the Act and Regulation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Users of Roads</strong>—Provide information and support not direction</td>
<td><strong>Trucks and Equipment</strong></td>
<td><strong>Loads</strong></td>
<td><strong>Workers/Drivers/Operators</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Roads intended for use by Workers and equipment will be designed and constructed to a predetermined acceptable standard that will support safe use.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Owners</strong>—General duties apply to all Owners; but primary road obligations are to the Owner who has most control and knowledge.</td>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>These activities may be carried out by a Maintenance Contractor.</strong></td>
<td>Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations. Owner makes provision for providing appropriate information to the public.</td>
<td>Provide supporting information that will assist an Employer in the development of a program that will ensure that drivers are fulfilling their obligations.</td>
<td>Provide monitoring of directly related stakeholders such as Prime Contractors.</td>
<td></td>
</tr>
<tr>
<td>Roads intended for use by Workers and equipment will be maintained to an acceptable standard that will support safe use.</td>
<td>Owners will supply and update road information so informed selections can be made regarding trucks and other equipment for use by Workers. Information will be specific to given road systems.</td>
<td>Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations. Owner makes provision for providing appropriate information to the public.</td>
<td>Provide supporting information that will assist an Employer in the development of a program that will ensure that drivers are fulfilling their obligations.</td>
<td></td>
</tr>
<tr>
<td><strong>Intent</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td><strong>Prime Contractor in place as per 118 of the Act.</strong></td>
<td></td>
</tr>
<tr>
<td>Provide or require adequate design and construction standards for roads. These road standards must meet good engineering practices.</td>
<td>Ensure that a system is in place to identify and communicate all hazards to users. Such hazards would include known users and their anticipated use characteristics, as well as, other tenures as they are let. Roadsides hazards are identified and mitigated on a regular planned schedule and include issues such as excessive grades, dangerous trees, rocks or other loose material, vision restricting brush, etc. This is an on-going obligation of the Owner or party that permits road use.</td>
<td>Owner will have a system to select a Prime Contractor that has the capacity to carry out the functions of coordination and ensure compliance on the road systems. Sufficient information and authority will be provided to the Prime Contractor. A system will be in place to ensure all required information is current, including additional users as they are permitted. Prime Contractor activities will be monitored and records kept.</td>
<td>Owners provide sufficient information to Prime and Maintenance Contractors in a timely manner.</td>
<td></td>
</tr>
<tr>
<td>Road maintenance must be provided to fit the anticipated use of the roads.</td>
<td>Owner will have a system to select a Prime Contractor that has the capacity to carry out the functions of coordination and ensure compliance on the road systems. Sufficient information and authority will be provided to the Prime Contractor. A system will be in place to ensure all required information is current, including additional users as they are permitted. Prime Contractor activities will be monitored and records kept.</td>
<td>Owners provide sufficient information to Prime and Maintenance Contractors in a timely manner.</td>
<td>Owners provide sufficient information to Prime and Maintenance Contractors in a timely manner.</td>
<td></td>
</tr>
<tr>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td>Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations. Owner makes provision for providing appropriate information to the public.</td>
<td>Provide supporting information that will assist an Employer in the development of a program that will ensure that drivers are fulfilling their obligations.</td>
<td>Provide monitoring of directly related stakeholders such as Prime Contractors.</td>
<td></td>
</tr>
<tr>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td>Ensure all parties are aware of loading restraints as conditions change, such as in road or bridge limitations.</td>
<td>Ensure that road information provided to Employers for their Workers is complete and current. This includes changes in allowable speeds or other limitations as seasonal changes and conditions dictate.</td>
<td>Identify where the fundamentals of the safety program can be employed by Owners to support other stakeholders in their supervision duties.</td>
<td></td>
</tr>
<tr>
<td><strong>The activities in this column are carried out through the Prime Contractor.</strong></td>
<td>Help ensure pertinent, related information from other incidents or circumstances is made available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>Application and Care</td>
<td>Training and Communication</td>
<td>Supervision and Direction</td>
<td>Sample Documents</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------</td>
<td>-----------------------------</td>
<td>---------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Future roads must be designed and constructed to an acceptable standard. Contractors must have sufficient capacity, information, and authority to carry out their functions.</td>
<td>Ensure roads currently in use meet the required design and construction standards for their permitted use. Contract requires that standards of maintenance are identified for regular and requested use.</td>
<td>Staff responsible for road design and construction are trained and must ensure the safety design standards are met. Owner monitors to ensure maintenance is carried out. Additional requested maintenance is carried out, or affected Employers are informed of any outstanding maintenance issues. Specific inherent hazards are identified on a map or other effective means.</td>
<td>When traveling resource roads field staff are directed to be observant to road design and construction standards. An Owner will provide an effective reporting system for any observations or concerns. Ensure staff are observant to the application of maintenance standards. Ensure that a reporting system is in place to assist travelling staff, who must look for and report on new or created hazards.</td>
<td></td>
</tr>
<tr>
<td>Ensure there is a system in place where all known and created hazards will be reported to the appropriate parties. Created hazards include other Tenure Holders, roadside work, etc.</td>
<td>Contract requires that standards of maintenance are identified for regular and requested use. Known issues on road use would include use limitations created by design, construction, maintenance, traffic flow, traffic volumes, loads, and truck configurations.</td>
<td>Staff responsible for road design and construction are trained and must ensure the safety design standards are met. Owner monitors to ensure maintenance is carried out. Additional requested maintenance is carried out, or affected Employers are informed of any outstanding maintenance issues. Specific inherent hazards are identified on a map or other effective means.</td>
<td>When traveling resource roads field staff are directed to be observant to road design and construction standards. An Owner will provide an effective reporting system for any observations or concerns. Ensure staff are observant to the application of maintenance standards. Ensure that a reporting system is in place to assist travelling staff, who must look for and report on new or created hazards.</td>
<td></td>
</tr>
<tr>
<td>Ensure there is a plan to provide pertinent information in a timely manner.</td>
<td>Review all load-related investigations to ensure road limitations have not been exceeded. Ensure regular road reports on conditions that could affect driving or operating equipment are made available to Tenure Holders, Licensees, or Employers.</td>
<td>Ensure all road users are aware of the system and how to use it. Provide related information to Tenure Holders, Licensees, Employers, and users. This may be carried out through information boards, bulletins, drivers/ operator meetings, and/or direct communication.</td>
<td>Support a system to enforce limitations of road use as they relate to trucks, trailers, and other mobile equipment. Support the enforcement system for safe road use protocols considers changes in road conditions. Encourage all persons to use the safety information provided and relate it to their specific road systems and circumstances. Require feedback from the affected parties on actions or changes made as a result of reports of unsafe conditions.</td>
<td></td>
</tr>
<tr>
<td>Ensure there is a plan in place to identify load restrictions and loading issues to all persons. Information that must be communicated to drivers includes accident and incident investigation results. Support network opportunities that would be beneficial to the drivers/operators.</td>
<td>Ensure there is a plan in place to assess active roads and provide pertinent information. Information that must be communicated to drivers includes accident and incident investigation results. Support network opportunities that would be beneficial to the drivers/operators.</td>
<td>Ensure staff are observant to the application of maintenance standards. Ensure that a reporting system is in place to assist travelling staff, who must look for and report on new or created hazards.</td>
<td>When traveling resource roads field staff are directed to be observant to road design and construction standards. An Owner will provide an effective reporting system for any observations or concerns. Ensure staff are observant to the application of maintenance standards. Ensure that a reporting system is in place to assist travelling staff, who must look for and report on new or created hazards.</td>
<td></td>
</tr>
<tr>
<td>Ensure a system is in place that will identify areas of support for supervision.</td>
<td>Ensure a system is in place that will identify areas of support for supervision.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The activities in this column are carried out through the Prime Contractor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Management of Roads**—Prime Contractor will provide support for road management and will have direct responsibilities for coordination and a system for compliance on a MEWP.

**Users of Roads**—Owners provide information and support

<table>
<thead>
<tr>
<th>Trucks and Equipment</th>
<th>Loads</th>
<th>Workers/Drivers/Operators</th>
</tr>
</thead>
</table>

**Owners**  
For a MEWP, an Owner may, through written agreement, create a Prime Contractor to fulfill coordination and compliance obligations.

<table>
<thead>
<tr>
<th>Obligations</th>
<th>Owners</th>
<th>Prime Contractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the land and premise in a safe condition.</td>
<td>Ensure a maintenance system is in place.</td>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
</tr>
<tr>
<td>Ensure a maintenance system is in place.</td>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
<td>For multiple-Employer workplaces, ensure that the activities relating to occupational safety and health are coordinated.</td>
</tr>
<tr>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
<td>Establish and maintain a system to ensure compliance with the Act and Regulation.</td>
<td>Establish and maintain a system to ensure compliance with the Act and Regulation.</td>
</tr>
<tr>
<td>Ensure all known and foreseeable hazards will be identified to all users.</td>
<td>Ensure all known and foreseeable hazards will be identified to all users.</td>
<td>Employers must ensure the safety and health of all workers at the workplace.</td>
</tr>
<tr>
<td>Ensure or confirm roads will be maintained to an acceptable standard that will support safe use.</td>
<td>Ensure coordination for a system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
<td>Other parties must provide support for this obligation.</td>
</tr>
<tr>
<td>Provide coordination for a system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
<td>Provide a system to reasonably assure compliance by all parties regarding use of the road system.</td>
<td>Ensure adequate information, instruction, and training so the job can be done safely.</td>
</tr>
<tr>
<td>Ensure there is a plan in place to recognize and report any observed hazardous situations.</td>
<td>Ensure there is a plan in place to recognize and report any observed hazardous situations.</td>
<td>Ensure or confirm roads are designed to support safe use.</td>
</tr>
<tr>
<td>Ensure that all related road issues are communicated to all users.</td>
<td>Require all accidents/ incidents to be reported and analyzed to identify causes and any necessary changes to the road system, maintenance or administration of road use.</td>
<td>Ensure that all related road issues are communicated to all users.</td>
</tr>
<tr>
<td>Ensure that all related road issues are communicated to all users.</td>
<td>Provide a system to reasonably assure compliance by all parties regarding use of the road system.</td>
<td>Ensure that all related road issues are communicated to all users.</td>
</tr>
<tr>
<td>Ensure standards of maintenance are identified for regular and requested special use.</td>
<td>Ensure there is a plan in place to identify to all persons load restrictions and loading issues.</td>
<td>Ensure there is a system in place to assess active roads on a regular basis and provide pertinent information.</td>
</tr>
<tr>
<td>Coordinate/provide a safe road use plan including criteria such as rules of the road, radio use requirements, and allowable speeds.</td>
<td>Ensure a plan is in place to provide pertinent information in a timely manner.</td>
<td>Information that must be communicated to drivers includes accident and incident investigation results. Support network opportunities that would be beneficial to the drivers/operators.</td>
</tr>
<tr>
<td>Ensure there is a system in place to identify to all persons load restrictions and loading issues.</td>
<td>Ensure there is a system in place to identify to all persons load restrictions and loading issues.</td>
<td>Ensure a system is in place to assess active roads on a regular basis and provide pertinent information.</td>
</tr>
<tr>
<td>Ensure there is a system in place to identify to all persons load restrictions and loading issues.</td>
<td>Ensure there is a plan to provide pertinent information in a timely manner.</td>
<td>Ensure a system is in place to assess active roads on a regular basis and provide pertinent information.</td>
</tr>
</tbody>
</table>

**Prime Contractor**—Must have the capacity, knowledge, and control to coordinate and ensure compliance on the road system.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirm the road design and construction standards will safely support intended use and any additional use.</td>
<td>As additional roads come under their responsibility, Prime Contractors ensure the roads are designed and constructed to an acceptable standard for the prescribed use.</td>
</tr>
<tr>
<td>Note: Prime Contractor will likely have maintenance as part of duties. Ensure or confirm roads will be maintained to an acceptable standard that will support safe use.</td>
<td>Ensure there is a system in place where all known and created hazards will be reported to the appropriate parties. Created hazards include other Tenure Holders, roadside work, etc.</td>
</tr>
<tr>
<td>Ensure coordination for a system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
<td>Coordinate/provide a safe road use plan including criteria such as rules of the road, radio use requirements, and allowable speeds.</td>
</tr>
<tr>
<td>Ensure that all related road issues are communicated to all users.</td>
<td>Ensure a plan is in place for compliance. The plan should include setting of expectations for users, communication of issues to and from users, and enforcement of the standards.</td>
</tr>
<tr>
<td>Ensure there is a plan in place to identify to all persons load restrictions and loading issues.</td>
<td>Ensure there is a plan in place to identify to all persons load restrictions and loading issues.</td>
</tr>
<tr>
<td>Ensure all known and foreseeable hazards will be identified to all users. These will include physical hazards as well as those that may be created by others’ use. Consideration should be given to providing information to the public for safe road use.</td>
<td>Ensure coordination for a system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
</tr>
<tr>
<td>Ensure or confirm roads will be maintained to an acceptable standard that will support safe use.</td>
<td>Ensure coordination for a system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
</tr>
</tbody>
</table>

---

Note: Prime Contractor—Must have the capacity, knowledge, and control to coordinate and ensure compliance on the road system.

Employers must ensure the safety and health of all workers at the workplace. Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations. Ensure all parties are aware of loading restraints as conditions change, such as in road or bridge limitations. Employers must ensure the safety and health of all Operators and Workers. Provide supporting information that will assist an Employer in the development of a system that will assure drivers are fulfilling their obligations. Ensure that road information provided to Employers for Workers is complete and current. This includes changes in allowable speeds or other limitations as seasonal changes and conditions dictate. Ensure there is a plan in place to identify to all persons load restrictions and loading issues. Employers must ensure the safety and health of all Workers at the workplace. Other parties must provide support for this obligation. Employers must ensure the safety and health of all Workers at the workplace, and provide information and training so the job can be done safely. Employers must ensure the safety and health of all Workers at the workplace, and provide information and training so the job can be done safely. Employers must ensure the safety and health of all Workers at the workplace, and provide information and training so the job can be done safely. Employers must ensure the safety and health of all Workers at the workplace, and provide information and training so the job can be done safely.
| Application and Care | Ensure roads currently in use meet the required design and construction standards for their use.  
Note: If a Maintenance Contractor is used, they must have sufficient information and authority to carry out their functions. | Known issues on road use would include use limitations created by design, construction, maintenance, traffic flow, traffic volumes, loads, and truck configurations. | The compliance system should be based on involvement of all users and a system to identify deviations from the safe road use plan. Provide methods for all stakeholders (e.g., user groups) to identify and report road hazards. | Provide sufficient and relevant information for Employers that may assist them in making appropriate equipment decisions. | Review all load-related investigations to ensure road limitations have not been exceeded. | Ensure regular road reports on conditions that could affect driving or operating equipment are made available to Tenure Holders, Licensees, and/or Employers. | Use of network or associations to identify and bring forward related information on all aspects of road use that would be beneficial to drivers/operators. Such a network could include Forest Safety Council, TruckSafeBC-related enforcement agencies, and other less formal venues. | Report to appropriate Tenure Holder, Licensee, or Employer all unsafe loads, trucks, and operating procedures on the road system. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and Communication</td>
<td>Staff responsible for assessing road suitability, road design, and construction receive appropriate training for their applicable function. Ensure any additional requested maintenance is carried out or affected Employers are informed of any outstanding maintenance issues. Specific inherent hazards are identified on a map or other effective means. Communicate the safe road use plan to all users. Make provision for appropriate public information.</td>
<td>Ensure effective communication is maintained through appropriate signage including radio frequencies and contact phone numbers. A system is in place to communicate changes that will affect safety or emergency response situations. Maintain documentation of road issues, road use system and compliance system.</td>
<td>Provide a hazard reporting system for Employers and other persons. The system would include resolutions to reported issues, feedback to the persons reporting, tracking and documentation.</td>
<td>Ensure all persons are aware of the system and how to use it.</td>
<td>Provide related information to Tenure Holders, Employers and users. This may be carried out through information boards, bulletins, driver/operator meetings and/or direct communication.</td>
<td>Ensure all persons are aware of the Owner's support system.</td>
<td>---</td>
</tr>
<tr>
<td>Supervision and Direction</td>
<td>When traveling resource roads: TruckSafeBC directed to be observant to road design and construction standards. An Owner will provide an effective reporting system for any observations or concerns. Ensure staff are observant to the application of maintenance standards. Ensure that a reporting system is in place to assist traveling staff, who must look for and report on new or created hazards. Compliance may include establishing and setting the composition and focus of road user committees. Issues brought forward by the committees must be addressed and corrective action taken when required.</td>
<td>Provide a system for enforcement of road use standards. The system should ensure roads are only used as designated. Ensure roads and bridges are inspected for hazards and other issues on a regular basis.</td>
<td>Provide a system to enforce limitations of road use as they relate to trucks, trailers, and other mobile equipment.</td>
<td>Ensure the enforcement system for safe road use protocols considers changes in road conditions.</td>
<td>Encourage all persons to use the safety information provided to relate to their specific road systems and circumstances.</td>
<td>Require feedback from the affected parties on the action or changes made as a result of reports of unsafe conditions.</td>
<td>---</td>
</tr>
<tr>
<td>Documentation</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
### Management of Roads—Maintenance Contractors provide maintenance and support for other functions.

