BC Forest Safety Ombudsman

No longer the road less travelled.

BC **Forest Safety** Council

REVIEW | RESOURCE ROADS | 2007-08

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PREFACE

About the Forest Safety Ombudsman

The Office of the Forest Safety Ombudsman was established in 2006 to enhance safety in the BC forest sector by becoming a safe, confidential and persuasive agent for raising and reviewing safety concerns throughout the sector and facilitating impartial and timely resolution of safety issues. The Forest Safety Ombudsman is appointed and funded by the forest industry through the BC Forest Safety Council and has a mandate to investigate safety issues and recommend the best means to address them. The Ombudsman will use review, recommendation, mediation and conciliation where necessary. The Ombudsman will adhere to the principles of impartiality, fair and timely process, confidentiality and coordination of action given the number of other organizations involved in safety in British Columbia. In particular, the Ombudsman will work closely with WorkSafeBC whose mandate is to enhance safety in British Columbia.

The Ombudsman is an independent and impartial advisory voice that carries out all the responsibilities of the Ombudsman while also providing feedback to the BCFSC on trends, issues, policies and practices.

The BC Forest Safety Council

The BC Forest Safety Council was created by the forest industry to eliminate fatalities and serious injuries by: promoting cultural change to ensure that safety is treated as an over-riding priority, promoting a safety-conscious legal regime, developing a competent and confident workforce, encouraging SAFE companies to have functioning safety programs and encouraging and rewarding safe conduct.

All the organizations and associations that represent the forest sector are members of the BC Forest Safety Council: the regional logging associations, associations representing major licencees and small tenure holders, organized labour, the silviculture sector, independent fallers and key government agencies.

The Council is funded through industry contributions through WorkSafeBC assessments, contributions from diverse sources for specific programs and fees for services.

More information on the Council and the Forest Safety Ombudsman is available on the Council's website at www.bcforestsafe.org.

EXECUTIVE SUMMARY

The Forest Safety Ombudsman Office was established primarily to raise and review safety concerns in the forest sector. I am focusing my second review on resource roads, a network around the province of some 400,000 kilometers of what used to be called logging roads. I could not and would not ignore the subject of the greatest volume of calls to the Ombudsman's Office over the last two years, and the 16 drivers who have died on logging roads in the past three years.

There are more than 400,000 kilometers of gravel logging roads in BC, a legacy of the forest sector to the province. Although owned by the public, many of the roads were located in isolated, fairly inaccessible regions where the predominant users in the past were forest sector employees, contractors and local communities with close ties to logging. That has now changed and the result is an increasing demand on the forestry sector to maintain these roads for many different purposes than forestry activity.

With increased activity on resource roads, risks are not limited to forestry workers. During my interviews from May to December 2007, it became apparent that any solution to making this network of roads safe for all the groups who use them would require both cross-government and cross-industry participation.

The Ministry of Forests and Range is the sole agency responsible for this off-highway road network. However, ministries responsible for public safety, health care, small business, oil exploration, gas exploration, mining, tourism, education, highways, revenue and forestry now all have an equal interest in some resource roads.

Since the introduction of the Forest and Range Practices Act, while there are standards for the design, construction and maintenance of logging roads, they are much less prescriptive today. Design, construction and maintenance requirements now differ significantly from user to user, and this needs to be addressed. For many communities, including First Nations communities, a road that is open, usable and safe year round is a priority for health care, education, economic and public safety. It is essential that resource roads be consistently maintained to a level that provides safe, reliable access. As these roads will continue to be used by the forest sector as well as other industrial and commercial traffic, their specifications must align and comply with all the industries that will use these roads and will require standards of design, construction and maintenance that fit those specific industries.

In addition, the components of safety do not include just the road's physical attributes, but also include the management regime, driver competency, public education and involvement. As the term logging road has evolved, it now seems appropriate and timely to modernize the management model for our resource road network as well. A new public highway designation for resource roads that serve as primary or secondary access to communities in BC needs to be created that has clearly defined standards for construction, maintenance, enforcement and be funded/resourced similarly to the public highway system.

Creating a new designation for resource roads that service communities is important, but so also is improving the safety environment on the

remaining hundreds of thousands of kilometers of resource roads in the province of British Columbia.

In a new operating environment, it makes sense to establish a management model that calls on a local stakeholder group to manage a specific resource road network. A Road Safety Management Group (RSMG) would be made up of representatives from appropriate industries, government ministries and the public who are responsible for ensuring that the management of a specific section of resource road meets the needs of the full range of local users and industries. The RSMG would jointly make decisions and be responsible for implementing all activities concerning road safety issues, including design, construction, maintenance, safe driving practices, signage, driver education and allocation of resources.

The range of users of these road networks varies significantly from region to region: The operating and governing model should be determined by each group and should reflect the uniqueness of that region. For example, if mining or gas and oil development are the predominant users of a road system, those industries should take the lead in any organizational structure.

It is important to ensure that road maintenance and other safety factors are not neglected due to a lack of funding. Funding formulas for Road Safety Management Groups need to be developed to ensure ongoing and consistent financial stability of any RSMG. District Managers within government ministries and agencies need to be able to make revenue decisions to ensure the integrity of any RSMG.

Public education is essential in order to establish a safe environment for not only the public but also workers in the forest sector and other industrial users who now share these resource roads. Public education specific to an area will require an effective communications plan that potentially includes: signage, local visitor information centres, utilizing local government services, local media and any other communication strategies that keep public users current with the conditions on resource roads. With the mobility of logging truck drivers and contractors around the province, it is critically important to standardize this aspect of resource road management.

Because there is a gap in coordination of emergency response services on resource roads, every RSMG should develop an Emergency Response Plan that integrates the responses of the RCMP, BC Ambulance Service, local fire departments or other designated first responders.

In our first review, "Not Out of the Woods," our Office recommended that Competency Certification be established for off-road log haul truck drivers. The challenges of driving on gravel roads are not restricted to large trucks requiring a Class 1 licence, but extend to all vehicles. Operating any vehicle on a resource road requires an additional level of knowledge not just in handling a vehicle but in understanding the responsibilities and protocols of the road. However, given that resource roads are not

restricted to those with a Class 1 licence, an Industrial Drivers Endorsement Program should be developed for all industrial vehicles operating on resource roads.

Resource road safety and enforcement is another area that needs attention. Some organizations are of the view that whoever is responsible for maintaining resource roads (i.e., the Road Permit Holder) is in the best position to also conduct enforcement. But there are many problems inherent in this presumption.

There is a role for all of the industries that use resource roads to influence behaviour on resource roads through their contractual relationships with employees, suppliers and contractors. But influence and enforcement are significantly different, and there is neither public nor business appetite to move law enforcement into the private sector. In our view, while there are some inherent challenges and inconsistencies in how the many agencies responsible for enforcement manage those responsibilities, they are still the appropriate groups responsible for enforcement.

Cycle time or "trip time"—the amount of time it takes a logging truck to complete the trip from the cut block to the mill/sort yard and back to the cut block—plays an important part in improving safety on both the resource roads and our public highways. How it is determined impacts driver behaviour that could put everyone at risk. The Ombudsman's Office received a high number of inquiries over the last two years on this subject. Cycle times are complex, with many variables that influence their determination, including corporate structure, road design, maintenance, construction, truck configurations, changes in road users and changes in regulations. However, cycle time determination is a safety issue and should fall within the scope of WorkSafeBC. Cycle times need to be monitored as part of a management/operational decision-making process.

There are two technological innovations that may assist in improving safety on our resource roads—Global Positioning Systems (GPS) and Electronic Stability Control (ESC). These innovations are now available commercially and should be considered as new opportunities to improve safety on resource roads, particularly those traveled by a variety of users.

During the interviews I conducted for this review, it was apparent that many contractors were reluctant to follow up on their initial calls to the Office for fear of economic reprisals. However, it is also evident that economic conditions in the forest sector workplace influence decisions that individuals make, and many of those decisions have an impact on safety.

