

**REPORT**

**on**

**POSSIBLE CONSOLIDATION  
of the  
MINES ACT  
and the  
WORKERS' COMPENSATION ACT**

**for the**

**ROYAL COMMISSION  
on  
WORKERS' COMPENSATION IN BRITISH COLUMBIA  
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**by**

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## **EXECUTIVE SUMMARY and RECOMMENDATIONS**

The writer was asked by the Royal Commission on Workers' Compensation Board in British Columbia, through consultation, to assess whether the BC Mines Act and regulations should be consolidated with the provincial Workers' Compensation Act, with respect to: (a) mines inspection, and (b) occupational health and safety in the mine workplace generally.

In order to get a broad picture of the issue, the writer interviewed government departments, mine officials, mining associations and labour in 9 provinces and territories, as well as those in British Columbia, and reviewed submissions to the Royal Commission relating to the issue. Time did not permit an exhaustive research of the issue, nor was the writer privy to the extensive submissions regarding operations of Workers' Compensation Board [WCB]. The writer also would like to caution the reader that views expressed in the "Consultation Process" [appendix B] should be taken in the context that it is not always prudent to offer personal viewpoints. It is one thing to voice an opinion amongst one's peers, but quite another to a public body; some comments were made in confidence. Consequently, the writer has attempted to incorporate the views and opinions expressed, in such a way as to give the reader an underlying position of the various jurisdictions regarding this issue.

One topic which was brought forth by most participants was the "internal responsibility system." Several provinces and territories, notably Ontario and Nova Scotia, have adopted this system, and other jurisdictions appear to be moving in this direction. Since it was not specifically relevant to the issue of consolidation, the writer has included it under the "Consultation Process."

In order for the reader to assess, in greater detail, whether consolidation should or should not take place, a "summary of criteria" follows the conclusions and recommendations.

### **CONCLUSIONS**

British Columbia's Mines Act and Mine Health, Safety and Reclamation Code are examples of legislation and regulations that reflect today's workplace conditions. They are reviewed on a regular basis, in order to meet changing technologies and new information about hazardous substances. This cannot be said for the Workers' Compensation Act regulations, which presently are being reviewed after a 30-year period.

It is the writer's understanding that the BC Mines Act and regulations encompass a greater number of general regulations specific to health and safety, over and above those specific to the mining industry, than are presently incorporated in the Workers' Compensation Act. The writer was informed that "some of the good things in the BC

Mines Act, and Mine Health, Safety and Reclamation Code are going to be included in the Workers' Compensation Act.”

The relatively large number of mines inspectors [appendix A - fig.1], their high qualification standards, and their focus on a single industry, permit better coverage to ensure compliance with regulations. WCB, due to the large number of industries, cannot provide this same focused attention on any one industry. Thus, the Mines Branch, overseeing a single small industry (2000 work sites) is able to respond to health and safety issues in a much more timely fashion than WCB who are responsible for some 145,000 worksites.

In an industry that encompasses a wide range of hazardous conditions in open pit and underground mines, the need to have inspectors with extensive experience in mining and the mining workplace cannot be over emphasized. “If you don't have an intimate knowledge of work practices, how can you monitor compliance, or identify problems?”

The issue of “fines/penalties” [WCB] versus “orders” [Mines Branch] and reporting data, are not important enough to be considered in the analysis on whether consolidation should take place. However, BC's mining industry's safety record [appendix A - fig.2], and, to a much lesser extent, audit procedures, argue for the status quo, in the writer's opinion.

Consolidation, whether under WCB, Departments of Labour or Ministry of Labour, or in Alberta's case, the Alberta Energy Board [AEUB], does not appear to be an issue with regards to mines inspection, health and safety in other provinces and territories. The significant changes in health and safety inspections appear to have occurred when mine regulations were incorporated into the various provinces' and territories' respective Occupational Health and Safety Acts[OH&S]. These Acts all come under the jurisdiction of the above mentioned departments or agencies, and the mining industry is governed by the regulations in those Acts. In a cursory review of the various OH&S Acts, it appears that BC's Mines Act and Mine Health, Safety and Reclamation Code have similar general and specific regulations. It is those regulations [not consolidation] in the various Acts, including BC's, that stipulate duties, role and structure of committees, qualification of inspectors, etc., in the writer's opinion, that have played a significant role, in better than average safety in mines compared, to other industries.

Some jurisdictions have separated approval from inspection and enforcement, believing that the onus for compliance with regulations should be on the employer, with no apparent increase in injuries in the workplace; for example, Ontario, with the largest number of mines, has the best safety record in Canada. Then, there are those provinces who continue to integrate approvals, inspection and enforcement, and they, too, have good safety records; for example, BC's mining industry is the safest heavy industry in the province. It is the writer's opinion that approval, inspection and enforcement whether separated or not, is not a relevant issue in deciding whether consolidation should take place. Good safety records appear to be achieved under all agencies using either method. Whether

separation of duties should or should not be employed, it is the writer's opinion, that such a decision is best left to those directly involved in the industry.

The only argument the writer encountered that might possibly justify consolidation, was in the area of additional "resources" that would be available under WCB: such as, an extensive library system, more health and safety training available for inspectors and workers, greater opportunity for inspectors [some of whom are on national and international committees charged with developing standards for mine safety] to attend workshops and technical committee meetings with their peers in other jurisdictions, etc. Given the fact that the mining industry's levy, paid to the Mines Branch, only covers health and safety services, and that the Branch's budget is limited, these additional beneficial programs and services cannot always be satisfied or provided, due to funding constraints.

However, in comparison to WCB, the mining industry and its workers now receive: first and foremost, highly qualified inspectors in sufficient numbers to ensure greater frequency of inspection; regulations that are wider in scope, thus providing better health and safety conditions for workers; regulations that are reviewed on a regular basis, thus providing an opportunity for revision and additions, as conditions change in the workplace; and, a single focus from a regulatory body which permits a closer working relationship in resolving issues, thus benefiting both the workers and the companies. All things considered, it is clear that both the workers and the companies are best served by maintaining the present system.

The Sloan Commission's Workmen's Compensation Inquiry, 1952, reported, "To say that all safety inspections should be concentrated and administered under one head is a simple solution. Its execution is, however, less simple because it involves a revision - and in some instances a substantial revision - of the Statutes which apply." The Commission further states, "to extract the inspection forces from all Government departments and concentrate them under one extraneous head would necessitate their replacement within the affected department by other officials to carry out the duties which the Inspectors perform beyond those of mere safety inspection. This is especially true of the Mines Department..... ."