<table>
<thead>
<tr>
<th>Maintenance is a function that may be contracted.</th>
<th>Carry out maintenance obligations.</th>
<th>Support the Owner in providing necessary information to identify and eliminate or control hazards.</th>
<th>Support the Owner or Prime Contractor in their obligation to establish and maintain a system to ensure compliance with the Act and Regulation.</th>
</tr>
</thead>
</table>

#### Duties

- **Scope**
  - Maintenance procedures or practices should not change the intended design of the road.
  - The required maintenance functions are carried out to support safe travel.
  - All maintenance functions that may create hazards are identified.
  - Maintenance processes and standards are coordinated with other functions of road use to ensure safety is considered.
  - Maintenance equipment on the road system does not compromise any persons safety.
  - Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations.
  - Maintenance equipment is supported by the Owner or Prime Contractor.

- **Planning**
  - A system is planned and implemented to provide Owners and users with information on structural road changes or previously unidentified issues as they become evident.
  - Plan maintenance to support road use criteria and identified needs of users.
  - Hazards that may be created by the maintenance process are identified and a plan to mitigate the hazards is in place.
  - Plan maintenance so the activity causes the least disruption possible to the use of the road.
  - Structure, implement, and maintain an element in the safety plan that addresses maintenance practices and all trucking requirements and related issues.
  - Carry out all planned maintenance on equipment that is used to service the roads.
  - As part of the safety plan, Workers are informed of their responsibilities under Sec. 3.10 of the Regulation.
  - Provide a system that keeps all parties informed of up-to-date road conditions that will affect driving and use.
  - A system is in place to provide feedback to Employers and drivers/operators on specific drivers' road use.

- **Application and Care**
  - Responsible maintenance persons are diligent in being aware of changes and effects the maintenance may have on planned road use.
  - Carry out maintenance to meet the needs of all identified users.
  - Where requested and/or required, meet the special needs of users such as accommodation of hauling oversized equipment.
  - Review maintenance practices regularly to ensure any created hazards are known.
  - Information to control or mitigate the hazards is provided to all affected parties.
  - Adhere to planned maintenance schedule whenever possible.
  - Provide warnings and information when disruptive, unplanned maintenance is necessary.
  - Maintenance is organized and in itself does not create significant hazards.
  - Maintenance equipment is operated to a safe standard for the type of service required, and the equipment itself does not create an undue hazard to road users.
  - Operators are observant to identify loads that appear hazardous or unstable.
  - Evaluate road conditions regularly to identify changes that will affect use decisions.
  - Maintenance program includes a reporting system for observed misuse of the road system by any users.
  - Establish relationships and communication avenues with other users such as drivers/operators.

- **Training and Communication**
  - If the changes have a permanent effect and alter the original design of the road, appropriate changes to the use criteria are recommended.
  - Communicate to affected parties planned maintenance and schedules. Identify to users when any planned or requested maintenance cannot be accommodated.
  - Provide to the Owner and users a specific contact person for maintenance-related issues.
  - Communicate road and maintenance changes that will affect safety or compromise travel in emergency situations.
  - Operators ensure essential emergency equipment is in place and all units are fitted with radios with proper frequencies.
  - Provide appropriate fire protection and special equipment.
  - Unstable hazardous loads are reported immediately to the appropriate party and/or their Employer.
  - Use effective communication to ensure all parties are aware of current road use.
  - All persons are aware of the system for monitoring/addressing individual driver’s road use.
  - All parties understand the requirements for carrying out the maintenance process.

### Users of Roads—Provides support to all parties and users.

<table>
<thead>
<tr>
<th>Trucks and Equipment</th>
<th>Loads</th>
<th>Workers/Drivers/Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Employers in meeting their obligation to ensure the safety and health of all Workers at the workplace.</td>
<td>Support Employers in ensuring the safety and health of all Workers at the workplace, and in providing information and training so work can be carried out safely.</td>
<td>Provide information and support to Employers. Employers must provide systems that ensure adequate information, instruction, and training is in place for drivers and operators.</td>
</tr>
<tr>
<td>Support Supervision of structures, implement, and maintain an element in the safety plan that addresses maintenance practices and all trucking requirements and related issues.</td>
<td>Provide systems for observed misuse of the road system by any users.</td>
<td>A maintenance system allows the opportunity for some traditional supervision to be provided. Workers also must support the supervision functions of Employers.</td>
</tr>
</tbody>
</table>

#### Maintenance Contractor—Duties are to road maintenance. Is accountable to the Owner or prime.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Planning</th>
<th>Application and Care</th>
<th>Training and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance procedures or practices should not change the intended design of the road.</td>
<td>A system is planned and implemented to provide Owners and users with information on structural road changes or previously unidentified issues as they become evident.</td>
<td>Responsible maintenance persons are diligent in being aware of changes and effects the maintenance may have on planned road use.</td>
<td>If the changes have a permanent effect and alter the original design of the road, appropriate changes to the use criteria are recommended.</td>
</tr>
<tr>
<td>The required maintenance functions are carried out to support safe travel.</td>
<td>Plan maintenance to support road use criteria and identified needs of users.</td>
<td>Carry out maintenance to meet the needs of all identified users. Where requested and/or required, meet the special needs of users such as accommodation of hauling oversized equipment.</td>
<td>Communicate to affected parties planned maintenance and schedules. Identify to users when any planned or requested maintenance cannot be accommodated.</td>
</tr>
<tr>
<td>All maintenance functions that may create hazards are identified.</td>
<td>Hazards that may be created by the maintenance process are identified and a plan to mitigate the hazards is in place.</td>
<td>Review maintenance practices regularly to ensure any created hazards are known. Information to control or mitigate the hazards is provided to all affected parties.</td>
<td>Provide to the Owner and users a specific contact person for maintenance-related issues.</td>
</tr>
<tr>
<td>Maintenance is coordinated with other functions of road use to ensure safety is considered.</td>
<td>Plan maintenance so the activity causes the least disruption possible to the use of the road.</td>
<td>Adhere to planned maintenance schedule whenever possible. Provide warnings and information when disruptive, unplanned maintenance is necessary.</td>
<td>Communicate road and maintenance changes that will affect safety or compromise travel in emergency situations.</td>
</tr>
<tr>
<td>Maintenance processes and standards are coordinated with other functions of road use to ensure safety is considered.</td>
<td>Plan maintenance so the activity causes the least disruption possible to the use of the road.</td>
<td>Adhere to planned maintenance schedule whenever possible. Provide warnings and information when disruptive, unplanned maintenance is necessary.</td>
<td>Communicate road and maintenance changes that will affect safety or compromise travel in emergency situations.</td>
</tr>
<tr>
<td>Maintenance equipment on the road system does not compromise any persons safety.</td>
<td>Structure, implement, and maintain an element in the safety plan that addresses maintenance practices and all trucking requirements and related issues.</td>
<td>Maintenance is organized and in itself does not create significant hazards.</td>
<td>Operators ensure essential emergency equipment is in place and all units are fitted with radios with proper frequencies.</td>
</tr>
<tr>
<td>Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations.</td>
<td>Carry out all planned maintenance on equipment that is used to service the roads.</td>
<td>Maintenance equipment is operated to a safe standard for the type of service required, and the equipment itself does not create an undue hazard to road users.</td>
<td>Provide appropriate fire protection and special equipment.</td>
</tr>
<tr>
<td>Provide a system that keeps all parties informed of up-to-date road conditions that will affect driving and use.</td>
<td>As part of the safety plan, Workers are informed of their responsibilities under Sec. 3.10 of the Regulation.</td>
<td>Operators are observant to identify loads that appear hazardous or unstable.</td>
<td>Unstable hazardous loads are reported immediately to the appropriate party and/or their Employer.</td>
</tr>
<tr>
<td>A system is in place to provide feedback to Employers and drivers/operators on specific drivers’ road use.</td>
<td>Provide a system that keeps all parties informed of up-to-date road conditions that will affect driving and use.</td>
<td>Evaluate road conditions regularly to identify changes that will affect use decisions.</td>
<td>Use effective communication to ensure all parties are aware of current road use.</td>
</tr>
<tr>
<td>Support supervision of structures, implement, and maintain an element in the safety plan that addresses maintenance practices and all trucking requirements and related issues.</td>
<td>Provide a system that keeps all parties informed of up-to-date road conditions that will affect driving and use.</td>
<td>Maintain structures, implement, and maintain an element in the safety plan that addresses maintenance practices and all trucking requirements and related issues.</td>
<td>All persons are aware of the system for monitoring/addressing individual driver’s road use.</td>
</tr>
<tr>
<td>Support supervision by reporting user road use issues.</td>
<td>Support supervision by reporting user road use issues.</td>
<td>Establish relationships and communication avenues with other users such as drivers/operators.</td>
<td>All parties understand the requirements for carrying out the maintenance process.</td>
</tr>
<tr>
<td>Supervision and Direction</td>
<td>Ensure persons carrying out maintenance are aware of the requirement to maintain the original road design during maintenance.</td>
<td>Identify and report maintenance issues and activities to the Owner on a regular basis.</td>
<td>Provide supervision for maintenance activities.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Licensee or Tenure Holder
Is also an Owner who will fulfill obligations in the event they are the Owner with the most knowledge and control.

### Scope
- **Licensee or Tenure Holder** - When appropriate, the Tenure Holder should have input into road design and construction by providing information on intended use.
- **Provide information so roads used by Workers and equipment can be maintained to an acceptable standard that will support safe use.**
- **All known and foreseeable hazards are identified to all related Employers/persons.**
- **Provide support for a system of safe road use.**
- **Licensee’s safety program has a section that relates directly to a safe road use system.**
- **Relates to the Tenure Holder’s responsibility to provide sufficient information to an Employer to assist in selection and care of appropriate trucks and other equipment by Employers.**
- **Relates primarily to the loading of trucks and maintaining the loads in a safe and secure manner. For the Tenure Holder, there is the implicit responsibility to request and only accept loads that are safe on the specific road system. Under Sec. 3.10 of the Regulation, all persons have some responsibilities to recognize and report any observed hazardous situations.**
- **Provide direct information to support the Employer’s safe road use plan so the drivers can fulfill their obligations.**
- **When dealing with Employers on road issues, the Tenure Holder is aware of information that will be of value to Workers.**
- **Tenure Holders must provide a type of supervision to monitor contractors conducting related work, in particular independent Owner operators.**

### Planning
- **Consider road design and construction when planning hauling operations.**
- **Ensure contractors have an effective method to identify and bring forward maintenance issues.**
- **Create a plan to provide to all related contractors on the road systems with information on hazards and associated limitations.**
- **Licensees plan their participation and contribution to coordination.**
- **Plan for compliance for all users under their control.**
- **Plan how to provide related contractors / Employers with required information to make appropriate decisions on truck and equipment use on the specific road system.**
- **Plan requirements and expectations of contractors to ensure safe and stable loads on the road systems.**
- **Make a plan to support related Employers by way of planned trucker meetings and truck safety committees.**
- **Make a plan to collect and disseminate industry information related to safety that will assist contractors, truckers, and equipment operators.**
- **Make a plan to hold Employers accountable for the supervision of Workers using the road systems.**

### Application and Care
- **Provide the Owner and Maintenance Contractor with a specific contact person for road-related issues. Identify to the appropriate party truck configurations, hauling practices, and equipment that will be used.**
- **Provide relevant feedback to individual contractors on maintenance-related concerns.**
- **Provide a system to communicate the anticipated hazards of their own use of the road system (i.e., roadside drilling) to all contractors and all other affected users.**
- **Ensure the work of all related Employers is coordinated.**
- **Ensure there is no unauthorized use on the roads by persons under their control. Provide a system for occasional users to be made aware of safe road use practices.**
- **Review the road use system as it relates to equipment decisions each time new equipment is permitted on the road system.**
- **Implement a system that will bring attention to load issues. The system may use related paperwork from scales or check points.**
- **Provide an organizational infrastructure that will bring pertinent, meaningful and current information to venues such as trucker meetings and truck safety committees.**
- **Support drivers through accurate, pertinent information gathered from other parts of industry.**
- **Hold parties accountable for their actions, and take corrective action as needed.**
<table>
<thead>
<tr>
<th>Training and Communication</th>
<th>Communicate road design and road construction issues to affected users.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Provide communication of their road use needs and issues and those of related contractors to the Owner and/or Maintainer.</td>
</tr>
<tr>
<td></td>
<td>Provide a feedback system from Employers so additional identified hazards are reacted to appropriately. Provisions that will control or mitigate the additional created hazards must be made and communicated to affected stakeholders.</td>
</tr>
<tr>
<td></td>
<td>Communicate the Licensee’s safe road use plan to all truckers and road users under their control.</td>
</tr>
<tr>
<td></td>
<td>Ensure an effective hazard-reporting system is in place for the Licensee’s contractors.</td>
</tr>
<tr>
<td></td>
<td>Develop and implement a system to communicate truck- and equipment-related issues to all Employers and parties. This system would include related issues and prevention.</td>
</tr>
<tr>
<td></td>
<td>Ensure contractors are aware that violations will be recorded and addressed appropriately.</td>
</tr>
<tr>
<td></td>
<td>Support programs from the BCFSC and WorkSafeBC TruckSafe programs.</td>
</tr>
<tr>
<td></td>
<td>Encourage Employers to follow up to ensure drivers/operators apply provided safety information.</td>
</tr>
<tr>
<td></td>
<td>Contribute to public information as appropriate.</td>
</tr>
<tr>
<td>Supervision and Direction</td>
<td>Ensure a system is in place to identify any contemplated changes in trucking practices, and that such changes are compatible with the road design and construction before they are put into service.</td>
</tr>
<tr>
<td></td>
<td>Validate related Employer special needs, issues, and requests before taking them forward to the Maintenance Contractor. This is done either through site visits, discussion, or understanding of the area and concerns. Provide regular feedback to Owner/Maintenance Contractor on maintenance issues.</td>
</tr>
<tr>
<td></td>
<td>Support decisions made with respect to road use shutdowns for reasons such as inclement weather.</td>
</tr>
<tr>
<td></td>
<td>Support the system in place for road use coordination, and participate in a road use committee if applicable.</td>
</tr>
<tr>
<td></td>
<td>Hold related contractors accountable to follow road use rules/protocols. Ensure road use requirements are enforced for persons under their control.</td>
</tr>
<tr>
<td></td>
<td>Ensure an effective periodic inspection of maintenance equipment as required by the Regulation and manufacturer’s specifications. During review of incident investigations, consider interactions with users and maintenance equipment.</td>
</tr>
<tr>
<td></td>
<td>Investigate all loading issues reported by related contractors and take appropriate action. Review Employer investigations to ensure loading has been considered.</td>
</tr>
<tr>
<td></td>
<td>Encourage Employers and Workers to participate in relevant safety venues.</td>
</tr>
<tr>
<td></td>
<td>Follow up to validate the appropriateness and usefulness of information provided. This may be through observation or direct contact with Employers or Operators.</td>
</tr>
<tr>
<td></td>
<td>Evaluate travel and use on a regular basis, and determine if use compromises safe travel for any persons. Mitigate hazards as necessary.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Documents</th>
<th></th>
</tr>
</thead>
</table>
### Management of Roads—Employers support and actively engage with all parties.