Vulnerability and disruption often put individuals who are trying to hang onto their equipment or provide for their families into difficult situations. They are more inclined to take on work that they know is unsafe, or perform work in an environment that is unsafe. In this new economic reality, legislation needs to be introduced to provide relief to contractors and owner-operators whose economic vulnerability is resulting in undue risks and unsafe work for them and those who work for them. I urge the government to modernize the Woodworker Lien Act to extend at least the same economic protection to contractors as that to which employees are entitled. Reducing vulnerability and economic pressure will also

improve the ability of individuals to speak out freely on safety-related matters.

Another issue that continues to raise concerns is substance abuse. Substance abuse is not just limited to illegal drugs and alcohol but extends to the overuse of legal, over-the-counter prescription drugs and stimulants. I encourage WorkSafeBC to consider ways to ensure that the responsibility for a safe workplace is taken seriously by implementing policies around overuse of legal drugs in the workplace. However, the factors that compel individuals to misuse these substances also need to be addressed. I believe that proper checks and measures need to be in place at the management level to ensure that employees and contractors have adequate time between shifts to rest, and to allow for more regular and predictable work schedules.

I hope this review and its recommendations provide a framework for discussion for solutions that will improve safety on the many kilometers of resource roads that weave this province together.

INTRODUCTION

In 2006 when I began my work as BC Forest Safety Ombudsman, my first formal action was to undertake a review of training and certification within the forest industry, because the core component of any safe work environment is a well-trained and educated workforce. Now, in my second year as Ombudsman, I am choosing to focus on resource roads, a network around the province of some 400,000 kilometers of what used to be called logging roads.

The primary reason for establishing the Forest Safety Ombudsman Office was to raise and review safety concerns in the forest sector, and resource roads are certainly an area for safety concern. I could not and would not ignore the subject of the greatest volume of calls to the Ombudsman's Office over the last two years, and the 16 forest industry drivers who have died on logging roads in the past three years.

In 2005, 11 logging truck drivers died on the job, which accounted for 26 per cent of the total fatalities in the forest sector that year. In 2007, there were fewer truck driver fatalities, but the deaths on logging roads accounted for 42 per cent, or 5 of the 12 total forest sector fatalities that year. It is important to note that these deaths that occurred are not necessarily logging truck drivers. In fact, in 2007, only one fatality was a logging truck driver; the other four individuals who died were driving pick-ups, which is why safety on our resource road network cannot be focused only on large industrial traffic.

Calls to the Ombudsman's Office on the topic of resource roads cover a wide range of concerns: road construction, road maintenance, cycle times, jurisdictional issues, hours of work, regulatory environment, technology innovations, truck driver training and certification. In addition to inquiries raised by the log-hauling sector, other groups representing community interests have also contacted our office to raise issues about the construction and ongoing maintenance of resource roads in and around their communities. Their interests range from public safety to health care and education, from economic development to the cultural and social aspects of living in communities that now share what used to be known as logging roads. How these communities interact (or do not interact) with the forest industry has created conditions that they believe now present hazards on these roads.

A third user group that approached our office regarding resource roads includes other industrial and commercial users of the resource road network. The agricultural sector, mining sector, gas and oil sectors all increasingly use logging roads right across the province. Lighter commercial businesses, conventional tourism, eco-tourism and public users of this road network are increasing.

Two other factors have also accelerated the need to focus on resource road safety. The provincial government has increased harvest levels in the forest sector due to the Mountain Pine Beetle. They have introduced policy initiatives that are resulting in additional traffic on our resource road network. And, as population increases in our province and new communities mature from what were once exclusively logging communities, some resource roads have become the primary roads connecting these communities to BC's public

highway system. Some roads serve as secondary access to these communities, and for many First Nations communities, resource roads are the only access to the public highway system.

Logging roads are no longer the exclusive domain of logging; hence the need to refer to this extensive network now as "resource roads." And, with different users comes different requirements. Many of these new industries have different specifications for road construction and maintenance, as the equipment they operate differs significantly from that used in the forest sector.

Issues around construction, maintenance, management control and regulatory environment of this extensive road network are complex. And complex problems rarely, if ever, lend themselves to easy or simple solutions.

The Coroner's Inquest in June 2007 into the death of logging truck driver Joseph Leroux provides an insight into some of the challenges facing the management and operation of trucks on our resource road system. Recommendations from that inquest were directed at a number of organizations.

Those to Ministry of Forests and Range covered topics of risk assessment, signage, operating procedures, notifying road use committees about instances of non-compliance, resources for compliance and enforcement, and construction and maintenance standards.

Recommendations from the inquest to WorkSafeBC covered safe load limits for off-highway trucks, establishing road marshals or truck foremen for multi-employer forest roads, installing and utilizing truck tracking systems, mandatory drug and alcohol testing and notifying employers that prime contractor responsibility extends beyond the operating work area to accountability "home to home."

Recommendations to the BC Forest Safety Council (BCFSC) and ICBC included expediting the development of standardized radio use throughout the province, truck driver education, substance abuse and commercial logging truck driver training.

The Joseph Leroux Coroner's Inquest provided a number of recommendations that this review will be referencing. The fact that the recommendations were multi-jurisdictional, covering issues from training to construction reinforces the complexity of the challenges.

Over the last two years, our office has engaged the BCFSC's Forestry TruckSafe program to deal with inquiries as they arise from truck drivers, communities and industry. Forestry TruckSafe has been a leader in the province in bringing communities and industry into the same room to develop local road use protocols and to establish Road User Groups. In a practical way in the absence of any formal requirement, Forestry TruckSafe has brought some organization to a difficult problem. It has been effective in resolving issues concerning road construction, road maintenance and operating procedures.

While Forestry TruckSafe has been an effective informal tool in improving safety on our resource

roads, it is time to move from voluntary to mandatory organizations and authorities to govern our off-highway road network.

BC is not the first province to look at how to deal with resource road issues. In 2000, the Ontario government commissioned a report titled "Forest Roads and Water Crossing Initiative." This report dealt with the uncertainty "as to who has responsibility for roads and water crossing which were no longer required for forest management purposes." In addition to addressing the challenges of long-term maintenance, the report also attempted to look at ways "to reduce or eliminate public safety hazards and environmental concerns." It provides some guidance about planning processes, road user groups and road designations that may be useful in developing solutions for British Columbia.

Improving safety for the forest sector cannot be achieved in isolation from the other many and varied users of these road systems.

As I conducted interviews across the province from May to December 2007, it became apparent that any solution to increasing safety on resource roads would require both cross-government and cross-industry participation. With increased activity, risks are not limited to forestry workers. Making this network of roads safe for all the groups who use them will be complex, requiring the involvement of a wide variety of stakeholders.

The forest sector on its own cannot resolve all the challenges, but may be the right leader to bring the right participants to the table.

The complexity of issues involving the log-hauling sector requires more than a simple intervention or negotiation. Through this review, we present a thorough examination of resource road issues and provide recommendations that may be the basis for resolving the many inquiries to the Ombudsman's Office over the last two years.

In the end, no matter how effectively we establish a regulatory regime, improve operating environments and create workplace standards, it is how we as individuals choose to operate our vehicles that will have a far more significant impact on reducing the number of deaths, accidents and close calls. Each of us must put a greater demand on ourselves to ensure that our actions are not contributing to the problem, but contributing to the solution.

As with my first review, I would like again to thank all of the individuals and groups who gave up some of their valuable time to provide the Office of the Ombudsman with an insight into the challenges they face and the issues as they see them, as well as the constructive advice and solutions they provided. Their thoughtful and candid comments are part of the solution to creating a safer environment for all.

HISTORICAL CONTEXT

Over the years, users of resource roads have increased in both number and purpose. But the costs for maintaining these roads is still borne for the most part by a single ministry and a single entity—the tree.