## **RECOMMENDATIONS**

Based on the above conclusions and the following "summary of criteria", the writer recommends that:

**The mines inspection, health and safety remain under the jurisdiction of the Energy and Minerals Division, Ministry of Employment and Investment.**

**SUMMARY of CRITERIA****CONSOLIDATION**

The writer first understood that consolidation, in the context of this report, meant the incorporation of mines inspection, health and safety with Workers' Compensation Board [WCB]. The impression was that several, if not all, provinces and territories, save BC, had amalgamated. On the contrary, it turns out that some have merged with WCB and others have merged with non-mining departments. The North West Territories [NWT], Yukon, Quebec and New Brunswick, all have consolidated these services under their respective WCBs. Whereas, Manitoba, Saskatchewan and Nova Scotia have placed these services under their Departments of Labour [DOL]; Ontario's comes under their Ministry of Labour [MOL]; and, Alberta's under the Alberta Energy Utilities Board [AEUB]. In the latter provinces, WCBs remain separate agencies, although there is some cooperation between jurisdictions; some provinces' health and safety training are funded by WCB. BC is the only province where mines inspection, health and safety remain under the same department, Mines Branch, along with general mining services, such as claim recording, assessment work, and economic development. In Ontario and Nova Scotia, such services are under the Department of Natural Resources, and in Quebec, the Department of Energy and Mines.

In all provinces, the primary reason for merging was to consolidate mines inspection with health and safety under one umbrella. New Brunswick felt it was a logical move which would result in savings in administration costs; however, the writer was unable to substantiate this claim, as the merger took place in the early 1980s. Ontario made the decision to merge in 1991, in order to eliminate duplication of services that existed under their mines and occupational health and safety departments. The Yukon government felt that it made sense to have all health and safety under one roof and in 1989 made the transition. In 1981, Quebec put all their primary industries, including mining, under their CSST [WCB]; "a unified system made sense." In the NWT, consolidation took place a year ago, and it may be too soon to assess the results, although, the writer was told that it appears to be a "non-event."

The writer was informed that each province and territory had experienced good safety records in mining; in some cases, much better than other industries in the region. It does not appear that consolidation with WCB is directly responsible for decreased injury and fatality rates. Ontario has the safest mining record in Canada, and, their mines inspection, health and safety division is completely separate from WCB. BC also has a very good safety record with a separate department.

## **PERMITS and APPROVALS**

One of the most serious concerns expressed by Mines Branch and the mining industry in BC is the potential separation of the role of approvals from inspection and enforcement. The Mines Act and Mine Health, Safety and Reclamation Code apply to all phases of mining, from mineral exploration to mine closure and reclamation. Before commencement of any work, on or about a mine or exploration project, a permit/approval is required from the chief inspector of mines. The Mines Branch and mining industry believe that this integration of permitting/approval, inspection and enforcement has produced a healthy and safe working environment, not found in any other industry in the province. Several inspectors in other provinces felt that the separation of permitting/approval from health and safety was a key factor in the Westray disaster. Submissions to the Westray inquiry have argued that the regulators failed to enforce existing standards for safe practices. It appeared to the writer that both departments, the former department of Mines [planning and approval], and DOL [health and safety operational regulations] had the legislative power to enforce closure, either in concert or separately. Consequently, the separation of duties, or lack of communication, as has been suggested, does not appear to this writer, as the fundamental underlying cause for not issuing closure by either party.

Several provinces have separated permitting/approval from health and safety and enforcement, most notably Ontario and Quebec. In Quebec, mines inspection, health and safety are under their CSST [WCB] jurisdiction. No prior approval is required for work in a mine; the onus is on the company to comply, although plans and documents must be submitted to the CSST. In Ontario, health safety and mines inspection come under the MOL. All permits and approvals have been removed. The onus is squarely on the company to comply with the regulations. As of July/1997, several regulations in the Occupational Health and Safety Act [OH&S] have been amended. For example, striking out “approved by the Director ‘and substituting’ designed, built and tested according to appropriate engineering standards”; striking out, “sent to an inspector forthwith ‘and substituting’ kept readily available at the mine site.” Yukon, Nova Scotia and Alberta require no approval prior to work commencing. However, NWT, Manitoba and Saskatchewan require approvals from their respective inspectors.

Several provinces and territories are watching Ontario’s situation very closely. Some in the industry are very concerned about liability being “dumped back on industry.” There is a comfort factor in having a third party looking over a company’s shoulder and saying, “you are or you are not on the right track.” Also, a third party can give an unbiased, more credible decision in the eyes of the union or management.

“Since the 1970s, Ontario’s mining industry has improved its lost-time injury rate by more than 80%. Mining now has an injury rate lower than the average of all other industries in Ontario.” In BC, where approvals are required, WCB statistics for the period 1991-1995 [appendix A - fig.2] indicate that, “not only is mining among the safest industries in the province, but it is by far the safest of the heavy industrial activities.” According to 1996 Canadian Mining Facts, “the Quebec mining industry has significantly improved its performance safety records with a 30% decline over 3 years of combined frequency rate

for compensable accidents and modified assignments.” Here is a situation where mines inspection, health and safety is under 3 different jurisdictions: MOL, Mines Branch and CSST; and where each have good safety records. It would appear then that the issue of prior permits/approval is not a significant factor in improved, or better than average safety in the workplace. What may be of significance is that, whether a prior approval is required or not, plans or changes must be submitted to a mines inspector, whereas BC industries under WCB jurisdiction, are not required to do so. It is the writer’s opinion that there is an advantage to the worker in having plans reviewed by an inspector. A legitimate concern then would be whether the same stringent requirement under the Mines Act would remain intact, should a transfer of responsibilities from Mines Branch to WCB take place.

## **INSPECTORS**

### **(a) Qualifications**

Every province and territory emphasized the importance and need to have highly qualified mines inspectors with mining experience. Each has stipulated in their respective regulations the qualifications and certifications required to be a mines inspector. Also, chief mines inspectors, in all jurisdictions, must be professional engineers, or the equivalent, as well as possessing several years of mining and inspection experience. Most provinces and territories also emphasized the importance of inspectors having, or acquiring, health and safety training.

In Manitoba, the “mines inspector” is a health and safety officer, competent through experience and training in mines and mining. An inspector does not need to be a graduate; however, whether a professional engineer or trained technician, an inspector must be certified in workplace safety [2-year course]. In Nova Scotia, “occupational health and safety officers lacking in mining experience should not be permitted to inspect mining operations, unless a specialist for a specific purpose [e.g. occupational hygienist].”

A fear expressed in BC is that inspectors, if transferred, would become, over time, “generalists.” There was an overwhelming concern that this would not bode well for health and safety in the industry. Other jurisdictions have expressed the view that, “if you don’t have the background, how can you go into a mine and define the problems?” The writer was informed that it was possible that under WCB, a mines inspector conceivably might not be restricted to just inspecting mines; that their training could be expanded to other industries. Of greater concern to the mining industries is, if the reverse were to happen; inspectors from other industries with little mining experience inspecting mines. Given the hazardous conditions that exist in mining, especially in underground hardrock and coal mines, these are legitimate, serious concerns. Prior to the late 1980s, Quebec mine inspectors became more “generalists” which had serious repercussions and led to unacceptable increases in

fatalities and injuries in their mines. Since then, only inspectors with considerable mine experience inspect mines.