<table>
<thead>
<tr>
<th>Employer OBLIGATIONS</th>
<th>Users of Roads—Ensure that systems are in place for safe use.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employer</strong></td>
<td><strong>Trucks and Equipment</strong></td>
</tr>
<tr>
<td>Has Workers and operates on or around the road system. May also have obligations as Owner or Prime Contractor.</td>
<td>Provide the land and premise in a safe condition.</td>
</tr>
<tr>
<td></td>
<td>Ensure a maintenance system is in place.</td>
</tr>
<tr>
<td></td>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
</tr>
<tr>
<td></td>
<td>Establish and maintain a system to ensure compliance with the Act and Regulation.</td>
</tr>
<tr>
<td></td>
<td>Provide a system to support the coordinated system of safe road use, which includes ensuring that all related road issues are communicated to all users.</td>
</tr>
<tr>
<td></td>
<td>Ensure that systems are in place for the roads.</td>
</tr>
<tr>
<td></td>
<td>Provide a system to ensure compliance of their Workers and support the coordinated compliance system for the roads.</td>
</tr>
<tr>
<td></td>
<td>Ensure load-related standards are known and adhered to, and that associated procedures are followed.</td>
</tr>
<tr>
<td></td>
<td>Implement a safe road use plan requires drivers and equipment operators to demonstrate awareness of the rules of the road and right of way.</td>
</tr>
<tr>
<td>Scope</td>
<td>Evaluate roads and use information to make decisions on their road use.</td>
</tr>
<tr>
<td></td>
<td>Plan for safe use of the specific road system.</td>
</tr>
<tr>
<td></td>
<td>Evaluate maintenance requirements for routine travel and work, as well as special needs or requirements.</td>
</tr>
<tr>
<td>Planning</td>
<td>Before startup, ensure the Owner has identified all known hazards.</td>
</tr>
<tr>
<td></td>
<td>Plan safe coordination of vehicle travel and equipment use under Employer’s control. Support trucker meetings.</td>
</tr>
<tr>
<td></td>
<td>Plan and implement an element in their safety program specific to road use.</td>
</tr>
<tr>
<td>Application and Care</td>
<td>Carry out a risk assessment of each specific road to ensure all truck configurations, load types, and equipment can navigate the road system without endangering any persons.</td>
</tr>
<tr>
<td></td>
<td>Ensure all hazards or maintenance issues are reported to the workplace party that has the authority to address the issue.</td>
</tr>
<tr>
<td></td>
<td>Identify where and when specific safety procedures for hauling would be required (i.e., steep grades). Must ensure procedures are in place and are followed.</td>
</tr>
<tr>
<td></td>
<td>Identify to the Tenure Holder and/or maintainer a contact for the Employer who is responsible to speak on behalf of the Employer for health and safety purposes.</td>
</tr>
<tr>
<td></td>
<td>Provide a safety plan for road use to Tenure Holder and other parties as necessary.</td>
</tr>
<tr>
<td></td>
<td>Ensure that a system is in place to communicate changes that will affect safety or emergency situations to all truckers, equipment operators, and other Workers traveling the road systems.</td>
</tr>
<tr>
<td></td>
<td>Confirm truck and trailer configurations are capable of safely navigating the road systems.</td>
</tr>
<tr>
<td></td>
<td>Trucks trailers and other equipment are maintained to safe standard.</td>
</tr>
<tr>
<td></td>
<td>Ensure load-related standards are known and adhered to, and that associated procedures are followed.</td>
</tr>
<tr>
<td></td>
<td>All Employers will provide a safe operating system that includes appropriate information, training, and direction for driving on active resource roads in all weather conditions for drivers/operators.</td>
</tr>
<tr>
<td></td>
<td>Ensure planned supervision that fits the trucking or operating circumstances is in place.</td>
</tr>
<tr>
<td></td>
<td>Ensure there is a method of supervision in place to monitor/validate safe driving.</td>
</tr>
<tr>
<td></td>
<td>Drivers/operators demonstrate they are aware of other anticipated road users and potentially hazardous situations.</td>
</tr>
<tr>
<td>Sample Documents</td>
<td>Documented risk assessments.</td>
</tr>
<tr>
<td>Training and Communication</td>
<td>Identify truck configurations and equipment and hauling planned practices to Tenure Holder or other responsible party. Hauling practices would include anticipated road usage, load specifications, start time and duration of hauling, and number of loads per day.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Supervision and Direction</td>
<td>Ensure any contemplated changes in trucks and hauling practices are within road limitations before they are put into service.</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Trucks and Equipment</td>
<td>Loads</td>
</tr>
<tr>
<td>Provide the land and premise in a safe condition.</td>
<td>Employers must ensure the safety and health of all Workers at the workplace. Other parties must provide support for this obligation.</td>
</tr>
<tr>
<td>Ensure a maintenance system is in place.</td>
<td>Employers must ensure the safety and health of all Workers at the workplace.</td>
</tr>
<tr>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
<td>For each MEWP, establish and maintain a system to ensure compliance with the Act and Regulation.</td>
</tr>
<tr>
<td>For multiple-Employer workplaces, ensure that the activities relating to occupational safety and health are coordinated.</td>
<td>Unstable or unsecured materials or loads do not endanger persons in vehicles and on equipment.</td>
</tr>
<tr>
<td>For each MEWP, establish and maintain a system to ensure compliance with the Act and Regulation.</td>
<td>Operator obligations for their personal safety and that of passengers must be outlined in the Employer’s safety program. Specific instruction and training must be in place.</td>
</tr>
</tbody>
</table>

### Personnel Transport Vehicles and Equipment
(includes all vehicles such as pickups, buses, quads, and snow machines)

<table>
<thead>
<tr>
<th>General Duties</th>
<th>Special Considerations</th>
<th>Sample Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>All persons have an obligation to ensure the system provided is safe for use by the specific personnel transport vehicles and equipment.</td>
<td>All persons involved must ensure equipment can be operated within manufacturer’s specifications, given the specific road design and construction.</td>
<td></td>
</tr>
<tr>
<td>Road maintenance needs to accommodate the personnel transportation vehicles and equipment. Transport vehicles and equipment are known and addressed in the regular maintenance system.</td>
<td>Ensure all users are aware of the potential of personnel transportation equipment being on the road systems.</td>
<td></td>
</tr>
<tr>
<td>Known and foreseeable hazards to transported workers on the roads are mitigated.</td>
<td>Employers must ensure trucks, related equipment, vans/buses, and other equipment are appropriate for the road system and outfitted for anticipated use. This includes proper seating and seat belts.</td>
<td></td>
</tr>
<tr>
<td>The use of personnel transportation vehicles and equipment is coordinated with other users so additional hazards are not created.</td>
<td>Employers must ensure emergency equipment is maintained and radios are kept in operating condition.</td>
<td></td>
</tr>
<tr>
<td>There is a system of compliance in place for personnel transport systems.</td>
<td>Employers must ensure trucks, related equipment, vans/buses, and other equipment are appropriate for the road system and outfitted for anticipated use. This includes proper seating and seat belts.</td>
<td></td>
</tr>
<tr>
<td>Appropriate vehicles with safety equipment are in place for use by personnel transport.</td>
<td>Operators must take notice of current weather and road conditions and take particular care as conditions dictate.</td>
<td></td>
</tr>
<tr>
<td>Unstable or unsecured materials or loads do not endanger persons in vehicles and on equipment.</td>
<td>There is a provision for passengers to report unsafe conditions, acts, and near misses to Employer and/or Licensees. Consideration must be given to programs that support safe use of the roads by Workers traveling in their personal vehicles or equipment. This would include non-work related travel and carrying passengers.</td>
<td></td>
</tr>
<tr>
<td>Operator obligations for their personal safety and that of passengers must be outlined in the Employer’s safety program. Specific instruction and training must be in place.</td>
<td>Operators take notice of current weather and road conditions and take particular care as conditions dictate.</td>
<td></td>
</tr>
<tr>
<td>Operators must know and fulfill obligations for safe equipment and vehicle operation.</td>
<td>Persons operating equipment and vehicles with passengers will assume the role of supervision for those passengers when the vehicles and equipment are in operation.</td>
<td></td>
</tr>
</tbody>
</table>
## Management of Roads

<table>
<thead>
<tr>
<th>Other Vehicles</th>
<th>OBBLIGATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SProvide the land and premise in a safe condition.</td>
<td>Ensure a maintenance system is in place.</td>
</tr>
<tr>
<td>Ensure maintenance system is in place.</td>
<td>Provide information necessary to identify and eliminate or control hazards.</td>
</tr>
<tr>
<td>For multiple-Employer workplaces, ensure that the activities relating to occupational safety and health are coordinated.</td>
<td>For each MEWP, establish and maintain a system to ensure compliance with the Act and Regulation.</td>
</tr>
<tr>
<td>Employers must ensure the safety and health of all Workers at the workplace.</td>
<td>Other parties must provide support for this obligation.</td>
</tr>
</tbody>
</table>

### Scope Note

**Obligations in the Owner, Employer, and Worker sections may also apply.**

**Potential users need to be informed of the design and construction limitations of the roads.**

**Users must be aware of the maintenance standards to ensure their use does not compromise their safety or any other persons.**

**Users must be aware of known hazards that could affect their safe use.**

**The coordination system must address use by occasional users.**

**Compliance with the Act and Regulation is expected from occasional users, as well as compliance with the fundamentals of road use.**

**Occasional users must be aware of the road limitations and thereby the appropriateness of their particular vehicles or equipment.**

**Loads must be planned, secure, and stable. Overloaded vehicles/equipment on the road system should not be permitted.**

**Road use should be planned, and the Employers must ensure all obligations are met so safety is not compromised.**

**Drivers/operators must know and fulfill their general obligations and specific obligations when operating on resource roads.**

**A system of supervision must be provided in instances when direct supervision is not feasible.**

### Planning

**Plan use to ensure each road can be navigated safely, based on required use; this includes carrying out a specific risk assessment.**

**Ensure maintenance is made aware of the anticipated use of the road and any related maintenance issues before or after use.**

**Each driver/operator must ensure they have been apprized of known hazards and their expected control on a regular basis.**

**The stakeholder who causes the occasional user must identify for appropriate parties any unique issues or hazards that will need coordination considerations. This may include moving of oversized equipment.**

**Employers of “occasional users” must have an element in their safety program specific to occasional drivers usage of resource roads.**

**Ensure equipment is capable of safely navigating the road system.**

**Ensure load limitations of the truck or the road system are not exceeded. This includes weight and load dimensions.**

**Employers must know individual drivers’ capabilities.Ensure that only drivers/operators capable of safely carrying out the tasks are assigned to work involving road travel.**

**Employers must validate the specific training and experience of a driver/operator to safely navigate the road system before travel. This may be done through licensing, observation of driving, questions on experience, etc.**

**Ensure there is a planned system to address supervision requirements.**

### Application and Care

**Personal driving skills, experience, and limitations must be considered as well as vehicle and equipment limitations.**

**Identify to maintenance a contact person, truck configurations, types of loads, and equipment that may be used, in addition to any specific maintenance needs.**

**Monitor radio for immediate concerns.**

**Ensure safe road use plan is known and followed.**

**Identify safe use rules/protocols for the specific road system before planned travel or use of the road. Evaluate travel and use each time before the process is started to identify any issues that may arise. Ensure hazards are mitigated before proceeding.**

**The safe road use plan should ensure that road travel and use occur as much as possible during hours when traffic is not heavy.**

**If load is oversized, communicate with maintenance or Tenure Holder to establish a safe method and time of travel.**

**Ensure operators have specific training and instruction to travel or work safely on the road systems.**

**Ensure that drivers/operators have all the required information to be confident that operating tasks can be completed safely.**

**Ensure that appropriate methods of supervision are in place.**

### Training and Communication

**Identify any special maintenance needs and communicate to the appropriate party.**

**If travelling without a radio, proceed with extreme caution.**

**Identify to appropriate parties when use of the road may compromise others’ safe use, and ensure hazards are mitigated**

**Be aware of approaching loaded vehicles, and take appropriate action if hazards are identified.**

**Employers will ensure the Workers assigned to carry out duties on the road system are made aware of the road supervision system in place.**

## Users of Roads—Heightened awareness of other users.

<table>
<thead>
<tr>
<th>Trucks and Equipment</th>
<th>Loads</th>
<th>Workers/Drivers/Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure adherence to the Act and Regulation.</td>
<td>Ensure the road system in place.</td>
<td>Ensure operators address the Act and Regulation.</td>
</tr>
<tr>
<td>Failure of the road system to be safe and complete.</td>
<td>Failure of the road system to be safe and complete.</td>
<td>Failure of the road system to be safe and complete.</td>
</tr>
<tr>
<td>Ensure that drivers/operators have all the required information to be confident that operating tasks can be completed safely.</td>
<td>Ensure that drivers/operators have all the required information to be confident that operating tasks can be completed safely.</td>
<td>Ensure that drivers/operators have all the required information to be confident that operating tasks can be completed safely.</td>
</tr>
</tbody>
</table>

### Occasional Users

(Such as service vehicles and low beds)

<table>
<thead>
<tr>
<th>Scope Note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obligations in the Owner, Employer, and Worker sections may also apply.</strong></td>
</tr>
</tbody>
</table>

**Plan use to ensure each road can be navigated safely, based on required use; this includes carrying out a specific risk assessment.**

**Ensure maintenance is made aware of the anticipated use of the road and any related maintenance issues before or after use.**

**Each driver/operator must ensure they have been apprized of known hazards and their expected control on a regular basis.**

**The stakeholder who causes the occasional user must identify for appropriate parties any unique issues or hazards that will need coordination considerations. This may include moving of oversized equipment.**

**Employers of “occasional users” must have an element in their safety program specific to occasional drivers usage of resource roads.**

**Ensure equipment is capable of safely navigating the road system.**

**Ensure load limitations of the truck or the road system are not exceeded. This includes weight and load dimensions.**

**Employers must know individual drivers’ capabilities. Ensure that only drivers/operators capable of safely carrying out the tasks are assigned to work involving road travel.**

**Employers must validate the specific training and experience of a driver/operator to safely navigate the road system before travel. This may be done through licensing, observation of driving, questions on experience, etc.**

**Ensure there is a planned system to address supervision requirements.**
<table>
<thead>
<tr>
<th>Supervision and Direction</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Road users report any additional road hazards and/or driving near misses to their Employer and the Contractor or person that hired them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample Documents</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
## Management of Roads

<table>
<thead>
<tr>
<th>Other Vehicles</th>
<th>Obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other and Worker sections may also apply.</td>
<td>Provide the land and premise in a safe condition. Ensure a maintenance system is in place. Provide information necessary to identify and eliminate or control hazards. For multiple-Employer workplaces, ensure that the activities relating to occupational safety and health are coordinated. For each MEWP, establish and maintain a system to ensure compliance with the Act and Regulation. Employers must ensure the safety and health of all Workers at the workplace. Other parties must provide support for this obligation. Employers must ensure the safety and health of all Workers at the workplace, and provide information and training so the job can be done safely. Employers must provide systems that ensure adequate information, instruction, and training are in place for drivers and operators. Workers must take reasonable care to do a safe and complete job when operating on the road systems, and must follow established work procedures. Employers must consider their obligation to provide effective and diligent supervision, given that traditional supervision in all cases is not feasible.</td>
</tr>
</tbody>
</table>