The term "resource road" is relatively new. It is the modern label for what was previously described as a "logging road." As timber harvesting reached farther and farther into the remote regions of the province, vast networks of roads were built, maintained and used by the forest sector. Today there are more than 400,000 kilometers of gravel logging roads in BC, a legacy of the forest sector to the province. That number is growing every year.

Many of these roads were built under a Section 88 designation of the Forest Act that allowed for logging companies to deduct the cost of road construction and maintenance from their stumpage. As a result, these roads are considered to be a public asset, belonging to the people of British Columbia and not the logging industry. Although owned by the public, many of the roads were located in isolated, fairly inaccessible regions where the predominant users were forest sector employees, contractors and local communities with close ties to logging.

As harvest activity began, logging camps were established in many regions. Over the decades as the forest industry changed, so did the logging camps they established. Some logging camps evolved into communities and eventually were incorporated as towns. In other cases, the camp workforce relocated to nearby existing local communities. New towns and existing settlements grew, attracting investment in entirely new industries, broadening the community's economic base beyond just the forest sector. New businesses attracted a more diverse population, often with an entirely different set of goals, aspirations, community interests and values.

Continual expansion of the logging road system provided new access to what had been previously isolated communities. Aboriginal and non-aboriginal communities that had relied solely on air, ferry, barge or sea freight now had land-based transportation access to products and services.

New resource industries took advantage of this lower cost access to expand their exploration for minerals, gas and oil, further broadening the economic base of previously isolated communities and introducing additional users to the logging road systems.

What had been almost exclusively logging roads began to see an entirely new group of users. In many cases these new users viewed the roads not as logging roads but as an extension of the public highway system. The result was increasing demand on the forestry sector to maintain these roads for a different purpose than forestry activity. In some cases, new users' interests complemented the forest sector; in other situations they competed.

Resource roads now provide a range of non-forest-industry related services. They provide safe, reliable access to isolated communities. They

support the mining, energy, gas and oil sector by providing cost effective access to remote regions for exploration and development. They provide access to the province's wilderness areas for eco-tourism and conventional tourism. They support the agricultural industry and provide access for First Nations to cultural sites and places of special cultural significance. For many students living in remote settlements, they provide access to public and post-secondary schools. In short, for many communities resource roads are an extension of the BC highway system.

Over the last two decades the forest sector has seen significant changes in corporate structure, consolidation of forest licences, re-allocation of timber and forest policies. All have had an impact on how resource roads are managed, built and maintained.

Today, proposed changes to WorkSafeBC regulations and legislative initiatives by the Ministry of Forests and Range, changes to Commercial Vehicle Enforcement regulations and environmental pressures all have an impact how "logging" roads are managed.

Though there have been many changes in the use of resource roads and many changes in the rules that pertain to them, the Ministry of Forests and Range continues to be the sole agency responsible for this off-highway road network. Since the introduction of the Forest and Range Practices Act, while there are standards for the design, construction and maintenance of logging roads, they are much less prescriptive today.

The Forest and Range Practices Act states roads must be maintained to an "industrial standard," but there is little to measure or hold anyone accountable for. Whatever standards do exist for design, construction and maintenance were never written or revised with safety as a priority.

With all of these complexities the fact remains that users of resource roads have increased in both number and purpose, but the costs for maintaining this road system is still borne by a single ministry and a single entity—the tree.

A move to improve safety on resource roads for the forest sector cannot be taken in isolation from other users. Although design, construction and maintenance requirements now differ significantly from user to user, the components of safety do not include just the road's physical attributes, but also include the management regime, driver competency, public education and involvement. As the term logging road has evolved, it now seems appropriate and timely to modernize the management model for our resource road network as well.

COMMUNITY CONNECTION

"Bamfield is no longer a logging town. We have over 3,500 students participating in marine programs and 16,000 man-days used by researchers at the Marine Institute. It scares me the thought of those school and tour buses on the road each day."

This comment, made at a town hall meeting in Bamfield, is not unique to that community. As with many communities' relationships with their logging roads, the Bamfield logging road is far more important, valuable and useful now to that community than when it was first constructed.

There are more than 400,000 kilometers of resource roads in the province and a small percentage of these roads connect directly with communities. They have become more than simply roads to service industrial activity; in many regions they have become an extension of the public highway system. These roads are either the primary or secondary access for communities to connect to the wider world.

For many First Nations communities in BC, the only connection they have to the public highways is through existing forest service roads. A road open, useable and safe year-round is a priority for these communities—for their health care, education, economic and public safety requirements.

For many other communities, resource roads provide an alternate route into a community or region. It is essential that this alternate road be consistently maintained to a level that provides safe, reliable access when weather or accidents may close the public highway.

In May and June of 2007, flooding and slides along Highway 16 cut off communities in the northwest from the provincial highway grid. A forest service road, the Cranberry Connector, had in the past provided the only alternative access for the communities of Terrace and Kitimat and the First Nations communities of the Nass Valley. However, no forest licensee had operated in the area in last five years, the road was no longer being used for harvest activities and maintenance had been minimal. The result was a serious degradation of the road surface conditions. The first trucks to attempt to use this alternative route after the flooding and slides found the road impassable. With this road closed as well, the communities in the northwest were completely isolated for several days. The road was finally repaired and opened on a very restricted schedule, which negatively impacted the communities and their economy.

While the use of logging roads has changed over the last decades, the regulatory conditions that are in place have not. The users of resource roads have changed, but the ministry charged with responsibility for the system and the method of funding construction, maintenance, compliance and enforcement has not.

Ministries responsible for public safety, health care, small business, oil exploration, gas exploration, mining, tourism, education, highways, revenue and forestry now all have an equal

interest in some resource roads. Burdening a single resource—trees—and a single ministry—the Ministry of Forests and Range—no longer reflects the modern reality on the ground.

There are a number of initiatives under way by WorkSafeBC and the Ministry of Forests and Range to address the jurisdictional challenges of resource road management. The Joseph Leroux inquest made recommendations in this area as well. However, it is not just industrial users that are now using the resource roads; expanding authority and making recommendations that do not extend beyond industrial users will not fix the problem.

These former logging roads now serve not only industrial users but also public users as a community's primary or secondary access to the provincial highway network. Rather than continue to try to fit all new user groups under the current model, a new designation of road is required.

RECOMMENDATIONS

1. The Province should establish a new public highway designation for resource roads that serve as the primary or secondary access roads for communities. The new designation would have clearly defined standards for construction, maintenance, enforcement and be funded/resourced similarly to the public highway system.
2. The Province should give strong consideration to extending the BC highways system model for compliance and enforcement of commercial vehicle regulations and inspections to this new road designation.
3. The Ministry of Forests and Range should take the lead in identifying which road systems this new road designation will apply to.

   Gravel road standards for construction and maintenance vary among ministries and agencies. The Ministry of Transportation (MOT), for example, currently adheres to the Transportation Association of Canada design guidelines in addition to using what is referred to as an "ambient design standard." Ministry of Forests and Range road design, construction and maintenance specifications, on the other hand, are regulated by the Forest and Range Practices Act and differ from MOT.

   As these roads will continue to be used by the forest sector as well as other industrial and commercial traffic, their specifications must align and comply with all the industries that will use these roads and will require standards of design, construction and maintenance that fit those specific industries.

RECOMMENDATION

4. When a road system receives a "new road designation," the standards for construction and maintenance on this road should be at the highest level needed by any industrial activity for which it will be regularly used.

ROAD SAFETY MANAGEMENT GROUPS

Creating a new designation for resource roads that are the primary or secondary access for communities to the public highway system is an important step in improving safety on some of our rural roads. However, improving the safety environment on the remaining hundreds of thousands of kilometers of resource roads in the province of British Columbia will require a different approach.