WCB inspectors have expertise in their fields; however, they do not require, through legislation, specific qualifications to do their job, as do BC mines inspectors. If consolidation were to take place, would the standards and qualification requirements for mines inspectors become less stringent over time? It is the writer's opinion that the present qualifications for mines inspectors should not be compromised. The tradeoff may prove to be too costly, in terms of health and safety for workers, in the long term.

**(b) Roles**

Inspector roles vary depending on the province or territory; but in most jurisdictions, mines inspectors only inspect mines. There are a few exceptions, notably in the Yukon and New Brunswick. In provinces where approvals are required, the inspector not only inspects and enforces compliance, but actively participates in the development and maintenance of standards. In Saskatchewan, their inspectors also act as consultants, and they feel this a far better system, as "everybody gets to know everybody." In BC, as in some other jurisdictions, inspections are, "viewed as an audit for operations; more educator than inspector; a third party talking to worker and management." One inspector summed up his role, as, "making sure the worker has a safe environment, and keeping the company out of trouble."

The role of inspector has changed significantly in Ontario, where approvals are not required. Their role is one of enforcement; they no longer will act as consultants. "The process of being a consultant was costly, took too much time and the taxpayers should not be paying for free consulting." Quebec and Nova Scotia inspectors work on a similar principle. However, in New Brunswick, as well as in the Yukon, inspectors' role is somewhat more diversified, in that they inspect non-mining worksites. In those provinces and territories, where the mining industry is small, departments find they have to justify their resources, "nowadays it's better to have more skill sets; however, the priority remains mine safety."

Another significant issue in BC regards the number of mines inspectors. The Mines Branch's ratio of inspectors to workplaces and workers is approximately 10 times higher than WCB. Mines Branch have 22 inspectors dealing with 2000 worksites employing some 13,000 workers; whereas, WCB has 186 inspectors for 450,000 worksites employing 1.5 million workers [appendix A- fig.1]. The Mines Branch believes that they are able to achieve compliance, resulting in low accident rates in the workplace, through a higher frequency of inspections. Due to the very large number of worksites under WCB jurisdiction, WCB cannot possibly give the same service. Given the mining industry's better than average safety record [appendix B], the writer believes that frequency of inspection has played a major role in achieving this record. Other incentives, such as significantly reduced assessment rates for improved safety at the worksite, also are important factors.

Concern was expressed by many in the mining industry, that the removal of the “focus on a single industry” would detract from the effectiveness and enforcement of present safety standards. There are no assurances that, if consolidation were to take place, mining would continue to be a separate, highly focused branch. It is more than likely, in the writer’s opinion, that mining would fall under the classification of “heavy industry”, and be treated similarly to forestry, construction, etc. It is difficult to have confidence that the same attention, would, or could, be given to the mining industry under this scenario. The writer agrees with the mining industry that this single focus has played an important role in the industry’s achieving a better than average safety record.

### **FINES/PENALTIES**

It was virtually unanimous among the mining fraternity in Canada, that cooperation in the workplace produces a safer working environment. Should an inspector be given the right to fine? In some jurisdictions, this would be viewed as a “weakness.” For example, the manager calls in an inspector for advice; if, instead, a fine is issued, a good working relationship could be destroyed. “Fines also have the potential to erode relationships between management and employees.” “Fines are viewed as after the fact.” Mines inspectors, in most jurisdictions, including BC, can issue “orders”. “If an inspector is of the opinion that a delay in remedying a hazard would be dangerous, an inspector must issue an order: for immediate remedial action; suspend work until remedial action is taken; or close the mine until remedial action taken.” This last section is viewed as the ultimate penalty by mines inspectors. WCB inspectors, under similar circumstances, have the power to levy fines, or effect closure, should the officer consider that conditions are of immediate danger.

Whether the issuance of fines, as opposed to “orders” by mines inspectors, has affected working relations between WCB inspectors and management, or between management and workers is unknown to the writer, as time did not permit an evaluation of this issue. However, the writer was informed that WCB inspectors also provide advice and spend some of their time consulting and educating.

### **TRAINING: Occupational Health and Safety/Mine Rescue**

Communications between all parties on a site is a must, whether an industry is under Mines Branch or WCB jurisdiction; safety is about cooperation and working together. Mine rescue teams are recognized for their expertise; and no other industry has the skill of these teams. In BC, and in several other provinces, such as Nova Scotia and Alberta, a member of a mine rescue team must possess a valid mine rescue certificate, plus other qualifications [first aid certificates, etc.]. Regular practice drills are stipulated.

In several provinces and territories, the WCB/CSST is responsible for the prevention aspect and training for health and safety. In Ontario, WCB funds safety associations,

whose role is to provide training and prevention. In Saskatchewan, their DOL trains health and safety committees on mine sites. The levy [\$0.52/\$100 payroll] paid by the mining industry in BC to the Mines Branch pays for health and safety services.

Where specific training is required to be taught at the worksite, it follows that a safer working environment is more likely to occur. Most of those interviewed expressed the need for more health and safety training, both for their inspectors and for workers. Most provinces' and territories' OH&S Acts stipulate that health and safety training must be provided to occupational health and safety committees and workers. Apparently, there is no similar regulation in BC's Workers' Compensation Act, as yet. Given the hazards posed by mining, especially underground, any relaxation in standards or training requirements, would not bode well for workers on a mine site. Will WCB regulations be strengthened, or will mines regulations be relaxed, should consolidation take place?

### **SAFETY RECORD**

All provinces and territories, stated that their respective mining industries have good, or better than average, safety records. The writer was informed that Saskatchewan has seen a significant drop in accident rates over the last 10 years. The writer already has noted the very good safety records achieved by Ontario, BC and Quebec. However, no specific details were given by any of the jurisdictions, nor was there time for the writer to acquire statistics regarding this issue.

Several jurisdictions indicated that the "carrot/stick" approach works well in conjunction with their health and safety programs. The same principle is used in industries under WCB. For example, assessment rates at several saw mills in the interior were rising to alarming levels, due to high injury rates. The mills asked for assistance from their inspectors to resolve this unacceptable situation. The result was a dramatic reduction in injuries in a relatively short period to time, accompanied by a significant drop in assessment rates.

It is highly unlikely, in the writer's opinion, that there would be a significant improvement in BC's mining industry's, already better than average, safety record, if consolidation were to take place. The Mines Branch and industry obviously are doing something right.

### **MINE REGULATIONS**

BC's mine regulations come under the Mines Act and Mine Health, Safety and Reclamation Code. Alberta's mine safety regulations, including those specific to the coal industry, come under their OH&S Act of 1995. In Manitoba, mines regulations consist of 14 sections under their Workers Health and Safety Act. In Ontario, Saskatchewan and Nova Scotia, mining regulations pertaining to inspection, health and safety, are incorporated in their respective OH&S Acts.

New Brunswick was the first province to merge their mines inspectorate with WCB. In the Yukon, mining was transferred to their OH&S Division 10 years ago; and, in the NWT, the Mine Health and Safety Act was consolidated under their Workers' Compensation Act in 1996, and the Mines Act was repealed.