### Other equipment travelling or working on the road

<table>
<thead>
<tr>
<th>Scope Note</th>
<th>Obligations in the Owner, Employer, and Worker sections may also apply.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road design and construction does not compromise safety for equipment traveling or working on the road.</td>
<td>Maintenance standards meet the needs of the various equipment in use on the road.</td>
</tr>
<tr>
<td>Hazards created by various equipment are communicated to other users and mitigated.</td>
<td>Coordination is in place for all equipment use on the road system.</td>
</tr>
<tr>
<td>Compliance systems take into consideration the uniqueness of other equipment, travel, or work.</td>
<td>Equipment on the roads is appropriate for travel and use.</td>
</tr>
<tr>
<td>Equipment related to other equipment do not create a hazard for any users.</td>
<td>Loads and materials related to other equipment do not create a hazard for any users.</td>
</tr>
<tr>
<td>The unique Employers of other Workers operating equipment on the road systems have direct obligations for safe operation.</td>
<td>This addresses the direct obligations of the persons responsible for the operation of the various equipment on the road.</td>
</tr>
<tr>
<td>Ensure a form of supervision to fit the unique requirements of the equipment operation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the equipment can be operated within manufacturer’s specifications and the safe limits dictated by the road construction and design.</td>
<td>Identify to Employer or other appropriate party areas where road maintenance is required after road travel or use by the equipment.</td>
</tr>
<tr>
<td>Each operator must ensure they are aware of known hazards and their expected control each time before proceeding on the road systems.</td>
<td>Plan travel and use to ensure all affected parties are informed when their specific equipment will be traveling on the road or if roadside work is expected.</td>
</tr>
<tr>
<td>Pre-plan to ensure equipment can safely navigate the road system.</td>
<td>Plan to ensure loading procedures are followed and trucks are not overloaded.</td>
</tr>
<tr>
<td>Plan to include in applicable parts of the safety program reference to operators of equipment that use the roads.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application and Care</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify pertinent specifics or operational issues related to the equipment and provide this information to the Tenure Holder, Maintenance Contractor, and/or Owner.</td>
<td>Ensure Maintenance Contractor or appropriate parties are made aware of anticipated use of the road and any related maintenance issues.</td>
</tr>
<tr>
<td>Advise Employer or appropriate party when their travel or work on the road system could create a hazard to other persons using the road system.</td>
<td>Ensure traffic control is provided when required to assist in safe travel or for work purposes.</td>
</tr>
<tr>
<td>Evaluate travel and use each time before road use in order to identify any issues that may be created. Ensure hazards are mitigated before proceeding.</td>
<td>Review road use system as it relates to equipment decisions each time equipment is to be permitted on the road system. Ensure appropriate maintenance of equipment. Ensure effective periodic inspections of the equipment as required by the Regulation and manufacturer’s instructions.</td>
</tr>
<tr>
<td>Ensure load limitations of the truck or the road system are not exceeded. This includes weight and load dimensions.</td>
<td>Ensure operators participate in accident investigations and crew safety meetings.</td>
</tr>
<tr>
<td>Ensure equipment operators demonstrate awareness of the Employer’s or Tenure Holder’s health and safety program requirements as they relate to roads, equipment travel, and working roadside.</td>
<td>Accept, support, and use the benefits of the supervisory system.</td>
</tr>
<tr>
<td>Training and Communication</td>
<td>Provide feedback to appropriate parties on maintenance that has been provided.</td>
</tr>
<tr>
<td>Supervision and Direction</td>
<td></td>
</tr>
<tr>
<td>Sample Documents</td>
<td></td>
</tr>
</tbody>
</table>


### Management of Roads—Support all systems in place.

<table>
<thead>
<tr>
<th>Obligations</th>
<th>Workers/Drivers/Operators</th>
<th>Employer—Duty to support and use all systems put in place, and operate with professionalism and care.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Workers/drivers/operators observe and report to their Employer or the appropriate party if the provided roads are not safe for the equipment they are operating (design, construction, or maintenance issues).</td>
<td>Through assessment of the vehicle or equipment and the anticipated load(s), users will evaluate if road maintenance will support safe use.</td>
</tr>
<tr>
<td></td>
<td>Workers/drivers/operators support the road maintenance system and safe use plan.</td>
<td>Each driver/operator must stay current and involved in all support systems such as special trucker meetings.</td>
</tr>
<tr>
<td></td>
<td>Workers/drivers/operators ensure they have been informed of known and foreseeable hazards on the road systems.</td>
<td>Each driver/operator must recognize, understand, and fulfill their responsibilities and contributions to the safe road system.</td>
</tr>
<tr>
<td></td>
<td>For each MEWPs, establish and maintain a system to ensure compliance with the Act and Regulation.</td>
<td>Each driver/operator must have a system to carry out required maintenance of the vehicle and related equipment.</td>
</tr>
</tbody>
</table>

### Users of Roads—Fulfills Personal Obligations and Demonstrates Care.

<table>
<thead>
<tr>
<th>Trucks and Equipment</th>
<th>Loads</th>
<th>Workers/Drivers/Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workers/drivers/operators</strong> are responsible for personal care of truck and equipment so that no other persons (either those being transported or other road users) are endangered through lack of care.</td>
<td>Workers/drivers/operators are responsible for loading and maintaining stability of loads.</td>
<td>Workers must take reasonable care to do a safe and complete job when operating on the road systems, and must follow established work procedures.</td>
</tr>
<tr>
<td>Employees must provide systems that ensure adequate information, instruction, and training are in place for drivers and operators.</td>
<td>Employers have a system to support drivers through dissemination of information and training so the drivers can fulfill their obligations.</td>
<td>Employers must consider their obligation to provide effective and diligent supervision, given that traditional supervision in all cases is not feasible.</td>
</tr>
<tr>
<td><strong>Workers/drivers/operators</strong> must understand, and fulfill their obligations to the Employer under the Act, as they apply to operating a vehicle or equipment, are to take care to do a safe job and follow safe work procedures.</td>
<td>Employers must consider what support can be given to the supervisor.</td>
<td></td>
</tr>
</tbody>
</table>
### Training and Communication

<table>
<thead>
<tr>
<th>Activity</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users must ensure issues or personal concerns with road system are reported to their Employer and mitigated before using the road.</td>
<td>Users must monitor radio and other forms of communication for previously unknown hazards. Users must communicate via radio or other methods any previously unknown hazards on the road system as soon as possible, such as public usage or equipment.</td>
</tr>
<tr>
<td>Users must ensure they are aware of planned maintenance. Users must also communicate specifics if maintenance of the road system is not adequate.</td>
<td>Users must recognize and use safe practices for activities such as parking on roadways and loading and unloading quads and other equipment. Users must also recognize the need to use specific procedures to navigate steep grades.</td>
</tr>
<tr>
<td>Users must be proactive in participating in safety meetings and related communication.</td>
<td>Users must ensure required daily inspections and maintenance are carried out and documented. Users must also ensure all truck or equipment related issues and concerns are reported and addressed appropriately.</td>
</tr>
</tbody>
</table>

### Supervision and Direction

<table>
<thead>
<tr>
<th>Activity</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users must know and react appropriately to all personal limitations that could affect their safe use of the current road system.</td>
<td>Users must report driving near misses to Employer and/or appropriate party.</td>
</tr>
<tr>
<td>Users must communicate with other drivers/operators informally to support awareness of maintenance and standards.</td>
<td>Users must identify problems where coordination is not effective, such as unscheduled equipment traveling on the road system.</td>
</tr>
<tr>
<td>Users must report driving near misses to Employer and/or appropriate party.</td>
<td>Users must drive within the speed limits and according to current and seasonal road conditions. Users must participate in the enforcement of safe road use as outlined in the safe road use plan. Drive defensively and give right of way to loaded or less maneuverable equipment.</td>
</tr>
<tr>
<td>Users must drive within the speed limits and according to current and seasonal road conditions. Users must participate in the enforcement of safe road use as outlined in the safe road use plan. Drive defensively and give right of way to loaded or less maneuverable equipment.</td>
<td>Users must ensure required log entries are kept.</td>
</tr>
<tr>
<td>Users must ensure required log entries are kept.</td>
<td>Users must report loading and load concerns to the appropriate party.</td>
</tr>
<tr>
<td>Users must report loading and load concerns to the appropriate party.</td>
<td>Users must ensure log entries are kept.</td>
</tr>
</tbody>
</table>

### Sample Documents

<table>
<thead>
<tr>
<th>Document</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log books.</td>
<td>Ensure support for the system is evident through participation in safety meetings.</td>
</tr>
</tbody>
</table>

21
Appendix 3: Officer Workbook
# Table of Contents

<table>
<thead>
<tr>
<th>Document</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Outline for collection of information</td>
<td>3</td>
</tr>
<tr>
<td>Officer directions in conducting field information gathering</td>
<td>8</td>
</tr>
<tr>
<td>Road owners’ checklist</td>
<td>11</td>
</tr>
<tr>
<td>Officer road inspection checklist</td>
<td>15</td>
</tr>
<tr>
<td>Log truck inspection checklist</td>
<td>17</td>
</tr>
<tr>
<td>Field work contractor checklist</td>
<td>21</td>
</tr>
<tr>
<td>Service providers’ checklist</td>
<td>25</td>
</tr>
<tr>
<td>Driver/Trucker survey</td>
<td>29</td>
</tr>
<tr>
<td>Public survey</td>
<td>31</td>
</tr>
<tr>
<td>Officer survey</td>
<td>33</td>
</tr>
<tr>
<td>Notes</td>
<td>36</td>
</tr>
</tbody>
</table>
RESOURCES ROAD DEMONSTRATION PROJECT
Project Activities Outline

Foreword
The following is an overview of the activities that will be undertaken by WorkSafeBC and the committee to establish a benchmark of the road management systems that are in place in relation to the expectations of the Act and Regulation. This will serve as a gap analysis leading to the next step of recommending procedures and processes that will complement the systems in place and support diligence on road management for the owners through the committee.

Project Boundaries
WorkSafeBC has defined the general project areas, as Prince George and Fort St. John. The specific roads to be evaluated will be used by different employers and owners. The roads themselves and the boundaries for the purposes of the project will be selected in conjunction with the local committee.

Evaluation of Road Management Systems
Gathering of information will require a review of documents, field observations and inspections and discussions with owners, committee members and a sampling of road users.

Project Activities to be undertaken by WorkSafeBC:
- Establish program objectives, terms of reference and project time lines
- Provide a written outline of the project. This includes objectives and expectations of the project steering committee; the persons directly involved in the project administration, field officers, the committee(s), owners and road users.
- Provide written clarification on identification of the levels of ownership and their duties so that road administration meets the test of diligence. This will require identification of the default PC and information that each other owner will need to provide so that safe coordination/compliance can be put in place.
- Meet with committees to establish the project processes and expected outcomes. This requires initial meetings and ongoing involvement with the committee and individual members during all phases of the project.
- Carry out initial evaluation of road safety management systems in place on the selected road systems. This is basically a document review that serves as an evaluation of the systems and documents in place that provide the administrative guidance to all persons who have duties that support safe road management.
- Carry out normal WorkSafeBC field activities that will validate what systems for information, coordination and compliance are in place and their effectiveness. WorkSafeBC field activities are identified below.
- Utilize other methods and avenues to identify effectiveness and/or gaps in road administration. This may include utilization of a road monitor to collect information, meetings with user groups such as trucking organizations, meetings with related Ministries, discussions with employers and other road owners and where reasonable, public.
- Communicate to other WorkSafeBC departments pertinent information related to the project. This will include information to field officers.
- Meet with other owners including licensees and Ministries. Some meetings may be general forums while significant owners such as large licensees and selected Ministries may require individual focused discussions. The meetings will include information about the project and outcomes.
• Organized and administer two (2) media events. These events are designed to provide information and to emphasize the importance of road safety and the significance of the contributions of each party (referenced in the Act) in both the administration and safe use of the roads.

• Evaluate findings, make recommendations going forward and where appropriate provide guidance and templates for safe road management and use. This will result in status reports periodically and a final report. Recommendations should, where appropriate, reference other concerns raised by previous reports focused on safe roads. These include the Attorney Generals and the Forestry Ombudsman report. Attachment-A is a summary of pertinent recommendations in the reports.

• Sponsor a review of new technology related to road safety. This review of technology will include identification of technology as well as evaluation and feasibility. The findings will be attached to the final report and will be offered without recommendation to industry

• Findings, progress and status and final reports will be shared with WorkSafeBC senior management and the involved industry committees.

• Results will be evaluated to determine future guidance for field officers with respect to resource road management and use. This will assist in determining regulatory diligence for field officers and will provide them with consistent standards to apply in fieldwork.

• There will be an evaluation of the project design, activities and resultant changes implemented by owners/committees. This evaluation may provide good guidance for future projects that relate to application of 115 – 119 of the Act in other situations or industries.

• Proven templates or road management models will be shared with all affected or interested industry parties.

• The final report will be distributed appropriately

In summary, WorkSafeBC will take the lead on designing and administering the project while remaining within their mandate.

Information to be collected From Owners/Committees Regarding Road Administration

The bulk of collection of information for road administration will come from the owner responsible for coordination and compliance on the road system. However, some information may still be required from other sources. This information will be collected as efficiently as possible with an initial one-day visit to the owner’s office.

In a management system that utilizes a road management group, (committee), the best person to guide the evaluators through this information is the owner’s representative on the committee.

Requested information will include:

• Name of person responsible for roads for the owner.

• Written rules of the road. In most cases these will be general to all roads under the owners care. Rules document is expected

• Road specifications relating to design, construction and limitations. The question will be as to what information was used to set road limitations including volumes. Some documents should be in place.

• Known Road Users and contact names. This includes trucking contractors as well as others using the road for personal or crew transportation. It also includes other owners using the road system. Document is expected.
• How road hazards are identified and communicated to all users. The communications of hazards may vary in forms such as being contained in signage. This will also include methods of communication from licensee to other licensees or users. Some documentation is expected.

• Specifications for signage and any specific road procedures beyond those supplied by the committee. Owners should have communication procedures that will ensure information is available to as many users as possible. Documents are expected.

• Process for Contractor orientation specific to their road system and expectations. Document expected.

• General information on planned maintenance. This may be included in the permit document. There may be considerations for maintenance in the case of special one-off circumstances.

• Planned inspections of the road. Document is expected.

• Monitoring system and records. Documentation is expected.

• Methods to get or receive information on road concerns from all users. Some documentation is expected.

• Recent incident investigations or reported hazards/issues. Recent for these systems should be within the past 12 months in order to touch on all hauling cycles. Related documents expected.

• Road related meetings including samples of hauling contractor start up meetings. Sample documents expected.

• Information specific to new or young worker orientations and supervision. This is primarily an employer function but is worthy of note to owners for awareness. Documentation may not be in place.

• Other relative information or records applicable to road use.

Note: Much of the above is part of the Safe Road Use Program as well as supports, coordination and compliance on the road systems.

Information Collected by Field Evaluations of Operational Use

Field evaluation of the systems in place and general road use will be conducted under the leadership of WorkSafeBC. Local officers will conduct the bulk of the field activity. Most documentation will be produced as a result of the officer’s activities and results will be shared with the committee and owners.

The field review looks for indications of effective implementation of Safe Road Use Programs utilizing collection methods of observations and information gathering through direct contact with users.

Any immediately dangerous circumstance or practices will be addressed.

Activities will include:

• Road inspection including maintenance review.
• Review of signage
• Road use observations both by WorkSafeBC and a road monitor. Rules of the road as well as adherence to general safe road use practices will be observed.
• Truck inspections
• Surveys to collect data and information from drivers and users and if needed contractors
• Review of information provided to various parties
• Identification of information flow, (owners, employers/contactors, occasional industrial users and any other available users)
• Review of Knowledge and use of procedures that were provided by the committee or owner
• Evaluation of coordination components of the compliance process
• Review of any components of a safe road use plan or program

Note: The activities will take place within agreed to time lines with the specific owner or committee.

Meetings

WorkSafeBC will take the opportunity to attend and gather or provide information at any field meetings or other meetings that relate to management and use of resource roads during the timelines of the project.

Demonstration Aspects of the Project

The project will result in more structured and consistent management of resource roads that combined with contractors and workers fulfillment of their obligations will support safe use. The specifics of what is being demonstrated are briefly covered in attachment B.

The demonstration of implemented systems will be evaluated in the spring of 09 after system updates have been introduced and given some time to become standard practice for road users. Committee models and templates for road administration will also be revised in 09.