For the majority of resource roads in the province, safety has become a huge issue, attracting the attention of a number of agencies and organizations, including the Ombudsman's Office. Safety concerns are not restricted to design, construction and maintenance; the way resource roads are managed needs to change as well. Management of traffic flow, communications, signage, training and public education about safe vehicle operation on resource roads are important parts of that change.

Currently in BC, there are sections of Forest Service Roads (FSR) for which the Ministry of Forests and Range issues road user permits. There may be more than one permit holder for the same road and, in some situations, these permit holders may be from different industries with entirely different requirements for road design, construction and maintenance. Each of the permit holders could also have a different economic cycle that would impact their ability to participate financially in supporting ongoing road maintenance programs. Some permit holders may have a detailed emergency response plan; others may not. Some may be involved in public education; others may not. This lack of consistency between road-user permit holders creates inconsistencies in the management and maintenance of resource roads.

In many regions of the province, the forest sector may still be responsible for the safe operation and maintenance of resource roads, but may no longer be the predominant user of these roads. Other industries and stakeholders are now frequent users and their requirements for design standards, construction and maintenance differ from that of the forest sector.

Attempting to impose a single set of regulations, with a single industrial application, across the entire province may actually worsen, not improve, safety conditions.

In a new operating environment, it makes sense to establish a management model that calls on a local stakeholder group to manage a specific resource road network. A Road Safety Management Group (RSMG) would be made up of representatives from appropriate industries, government ministries and the public. It would be responsible for ensuring that the management of a specific section of resource road meets the needs of the full range of local users and industries. The RSMG would jointly make decisions and be responsible for implementing all activities concerning road safety issues, including

design, construction, maintenance, safe driving practices, signage, driver education and allocation of resources.

The management model chosen by an RSMG to implement its operational plan may change from region to region as user groups and priorities differ. Levels of forest harvest activities, other industrial and commercial activity, status of road use permit holders, multi-licensee jurisdictions and proximity to communities will all be factors in these considerations.

RECOMMENDATIONS

5. The Province, through the Ministry of Forests and Range, should establish regional Road Safety Management Groups (RSMG) with the responsibility to manage all activities on resource roads in the province.
6. The Ministry of Forests and Range should identify the regional resource road networks that would logically be contained within any specific RSMG unit.

   The benefits of having an RSMG include:

   - Ensuring consistent and ongoing resource road maintenance
   - Ensuring a safer environment and reducing risk for road permit holders and road users
   - Managing and sharing costs
   - Accessing funding from several levels of government, sponsors such as ICBC, health authorities and other groups with an interest in improving accident rates (This ability to attract other forms of funding is directly related to the independence of the RSMG from specific user groups.)
   - Creating equality for all road users
   - Promoting public education about safe use of resource roads

   There are number of key considerations in establishing any Road Safety Management Group. The following are areas that our office believes require special focus.

Structure, Governance, Responsibility

The Ministry of Forests and Range is best suited to and should be responsible for identifying logical, practical regions and road networks that would be included in a specific RSMG.

The range of users of these road networks varies significantly from region to region: The operating and governing model should be determined by each group and should reflect the uniqueness of that region. For example, if mining or gas and oil development are the predominant users of a road system, those industries should take the lead in any organizational structure.

The Ojay Road Safety Management Group is a currently operating example of such an association. The group was initiated by British Petroleum (BP) when that company became concerned about the safety of its employees and others using the Red Deer and Wapiti FSR system east of Tumbler Ridge. It is made up

predominantly of oil and gas companies, along with area forest licensees and coal producers. The membership of this group now includes representatives from more than 50 oil and gas companies and contractors, two forest licensees, three coal interests, the RCMP, BC Timber Sales, Commercial Vehicle Safety and Enforcement (CVSE), WorkSafeBC, the BC Gas and Oil Commission, the Ministry of Forests and Range, Enform and the Ministry of Energy and Mines. From that group, a steering committee has been formed with BP taking the lead. However, the entire group identifies issues and potential solutions.

The focus of the group is safety on the road system for all users, both industrial and public. The group's terms of reference include goals, cost sharing and conflict resolution mechanisms and the group is drafting its final agreement for structure and cost sharing formulas. The group is investigating partnering with other agencies to pilot innovative technological solutions for communications and vehicle tracking, such as creating a website for sharing road conditions and information regarding upcoming activities. They are planning to set up an FM transmitter at the entry to the road system for all road users to gain quick access to road procedures, radio calling procedures, frequencies and warnings about conditions.

Resources and Funding

It is one thing for an RSMG to be able to specify frequency and standards for resource road maintenance. It is another thing to ensure funding.

Funding formulas for Road Safety Management Groups need to be developed. Funding formulas tend to work well when all parties are actively operating and generating revenue. However, difficulties arise when one of the funding partners is no longer able to contribute or ceases to operate in an area. Because economic ups and downs are traditionally part of the economic cycle of industrial and commercial road users, other non-cyclical potential sources of funding could include the provincial government, federal government and sponsorships from organizations such as ICBC or provincial health authorities.

Currently, the Oil and Gas Commission and Ministry of Forests and Range allow for credits towards oil and gas royalties and forest stumpage for capital upgrades to resource roads. But neither organization will recognize those credits if they are applied to a road outside their ministry. So while industry is prepared to work together and jointly fund capital improvements to resource roads, there is no method to have that investment recognized. This is and will be a severe deterrent to establishing financially sustainable RSMGs unless this problem is rectified.

It is important to ensure that road maintenance and other safety factors are not neglected due to a lack of funding. District Managers within

government ministries and agencies will require the full flexibility of their organizations to make revenue decisions to ensure the integrity of any RSMG. (There are other issues raised in this review that would also be addressed if government ministries could provide revenue options and flexibility for their staff at the District level. Recommendation 10 encompasses a solution for the issue noted in the paragraph above and for one detailed in the later "Appraisal Manual Limitations" section of this review.)

Each RSMG will have to determine its own formulas for cost sharing responsibilities. There has been some initial work done by the Forest Engineering Research Institute of Canada (a private, non-profit research and development organization and a division of FP Innovations) that could assist in calculating road degradation based on usage.

RECOMMENDATION

7. The Provincial Government should work with industry to ensure that capital costs of resource road construction and maintenance within an RSMG unit are fully recognized for the purpose of tax credits and stumpage calculations.

Public Education

Road safety is about more than design, construction and maintenance of a physical road surface. Public education is essential in order to establish a safe environment for not only the public but also workers in the forest sector and other industrial users who now share these resource roads.

Although industrial operations will continue to be the major user of resource roads, one of the challenges that an RSMG will have to deal with is balancing public use and public education regarding industrial use on resource roads in their region. Public education specific to an area will require an effective communications plan that potentially includes: signage, local visitor information centres, utilizing local government services, local media and any other communication strategies that keep public users current with the conditions on resource roads. The OJAY Road Management Group's use of websites and FM radio are two examples of how effective communication plans can be put into place.

Standard Protocols

There is currently an initiative by Industry Canada, BCFSC's Forestry TruckSafe program, BC Timber Sales and the Ministry of Forests and Range to establish common signage, radio frequencies and radio protocols on every resource road in the province. With the mobility of logging truck drivers and contractors around the province, it is critically important to standardize this aspect of resource road management.

If all non-industrial users of resource roads saw common signage, radio frequencies and radio protocols across the province, it would significantly improve the ability of all RSMGs

to develop public and community awareness programs. Common signage, frequencies and protocols would be especially helpful for emergency responders.

RECOMMENDATION

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

Emergency Response

Many members of the public, especially tourists, do not know how to operate safely on resource roads that are actively used by industry. ICBC reports that in crashes between industrial vehicles and private vehicles, the driver of a private vehicle is at fault 85 per cent of the time. Most of these crashes occur in remote locations with limited and time-consuming access to health care facilities, making the consequences of these crashes even more serious. Therefore, effective emergency response is important to individuals in a very real and practical way.