The Canadian Auto Worker's [CAW] submission to the Royal Commission stated that, "we need an OH&S Part of the Workers' Compensation Act." They suggested that it be written in a similar way to the various OH&S Acts in other provinces. Their recommendations for inclusion into BC's Workers' Compensation Act include numerous regulations from Manitoba's WH&S Act and Ontario's, Saskatchewan's, and Quebec's OH&S Acts, as well as making reference to New Brunswick's, Nova Scotia's and NWT's Acts. The CAW also recommended several regulations in BC's Mines Act and Mine Health, Safety and Reclamation Code be included in the Workers' Compensation Act. CAW's opinion is that, "the BC statute (*meaning Workers' Compensation Act*) is simply out of date and the regulations have not kept pace with statutory developments elsewhere."

It would appear that workers in the mining industry, with regards to health and safety at the worksite, are much better protected under the BC Mines Act and regulations than they would be under the existing Workers' Compensation Act. If consolidation were to take place, whose regulations would be empowered? It strikes the writer that to transfer workers from a jurisdiction where they are better protected, to one where significant additions would be required to give them the same protection, would not be a prudent move.

Another pertinent issue pertaining to regulations is the frequency of review and revisions. In 1988/90, a major review of the Mines Act and regulations by a tripartite committee, composed of labour, industry and government, resulted in the first Mine Health, Safety and Reclamation Code. It was recently revised in 1995/96. In Nova Scotia, the "Working Group", established in 1993, recommended that, "there should be a review and continuous improvement of mine regulations", and that the review involve employers and workers at intervals of no less than 24 months. Every jurisdiction indicated the importance of maintaining regular reviews, and several provinces and territories are mandated, through Advisory Committees, to do just that.

BC's first Workers' Compensation Act became law in 1916. The first Royal Commission to review the Act was in 1941; the second in 1949; the third in 1962; and this, the fourth, was struck in 1996. If legislation, as it pertains to workplace health and safety, is to reflect current conditions and technology in the workplace, timely reviews must take place. The Mines Branch appears to be satisfied with a 3-year interval; other jurisdictions have said 2 years, some 5 years. An 8 to 35-year gap obviously is not acceptable, nor can legislation drafted so long ago be comprehensive enough to reflect changes in the workplace environment [for example, regarding equipment, hazardous substances, etc.]. Are there any guarantees that there will be regular reviews, 5 years or less, of the Workers' Compensation Act after this Commission finishes its review?

## COMMITTEES

In BC, as in most other provinces and territories, where there are more than 20 regularly employed workers, the mine manager shall arrange for an inspector or other qualified person to provide training sessions for the occupational health and safety committees, who must meet on a regular basis [varies from province to province]. The committees role, primarily, is to consult on measures for promoting health and safety in the workplace. Membership consists of an equal representation of management and labour [workers]; and, if the number of workers on site is less than 20, there is at least one worker representative. One prominent labour organization involved in the mining industry stated that, “where joint health safety committee systems [JHSC] function properly...concerns about occupational exposures can be dealt with effectively.” In Ontario, the view is the “JHSCs will play a larger role now that the MOL is shifting responsibility to the workplace taking a stronger role in health and safety.” In Nova Scotia, their Working Group was of the opinion that, “when properly trained, consulted and supported, the importance of this joint problem-solving body cannot be overestimated.” CAW also pointed out in their submission that, “joint worker-management health and safety committees have been the cornerstone of the BC Workers’ Compensation system since 1944.” However, the CAW goes on to say that their duties and powers should be described in detail, “as is the case in other OH&S Acts.” BC Mines Act regulations stipulates duties of the JHSCs.

Advisory Committees, with equal representation of workers, employers and professional bodies or government officials, are appointed by a Minister of a province or territory. Their job is to advise and make recommendations to the minister on workplace safety and health. Meeting schedules vary, but most are required to meet at least yearly. In BC, the chief inspector must establish and chair an Advisory Committee; and, also establish regional advisory committees to review applications for mine approval and reclamation permits referred to them by the chief inspector. CAW also recommended that the WCB establish an OH&S Advisory Committee to review current occupational health and safety regulations on an ongoing basis, and to recommend new or revised regulations where needed.

It is the writer’s opinion, that, to be an effective working body, duties and responsibilities must be in writing. All jurisdictions’ Acts specifically outline the duties and responsibilities of the JHSCs for mines. It is interesting to note, that, in most provinces and territories, these specific regulations come under their respective OH&S Acts; while in BC, they fall under the Mines Act regulations. Regardless of where these regulations are incorporated, the mine worker is covered. The question then arises, if consolidation were to take place, would these same protective regulations be incorporated in the Workers’ Compensation Act, or would the worker not be as well covered? An Advisory Committee, whose responsibility is to review and recommend to a Minister on a timely and regular basis, is, in the writer’s opinion, an extremely valuable tool to keep pace with changes in the workplace environment that relate to health and safety. The very poor

review record to date of the Workers' Compensation Act does not bode well for their workers.

### **AUDITS**

In 1989, the Mines Branch first initiated a system of mine audits designed to measure the adequacy and effectiveness of safety programs and procedures. A detailed questionnaire, dealing with different aspects of health and safety in various categories, was developed. Over a 2-day period, a team of people from the Branch visit the mine site and talk to workers, supervisors and co-chairs of the occupation health and safety committee. The Branch does approximately 5 audits per year. Also, specialized, small, intense audits are carried out every year focusing on such issues as, "wheels, tires and rims, which can contribute to safety hazards.

The issue of standards for equipment, which could present problems, if consolidation were to take place, was brought to the writer's attention. For example, restrictions on elevating work platforms. The Mines Branch have 4 or 5 standards [CSA], any one of which can be applied to an underground situation. WCB has one standard for elevating work platforms and every industry under its jurisdiction must conform to it. This is but one example of additional issues that would have to be resolved, if consolidation were to take place.

WCB also does audits, both internal and external, to assess accountability. It may be valuable to compare the overall effectiveness of audits, in terms of improved health and safety, of the one department focused on a single industry [mines], as compared to an agency [WCB] with a multitude of industries.

### **REPORTING DATA**

The writer had very little time to devote to this issue. The Mines Branch has their "MINAAC" system and WCB's has their "AIRS" interface. Both systems are relatively new, but indications are that they will be invaluable tools in teaching and determining causation of injuries and diseases in the workplace.

### **GENERAL**

#### **(a) Funding**

Presently, mines in BC pay \$0.52/\$100 payroll [\$2.3 million, 97/98] to the Mines Branch for health and safety services. Industry's concern, should consolidation occur, is where this fund would go, to a specific branch dealing solely with mines, or incorporated in the general WCB fund? Would there be any guarantee that this levy would be considered sufficient by WCB to provide for the same services? It is the writer's opinion that it is considerably easier for the Mines Branch to determine and

justify actual costs for these services, than it would be for WCB, if mines were included under heavy industry, along with forestry and construction.