Attachment-A

The Project will consider and apply within its structured objectives other reports recommendations such as:

Auditor General
• Ensure a safety infrastructure is in place.
• Ensure regulatory diligence by WorkSafeBC
• Use models in place in similar industries such as mining to set standards for road use
• Focus responsible parties on planning all aspects of the road management and use
• Enforce requirements for supervision functions on roads and road use
• All enforcement agencies carry out their duties related to safe road use.
• Establish and participate in resource road management groups
• Ensure training for drivers is relative to the specific hazards of road use
• Investigate hours of work as they relate to safe road use. This should include considerations of cycle times.
• Ensure systems in place are related to all worker travel including crew transport and individual pick-ups.
• Create a data system for information on road incidents and fatalities. A natural progression would be a pro-active information and communication system to all users to support specific information provided by owners.

Ombudsman Report
• Establish regional Road Safety Management Groups
• Logically establish resource road networks that would be contained within a RSMG unit
• RSMG’s should be active in establishing common procedures such as signage, radio frequencies and radio protocols. This would extend to identifying procedures required on each road system and providing a type of template that can be modified so that road procedures are specific to an area or an RSMG.
• Establish clear communication plans that are common throughout the province and necessary specifics to each area for “first responders”.
• ERP’s should be in place for the road systems. This does not replace the employer responsibility for an ERP.
• Safety standards on roads should be enforced by regulatory agencies. This does not negate the requirements for employers.
• All enforcement agencies should operate within their mandate but cooperate and work together when appropriate.
• Truckers should be required to record individual cycle times regularly
• Electronic stability control systems should be encouraged. This would carry forward into an evaluation and utilizing other new technology that can enhance road safety.

Attachment-B
Demonstration Project Concepts

The concept of the project is to demonstrate through application:

1. The information and system for road safety management defined in the RRSP and the Info flip provided to officers
2. To identify and validate the practicality of the information provided to users
3. Validate systems put in place by owners committees are in use in the field
4. Measure systems put in place by owners and owners committees against the standards defined in the tools given to officers
5. To identify structures and committees in place that assist the owners with road management
6. To validate an existing committee and/or structure an industry committee that can assist owners
7. Identify the limitations of committee
8. Validate the effectiveness of a prime contractor function without complete control. In this sense control means the right to limit access
9. Demonstrate acceptable coordination on roads with various industries and unrelated owners and employers
10. Provide structure to road management considering the anomalies of public use and unrelated industries
11. Identify ways and means of various players with different mandates to work together for the common good
12. Validate due diligence for all parties
13. Show status and importance of employers applying their safety programs’ fundamentals to their use of the roads
14. Key points of regulatory diligence for WorkSafeBC and field officers
Preamble

The resource road demonstration project focuses on safe management of resource roads by using an owner’s road management committee in the Prince George Forest District and another in the Lower Peace District, south of Fort St. John. These committees essentially fulfill many of the owner’s duties as required by the WCAAct. In carrying out the project, it is accepted that the committee (as an entity) does not assume the responsibilities of the owners involved but does, through its operation, offer an option where responsibilities are shared and fulfilled. All individual owners shall remain accountable for ensuring their responsibilities under the WCAAct, are carried out in a diligent manner.

A major portion of the project focuses on field implementation of standards set by owners or the committees.

Field officers will:
- Evaluate the field implementation.
- Contribute in several ways while working within their mandate to collect information on road management and use
- Carry out inspections, make observations, review documentation and report their collected findings, through their Regional Manager, with a copy to the project leader.

The project itself has several stages.

Stage 1  The initial stage and activities of collecting information will be done in a scheduled manner between November 1st and December 15th, 2008. Much of this information will form the basis of an initial status report that identifies gaps between what safe management systems are in place and those required by the Act.

One of the challenges in road management will be identifying and putting in place effective and manageable systems that will support coordination and compliance on complex road systems with unrelated owners and employers.

Stage 2  From January 2009 to through breakup, committees and owners will have the opportunity to put in place systems to fill the identified gaps.

The project will identify and articulate a safe road management model that uses owner committees (Safe Road Management Groups), and perhaps road user groups to attain diligence in relation to owner responsibilities in the WCAAct.

Stage 3  In April 2009, the systems in place will be revisited and the project will be evaluated. A final report with recommendations will then be completed.
Field Officer Directions

Officers are requested to carry out their duties within the time frames of the calendar work plan (copy attached).

During the field portion of the project, officers may identify issues or circumstances that relate to compliance with the WCAct or the Occupational Health and Safety Regulation. It is not the intention of the field portion of this project to identify and single out, in the final report of the project, non-compliance of individual owners particularly in circumstances that have been previously identified by WorkSafeBC. During this audit process, all issues should be addressed but discretion may be exercised in how issues are identified to owners. As always imminent hazards must be addressed through an inspection report and appropriate order(s). Less critical issues may be handled through meetings and feedback to owners but it should be clear that compliance is expected and follow up will take place.

A list of all issues identified during inspections and field related visits are to be submitted.

Officer Activities

**Essential Information Collection:** Project checklists are provided for recording essential information

1. **Inspect each road system for hazards and expected communication systems (such as signage and radio protocol, etc.).** This inspection should result in feedback being given to the permit holder and a copy of findings submitted.
2. **Observe road usage.** Part of this may be done in conjunction with a road monitor. If a monitor is to be used, the logistics will be handled by the project leader previous to any commitment made to the monitor or work being done with the monitor.
3. **Schedule and carry out truck inspections.** Since this is an audit process, we are looking for cooperation. These inspections should be carried out without other agency assistance. Company scales or loading and unloading areas may be used and inspection reports should be issued. Assistance of other officers to expedite the process should be considered. Twenty (20) truck inspections would be considered a minimum sample for each road system.
4. **Collect data and information through surveys** from drivers and users. Surveys should be carried out at the same time as truck inspections. Officers should consider assistance in collecting survey information. Fifteen (15) surveys per road system should be targeted.
5. **Contact known service providers.** Examples include Finning, Kal Tire, etc. The contact is to assess their level of knowledge awareness and level of preparedness to safely operate on resource roads. Contact up to three (3) service providers.
6. **Information from Contractors.** Intended for contractors whose workers use the road for hauling or travel. The questions are focused on information and processes that should come from an owner, prime contractor and/or the RSMG. The questions by design fall short of evaluating the contractor’s implementation of his complete safety program with respect to his workers. Contact one (1) contractor per road system.
7. **Additional Observations:** These would be observations of coordination and compliance that are referenced in the checklists. Any concerns here should be dealt with appropriately with the parties and a subjective note submitted to the project leader.
8. **Participate in collection of public input as/when requested**
Appropriate feedback should be given to licensees. Appropriate feedback would include items such as inspection reports, contact records, memos, or verbal communication.

Note: the project leader will review Documentation required by the road owner and permit holder. For reference only, a checklist has been enclosed in the field binder.

A summary of information collected should be submitted to project leader.

The following checklists and surveys are used for data collection.

They are designed to receive input from parties who manage and use resource roads, and from those affected by resource road use.
Road Owners’ Checklist

Date: ______________________  Road Name: ______________________________
Region: _______________________

Instructions: This is for Road Owners who would be the default prime contractor.

The questions are focused on information and processes that the PC would have in place. They are for the purposes of determining a baseline of compliance for the road owner and/or identifying the procedures and processes a RSMG would need to have in place to satisfy 119 and 118 of the Act.

The questions cover basic elements and the owner or RSMG may have more effective systems in place.

In circumstances where there is not a compliant PC function in place, the questions should be asked of the Road Permit Holder.

It is understood that the road permit holder is not responsible for compliance and coordination but in many cases his efforts support these requirements. In any event, this document will serve to provide a gap analysis between what is in place and what should be in place.

If you have questions about the checklist, contact Bob Schultz at 250-307-1612.

Road Management and Managing Road Use

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Are the limitations as dictated by road design, construction and maintenance identified and communicated?</td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td>1. Are the limitations as dictated by road design, construction and maintenance identified and communicated?</td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td>2. Is the level of planned maintenance identified to the users?</td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td>2. Is the level of planned maintenance identified to the users?</td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td>3. Are known hazards identified and communicated to all users?</td>
<td>Comments:</td>
</tr>
<tr>
<td></td>
<td>3. Are known hazards identified and communicated to all users?</td>
<td>Comments:</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>Question</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>----------</td>
</tr>
</tbody>
</table>
|   |   | 4. Are road users identified?  
   Note: Includes trucking contractors, others using the road for personal or crew transportation, and other owners using the road system.  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  
|   |   | 5. Are there up-to-date signage, bulletin boards, and/or hazard alerts that provide all users with information and knowledge?  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  

**Coordination and Compliance**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
</table>
|   |   | 6. Is the owner’s representative who is responsible for road coordination and issues identified?  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  
|   |   | 7. Is there special consideration for new and young workers orientations and supervision?  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  
|   |   | 8. Does the owner have a system for coordination of road use by all users?  
   Note: Includes identification of users, traffic volumes and type of use with respect to proportioning and coordinating safe use.  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  
|   |   | 9. Are the procedures developed by the RSMG communicated to all users?  
   **Comments:** ..........................................................  
   ..........................................................  
   ..........................................................  

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>10. Is there a process for road-specific contractor orientation?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note: Includes Rules of the Road and radio protocols.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Are planned inspections of the road carried out?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Is there a formal hazard, incident or issue-reporting system?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. Has the RSMG reviewed recent incident investigations or reported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hazards?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. Are there meeting minutes or other evidence that hauling contractors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or other users have discussed safe road use in start-up meetings?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15. Has each contractor identified a person responsible for that</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contractor’s safe road use?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Monitoring/Supervision

16. Are the owner’s expectations of safe road use identified in contractor orientations or other communication?
   **Comments:**
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

17. Is there a monitoring system in place and are records kept?
   **Comments:**
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

18. Is there a follow-up to issues identified during monitoring or otherwise reported to the owner?
   **Comments:**
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Owners’ Perspective on Road Use Issues

1. What are the major health and safety issues with resource **roads**?
   __________________________________________________________

2. What are the major health and safety issues with **trucks and their loads** on resource roads?
   __________________________________________________________

3. What are the major health and safety issues with **truck drivers** on resource roads?
   __________________________________________________________

4. What improvements could/should be made on resource road safety?
   __________________________________________________________

Additional Comments, Recommendations, or Issues

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
Officer Road Inspection Checklist

Date: __________________________  Road Name: ________________________________

**Instructions:** Please complete the form to provide the Demonstration Project with an objective measurement on resource road management. Forward your completed inspection checklist to Dave LaChance by November 28th, 2008. If you have questions about the checklist contact Dave at 604-214-6983.

<table>
<thead>
<tr>
<th>Road Management Issue</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource Road Signage</strong></td>
<td></td>
</tr>
<tr>
<td>Readability, location, adequate instruction for users. Potential issues advertising signs or other objects obscuring traffic control signs</td>
<td></td>
</tr>
<tr>
<td>Roadside/Hazards</td>
<td></td>
</tr>
<tr>
<td>Hazard trees, traffic flow, ditch lines, sharp corners, dead ends, etc.</td>
<td></td>
</tr>
<tr>
<td>Wildlife crossings</td>
<td></td>
</tr>
<tr>
<td>Villages</td>
<td></td>
</tr>
<tr>
<td>Ranches</td>
<td></td>
</tr>
<tr>
<td>Traffic control</td>
<td></td>
</tr>
<tr>
<td>Road maintenance activities</td>
<td></td>
</tr>
<tr>
<td>Road speeds</td>
<td></td>
</tr>
<tr>
<td>Industry standards used</td>
<td></td>
</tr>
<tr>
<td>Intersections</td>
<td></td>
</tr>
<tr>
<td>Clearly delineated</td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td></td>
</tr>
<tr>
<td>Weight restriction, etc.</td>
<td></td>
</tr>
<tr>
<td>Instructions</td>
<td></td>
</tr>
<tr>
<td>Who to contact, what radio freq, who to report to, where to get orientated, etc.</td>
<td></td>
</tr>
<tr>
<td>Non-hauling vehicle procedures</td>
<td></td>
</tr>
</tbody>
</table>

| **Radio Procedures**                                       |       |
| Call procedures being used on road sections                |       |
| Empty call                                                |       |
| Loaded call                                               |       |
| Both call                                                 |       |
| No radio                                                  |       |
| Identifying non-radio users                                |       |

| **Roads, Roadsides, and Hazards**                          |       |
| Hazard trees, traffic flow, ditch lines, sharp corners, dead ends, vehicle can safely access pullout when crossing |       |
| Pullout hazards                                            |       |
| Size of pullouts?                                          |       |
| Adequate for loads & vehicles.                             |       |
| Location in relation to traffic volumes                    |       |
| Chain up location                                         |       |
### Road Management Issue

#### Road and Road Surfaces

- Construction of road
  - Slope to corners
  - Crowning of road
  - Dust control or suppression
  - Brushing out
  - Avalanche hazards identified
  - Danger trees
  - Terrain Stability Structures or Hazards Identified
  - > 18% sustained grades, risk assessment and procedures
- Road surface quality
  - Pot holes
  - Snow ploughed
  - Water bars
  - Road width in relation to size of vehicles on road

#### Crossing Structures

- Bridge load ratings reviewed
- Culverts inspected by and when
- Construction of approach
  - Straight line as possible
  - Elevated at connection
  - Bull rails
  - Deck condition

### Other Comments:

__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________
__________________________

Thank you for your valued input.
**Log Truck Inspection Form**

Date: ______________________________ Location: ______________________________

Firm: ______________________________ Licensee: ______________________________

Driver: ______________________________ Truck Number: ______________________________

License Number: ______________________________ Truck Make: ______________________________ Configuration: ______________________________

☐ Loaded ☐ Empty

**Instructions:** Please complete the form to provide the Demonstration Project with your truck inspection results. Forward your completed inspection checklist to Dave LaChance by December 31\(^{st}\), 2008. If you have questions about the checklist contact Dave at 604-214-6983.