Currently WorkSafeBC has regulations in place that deal with risk assessment and basic requirements in the workplace. In logging operations, that workplace is the harvest cut block, mill or sort yard areas that are covered by the Prime Contractor designation. However, there is a gap in coordination of emergency response services in the terrain that falls between the cut block and the public highway. Integrating the responses of the RCMP, BC Ambulance Service, local fire departments or other designated first responders must be an issue addressed by RSMGs.

Every RSMG should develop an Emergency Response Plan and ensure that all resource road user groups and emergency service providers agree with and are familiar with it. It should be part of the operating manual for each RSMG and regularly reviewed.

The Emergency Response Plan (ERP) should address:

- Critical areas and hazards (e.g., areas of poor radio reception, difficult road condition areas, snow belts)
- Response capabilities of the local agencies, fire departments, ambulance, jaws-of-life, air ambulance services
- Specific procedures to deal with geographic issues unique to the region
- Provision of 24-hour emergency contact numbers so responders can gather any necessary information after operating hours
- Proper call procedures so that 911 calls to call centres not located in the region are handled efficiently and the appropriate agencies dispatched (e.g., description of accident, steep bank, fire, number of victims, occupants out of vehicle or trapped, injuries,

weather, exact location with directions, marshalling point, contact person at the marshalling point)

- Who within the RSMG is responsible for providing details of any project in the region (location, type and volume of work, timing, possible accidents/injuries type, limitations to rescue or response, communication)

Providing active project details and tracking these activities should be a key component of the Emergency Response Plan. While logging operations are required to post notification of commencement of work providing details of where harvest operations will be taking place, this may not be the same for all other commercial sectors operating on resource roads. An effective information gathering method will need to be developed for the ERP.

A recent incident in South Okanagan Similkameen highlights some of the issues raised above. The local fire department was dispatched in response to a report of a vehicle in the river at 10 kilometers up a local active logging road. Because the fire department was unsure if all logging activities had ceased for the day, the rescue truck was delayed while waiting for a radio-equipped vehicle to escort it up the road. The pickup truck with the road channel to which they gained access had no contact with the ambulance or the RCMP, neither of which came to the scene of the accident. This type of confusion or disjointed response to calls is not uncommon on our resource roads.

There are other issues that are barriers for first responders attending accident scenes. Due to liability concerns, many first responders cannot travel beyond municipal or regional district boundaries. The BC Ambulance Service does not always attend accident scenes on resource roads due to safety concerns for their staff. There appears to be no common provincial policy for the BC Ambulance Service in responding to accidents on what are viewed as industrial roads. In addition, search and rescue organizations rarely have the proper radio frequencies for operating in these areas.

There currently is a gap in the system for responding to accidents that occur on our resources roads and it must be addressed. As much as emergency response needs to be part of the work of any RSMG, establishing these RSMGs will take time.

RECOMMENDATIONS

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

Legal Connotations

Our office did give consideration to a model of Road Authorities rather than Road Safety

Management Groups. However, Road Authorities have a legal connotation that could impede effective and practical action. It is our view that a Management Group model is more workable.

Given the wide range of users now on our resource roads, a comprehensive approach to road safety management only makes sense. It would mitigate many of the risks currently on those roads, and would be able to coordinate capital upgrades, regular maintenance, clear signage and public education in an operating model. Local stakeholders, gathered into Road Safety Management Groups around the province, can maximize efficiency, keep the lines of communication open among all users and, above all, make the roads safe and reliable for all. From our perspective, the alternative of several different agencies laying out differing sets of rules without coordination would be unsafe.

APPRAISAL MANUAL LIMITATIONS

"They'll move a road to save a fish, but loggers are strictly on their own."

One of the areas that we explored during this review was the methodology involved in driving decisions within the Ministry of Forests and Range as it pertains to resource roads. There were a couple of situations that arose where licensees had identified an alternate route for hauling logs that, in their view, had fewer risks than the original route. The licensees requested that the Ministry of Forests and Range allow for this safer alternate route to be utilized.

Currently the Appraisal Manual provides for the least cost haul route. The cost that determines the route is based upon estimates of haul speed for the road alignment and does not take into account safety issues. As a result, haul speed replaces safety as the determining factor and licensees' rates are affected by what the Appraisal Manual recognizes.

There is currently no system in place within the Ministry of Forests and Range to recognize bona fide safety concerns and address them in a timely fashion. In both of the cases that have come to our attention, the application to use an alternate route is still being discussed after more than a year while hauling continues on a route that the licensee considers to be less safe. However, from the Ministry's point of view, the alternate route proposed would require an additional expenditure that would be deducted from the stumpage, thereby reducing revenue to the Crown.

As the Forest and Range Evaluation Program (FREP) report states, "In part, the appraisal system in British Columbia consists of subtracting the estimated costs of road development, harvesting and wood delivery from the estimated market value of the timber. This system generally does not recognize individual costs, but applies averaged costs for phases. Mainline and complex construction costs are based on individual Engineered Cost Estimates. Non-complex branch and block road costs are assigned a tabular cost." Any additional costs that are incurred by the industry are captured in the annual Logging Cost survey and then reflected in the stumpage system in a subsequent Appraisal Manual.

More commonly, there is no agreement between the Ministry of Forests and Range and the operator on whether work required to be done to a road surface is ongoing maintenance, which would be captured in the existing stumpage formula, or major capital investment, which would require a special amendment. Getting these costs recognized is cumbersome, timely and impractical. To have a new cost recognized, decision-making extends right through to the Executive or Ministry level, and requires questions and answers to be exchanged among the senior levels of the Ministry of Forests and Range, regional and district staff and the licensee or contractor.

In the FREP report; "Worker Safety Impacts Associated with Legislation, Policy, Planning and Implementation of Forest Harvesting Activities in BC," both loggers and planners identified that "approvals for amendments were onerous and time-consuming because the legislation was not flexible enough to accommodate safety issues…. Because of the perceived delays… safety problems are often worked around rather than addressed." This cumbersome management structure has left many loggers unhappy with the current policy. The policy may address the issue, but the authority to act on concerns rests at a level too remote from the decision-making process to be effective in improving worker safety. As one contractor put it, "They'll move a road to save a fish, but loggers are strictly on their own."

The Joseph Leroux Coroner's Report made a number of recommendations specifically concerning putting a safety perspective on decisions made by the Ministry of Forest and Range. Recommendations 1, 3 and 5 all spoke of the need for District Managers in either BC Timber Sales or the Ministry of Forests and Range to conduct risk assessments or ensure those risk assessments have been completed on roads prior to issuing permits.

Recommendation 8 specifically called on the Ministry of Forests and Range to consider developing safety-focused standards for engineering, construction and maintenance of resource roads as well as to assess the standards and upgrade accordingly.

Implementing any of these recommendations requires timely decision-making during all phases of a harvest operation. If risk assessments are to be undertaken, then both licensees and the Ministry of Forests and Range need to be involved and safety has to be of equal importance as the environment and Crown revenue. That is not the case today.

A number of organizations have also been advocating for the inclusion of safety as an objective in Forest and Range Practices Act. The

belief is that if Forest Stewardship Plans were required to consider safety in the course of planning, safety consciousness may be more likely to permeate throughout all forest practices. While I do agree that this approach may create safety consciousness at a high level, it does not necessarily translate to safety practices on the ground. Resource road safety requires those individuals closest to the results to have the flexibility to make and implement decisions.

As new methods of managing resource roads are developed, the need for organizations to ensure they have the resources to manage the responsibilities will be critical. It is a given that if a road user group should default in the future, resource road responsibilities will revert back to the Crown. Because of this possibility, it is imperative that managers at the operational level have all of the economic tools at their disposal to be able to respond to any changes in the structure of an RSMG.