**(b) Jurisdictional Gaps**

The following is an example of where jurisdictional gaps potentially can pose serious health and safety risks to workers on a mine site. A project, although in the development stage, can be classified as a mine by the chief inspector. Once this designation takes place, all land used to access the actual mine site comes under the jurisdiction of a mines inspector. Logging may be required for extensive access to the site; followed by road construction; then by power lines; and, finally mine buildings are constructed on the property. The mines inspector's experience is in mining, health and safety, not logging, not road construction, not installation of power lines, nor perhaps building construction. Because the site is classified as a mine, WCB inspectors experienced in those areas, no longer are permitted, officially, to inspect the worksite. As more properties are developed in the more remote regions of the province, this type of problem could become prevalent. This is a conundrum that should be resolved, since, worker safety can be jeopardized.

If mines inspection, health and safety were under WCB, this jurisdictional gap would not arise. However, since these are not everyday occurrences, a regulation, correcting this should be added to the Mines Act.

**APPENDIX A**

**Comparison of Number of WCB and Mines Branch Inspectors**

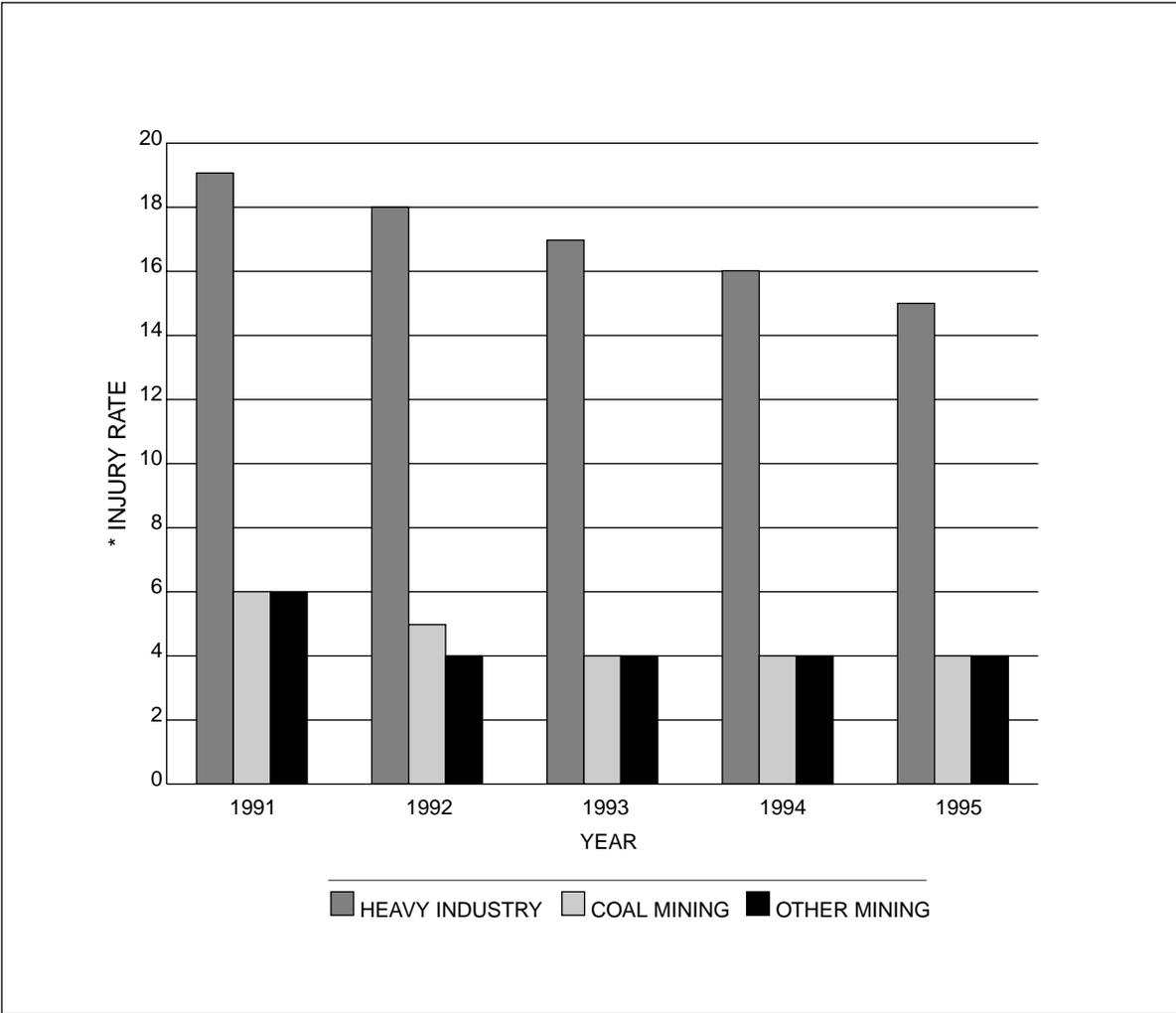
**Accident Frequency: Mining vs Heavy Industry**

**COMPARISON OF WORKERS' COMPENSATION BOARD  
AND  
REGIONAL OPERATIONS, HEALTH AND SAFETY BRANCH  
1996**

	W.C.B.	ROHS
Occupational Health & Safety Inspectors	186	22
Registered Employers	145,000	N/A
Work Sites	450,000	2,000
Workers	1,540,000	13,000
Ratio of Staff		
per 1,000 worksites	0.4	11.0
per 1,000 workers	0.1	1.7
Sanctions/shutdowns	384.0	40.0
per 1,000 worksites	0.9	20.0
per 1,000 workers	0.3	3.1

**APPENDIX A — Figure 1**

# ACCIDENT FREQUENCY MINING VS. HEAVY INDUSTRY



\* *Injury rate* refers to short-term disability claims per 100 person years worked

Source: WCB Statistical Services Department

**APPENDIX B**

**Consultation Process**

## CONSULTATION PROCESS

In the course of discussions and reviewing submissions, regarding whether mines inspection, health and safety in BC should be transferred to the Workers' Compensation Board [WCB], the writer became aware of a number of significant issues that arose that were important to the deliberation of this issue. Following [more or less verbatim] is a summary of these issues. The writer also felt that a historical perspective and outline of the present state of the mining industry in BC would assist the reader in understanding the issue at stake.

### **Historical Background: Mining Industry/BC Mining Industry**

The office of mine inspectors goes back over 200 years with France being the first country to establish a mines inspectorate in 1781; Britain followed suit in 1842; and the Federal Department of Mines in Canada [now known as Natural Resources Canada] was created in 1907. In 1576, the Company of Cathay was chartered as a result of a "fools" gold strike in Frobisher Bay. The company has the double distinction of being Canada's first, and possibly most unsuccessful, mining company. Gypsum mines were the first mining operations in Nova Scotia in 1779, in Ontario in 1822, and in Manitoba in 1901. One of the earliest discoveries of placer gold was found in Quebec in 1823. In 1886, the first shipment of coal was recorded in Alberta.