Note: **C** = Compliant  **NC** = Non Compliant

### Truck Inspection Compliance Requirements

<table>
<thead>
<tr>
<th>C</th>
<th>NC</th>
<th>Regulation Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Bulkhead</td>
<td>□</td>
<td>Regulation 26.65</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>At least 15cm (6”) higher and at least as wide as the cab (MVA – 6” wider)</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Self loaders – not less than cab height</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Capable of withstanding horizontal forward load equal to 40% of cargo weight</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Constructed to prohibit penetration</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Attachment Systems</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Softeners and stiffeners in place</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Attached by 6-3/4” grade 8 bolts each side, or 3-1” u-bolts w/ bottom plates each side, or 2-1” grade 8 u-bolts each side (driver must verify), or 4-3/4” grade 8 bolts &amp; 1-1” u-bolt at back each side</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Permanently marked or rated (name &amp; address of manufacturer, model, or serial #, rated capacity of cargo weight)</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>Documentation in cab (same as above and signed by manufacturer or engineer)</td>
</tr>
</tbody>
</table>

| ☐ Cab Steps | □ | Regulation 26.73 |
|☐ | □ | Slip resistant surfaces |

| ☐ Cab occupants | □ | Regulation 26.75, 17.7 |
|☐ | □ | No unauthorized riders |
|☐ | □ | Animals not carried w/o facilities |

| ☐ Cab Housekeeping | □ | Regulation 17.5(1), and 17.6(b) |
|☐ | □ | Tools and supplies secured |
|☐ | □ | Cab cleanliness |
|☐ | □ | No hazardous materials in cab – must be carried externally, isolated, vented, secure |

**Note:** This checklist is a guide only. The user should consult the OHS Act and Regulations for comprehensive information related to log truck inspection requirements.
<table>
<thead>
<tr>
<th>C</th>
<th>NC</th>
<th>Regulation Topic</th>
<th>Details</th>
</tr>
</thead>
</table>
|   |    | **Windows/Mirrors**  
Regulation 16.12 | □ In place and maintained  
□ Provides clear vision to operator |
|   |    | **Back up alarm**  
Regulation 16.8 | □ Installed and operational |
|   |    | **First Aid Kit**  
Regulation 3.16(1) | □ Available, complete, clean |
|   |    | **Guarding (Self-Loaders)**  
Regulation 26.70(1)(2) | □ Overhead protective guard (if practicable)  
□ Heel-bar on operator side equipped w/ deflector shield – not used for heeling |
|   |    | **Lights**  
Regulation 16.9 | □ Headlights – High and low beam  
□ Taillights – operational, visible  
□ Backing light in place & operational |
|   |    | **Turn Signals** | □ Operational and visible (clean) |
|   |    | **Tires & Wheels** | □ Tires: condition, cuts, tread depth, rocks  
□ Lug nuts: Present and secure |
|   |    | **Horn** | □ Operational  
□ Electric and air |
|   |    | **Low Air warning** | □ Device operational  
□ Wigwag or buzzer |
|   |    | **Seat & seatbelts** | □ Good condition  
□ Belts available and in use |
|   |    | **Brakes** | □ No air leaks  
□ Slack adjusters OK – documented  
□ Park break -- maxi-type |
|   |    | **Wet Tank** | □ Serviced |
|   |    | **Trailer** | |
|   |    | **Bunks & Stakes**  
Regulation 26.66 | □ Bunks  
■ Freely rotate on pivots (if applicable)  
■ Bunk/stake angle < 90 degrees (loaded)  
□ Stakes  
■ Releasable from opposite bunk end  
■ Keeper pins secured  
■ Stakes > 1.2m (4’) are designed to return to vertical position  
■ Extensions secured  
■ Cable cannot be swaged wire road  
□ Inspected daily and not used if excessive wear is present |
|   |    | **Lift Molley**  
Regulation 15.23, 15.25 | □ 4 wire rope clips in place  
□ Good condition (rejection criteria) |
|   |    | **Trailer secure** | □ Placed in bunk or on rider bars  
□ Safety chain/cable in place |
|   |    | **Brakes** | □ No air leaks  
□ Slack adjusters OK – documented |
<table>
<thead>
<tr>
<th>C</th>
<th>NC</th>
<th>Regulation Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reach Regulation 26.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good working condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No cracks or fractures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bar stop in place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tunnel clamp tight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety chains/cables in use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Handles in place for tractor securing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Compensator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bushing intact and acceptable wear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slides easily – not bent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pinned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pintle Hitch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good working condition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No cracks or fractures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lights</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tail lights operational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fog light in place &amp; operational (loaded)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certification availability Regulation 4.8(c), 4.8(2a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No manufacturer spec available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modification has occurred</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wear, corrosion, damage, fatigue present</td>
</tr>
</tbody>
</table>

Other Comments:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
This page has been intentionally left blank.
### Field Work Contractor Checklist

**Date:** ___________________

**Road Name:** __________________________________________________________________________

**Region:** _____________________________________________________________________________

**Instructions:** Intended for contractors whose workers use the road for hauling and/or travel. The questions are focused on information and processes that should come from an owner, prime contractor and/or the RSMG. The questions touch on employer’s responsibilities but by design fall short of evaluating the contractor’s implementation of his safety program with respect to his workers.

If you have questions about this document, contact Bob Schultz at 250-307-1612.

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>General</strong></td>
</tr>
</tbody>
</table>
|   |   | 1. Is the contractor aware of the Prince George Safe Road Management Group (RSMG) and its function?  
**Comments:** ____________________________________________________________ |
|   |   | 2. Is the contractor represented on a Road User Group (RUG)?  
**Note:** This may also be a maintenance group that discusses safe use.  
**Comments:** ____________________________________________________________ |
|   |   | 3. Does the contractor have and use the five (5) procedures produced by the Prince George RSMG?  
**Comments:** ____________________________________________________________ |
|   |   | 4. Has the contractor received an orientation specific to the roads they use?  
**Note:** Several questions below may be covered off in an orientation.  
**Comments:** ____________________________________________________________ |
|   |   | 5. Is the contractor aware of the rules of the road?  
**Note:** Includes radio requirements and usage.  
**Comments:** ____________________________________________________________ |

|   |   | **Planning and Information** |
|   |   | 6. Has the contractor been made aware of the road limitations?  
**Note:** Includes limitations by road design, construction and maintenance.  
**Comments:** ____________________________________________________________ |
<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
</table>
|   |   | 7. Has the contractor been made aware of the maintenance standards and any procedures that may affect his workers’ safety?  
**Comments:** |
|   |   | 8. Have known hazards been identified to the contractor?  
**Comments:** |
|   |   | 9. Is there a system to keep contractors and users up-to-date on current hazards and issues that may affect use?  
**Comments:** |
|   |   | 10. Does the contractor carry out a risk assessment of the roads prior to assigning workers and as conditions change?  
**Comments:** |
|   |   | 11. Does he adjust his workers’ road use based on the risk assessments?  
**Comments:** |
|   |   | 12. Is the contractor aware of the hazard reporting system and emergency response procedures specific to the road?  
**Comments:** |

**Coordination and Compliance**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
</table>
|   |   | 13. Has the prime contractor been identified to the contractor?  
**Comments:** |
|   |   | 14. Is the contractor aware of the coordination of use on the road system?  
*Note: Includes communication from the responsible party on others’ use of the road that may cause safety issues.*  
**Comments:** |
15. Is there communication between the PC and the contractor about road use that would support safe coordination?
   
   Note: Includes hazard updates, scheduling or proportioning of use and contractor meetings over maintenance and general use issues.

   Comments: ____________________________________________________________

16. Does the contractor have a portion of his safety program specific to safe road use?
   
   Comments: ____________________________________________________________

17. Does the contractor conduct start-up meetings that address road use after a long lay-off or when starting on a new road system?
   
   Comments: ____________________________________________________________

**Supervision**

18. Has the contractor identified a person responsible for supervision of his workers with respect to their road use?
   
   Comments: ____________________________________________________________

19. Is the contractor aware of the road monitoring system?
   
   Comments: ____________________________________________________________

20. Does the contractor support the monitoring system by following-up on issues reported to him?
   
   Comments: ____________________________________________________________

**Contractors’ Perspective on Road Use Issues**

21. What are the major health and safety issues with resource roads?

   ____________________________________________________________

22. What are the major health and safety issues with trucks and their loads on resource roads?

   ____________________________________________________________
23. What are the major health and safety issues with truck drivers on resource roads?

24. What improvements could/should be made on resource road safety?

Additional Comments, Recommendations, or Issues

Thank you for your valued input.
Service Providers’ Checklist

Date: ______________________  Road Name: ______________________________________
Region: ______________________________________________________________________

Instructions: The following is to be used for occasional users, such as service providers whose
workers use the road for work and/or travel.

The questions are focused on information and processes that should come from an owner, prime
contractor, or the PG RSMG in addition to the contractor that has required the service provider to
access the road.

The questions ask if the service provider (as an employer) is provided with sufficient information,
as required to help facilitate their workers operating safely without compromising the safety of any
other road users.

In general, this is a small group that uses the road system periodically and would not likely be
considered as additional volume except in circumstances where they would be disruptive (such
circumstances may be moving oversized equipment or large numbers of equipment).

If you have questions about the checklist, contact Bob Schultz at 250-307-1612

<table>
<thead>
<tr>
<th>Road Management and Managing Road Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Y</strong></td>
</tr>
<tr>
<td><strong>General</strong></td>
</tr>
</tbody>
</table>

Several questions below may be covered off in an orientation.

- [ ] [ ] 5. Has the service provider received an orientation specific to the roads
  they use?  
  **Comments:** ____________________________________________________________

- [ ] [ ] 6. Does the service provider have and use the five (5) procedures
  produced by the Prince George RSMG?  
  **Comments:** ____________________________________________________________

- [ ] [ ] 7. Is the service provider aware of the rules of the road?  
  *Note: Includes radio requirements and usage.*  
  **Comments:** ____________________________________________________________

- [ ] [ ] 8. Does the service provider have a section in their program specific
to resource road use?  
  **Comments:** ____________________________________________________________
<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
</table>
|   |   | 9. Does the service provider have provision for planning before assigning workers to travel on resource roads?  
Note: Planning may vary with each circumstance and a checklist of points to be covered would be helpful. |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 10. Has the service provider been made aware of the road limitations? This would include limitations by road design, construction and maintenance. |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 11. Has the provider been made aware of maintenance standards and any procedures that may affect his workers’ safety? |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 12. Have known hazards been identified to the provider?                 |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 13. Does the provider carry out a risk assessment of the roads to be traveled and circumstances prior to assigning workers? |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 14. Does he adjust his workers road use based on the risk assessments? |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | 15. Is the service provider aware of the hazard reporting system and emergency response procedures specific to the road? |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |

**Coordination and Compliance**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>16. Has the prime contractor been identified to the service provider?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. Does the service provider get current road information from the PC or the contractor that hired them before proceeding on the road system?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>Question</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
|   |   | **18.** Are the provider’s vehicles properly outfitted to travel on resource roads?  
   |   | *Note: Includes proper radios and frequencies.*                       |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | **19.** Is there provision made for vehicles traveling without radios?  |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | **20.** Does the contractor require vehicle logs and checklists?        |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | **21.** Is there a hazard or incident reporting system that includes communication with the prime contractor?  |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |
|   |   | **22.** Is resource road safety considered as a topic at the service providers’ safety meetings?  |
|   |   | **Comments:**                                                           |
|   |   |                                                                         |

**Supervision**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>23.</strong> Has the service provider identified a person responsible for supervision of his workers with respect to their road use?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>24.</strong> Is the contractor aware of the road monitoring system?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>25.</strong> Does the contractor support the monitoring system by following up on issues reported to him?</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Comments:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Contractors’ Perspective on Road Use Issues**

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>26.</strong> What are the major health and safety issues with resource roads?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
27. What are the major health and safety issues with trucks and their loads on resource roads?

28. What are the major health and safety issues with drivers on resource roads?

29. What improvements could/should be made on resource road safety?

**Additional Comments, Recommendations, or Issues**

Thank you for your valued input.
Driver/Trucker Survey

We need your help to improve safety on resource roads

Driving on resource roads is becoming increasingly dangerous as road use increases from different industry and the recreational public. By completing and returning this survey, please give us your respected advice on how to reduce vehicle collisions, injuries, and death on resource roads.

DRIVER FACTORS: Choose three driver factors that you think have the greatest impact for driving safely on resource roads. Rank your choices, with “1” as the most important.

- Shift work
- Inadequate qualifications & training
- Substance abuse
- Aggressive driving
- Lack of professional attitude
- Lack of experience
- Lack of supervision
- Cycle times
- Fatigue
- Operator lifestyle and health
- Inadequate radio protocols
- Other (describe)

Comments:

TRUCK AND LOAD FACTORS: Choose three truck-and-load factors that you think have the greatest impact for driving safely on resource roads. Rank your choices, with “1” as the most important.

- Truck tractor and trailer design
- Truck maintenance
- Load weight
- Load configuration
- Improperly equipped (no chains, etc)
- Other (describe)

Comments:

ROAD FACTORS: Choose three road factors that you think have the greatest impact for driving safely on resource roads. Rank your choices, with “1” as the most important.

- Inadequate passing space
- Inadequate road maintenance
- Speed
- Road signage/markings
- Lack of rest area facilities/pullouts
- Road design
- Road composition
- Other (describe)

Comments:

GENERAL FACTORS: Choose three general factors that you think have the greatest impact on driving safely on resource roads. Rank your choices, with “1” as the most important.

- Commitment to safety by employer
- Cycle times
- Lack of safety programs/systems
- Time of year
- Supervision
- Direction from owner or employer
- Weather (driving conditions)
- Other (describe)

Comments:

COMMENTS: Use this space to comment on anything in this survey, or to give us ideas that you think we should explore.

ABOUT YOU: Which industry do you belong to?

- Forestry and Silviculture
- Oil and Gas
- Mining
- Other (please specify)

Are you a

- Driver
- Owner
- Contractor
- Other:

Commercial driving experience: __________ years

Type of vehicle most commonly used:

OPTIONAL: If you’d like more information, please leave your information below.

Address: __________________________________________ E-mail: __________________________
Phone: __________________________________________

Page 29 of 36
This page has been intentionally left blank.
WorkSafeBC needs your help to make resource roads safer

Along with industry partners, WorkSafeBC is currently conducting a demonstration project in your area to increase safety along resource roads and would appreciate your input and ideas.

"Resource roads" is an umbrella term for a wide variety of industrial roads that are not considered highways or municipal roads.

In the past, resource roads were built to provide access to remote locations. Today, different industries with different truck configurations and the general public are sharing the same road.

You may know resource roads by another name, such as “logging roads,” “forest service roads,” “industrial roads,” or “petroleum development roads.”

Many resource roads have a gravel surface and are suitable for one or two lane traffic.

Please take a few moments to fill-out this survey and return it using the enclosed pre-paid envelope by xxx.

Do you travel on resource roads?

☐ Yes  ☐ No

If you answered “Yes,” please continue with these questions below.

**Question 1:** Why do you travel on resource roads?

(Check all that apply)

☐ Work  ☐ Recreation

☐ Access to home or community  ☐ Other (please specify)

**Question 2:** What is your primary mode of transportation on resource roads?

(Select one)

☐ Car  ☐ Pick-up truck

☐ Haul truck (e.g. logging truck)  ☐ Service vehicle (e.g. xxx)

☐ Bus or similar vehicle  ☐ ATV

☐ Other (please specify)

**Question 3:** How often do you travel on resource roads?

(Select one)

☐ Every day  ☐ Weekly

☐ Every two weeks  ☐ Monthly

☐ Every three months  ☐ Every six months

☐ Once a year  ☐ Other (please specify)
Question 4: What are the top three safety issues on resource roads?
(Select three)

☐ Number of trucks on the road at the same time  ☐ Speeding  ☐ Lack of radio use/protocol
☐ Lack of up-to-date signage about road hazards and conditions  ☐ Roads too narrow to accommodate vehicles  ☐ Other (please specify)

Question 5: How do you get information about road conditions, road hazards, rules of the road, etc? (Check all that apply)

☐ Signs found on the road  ☐ Printed material  ☐ Public meetings  ☐ E-mail alerts
☐ Other (please specify)

Question 6: Do you know how to report concerns or issues about the particular resource road that you use?

☐ Yes  ☐ No

If so, to whom?  (Please specify)
If so, how?  (Please specify)

Question 7: Do you travel on radio-assisted resource roads?

☐ Yes  ☐ No

If so, do you have a radio and use the appropriate road frequencies?

☐ Yes  ☐ No, I do not have a radio  ☐ No, I have a radio but I do not know the frequency

Question 8: What is the best way to communicate information on resource roads?

Other comments:

Thank you for your time!
Please return this survey using the enclosed pre-paid envelope by xxx.
## Officer Survey

### Road Management Issue

#### Officer Personal Use of Resource Roads

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Have you received instruction and/or training for driving on resource roads?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. When driving on resource roads are you required to give a specific destination to your Man Check System?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Is your vehicle equipped for safe travel on resource roads?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Do you have access to safety supplies and equipment that would be required for travel on the resource roads?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Does your radio have required frequencies for the resource roads you travel?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. Have you received an orientation to the resource roads you travel from the permit holder or owner of the road?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Have you received written information or orientation for safe travel specific to the roads? This includes rules of the road, radio protocols, identified hazards and other procedures specific to use of the roads.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Do you carry out a risk assessment for your personal travel on the roads as and when conditions change?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Are you aware of the hazard reporting system and emergency response procedures specific to the road?</td>
<td></td>
</tr>
</tbody>
</table>

### Officer’s Perspective on Road Use Issues

10. What are the major health and safety issues with resource roads?
11. What are the major health and safety issues with *trucks and their loads* on resource roads?