For District Managers to be able to focus on safety in any deliberations or decisions they undertake, safety considerations must be on an equal footing with environmental and Crown revenue objectives. Monetary issues cannot be seen to be a barrier to evaluating operating options on cut blocks and road systems. Without an enabling strategy that includes measurable results on the ground, safety considerations will continue to be reactive, rather than proactive. A new system must ensure that safety, environment and revenue to the Crown are all treated as equals. The system shouldn't drive safety – safety must drive the system.

RECOMMENDATION

11. The Ministry of Forests and Range and forest licence holders should undertake a collaborative review and overhaul of the stumpage appraisal system to identify and address impediments to timely decision making at the operational level.

TRAINING

"The focus of a lot of the attention has been log truck drivers, but the scariest vehicles I meet on the roads are all the light pick-ups and service trucks. They're being driven like they were just stolen."

Driving loaded logging trucks on gravel roads is different from highway driving. It requires not only different skills not included in any Class 1 driver program, but also an understanding of the operating protocols in effect on resource roads. In our first review, "Not Out of the Woods," our Office recommended that

a Competency Certification model be established for off-road log haul truck drivers. Currently the BC Trucking Association, in partnership with the BCFSC and ICBC, is working on developing the criteria for upgrading Class 1 Drivers Licences and BC Forestry TruckSafe is developing the criteria for off-highway truck driver certification.

The challenges of driving on gravel roads are not restricted to large trucks requiring a Class 1 licence, but extend to all vehicles. Operating any vehicle on a resource road requires an additional level of knowledge not just in handling a vehicle but in understanding the protocols of the road. As one truck driver stated in a meeting in Nelson, "The focus of a lot of the attention has been log truck drivers, but the scariest vehicles I meet on the roads are all the light pick-ups and service trucks. They're being driven like they were just stolen." Making resource roads safer will require a clear understanding by all users of the roles, responsibilities, protocols and operational skill set of operating any vehicle on a gravel resource road.

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.

ENFORCEMENT

Immediately an RCMP officer in the back of the room stood up and said, "If you won't fine them, then we will."

In British Columbia there are 47,000 kilometers of public highways, and the legal and regulatory responsibility for these roads and those who drive on them is clearly defined. The Ministry of Transportation has responsibility for building and maintaining the public highway system, and also has the responsibility for commercial vehicle safety and enforcement.

Currently the responsibility for building and maintaining the more than 400,000 kilometers of resource roads falls to the licensees, road permit holders and BC Timber Sales. But it is far less clear who is responsible for resource road safety and enforcement.

Some organizations are of the view that whoever is responsible for the maintenance of resource roads (i.e., the Road Permit Holder) is in the best position to also conduct enforcement. But there are many problems inherent in this presumption.

For most operators who are road permit holders there is a lack of understanding of the regulatory and legal framework under which resource roads currently operate. In some cases that lack of clarity also exists between agencies and regulatory bodies themselves.

In Houston at a log truck drivers meeting, a representative from Commercial Vehicle Safety and Enforcement (CVSE) was giving a presentation on how to complete a logbook. During the presentation in answer to a question on the amount of detail required when identifying the location of a truck, the representative from CVSE stated that if the driver did not add the letters "BC" to the location in the logbook, CVSE would not fine that individual. Immediately an RCMP officer in the back of the room stood up and said, "If you won't fine them, then we will."

This exchange clearly illustrates the gap in understanding, training and enforcement among different agencies charged with the responsibility for enforcing identical regulations. It is little wonder that truck drivers who are financially impacted by these inconsistencies are often frustrated by enforcement agencies.

In a specified work site, it is clear that WorkSafeBC's Prime Contractor designation devolves and assigns the responsibility for safety to an employer controlling a specific workplace. The Prime Contractor model is effective in a workplace with defined boundaries, as the "Prime Contractor" has both the authority and ability to control the workplace. Less clearly defined and less controllable is the resource road network that extends between the work site (in the forest industry, the cut block) and the mill/sort yard or public highway.

On resource roads, a road permit holder does not have the authority to control or enforce safety standards on the full range of users, or even the ability to know who those users might be. There are also other arguments that could be made against delegating enforcement responsibilities to the road permit holder:

- Can the Crown legally delegate law enforcement?
- If the road permit holder is in competition with other resource road users, an inherent conflict of interest exists.
- No private entity has the authority to conduct enforcement.
- No private entity has authority over other industrial users, ranchers, homeowners, First Nations or public users.

There is a role for all of the industries that use resource roads to influence behaviour on resource roads through their contractual relationships with employees, suppliers and contractors. But influence and enforcement are significantly different, and there is neither public nor business appetite to move law enforcement into the private sector. In our view, while there are some inherent challenges and inconsistencies in how the many agencies responsible for enforcement manage those responsibilities, they are still the appropriate groups responsible for enforcement.

RECOMMENDATIONS

13. Responsibility for enforcing safety standards on resource roads should remain with government agencies currently charged with

that responsibility--Ministry of Forests and Range, Ministry of Transportation, RCMP and WorkSafeBC--regardless of any changes in jurisdiction for resource road maintenance or operation.

14. The Province should undertake a full review of the inter-agency training for all Government Agencies responsible for enforcing provincial statutes to ensure that agencies responsible for enforcement of provincial statutes are applying those laws and regulations equally and with the same interpretation.

CYCLE TIME

Negotiating a truck rate is a business decision; determining a cycle time is a safety issue.

An issue unique to the interior forest sector is cycle times. Cycle time, or trip time, is the amount of time it takes a logging truck to complete the trip from the cut block to the mill/sort yard and back to the cut block. The cycle time calculation takes into consideration loading time in the bush, driving time and unloading time in the mill/sort yard.

This is an area where the Ombudsman's Office has received a high number of inquiries over the last two years. The issue is that negotiated cycle times in some cases do not fairly represent the actual time it takes to complete a full trip. Situations and conditions may change since a cycle time was determined and the time allotted no longer reflects the actual time required to complete a full cycle.

Cycle time plays an important role in improving safety on both resource roads and public highways as how it is calculated may impact driver behaviour.

Cycle times are complex, with many variables that influence their determination, including corporate structure, road design, maintenance, construction, truck configurations, changes in road users, changes in regulations and operational conditions.

Our office sees the negotiation of a truck rate as a business decision; the determination of a cycle time is a safety issue.

Corporate structure

In many areas, licensees determine the cycle time for any given haul from the cut block to the mill or sort yard. The cycle time includes both the physical time allotted for the trip and a rate to be paid to the truck driver for the haul. Both truck and trailer configurations are identified in the rate.

In many cases licensees engage full-phase contractors to harvest their timber, who in turn may retain sub-contractors and/or owner-operators to undertake the work. The negotiated rate is applied throughout the line of contracts

and sub-contracts, with some contractors also assessing an administrative fee. The result is that the original cycle time rate is not passed through to the log haulers.

In other cases a contractor who owns the loading or unloading equipment may add additional trucks to a log haul to ensure that equipment does not sit idle. Truck drivers then have to wait longer in the bush to be loaded and longer in the mill/sort yard to be unloaded. The result is that drivers will attempt to make up the additional time used while waiting during the driving phase of the cycle time.

Situations like these can impact the accuracy or fairness of the original cycle time calculation and rate by either adding time to the trip or impacting the rate that flows down to the truck driver. If truck drivers cannot work within the posted cycle time, safety will be compromised and not only the drivers themselves but the entire public is put at risk as drivers attempt to make up time.

Road Maintenance, Construction and Weather

The standards of design and construction of any given road will have an impact on the ability of the licensee to maintain them. Difficult switchbacks, severe adverse, soft shoulders or narrow road surfaces all add significantly to the demands of ongoing maintenance. The level of maintenance on a road surface will directly affect the speed vehicles can travel. If poor road maintenance would normally force drivers to reduce their speed, then the ability of the driver to achieve the set cycle time is affected. This can cause drivers to push themselves to operate their vehicles beyond the safe limits of the resource road surface in order to stay within the contracted time for the haul.