The first mining operation [coal] in British Columbia was on Vancouver Island in 1854, and it was not until 1877 when the first mine inspectorate was appointed. In 1909, the first Chief Inspector of Mines was appointed and the first annual report submitted [a practice that continues to this day]. In 1911, the Coal Mine Act gave coal mine workers the right to conduct their own safety inspections, and in 1948, the Mines Regulation Act gave all mine workers the same right. It was over 20 years before regulations for other industries [Factories Act, 1908] were established, and 40 years before the Workmen's Compensation Board came into being [1917]. From these early beginnings, there have been significant changes in mine regulations, which have attempted to keep pace with the ever changing face and operations of the mining industry.

The first mine rescue station was established in 1909 and this function remains one of the top priorities of mines. Also since 1909, the Branch has examined and certified the credentials and competency of managers and officials of underground coal mines; and in 1960, certification was extended to shift bosses and supervisors at underground metal mines. From its inception in 1877, health and safety issues have played an important role in mining regulations. BC's Mine Health, Safety and Reclamation Code [1997] is recognized world-wide, as a model for cooperative development of safety standards for mining and other industries. The International Labour Congress in Switzerland developed an international mining code based on BC's Mine Health, Safety and Reclamation Code. A number of delegations from around the world, Chile, Peru, China, Japan and Australia, have visited BC to investigate BC's mining regulations.

British Columbia has been first in many safety aspects of the mining industry in Canada:

- 1946: first specialized electrical inspections pre-operational reviews.
- 1966: first specialized mechanical inspections conducted at mine site.
- 1992: first jurisdiction in North America to set standards for respirable combustible dusts in underground mines.
- 1988/90: first Health, Safety and Reclamation Code for mines.

In the 1980s, pre-mining reviews of projects were expanded to cover all aspects of health, safety, environmental, reclamation and socio-economic considerations. In 1998/90, a major review of the Mines Act by a tripartite committee, composed of labour, industry and government, resulted in the Mine Health, Safety and Reclamation Code. This was revised again in 1995/96 and published in 1997. WCB statistics from 1991-1995 “indicate that not only is mining among the safest industries, but is by far the safest of the heavy industrial activities.” [appendix A - fig. 2].

### **BC’s Mining Industry**

Mining in BC encompasses both surface and underground mines. The workplace environment changes constantly, as mining progresses. Mining also is a hazardous industry requiring specialized expertise and skills, and constant monitoring of conditions, in order to protect the health and safety of workers. Current mining regulations reflect the changing nature of the industry and the fact that each mine is different. Mechanisms effective in one mine may be totally ineffective in another. Even within a single mine, multiple variable factors exist which require consistent reviewing and monitoring.

Because of the great variety of activities at mines, from underground drilling and blasting to the operation of massive equipment on surface, workers are exposed to a wide range of hazards. The industry argues that the need for discretion and understanding of the variables inherent in the industry by inspectors is crucial to a smooth running and safe operations of mines.

The Branch not only inspects and enforces compliance, but actively participates in the development and maintenance of standards. Routine procedures employed by the Branch are: pre-approval of mining projects and equipment; frequent inspections, close contact with employees; liaison with local occupational health and safety committees, mine management and local unions; auditing of safety programs; review of work and safety procedures; and, accident investigation. The Branch also issues orders requiring compliance and/or shut down and corrective action where hazards exist.

Branch health and safety inspectors are located in 6 regional offices covering all areas of the province. Several specialist functions: such as, manager, occupational health; electrical engineer; industrial hygienist; are located in Victoria and provide assistance to the regional offices. The Mines Act and the Mine Health, Safety and Reclamation Code

apply to all mining operations in BC and to all onsite activities connected with mine operations. Mine employees have 3 basic rights enshrined in the Act: Right to Know [hazards and risks]; Right to Participate [rules, accident investigation]; and, Right to Refuse [unsafe environment]. The Branch's budget for health and safety services for 1997/98 is \$2.3 million, of which 93% goes to wages, benefits and travel for inspectors. The budget is fully funded by a levy on operating mines: \$0.52/\$100 of payroll. This assessment is in addition to the assessment paid to WCB for the insurance portion of claims. 1996/97 was the first year in which the Branch's occupational health and safety and mine inspection function was fully funded by industry. Funding by industry has ensured the continuance of the Branch's operations, for these services.

Mine rescue training is required under the Mines Act and until 1988, all mine rescue training was conducted by Branch inspectors. Since then, larger operations conduct their own training. Mine inspectors examine and certify all mine rescue personnel, and each year the Branch sponsors mine rescue competitions which are designed to ensure consistent standards across the province. The Branch maintains a complete record of all trained personnel, and is responsible for coordinating emergency response facilities within the province and neighbouring jurisdictions. The Mines Act also requires that all persons employed in a supervisory capacity at every mine must be certified by the Branch. No other industry certifies front line supervision

In summary, the mining industry argues that given the professional and experienced inspectorate, a proven track record in health and safety for its workers, and timely regulation reviews, that mines inspection and occupational health and safety regulatory processes should remain under the jurisdiction of the Energy and Mineral Division, Ministry of Employment and Investment.

### **CONSOLIDATION**

The writer first understood consolidation to mean the incorporation of mine inspection, health and safety under the jurisdiction of Workers' Compensation Board [WCB]. This presumably had taken place in many provinces and territories, other than in BC. However, that definition is far from exact. A form of consolidation has taken place, but not under WCB in every instance. **Alberta** has a central agency called the Alberta Energy Utilities Board [AEUB]. All mine applications go to the AEUB where they are then distributed to the various departments for comments. The Director of Mines, who also is the Chief Inspector of Mines, operates under the jurisdiction of the Department of Labour [DOL], a division of the AEUB. All health and safety inspections fall under the auspices of the Occupational Health and Safety Division, [OH&S], a branch of the AEUB. WCB also is another division of the AEUB. Mine safety regulations, including those specific to the coal industry come under the Occupation Health and Safety Act of 1995.

In 1972, the Occupation Health Act in **Saskatchewan** came into force and the Occupational Health and Safety Branch of the DOL was created. The previously

fragmented protection of worker health and safety was replaced by a centralized system administered by the DOL. Saskatchewan was the first jurisdiction in North America to adopt a concept which recognized the interdependence of medicine, hygiene, engineering and accident prevention in workplace health and safety. Since that time, several changes in the Act have taken place and it is now called the Occupational Health and Safety Act. Mines inspection comes under the jurisdiction of the DOL and is autonomous from the WCB, although, mines inspection, health and safety is funded by WCB.

There used to be a Department of Energy and Mines in **Manitoba**; however, 10 years ago it was moved to Environment and from there it was moved to DOL. The Workers Safety and Health Act [WS&H] falls under the jurisdiction of DOL. Mine regulations consist of 14 sections under the WS&H Act. The DOL oversees workplace safety and health, while the WCB, an agency of the DOL, oversees compensation. However, WCB funds 95% of the WS&H Division of DOL employers, workers and others to support occupational, health and safety initiatives. Among the initiatives and projects undertaken by WCB are: health and safety training; continuance of existing safety officer programs; and, enhancing the use of WCB data to target prevention activity. The WS&H Division has primary responsibility for safety promotion and enforcement of workplace compliance with occupational health and safety legislation and regulations.