12. What are the major health and safety issues with *truck drivers* on resource roads?

13. What improvements could/should be made on resource road safety?

### Road Safety Management Programs

#### Coordination Issues

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>14. Does more than one employer utilize the roads?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15. Is there more than one owner or licensee operating on the road system?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16. Is the owner who would be considered the default prime contractor identified? Please answer this for both the FSRs and permit roads.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. Does the owner responsible for the prime contractor have and provide information required for coordination and compliance, including: users, intended use and any special needs?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18. Is use coordinated? If yes, <strong>explain</strong> what is the process to reasonably assure compliance of users?</td>
</tr>
</tbody>
</table>

**Comments:**

#### Planning Issues

|   |   | 19. Has the road limitations put on by design, construction and maintenance being identified and communicated to users |
|   |   | 20. Is road use planning by owners evident(26.2.1)? This would include risk assessments and matching driver, truck and trailer configurations to the specific road. |
|   |   | 21. Are the maintenance systems in place adequate for the use, type and volume of traffic? |

#### Communication Issues

*A road management group would typically be made up of owners who are sharing responsibilities of 119 and 118 of the Act. A RUG is more at the operational level and implementation of processes and procedures put in place by an owner or owners group.*

|   |   | 22. Is there a road management group in place? |
|   |   | 23. Is there a road user group (RUG)? |
|   |   | 24. Are hazards identified and communicated to users? |

### Road Safety Management Programs, continued:

#### Instruction and Training Issues

|   |   | 25. Is information and procedures communicated to users including unrelated employers and the public? **If, yes, please explain.** |

---

Page 34 of 36
26. Is there a monitoring system in place? **If, yes, please explain.**

27. Is there a system for incident or hazard reporting? **If, yes, please explain.**

28. Is there a system for the components of an ERP that supplements the contractors ERP? **If, yes, please explain.**

**Any Additional Comments, Recommendations or Issues?**
Safety on Resource Roads is a very complex issue. Your input to find combinations of solutions is vital. Please provide any suggestions or other comments that should be considered or may provide solutions to Safe Road Management and Use

Thank you for your valued input.
Appendix 4:
Resource Road Safety Management Tool Kit
Resource Road Safety Tool Kit

Introduction

An organized approach to Health and Safety and regulatory compliance on resource roads has been an ongoing challenge for all persons who must travel on resource roads for either their work or pleasure.

Currently resource roads have a range of road users, the majority from industry that requires safe and well maintained corridors that allow access and egress to remote locations, facilitating the transport of resource products, heavy equipment and workers. Simultaneous use by various industries, their associated owners, contractors and service providers increase the hazards and risks to all users of the road. Along with industry needs, the roads are used for a variety of purposes including travel by the public to access communities, parks, recreation areas, sports and tourism. The vast array of users and the general absence of strong safety coordination, results in heightened hazards and a high risk of serious injury and death. Road users and related stakeholders need guidance and assurance that a solid operational process or system is in place to effectively coordinate activities and increasing workplace and public safety when travelling resource roads.

This Resource Roads Safety Management Tool Kit is intended to provide guidance for the establishment of a systematic administrative approach in coordinating health and safety for all road users in a predetermined area or district.

Resource Road Demonstration Project Concept

The concept of the project was to demonstrate a field implementation of a committee structure that would provide a system to support diligence of 118 of the Workers Compensation Act on resource road systems. The Act does not recognize committees and responsibility for diligence and therefore diligence itself remains with each individual party including owners, employers and workers. However the demonstrated committee structure will provide a framework for diligence that when supported by each contributing party will result in diligence for the parties.

The project and the committees are to provide information and the framework for coordination and processes for compliance by individuals in circumstances where the activities of more than one employer adjoin or overlap. Committees start from the point that
owners systems are in place to provide necessary information on the road and anticipated usage, maintenance systems are in place and known hazards have been communicated.

A committee’s contribution and success is limited to the information and support it is provided by all parties. The foundation of the committee is in the participation of the affected Ministries, road owner and key licenses, producers or other owners. Without this support and participation the committee cannot provide the required framework for diligence and the responsibility for 118 of the Act will default to the owner with the most control or influence.

Resource Road Safety Management Process

1. Road Safety Management Committee
2. Terms of Reference
3. Procedures
4. Road User Safety Plan

Administration

Operation

Information Sharing Communication

Road User
1. Road Safety Management Committee, (Owner Committee):

It is at the RSMC where a representative group of owners (including the Road Owner) establish safe work procedures and direction. These consistent usage standards are established, endorsed by all owners and mandated for the contractors and workers who are employed by the specific owners. This is an ongoing group of owners with influence and control over their related contractors, who share information on road safety. If the committee is organized and supported by all owners, the committee can be a means to provide some legislative diligence and improved road safety. The committee provides diligence for WC Act 118 through sharing of information and providing a means of effective communication and at the same time, it also supports some owner’s duties as described in WC Act 119. The key principle is that the committee can operate only with the support of the owners and within the systems and information provided by the owners.

The most effective manner to ensure success of a committee is by all major owners on a road system agreeing through a Memorandum of Understanding (MOU) on their responsibilities and contributions to a Road Safety Management Committee and system for administration. This simple working document will facilitate each owner understanding their contributions to the committee and their related contractors, and implementation of the policies and procedures put in place by the committee.
2. Terms of Reference for Road Safety Management Committees - The following is offered as guidance for development of committees’ terms of reference.

Introduction

The concept of utilizing RSMC’s for road administration is driven out of a need for systems to effect coordination and compliance in complex circumstances. Owners enhance effectiveness of road safety systems through sharing of responsibilities. All owners have significant contributions to make.

Purpose

The primary purpose of the committee is to facilitate road safety and provide owners diligence with respect to the WC Act.

RSMC’s Control

The RSMC as a collective group is considered to have control over road use of contractors and workers that are directly related to the representative owners or are carrying out any work for the owners’ purposes. BCTS sale owners are related BCTS and other licensee holders or road use permit holders are related to the Ministry that issued the license or permit.

This group as a collective will exert influence over other users such as the public.

The RSMC will operate as a committee.

Committee Membership

The Road Safety Management Committee will operate as a committee. The group will be structured from a representative management level with authority from their upper management to commit to fundamental decisions that positively affect road use safety. The committee will be an owners group. Key owners will be the Road Owner, Ministries that is responsible to “let” tenures which require road access, BCTS, licensees and producers as well as the Road Permit Holder. Other parties that have vested interest in safe use of the resource roads may attend as members or may be utilized as required in a consultative role. WorkSafe would one such party. The participation of the key owners is essential as each owner has unique knowledge and/or operational contributions that as a whole are critical to successful safe road management.
Function

The primary function of the committee is to provide information required for all persons to operate safely on the roads as well as provide systems for coordination of use and compliance by all users. Systems will be designed to facilitate compliance for all persons directly related to an owner represented on the committee as well as to provide information and influence safe use for persons not directly related.

Committee Responsibility:

The committee should have information and coordination systems in place that lead to consistent safe road use and compliance by users. The individual committee members have control over and are responsible to apply any SRUP to the contractors and workers that are directly related to them. However the committee itself does not assume any responsibility as specified by the WC Act, rather the responsibilities outlined in the Act remain with the individual parties defined in the legislation.

Support Groups:

There may be several road user groups (RUGS) operating in the geographical areas. These groups may deal with the implementation of operational procedures and processes developed by the committee as well as the maintenance sharing costs.

The RSMC will deal with broader issues faced by road users and develop policies, procedures and systems that lead to a safe road use plan.

The RSMC will determine and articulate their goals and objectives, set terms of reference to meet those goals and objectives and monitor operational implementation and effectiveness.

Governance

The committee should structure itself with a chair, vice-chair and members at large. The committee is considered a working committee so action items will be assigned appropriately to individual committee members. Accurate minutes should be kept likely through a non-member clerical person.

Meetings should have an agenda, minutes should be kept and circulated and action items should be tracked.

The Road Owner and a significant Road Permit Holder should consider taking the chair and vice chair.
Operating Terms of Reference

The following is a sample framework with words and phrases that may be adopted, modified or replaced with concepts that are more suitable to the individual committee.

Scope

1. The RSMC will focus on resource roads and resource road use by industrial users as well as the public.

2. Associated public road usage will be dealt with within the committee’s influence and control.

Goals and Objectives

1. Reduce the risk of road incidents and accidents involving workers and vehicles traveling on resource roads in the …

2. Develop and implement the principles of a SRUP.

3. Work with all users to put in place effective and “fair” systems for coordination and compliance. Develop and implement a dispute resolution system to use as required.

4. Develop standardized resource road procedures.

5. Work with existing RUGs to ensure road upgrades are prioritized and communication systems are in place that supports safe road use.

6. Provide clarification and “local” application of existing legislation.

7. Provide leadership and guidance in planning and developing policy.

8. Consider impacts on all users including the public when making decisions on traffic patterns and flow.

9. Utilize mechanisms to communicate SRUP to the public.

10. Other issues…

Guiding Principles

1. Work within current legislation and regulations.

2. Treat all user parties fairly by considering all factors and by being transparent.
3. Be pro-active through identification of needs and planning and be results focused.

4. Prioritize activities to achieve the most benefit.

5. Avoid duplication with other groups such as RUG’s.

Committee Members (*Consider the following parties*)

- Ministries
- BCTS
- Producers
- Licensees
- Mining firms
- Other tenure holders
- Others

Consultative Members

- WorkSafe
- Industry Associations

Possible Subject Matter Experts (*That can be called upon as required*)

- ICBC
- Consultants
- Road engineers
- Trucking contractors
- Road maintenance contractors
- Road Use Committee members
- Community associations
- Individual users/truckers
Additional supporting committees

- RUGS
- Maintenance Committee (optional)

Business Rules

1. Meeting will be scheduled…

2. If a committee member cannot attend a meeting an alternate will be sent in their place

3. The committee in part will be viewed as a working committee that either creates the procedures and standards for safe use or oversees the creation of the documents. All documents prepared will be vetted through the committee and distributed as necessary by the committee members to their related contractors and workers.

4. All decisions and document distribution will be tracked.

5. Decisions of the committee will be reached through consensus except in cases where legislative compliance is a concern. In such cases the committee will offer non binding input to the workplace party that has the responsibility for compliance.

6. All documents will be reviewed and updated annually.

7. Committee minutes will be kept and distributed to all members and concerned parties via email.

8. A RSMC website will be developed.

Accountability

The committee will review its general and operating terms of reference annually. The review will also include the specifics of the SRUP and any additional procedures and practices put in place during the previous year.

Monitoring processes will also be reviewed to assure effectiveness.
3. Safe Road Use Procedures

Issues, Policies and Procedures

Common issues and the need for policies and procedures will be identified by the committee through knowledge of resource road use, issues, incidents and concerns raised by users or user groups as well as the need to be diligent in satisfying legislative requirements. Some common issues and needs for procedures or processes may include:

General:

- Rules of the road
- Radio protocol
- Signage
- Risk assessment
- Monitoring
- Responsibility document
- ERP including first response
- Hazard reporting
- Inspections
- Communication document-flow chart

Specifics may include:

- Low bedding including oversized equipment
- Rig moves
- Roadside work
- Traffic control
- Roading equipment
- Other

The above considerations are offered as guidance only. Road usage through each identified workplace must be planned with safety of all persons affected by the use considered.
Much of the above will be contained in a SRUP.

Note: The assistance of the committee with overall planning, identifying best practices and procedures, communicating information and monitoring all support the individual licensees/ producers and contractors but does not relieve them of their obligations as owners and employers.

Attached at the end of this Appendix, are examples of procedures used by the Prince George Road Safety Management Committee.
4. Safe Road Use Plan (SRUP) Considerations

SRUP is an operational safety information document (program) developed and administered by those parties responsible for resource road management and use. The SRUP as part of a road safety program is a definite plan of considerations and actions designed to prevent accidents on a designated road system or network. This is a living document focused on end users and it becomes the responsible party’s diligence plan. It must contain sufficient processes, procedures and information for road users to operate safely. Being specific to a road system, the SRUP will form the basis of an information package or safety standard to be given to specific road users such as contractors and service providers. These employers will utilize the pertinent information in planning their safe road use.

Preparing an SRUP

Consider a Policy Statement by the Road Safety Management Committee. The statement should include:

- Management’s commitment (via the RSMC) to protect the safety of workers and users of the road system.
- Objectives of the program
- Statement regarding the Committee’s safety philosophy
- General responsibilities of all parties using the road system
- Statement confirming safety will not be sacrificed for expediency, and
- Policy that unacceptable safety performance of duties will not be tolerated

Attached in Appendices – 5 is an example of the Prince George Road Safety Management Committee: Safe Road Use Procedures and Policies.

Administrative Information

- Road management structure, i.e. Road Safety Management Committee, Prime Contractor
• Operational committees, i.e. Road User Group, Maintenance Committee

• Contact Numbers

• Expectations of users--General statement such as; Users will apply pertinent content of the SRUP and operate in a manner that is safe for them and others, (Specific expectations detailed below).

**Operational Considerations**

• Industrial users needs and potential of public use and its impacts

• Types of anticipated vehicles and equipment

• Volume and volume related concerns

• Process for scheduling use if necessary

• Seasonal impacts and environmental concerns

• Anticipate there will be anomalies that must be addressed

**Initial Information will include:**

• Workplace boundaries or the boundaries of the road systems that the specific SRUP is designed to cover.

• Road limitations within the workplace boundaries.

• Maintenance standards and practices.

• Known hazards on the road systems and adjacent areas.

**Management processes to include:**

• The system for coordination of use and the process for compliance.

• Ongoing information system, (keeping information that will affect use, current).

• Hazard reporting and investigation system

• ERP specific to road systems

• Road inspection process

• Signage standards
Managing the SRUP

Taking the systems to the operational level would be through a Road User Group or other means. The effectiveness any system put in place will still rely on the end users.

Communication

Communication systems from the RSMC through the RUG and to the end users must be planned with a feedback mechanism. Communication venues can include:

- Statement of expectations
- Written policies and procedures
- Road use Agreements
- Rug or other committee meetings
- Bulletins or hazard alerts
- Signage

Expectations of Users

Support all systems in place and participate in the operational committees as appropriate. Manage their workers and associated subcontractors to support safe usage for all persons. Support systems would require:

- Risk assessments based on the information provided and user circumstances
- Planning road usage based on circumstances and needs with consideration to the SRUP, i.e. Contractors ensure their vehicles, and haul trucks; equipment and planned loads are within the limitations of the roads and the SRUP.
- Training/communication and ensuring sufficient information is provided to workers to operate safely.
- Supervision/monitoring of road users is in place at an employer level.
- Drivers/operators are aware of expectations.
Monitoring

Monitoring system to identify users’ issues should be administered at the RSMC level.

Operational Level

Usage should be guided by Policies and Procedures outlined in Section 3 of this document.
5. Road User Group: (User Committee)

These groups that involve unrelated representatives from the various users of the roads, who may have differing needs, meet on a regular basis to discuss safety issues that could impact each other or other companies or workers on a specific part or portion of the road network. The membership of this group adjusts itself based on needs and who is using the specific road at that time. Since some of the same owners are represented on the RSMC this group is proactive rather than reactive and it looks for guidance from the RSMC. Leadership of the group generally comes from the Maintainer of the road. These groups hold ongoing meetings generally at locations where the work is taking place. They meet when needed and when the work is being performed.

The RUG concept can be effective and compliant because it brings unrelated owners, to a common table so road use coordination and compliance systems can be implemented and can fairly and consistently address road users’ needs without compromising workplace safety. The group provides an avenue for the necessary sharing and transfer of information required by all users to operate safely on the road system.

If an owner or owners are not committed and fully supportive of the committee, ability to meet WC Act 118 may not be effective or compliant
6. Communications and Information Sharing

Communication Considerations

The myriad of roads, road users, owners, contractors and perhaps industries using a particular road network can be create many challenging safety situations at any given time or location on any road within the established road network. It is for this reason that the sharing of information through communication is essential. A key undertaking of owners, through the RSMC is to develop appropriate safe road procedures and a SRUP for road use within their area or span of control. This information will only become useful and effective if appropriate methods are used to inform, share and educate all stakeholders or people involved on the road network.

Owners including the road owner, Licensees and Producers have a duty to provide to the Prime Contractor or RSMC, employers and contractors information known to the owner that is necessary to identify and eliminate or control hazards to health and safety of those persons that use the roads. The RSMC is intended to fulfill, through due diligence, the function of a Prime Contractor and therefore the committee must receive and share all pertinent safety information from each owner. Further to this, each owner is obliged to be a sitting member of the committee or represented from an affiliated position.