Truck Configurations

Currently when there is a change in the truck and trailer configurations in an operation, there is usually no corresponding review of the cycle time. Yet changes in market requirements for timber for mills and log yards often result in a change in the length of logs being cut and handled by truck and trailer units. Changing a truck and trailer configuration or adding a pup trailer may change the time it takes to load and unload, and any change in loading and unloading times will impact the cycle times. Procedures need to be in place to monitor the impacts of changes in one part of an operation (on other parts of the operation). If cycle times remain static while operation times increase, then drivers will be compelled to operate outside of the posted limits in order to meet those cycle times.

Other Users

As the federal and provincial governments implement policies that support new investment and development, traffic on our resource roads changes. These changes, while often beneficial for the provincial economy, are not always beneficial for the log hauler who must now share the road. Increasing amounts of traffic on resource roads may influence whether a log hauler can achieve the set cycle time. This, too, should be monitored on an ongoing basis.

The Ombudsman's Office has no jurisdiction over cycle time rate negotiations, nor does it wish to have. However, if a cycle time results in behaviour that puts either truck drivers or others at risk, we are concerned. Operating a vehicle unsafely to meet posted cycle times puts everyone at risk.

Cycle time inquiries are difficult to resolve, as the issues that contribute to the cycle time calculation are complex. The agency charged with the responsibility for workplace health and safety for workers and employers is WorkSafeBC. It also has the responsibility to govern and regulate workers' behaviour. I am of the view that cycle time determination is a safety issue and should fall within the scope of WorkSafeBC. Cycle times need to be monitored as part of a management/operational decision-making process. In this way safety considerations will be put on an equal footing with production.

RECOMMENDATIONS

15. As part of its Section 26 Review, WorkSafeBC should incorporate individual cycle time reporting as a component of required documentation for log haul truck drivers.
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 perspective.

TECHNOLOGY

There are two technological innovations that may assist in improving safety on our resource roads.

Global Positioning System (GPS)

GPS systems now available commercially offer new opportunities to improve safety on resource roads, particularly those traveled by a variety of users. GPS could be used to track and locate vehicles in real time. This could play a significant role in locating the positions of all industrial and commercial traffic on a resource road network for any potential user. It could also be invaluable to help first responders locate vehicles that

have been involved in accidents, and to provide information for other emergency units about oncoming industrial or other traffic. GPS could not only improve safety for the emergency units responding to the call but also shorten the time required to reach the scene of the accident.

Electronic Stability Control (ESC)

ESC systems have shown themselves to be invaluable in improving driver control of a vehicle. In slippery conditions or when radical avoidance maneuvers are necessary, ESC assists the driver to maintain or regain steering control. They have now been incorporated extensively into both light and heavy vehicles in Europe with a great deal of success.

The complexities for log-haul truck drivers of driving on resource roads, where conditions are much more unpredictable than on public highways, are significant. Drivers cannot always react manually as quickly as electronics can to emergency situations. In 2007, 30 per cent of all crashes in BC between pick-up trucks and logging trucks involved roll-overs. ESC is proven to be effective in preventing roll-overs and could have provided a significant advantage to these drivers in preventing crashes.

While ESC systems are not a cure-all, coupled with professional driving skills, they can provide a substantial improvement in safety for both truckers and the public that use our resource roads.

RECOMMENDATION

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

CONCLUDING COMMENTS

Over the last two years, progress has been made to improve safety in the forest sector:

- The number of fatalities and serious injuries are down significantly from their traditional levels;
- There are now 2846 registered companies and 336 SAFE Certified companies;
- In 2006 and 2007 there were no faller fatalities, a first for the sector.
- There is activity to establish RSMG in the province, the Ojay Road Management group is one example;
- There is work being undertaken by industry, WorkSafeBC and government to establish standardized road signage, radio protocols and radio frequencies;
- There has been an introduction of supervisor training for bull buckers (faller supervisors);
- A number of agencies and industry are working on developing new competency requirements for Class 1 and off-highway truck drivers;
- The Silviculture association is developing training programs for ATV and light vehicle operators.

These are positive steps, but more needs to done to reach the goal of zero fatalities.

The Office of the BC Forest Safety Ombudsman was established to provide a confidential venue for individuals and groups to raise issues about safety in the forest sector. During the interviews I conducted for this review, it was apparent that some contractors were reluctant to follow up on their initial calls to the Office for fear of economic reprisals. The current economic situation in the forest sector has made work less available and no contractor or owner-operator wanted to do or say anything that might worsen his or her situation. For example, in areas in which Pope and Talbot operated before entering into the court protection of the Companies' Creditors Arrangement Act (CCAA) in the fall of 2007, contractors were severely restricted in their conversations during my interviews for this review. Many contractors, facing these conditions, were positioning themselves to exit the industry, which will have a much larger impact, with regard to safety, on the harvest sector in future years.

However, an issue that did arise is how the impact of economic conditions on the forest sector workplace influences the decisions that individuals make in the face of these economic conditions.

Corporate structure in the forest sector has changed significantly over the last decades. Companies that used to maintain a large employee base no longer do so today. In most cases, contractors or owner-operators have taken the place of employees. The impact of this change is significant when companies go into CCAA protection.

Historically, when a company went into receivership or bankruptcy, legislation provided some protection to employees who moved to the head of the line when any financial payouts occurred. In the new corporate reality, contractors and owner-operators are far more economically

vulnerable. Not only are the contract fees they would have earned captured in any CCAA process, but they are also liable for any personal investments in equipment and supplies they may have purchased in order to complete the contract. The impact of a major licensee going into CCAA is more disruptive on contractors and the broader communities in which they live and work than ever before.

That vulnerability and disruption often puts individuals who are trying to hang onto their equipment or provide for their families into difficult situations. They are far more inclined out of economic necessity and pressure to make workplace decisions that compromise their safety and the safety of others. They are more inclined to take on work that they know is unsafe, or perform work in an environment that is unsafe.

In this new economic reality, legislation needs to be introduced to provide relief to contractors and owner-operators whose economic vulnerability is resulting in undue risks and unsafe work for them and those who work for them.

I urge the government to modernize the Woodworker Lien Act to reflect the new corporate reality of the forest sector. Modernization of the Act would involve extending some form of economic protection to contractors. This could assist in relieving some of the economic pressures so that contractors have greater flexibility in how they approach future contractual engagements from a safety perspective. Reducing vulnerability and economic pressure will also improve the ability of individuals to speak out freely on safety-related matters.

Although I have no specific recommendations regarding this issue, it is a factor in a code of silence I encountered in some workplaces. Whether real or perceived, economic vulnerability is out there and our office encourages individuals and employers to be aware of its impact.

The SAFE Companies Certification established by the BC Forest Safety Council should provide some measure of assistance and protection, as companies are required to employ a safety management regime in their operations to gain and maintain certification. But no one benefits when individuals or firms feel silenced.

Another issue that continues to raise concerns is substance abuse. Substance abuse is not just limited to illegal drugs and alcohol but extends to the overuse of legal, over-the-counter prescription drugs and stimulants. ICBC will void driver insurance if there is evidence that the driver of a vehicle involved in a crash was under the influence of illegal drugs. While this addresses the illegal use of drugs and alcohol, it does not deal with the misuse of legal drugs or stimulants. Every employee and employer has a responsibility to ensure the workplace is safe both for themselves and for the people who work around them. WorkSafeBC may want to consider ways to ensure that this responsibility is taken seriously by implementing policies around overuse of legal drugs in the workplace.

However, the factors that compel individuals to misuse these substances also need to be

addressed. I believe that proper checks and measures need to be in place at the management level to ensure that employees and contractors have adequate time between shifts to rest, and to allow for more regular and predictable work schedules. Implementing cycle times that are reasonable and safe and scheduling shifts and production plans that value human factors equally with production needs would remove the need for individuals to utilize illegal substances or misuse legal ones.