Since 1981, all primary industries, including mines, in **Quebec** come under the jurisdiction of the CSST [WCB] which includes mines inspection, health and safety. They are of the opinion that having one unified system works well. The question was posed to the writer, “that if it was good to have mines separated from the CSST, why would you not separate other industries as well, such as forestry or agriculture?”

All mining regulations, including the Metalliferous Mines Quarries Act and the Coal Mines Regulations Act, fall under the Occupational Health and Safety Act [OH&S] which comes under DOL in **Nova Scotia**. Before 1986, mining activities, regulations, etc., except for environment, come under the Department of Energy, Mines and Resources. In 1984, the Committee on occupational health and safety recommended that DOL & Manpower [DOL] be the lead agency in the administration and enforcement of occupational health and safety. The committee further recommended that the DOL absorb the mines inspectors from the Department of Energy, Mines and Resources. As a result of consolidating the various departments dealing with occupational health and safety, the OH&S Act came into force in 1986, and the OH&S Division of the DOL was created.

In 1993, a “Working Group” composed of representatives from unions, management, technical consultants, and federal and provincial governments safety staff, was established to recommend occupational health and safety regulations for underground mines. It was also recommended by the Group that there be a liaison between the DOL and the Department of Natural Resources “to ensure that the mining industry of **Nova Scotia** is provided with a *one window* approach to mine development.” The Department of Natural Resources [DNR] has informed the DOL that they [DNR] do not have the expertise or

specialized knowledge of occupational health and safety in mines; that is not their jurisdiction.

**New Brunswick** was one of the first provinces to merge the mines inspectorate with their WCB which took place in the early 1980s. With the recent merger of WCB and the OH&S Commission, the Board now is called the Workplace Health, Safety and Compensation Commission. Industry supported this amalgamation; they felt it was a logical move which would result in savings in administration costs. The writer was informed that there were growing pains and initial problems in each of the bureaucracies at the beginning. However, the mining industry is of the opinion that it has been working well since its incorporation in 1996. The government has stepped away from issuing approvals; “we are no longer an approval agency, you [mining company] are responsible.” Inspectors will not accept liability.

Approximately 10 years ago, mining was a separate entity in the **Yukon**. It has since been transferred to the OH&S Division which falls under the jurisdiction of the WCB. There was considerable resistance at first. Within the OH&S Division are: mine engineering unit, field services unit, and the technical training unit. Mines inspections were done by the field services unit, but a decision was made to move mines inspection back to the mine engineering unit. Their responsibility includes: reviewing plans, rescue training and investigation of accidents. There are 2 inspectors in the branch who oversee 6 mines. There is not a lot of mining activity or exploration. The general opinion is that the industry and workers are much better off under WCB’s roof. “Miners in the Yukon have one place to go for all the answers.”

In the **North West Territories**, the Mine Health and Safety Act has been consolidated under the Workers’ Compensation Act, and the Mines Act was repealed. Consolidation has only been in force a short while [1 year]; however, it appears to be a “non-event.” There has been no drop in services, nor any significant changes, although a remark was made that working relationships appear to have improved. Other inspection branches also have joined the WCB, such that all inspectors are now under Prevention Services. Communication has improved because all parties are dealing with one organization. WCB is a small agency, consequently there is open and easy communication, along with an ease of paper transfer.

In the interests of health and safety of workers in mines, the 1976, Ham Commission in **Ontario**, recommended that “the proposed new Health and Safety in Mines and Plants Act be moved from the Ministry of Natural Resources to the Ministry of Labour [MOL].” Also, that the Mines Engineering and Inspection Branch and the OH&S Branch locate their respective staffs where they can interact personally. In the past, occupational health and safety was considered separate and apart from compensation for workplace injuries and illnesses.

Bill 99, which comes into force in January, 1998, will integrate health and safety into the Workers’ Compensation Act, and the new Act will be called the Workplace Safety and

Insurance Act. This new Act emphasizes the prevention of illness and injury and self-reliant workplaces. To a large extent, this Act is performance-based, setting out general principles, while most of the detailed requirements are contained in regulations. The mines inspectorate, health and safety come under the jurisdiction of the MOL. There is a provincial coordinator for mining under MOL who is responsible for developing regulations and program policies related to mining. Delivery of programs go through regional district managers.

In February, 1997, MOL initiated a consultation process for reform of the OH&S Act. The rationale for the review and overhaul of legislation was:

- (a) existing legislative framework for occupational health and safety stresses process and procedures rather than outcome.
- (b) emphasizes government involvement and does not adequately recognize responsibility and accountability of the workplace parties; and,
- (c) few incentives for employers and employees to strive for excellent health and safety performance.

The existing permit system recently has been streamlined [Aug/97] by the elimination of 14 permits and approvals and 40 notifications previously required of the mining industry. The MOL's duties now are to set, communicate and enforce standards.

### **APPROVALS/PERMITS**

This requirement ranges widely, from the onus of meeting standards and regulations being the mining company's responsibility to the other end of the spectrum where no activity is permitted until an approval is given by the chief inspector. Departments which have adopted a little of each see the merits of both sides.

For those who espouse no prior approval, "having a government agency stamping approval takes away responsibility from the workplace." The writer detected a distinct trend, in those provinces, where some approvals are required, towards more responsibility being laid at industry's door for safety at the workplace.

For those provinces where permitting and approval is required, the feeling is that by revoking this role, they would "lose control." There still is the need to see, if the regulations are being met prior to any work commencing. **Alberta** has a one window approach. All applications are submitted to a central agency [AEUB] which are then distributed to various departments for comments. 88 items, which formerly required approval have been reduced to 41. Those not requiring approval only need to be stamped by a professional engineer, and are made available to the inspector upon request when visiting the mine site.

In the **Yukon**, however, approvals/permits are not required. The inspectors inspect for safety. Their argument is that no jurisdiction has time to be involved in extensive

permitting. Permitting is a separate issue which should be done prior to a mine opening. The onus is on the employer to comply with the regulations; “the inspector monitors compliance.”

In the **North West Territories**, the mines inspection branch [under WCB Prevention Services], issues permits. The owner of a mine, in accordance with the regulations, must submit plans, specifications and drawings prepared and stamped by a professional engineer, to the WCB and chief mine inspector before work commences.

In **Ontario**, mine permitting and exploration work comes under the Department of Natural Resources. Since Aug/97, mine inspectors [MOL] no longer are an approval agency. It is government’s role to set, communicate and enforce standards. Employers are now responsible for design and must use professional engineers to ensure compliance with the regulations. “Government does not believe they have the monopoly on expertise; the private sector has the capacity and can exercise it.” In fact, the workplace has greater knowledge than the ministry. If a professional engineer puts his/her stamp of approval on plans, the company is accountable. “Companies can’t have all the services in the past and have less government intervention in the workplace.”

**Quebec**, likewise, only requests that companies send in their documents and plans; no prior approval is necessary. Responsibility has been shifted to the employer, whereby the employer must hire professional engineers to develop plans and put their stamp of approval indicating that the plans have met all the requirements, as stipulated in the regulations.