Owners must have an effective plan that ensures:

• Communication is maintained through appropriate signage that will display radio frequencies, contact information and other pertinent information.

• A system is in place that communicates changes that could affect safety or emergency response situations

• Documentation of road safety issues, road use and compliance system are maintained

Owners must make users aware of potential hazards or hazardous situations such as areas of roads with:

• Radio frequency conflicts

• One way/two way hauling conflicts

• Road construction issues

• Heavy traffic concentration
• A potential for landslides/washouts
• Active logging or blasting occurring adjacent to roads
• Temporary road closures
• Other issues…

As indicated in the graphical depiction of the relationships between the RSMC and the RUG, the RSMC provides the safety administration and system for safety compliance within the established road network.

The RUG is the operational group where safety type meetings of all road users are held to review procedures, bring forward and share information relating to safety on the road. It is an opportunity to discuss safety concerns and seek solutions from both contractors and owners.

Communication must be encouraged and the essentials recorded. Two-way dialogue between the RUG and the RSMC is essential, resulting in an improved safety system and more importantly provides an exceptional opportunity for better coordination of safety processes.
Appendix 5: Prince George Road Safety Management Committee: Safe Road Use Procedures

Note: The procedures contained in this appendix are under continual review and possible change by the Prince George Road Safety Management Committee. Please contact the Prince George Road Safety Committee for a copy of their current procedures.
DRIVING FOREST ROADS
FOREST ROAD PROCEDURE #1
(May 1, 2009 - Prince George Forest Road Management Group)
http://www.for.gov.bc.ca/dpg

These procedures apply to all forest roads in the Prince George Forest District.
Remember, roads are radio assisted not radio controlled. Drive accordingly.

DRIVE DEFENSIVELY – EXPECT THE UNEXPECTED

<table>
<thead>
<tr>
<th>Known Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Excessive Speed</td>
</tr>
<tr>
<td>2. Failure to follow traffic control procedures</td>
</tr>
<tr>
<td>3. Passing other vehicles on narrow roads</td>
</tr>
<tr>
<td>4. Freezing rain or snow</td>
</tr>
<tr>
<td>5. Extreme dust, fog, or smoky conditions</td>
</tr>
<tr>
<td>6. High traffic volumes</td>
</tr>
<tr>
<td>7. Soft shoulders</td>
</tr>
<tr>
<td>8. Reduced traction with road surface</td>
</tr>
</tbody>
</table>

1. Drivers must be fully licensed and certified for the vehicle being driven.
2. All traffic must drive on the right-hand side of the road.
3. Drivers shall slow down for oncoming traffic, when passing a stopped vehicle or when meeting road maintenance equipment.
4. All “Empty” direction traffic will allow all “Loaded” direction traffic the unobstructed clearance to pass safely.
5. Vehicles or equipment over 11’ 6” (3.5 meter) wide must be escorted by a radio equipped vehicle with headlights and safety flashers on (see FRP #3 Low-bedding/Wide loads).
6. Drive at a safe speed with headlights and taillights on. Be aware of road conditions and drive accordingly, obey all posted speed limits and other road signs.
7. All drivers and passengers must wear seatbelts. Seatbelts save lives!
8. There must be no loose articles in the vehicle cab that could become potential projectiles in a sudden stop. Such items must be stowed away or tied down.
9. All accidents and “near misses” must be reported within 24 hours to the appropriate supervisor.
10. Vehicles must not stop on haul roads except at a safe passing point or a turn out. In case of a breakdown, flares or reflectors must be utilized and other road users informed. If parking in a turnout, ensure you leave room for other vehicles to still use it.
11. Never pass any vehicle without notifying them on the radio and receiving the “OK”. The lead vehicle is responsible for slowing down, providing room and advising the passing vehicle when it is safe to pass.
12. All trucks over 5,500kg GVW must be equipped with the following safety equipment;

- PPE (hardhat, hi-vis vest, boots, protective eyeglasses)
- Personal first aid kit
- Roadside flares/triangles
- Load flags
- Tire chains (during winter)
- One working fire extinguisher
- Axe or Pulaski
- Shovel
- Sufficient wrappers/cinches to secure load
- Two way radio (only one two way radio permitted in trucks)

Follow the “3 C’s”: Courtesy  Common Sense  Concentration

Participating committee members:
Follow the “3 C’s”:      Courtesy  Common Sense  Concentration

Participating committee members;
Low-bedding/Wide loads
FOREST ROAD PROCEDURE #3
(May 1, 2009 - Prince George Forest Road Management Group)
http://www.for.gov.bc.ca/dpg

These procedures apply to all forest roads in the Prince George Forest District.
These procedures do not apply to roads regulated by the Ministry of Transportation

DRIVE DEFENSIVELY – EXPECT THE UNEXPECTED

Known Hazards
1. Restricting the road width for other users.  
2. Blocking the road while loading or unloading.  
3. Meeting other traffic unexpectedly.  
4. Load shifting while traveling.  
5. Overhead power lines.  
7. Sideswiping other vehicles.  
8. Hitting a bridge with load.

1. All low-bed and wide load (Low-bed) and escort vehicle drivers must be familiar with the Driving Forest Roads (FRP#1) and Radio Calling (FRP#2) Forest Road Procedures.
2. Whenever practical, Low-bed moves should be conducted during times of reduced traffic volumes.
3. When loading or unloading equipment on a haul road, safety triangles, warning signs or flag-people must be in place to warn drivers traveling from both directions.
4. Low-bed decks should be kept free of loose objects.
5. All loads must be secured before moving the low-bed.
6. Equipment must never be loaded sideways on the trailer.
7. The following procedures apply to all low-bed moves wider than 10’6” (3.2 meters), outside of an active cut block;
   a. Loads less than 11’ 6” wide (3.5 meters);
      i. Low-bed equipped with either amber rotating lamps or strobos.
      ii. Headlights and taillights on.
      iii. Wide load banner or sign.
      iv. Side marking flags for daylight moves, side marking lights for night moves.
   b. Loads more than 11’6” wide (3.5 meters):
      i. All of the requirements from 9 (a) above plus;
      ii. An escort vehicle traveling a sufficient distance in front of the low-bed as to provide ample warning to both the low-bed driver and the oncoming vehicle.
      iii. The escort vehicle equipped with the following:
         a. Either amber rotating lamp or strobe light (temporary mount acceptable).
         b. 2-way radio on the designated road channel.
      iv. Must identify themselves as a Wide Load on the radio, i.e. “wide load loaded 225”
      v. Must call every EVEN “Empty” km and every ODD “Loaded” km.

Follow the “3 C’s”:

<table>
<thead>
<tr>
<th>Courtesy</th>
<th>Common Sense</th>
<th>Concentration</th>
</tr>
</thead>
</table>

Participating committee members;
ROAD INFORMATION SIGN PLACEMENT
FOREST ROAD PROCEDURE #4
(May 1, 2009 - Prince George Forest Road Management Group)
http://www.for.gov.bc.ca/dpg

These procedures apply to all forest roads in the Prince George Forest District maintained for industrial use.

<table>
<thead>
<tr>
<th>Known Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Signs not posted</td>
</tr>
<tr>
<td>2. Signs having the wrong information</td>
</tr>
<tr>
<td>3. Signs fallen down or destroyed</td>
</tr>
<tr>
<td>4. Signs posted at the wrong location</td>
</tr>
<tr>
<td>5. Conflicting signage</td>
</tr>
<tr>
<td>6. Signs not clearly legible</td>
</tr>
</tbody>
</table>

1. **Forest Road Entrance Sign**
   - To be placed where entering a forest road off of a public road or where changing the radio calling protocol.
   - An adequate turn out should be available in front of the sign to allow the user to stop and safely read the sign.
   - The sign must be clearly visible and contain the following information;
     a. The road name
     b. The frequency of the radio channel to use.
     c. The radio calling protocol, i.e. Dual call or Single call, with a description.

2. **KM Marker Boards**
   - Marker boards should be placed 1 kilometer apart, but can be adjusted slightly to maximize visibility from both directions or for other safety reasons.
   - Odd numbered boards should be placed on the right hand side of the road and even numbered boards should be placed on the left hand side of the road, (both from the perspective of traveling in the loaded direction). Placement can be varied in order to maximize the signs visibility from both directions.

3. **Frequency Switch Sign**
   - To be placed whenever switching road channel frequency.
   - The sign must be clearly visible and contain the following information;
     a. The road name (if it is a named road).
     b. The frequency of the radio channel being switched to.

4. **Must Call Sign**
   - May be a separate sign or incorporated into a KM Marker, Forest Road Entrance or Frequency Switch Sign.
   - The sign should say; “Call…” followed by calling instructions; i.e. “…loaded 154”, “…empty onto the A Road”.
   - A must call sign is to be placed at all of the following locations;
     a. At a Forest Road Entrance Sign.
     b. At a Frequency Switch Sign.
     c. When entering onto a new road.
     d. At any point along a road where there is an increased safety risk or hazard and additional calling is required.
     e. At least one every 8 kilometers in the empty direction.

Follow the “3 C’s”:

<table>
<thead>
<tr>
<th>Courtesy</th>
<th>Common Sense</th>
<th>Concentration</th>
</tr>
</thead>
</table>

Participating committee members;
Follow the “3 C’s”:  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Known Hazards</strong></td>
<td></td>
</tr>
<tr>
<td>1. Users not aware of the current procedures.</td>
<td>4. Users not understanding the procedures.</td>
</tr>
<tr>
<td>2. Users given the wrong information.</td>
<td>5. Procedures not being regularly updated.</td>
</tr>
<tr>
<td>3. Users having out of date documents.</td>
<td>6. Procedures not being regularly reviewed.</td>
</tr>
</tbody>
</table>

1. **FRP Document Control**  
   - All electronic FRP files will be distributed in Adobe.pdf format to prevent editing.  
   - Any incorporation of the procedures into other documents will be done by way of an image paste.  
   - FRPs will be in effect for one year from the date printed at the top of the document.  
   - All individual FRPs will be limited to a single page, minimum 12-point font.  

2. **Direct Communications Plan For Known Road Users**  
   - Committee members will annually review and distribute the FRPs to their employees and contractor representatives who use the forest roads.  
   - Committee member contractors will annually review and distribute the FRPs to their employees and sub-contractors.  
   - Printed copies of the current FRPs will be posted and available at scale sites and the MoF District office.  
   - Reference to the FRPs will be included in all BCTS timber sale contracts.  
   - Reference to the FRPs will be included in all small-scale salvage licenses and road use permits issued by the Ministry of Forests.  

3. **Indirect Communications Plan For Other Possible Road Users**  
   - The current documents will be available to the public on-line at [http://www.for.gov.bc.ca/dpg/](http://www.for.gov.bc.ca/dpg/). The web address will be included in the FRP documents.  
   - A link to the web site containing the FRP’s will be e-mailed annually to an extensive distribution list of agencies, clubs, associations, other possible road users and the local news media.  

4. **Annual Review and Update**  
   - All FRPs will be reviewed by the Committee each spring, and the documents updated by May 1st.  
   - During the review, the Committee will look for ways to improve or clarify the FRPs based on the monitoring program results and user feedback received from the previous year.  
   - The indirect user’s e-mail distribution list will be updated.  
   - All Management System Documents and the Terms of Reference will be reviewed annually.  

These systems apply to all forest roads in the Prince George Forest District.
Follow the “3 C’s”:  

<table>
<thead>
<tr>
<th></th>
<th>Courtesy</th>
<th>Common Sense</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating committee members;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Follow the “3 C’s”: Courtesy Common Sense Concentration

Participating committee members;

**Forest Road Safety Roles**

**Management System Document “C”**

(May 1, 2009 - Prince George Forest Road Management Group)

These policy documents apply to all forest roads in the Prince George Forest District.

<table>
<thead>
<tr>
<th>Known Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Driving beyond the limits of the road.</td>
</tr>
<tr>
<td>2. Driving an unsafe vehicle.</td>
</tr>
<tr>
<td>3. Users unaware of road hazards and risks</td>
</tr>
<tr>
<td>4. Driving beyond your skill level</td>
</tr>
<tr>
<td>5. Users unaware of road safety procedures.</td>
</tr>
<tr>
<td>6. Users not following the road safety procedures</td>
</tr>
</tbody>
</table>

1. **The Role of the Prince George Forest Road Management Group is to;**
   - Through the involvement and cooperation of the forest road Stakeholders, develop and maintain an effective forest road safety management system including standardized Forest Road Procedures.
   - Facilitate the coordination of hauling and other industrial activities through the District’s Road User Committees.
   - Facilitate the communication of known forest road hazards through the District’s Road Maintenance Committee.

2. **The Role of the Road User Committee is to;**
   - Administer Road Use Agreements, including the notification of planned use to the Road Permit or Road Use Permit holders.
   - Seasonally coordinate hauling and road maintenance and then communicate that information to the Road Maintenance Committee.

3. **The Role of the Prince George Forest Road Maintenance Committee is to;**
   - Conduct regular multi-user meetings to discuss road hazards and other road safety issues and make the minutes available to other known industrial road users.
   - Coordinate current hauling and road maintenance activities on multi-user roads.

4. **The Role of the Driver is to;**
   - Avoid risks to themselves and other road users by following all the Forest Road Procedures and always driving safely.
   - Report any potential road safety hazards to their supervisor or employer.
   - Report all accidents or near misses to their supervisor or employer.
   - Always drive within the limitations of the road, the weather, the vehicle and their individual skill level.

5. **The Role of the Employer is to;**
   - Provide the necessary education and training in safe driving practices to their supervisors and drivers, including instruction in the published Forest Road Procedures.
   - Conduct regular road risk assessments, (see MSD-D) and communicate known hazards to their supervisors and employees.
   - Actively supervise and monitor their drivers to ensure they are driving safely and are following the published Forest Road Procedures.
   - Report any identified road safety hazards to the Road Permit or Road Use Permit holder.
Communicating Known Hazards and Assessing Road Risk

Management System Document “D”

(May 1, 2009 - Prince George Forest Road Management Group)

These policy documents apply to all forest roads in the Prince George Forest District maintained for industrial use and outside of a cutblock.

1. It is the Road Permit holder or Primary Road Use Permit holder’s responsibility to inspect and maintain the road to either a wilderness or industrial use standard, depending on the road’s intended use and the timing of that use. This responsibility may be transferred to another party through a written agreement.

2. It is the Road Permit holder or the Primary Road Use Permit holder’s responsibility to communicate known road hazards to known industrial road users. Road hazards include but are not limited to:
   - Temporary road closures or obstructions.
   - Active logging or blasting areas adjacent to the road.
   - Two way hauling activities.
   - Heavier than normal concentrations of traffic.
   - Known washouts or landslides.
   - Active road construction or road upgrade sections.
   - Radio frequency overlaps or conflicts.
   - Bridge repair or maintenance.

3. The communication of the known road hazards can be through either; information sign placement, road safety meetings, direct communication with affected users, advertising through the public media or flag persons.

4. It is the responsibility of the Employer to assess the inherent risks and limitations of a given forest road at a given time and adjust their; training, monitoring, choice of driver, choice of vehicle or load, timing of use or other behaviors accordingly. The inherent risks and limitations of forest roads include, but are not limited to:
   - Steep grades, sharp corners, narrow road surface and reduced sight distance.
   - Reduced visibility due to smoke, fog, snow or dust.
   - Reduced surface traction due to snow, ice or moisture.
   - Radio assisted traffic control systems.
   - Roads not adequately maintained for industrial use.
   - Fallen trees, rocks, wildlife or livestock, recreational vehicles or other obstructions.
   - Meeting other vehicles unexpectedly.

Follow the “3 C’s”:

<table>
<thead>
<tr>
<th>Courtesy</th>
<th>Common Sense</th>
<th>Concentration</th>
</tr>
</thead>
</table>

Participating committee members:
Appendix 6:
FP Innovations – FERIC Report: Technologies to Improve Resource Road Safety