There is a clear lack of understanding of the roles and responsibilities for safety on resource roads especially with regards to the roles of owners and Prime Contractor. Clarifying these roles will require Ministries/Agencies, WorkSafeBC and industry to work collaboratively to develop a safety program for resource roads. Any attempt by a single agency to implement a solution independent of the other stakeholders may only increase the confusion.

While this review has focused on the physical attributes of road design, construction, maintenance and operating models, it is the role we play as individuals and how we operate our vehicles that will have the greatest impact on reducing injury and death on our roads. Every individual is personally responsible to operate vehicles in a safe manner that does not endanger themselves or others.

The Ombudsman's Office was established to be the backstop, to see that safety gains are never lost. As we move into a new year, that is exactly what we intend to do.

Roger Harris

BC FOREST SAFETY OMBUDSMAN
FEBRUARY 4, 2008

Appendix A

RECOMMENDATIONS

1. The Province should establish a new public highway designation for resource roads that serve as the primary or secondary access roads for communities. The new designation would have clearly defined standards for construction, maintenance, enforcement and be funded/resourced similarly to the public highway system.
2. The Province should give strong consideration to extending the BC highways system model for compliance and enforcement of commercial vehicle regulations and inspections to this new road designation.
3. The Ministry of Forests and Range should take the lead in identifying which road systems this new road designation will apply to.
4. When a road system receives a "new road designation," the standards for construction and maintenance on this road should be at the highest level needed by any industrial activity for which it will be regularly used.
5. The Province, through the Ministry of Forests and Range, should establish regional Road Safety Management Groups (RSMG) with the responsibility to manage all activities on resource roads in the province.
6. The Ministry of Forests and Range should identify the regional resource road networks that would logically be contained within any specific RSMG unit.
7. The Provincial Government should work with industry to ensure that capital costs of resource road construction and maintenance within an RSMG unit are fully recognized for the purpose of tax credits and stumpage calculations.
8. RSMGs should take an active role in supporting and assisting Industry Canada, BC Timber Sales, ICBC and the Ministry of Forests and Range to implement province-wide common signage, radio frequencies and radio protocols.
9. Until there is a formal network of RSMGs across the province, regulatory agencies working with industry should develop clear communication plans for local first responders.
10. All RSMGs 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.
11. The Ministry of Forests and Range and forest licence holders should undertake a collaborative review and overhaul of the stumpage appraisal system to identify and address impediments to timely decision making at the operational level.
12. The BC Forest Safety Council should develop an Industrial Drivers Endorsement Program for operators of light/service industrial vehicles operating on resource roads.

13. Responsibility for enforcing safety standards on resource roads should remain with government agencies currently charged with that responsibility--Ministry of Forests and Range, Ministry of Transportation, RCMP and WorkSafeBC--regardless of any changes in jurisdiction for resource road maintenance or operation.
14. The Province should undertake a full review of the inter-agency training for all Government Agencies responsible for enforcing provincial statutes to ensure that agencies responsible for enforcement of provincial statutes are applying those laws and regulations equally and with the same interpretation.
15. As part of its Section 26 Review, WorkSafeBC should incorporate individual cycle time reporting as a component of required documentation for log haul truck drivers.
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 perspective.
17. The Province should take the lead in advocating for Electronic Stability Control systems for all new industrial, commercial and private vehicles.

Appendix B

ROSTER OF INTERVIEWS

Prior to May 2007	Fort Nelson	Licensee/Truckers/Contractors
	Prince George	New Technology Proponents
	Squamish	Licensee
	Vernon	BC Timber Sales
May 2007	Nanaimo	Ministry of Forests and Range
	Port Clements	Contractors
	Sandspit	Contractors
	Juskatla	Contractor
	Queen Charlotte City	Ministry of Forests and Range
June 2007	Houston	Log Haul Truckers Meeting
July 2007	Port Alberni	FN License/Contractor Group
	Courtenay	Contractor Association
	Prince George	Contractors/ Truck Driver
	Victoria	Ministry of Forests and Range
August 2007	Houston	MT&H, Licensees
	Dawson Creek	Road User Group
	Prince George	Council of Forest Industries

September 2007	Vancouver	BCTS
October 2007	Victoria	Ministry of Forests and Range
	Bamfield	Town Hall Meeting
	Port Alberni	Ministry of Forests and Range
November 2007	Terrace	Contractor Association
	Nelson	Silviculture Association
	Nakusp	Contractor/Truckers Meeting
	Fernie	Contractors/WorkSafeBC
	100 Mile House	Truckers Meeting
	Prince George	Contractor Association
December 2007	Nanaimo	Contractors
	Smithers	Town Hall Meeting

Appendix C

Recommendations of the Jury

FRANK LEROUX CORONER'S INQUEST

June 27, 2007

To: Honourable Rich Coleman
Minister of Forests and Range

1) We recommend that BC Timber Sales should be required to conduct risk assessments when allocating timber sales; such risk assessments should include study of impact on road safety and take into consideration operations involving existing road users.

2) We recommend that the Ministry of Forests and Range work towards standardization of forest road signage including the location and format of kilometre markers, must-call signs and signs indicating the location of pullouts.

3) We recommend a District Manager should be required to conduct an assessment of road user safety or be satisfied that such a risk assessment has been completed prior to issuing any road use permit.

4) We recommend a District Manager should be required to ensure that, if a road use agreement is required, a condition of the road use permit should be that road safety is addressed in the road use agreement.

5) We recommend that the Compliance & Enforcement staff be required to notify the road use committee and/or the primary road user of all instances of non-compliance with laws, regulations and rules of the road, including information related to written and verbal warnings issued to drivers.

6) We recommend that worker health and safety and road user safety, be included as an objective in all forest stewardship plans.

7) We recommend that adequate resources be provided to Compliance & Enforcement to ensure that adequate level of enforcement, including road safety focused enforcement, is carried out on forest roads.

8) We recommend that the Ministry of Forests and Range consider developing safety focused standards for the engineering, construction and maintenance of resource roads as well as assess the standards and upgrade accordingly.

To: Douglas Enns
Chair, Board of Directors
WorkSafeBC

9) We recommend that WorkSafeBC commission an engineering study to assess safe load limits for off-highway trucks and prescribe such load limits in the Occupational Health and Safety Regulations.

10) We recommend that WorkSafeBC make it a requirement that the primary road user on a multi-employer forest road establish the position of an unbiased Road Marshall or Truck Foreman to monitor road safety including road maintenance and snow ploughing, radio protocol compliance and compliance with speed limits and other rules of the road.

11) We recommend that WorkSafeBC conduct a study to test the feasibility of requiring the installation and utilization of truck tracking and monitoring devices for the purpose of road use compliance.

12) We recommend that WorkSafeBC, in conjunction with the RCMP, coordinates and implements a minimum of two resource road checks per logging season per forest district in regard to drug and alcohol abuse.

13) We recommend that WorkSafeBC notify all forest employers and remind them of their responsibility in regard to their employees' safety that it is from home to home not just within a specified work area, such as a forest service road or a logging site.

To: Tanner Elton
CEO/Executive Director
BC Forest Safety Council

14) We recommend that the BC Forest Safety Council continue to work, and expedite its efforts towards the development of a standardized radio use protocols throughout the province.

15) We recommend that the BC Forest Safety Council work on education of truck drivers about the compliance with requirements of pre-trip inspections, brake adjustments and seatbelt use.

16) We recommend that the BC Forest Safety Council move the issue of substance misuse in the forest industry to the forefront of their agenda.

To: Paul Taylor
President & CEO
Insurance Corporation
of British Columbia

17) We recommend that the Insurance Corporation of BC implement a forestry endorsement for commercial drivers and to include a 50 hour ride along time in a commercial logging truck prior to receiving the endorsement.

impartial, confidential, fair & timely

BC Forest Safety Ombudsman

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BC **Forest Safety** Council