**Nova Scotia** also has moved away from the reliance on government approvals. This has placed fewer demands on the DOL safety officers and resources, thus permitting them to assess, more objectively, workplace conditions and activities. The role of government is to set legal standards, explain the requirements of the law, monitor the workplace, and enforce where necessary.

In **British Columbia**, there is a one-window approach through the Mines Branch. Approval and permitting is required from the initial exploration stage, through conceptual design and operation of a mine to closure and reclamation, followed by monitoring and enforcement.

## **INSPECTORS**

### **(a) Qualifications**

Regardless of the system, legislation or jurisdiction, there was an overwhelming agreement among all parties of the importance of qualified mine inspectors. In all provinces and territories, inspectors must have mining experience, ranging from a few years to more than 10 years, some being professional engineers, others trained technicians. Each province and territory have stipulated, in their regulations, what

qualifications and/or certifications are required, in order to be an inspector or chief inspector of mines.

In many regions, inspectors see themselves as more than inspectors; they see themselves as a partner in the safe operation of a mine. There is a symbiotic relationship between the mines department and industry through the inspector. In most regions in Canada, mining inspectors are specialists, in that they only inspect mines. However, there are a few exceptions, such as in **New Brunswick**. In **Saskatchewan**, the inspectors also act as consultants and half their time is spent running health and safety committees. They feel it is a good system - “everybody gets to know everybody.”

In some jurisdictions, where once professional engineers with mine superintendent experience was obligatory, some inspectors now are hired with only a journeyman’s certificate. Consequently, confidence in inspectors’ competence has dropped which is of concern. Some provinces believe that inspectors need not have a professional degree; years of experience, plus health and safety training and certification are sufficient to qualify as an inspector. In the smaller mining regions, a view was expressed that all inspectors should work together, but that mining should still be handled by mining people. It also was suggested that those working in general safety could be trained in 6 months in a mining environment to qualify as a mines inspector. In most provinces and territories, the chief inspector of mines must be a mining engineer or its equivalent. The point made by many was, “if you don’t have the background, how can you go to a mine and identify problems?” “An intimate knowledge of work practices and hazards is required before an inspector has the ability to look for root causes.” Also, “only people with knowledge and experience will be able to assess the integrity of a mine plan or design.”

There is a trend in some regions towards a “generalist” inspector. One who has a broader base of skills other than mining; the reasoning, “a better allocation of resources and less expensive.” To some of the older, established inspectors, this has given them cause for concern. Another concern expressed is when inspectors go from a prescriptive to a performance-based role. Inspectors then may not be required to have specific skills, education or experience. Many years ago, qualifications to be a mining inspector in **Quebec** were not as stringent, and coupled with a reduction in numbers, there was an alarming increase in fatalities and accident rates. That has since been rectified, through an increase in the number of inspectors who are well qualified. One province stated that “occupational health and safety officers lacking mining expertise and experience should not be permitted to inspect mining operations unless they possess special skills for specific purposes [e.g. occupational hygienists].” The 1976, Ham Commission in Ontario [Royal Commission on the Health and Safety of Workers in Mines] recognized the importance of qualifications of mines inspectors, recommending that “mines inspectors, not only be persons of professional experience in mining and related fields of engineering, but this expertise be supplemented by special training in occupational, health and safety.”

**(b) Role**

Inspector roles are changing. In **Ontario**, the role of inspector has changed significantly. Where they once were enforcers, as well as consultants, they now are primarily enforcers. There currently is a drive in Ontario to smaller government. Consequently, the edict is to put in the workplace those responsibilities belonging to the workplace. “The process of being a consultant was costly, took too much time and taxpayers should not be paying for free consulting. That should be a company’s cost of doing business.” It was believed that some companies were taking advantage of the program, where instead they should hire a consultant to do the design work, etc., rather than use the government inspector. Since Aug/97, MOL now has two sets of inspectors. Those with health and safety knowledge and work experience who enforce the regulations; and, those who are professional engineers who audit designs. This change has come about, due to the belief that performance-based legislation [objectives or goals] is far more effective than prescriptive legislation [steps to be followed]. “The employer has the freedom to tailor a compliance strategy, and in doing so, creative and innovative mechanisms can be used to meet the standards.”

**New Brunswick’s** inspectors, although experienced in mining, are responsible for other industries. They will oversee health and safety in all work places in a particular region. Their reasoning being that “government has to justify its resources”, and the belief is that “nowadays it’s better to have more skill sets.” However, the priority still is mine safety. In **Alberta**, under a 1-year trial period ending Nov/97, inspection services are contracted out. The consultants are well briefed in the industry. The drawback experienced to date was that several of the inspectors lived and worked outside the province, so were not always available when needed.

A concern was expressed in one jurisdiction that mine inspectors were doing more than safety and that safety may not be their highest priority. In **BC**, as in several other provinces and territories, the inspector is viewed as an audit for operations; see their role as more educator than inspector; a third party talking to worker and management. One inspector summed up his role as, “making sure the worker has a safe environment, and keeping the company out of trouble.”

**FINES/PENALTIES**

It was virtually unanimous among the mining fraternity, government and industry that cooperation among all persons in the workplace produced a safer working environment. “Fines would not improve safety.” “Fines are not what drives a company to do something.” Labour was the sole opposition to this thinking.

Should the inspector be given the right to fine? In some jurisdictions, this would be viewed as a “weakness.” For example, the manager calls in the inspector for advice; if instead, the inspector issues a fine, a good working relationship could be destroyed. Fines have the potential to erode relationships between management and employees. In

**Ontario**, their psychology is to “get at the problem before it hits, and educate, whereas, labour likes fining which is after the fact. We attempt to act before.”

In view of the inspector’s preferred role as consultant, helper, adviser, the idea of imposing fines is an anathema. However, inspectors do have the power of closure, should serious infractions be ignored. This is viewed as the ultimate penalty.

## **HEALTH AND SAFETY**

There was unanimous agreement that safety is about cooperation and working together. Communication between all parties, workers, management and inspectors, is a must. Where there is good management and labour relations, a good safety record in the workplace usually follows. A safe operation generally translates into a productive, profitable mine.

Mine rescue teams throughout Canada are recognized for their expertise. No other industry has the skill of a mine rescue team. These teams can be viewed as symbolic, in that management and worker are working together towards a common objective. It was recognized by everyone, the importance of mine rescue training. It continues to be a top priority in the industry, whether training is handled by mining associations, government departments, safety associations or companies themselves.

In several provinces and territories, WCB/CSST take on the prevention aspects of health and safety. In **Ontario**, the WCB funds the safety associations whose role is training and prevention. Belief is that, if health and safety and prevention are under one roof, better results can be achieved. In the **Yukon**, mine safety is under WCB: uniform application and rules; they believe it to be a fair system to all parties.

Several individuals expressed the view that safety training should take on a stronger role. The argument used was that there is no guarantee that the worker is familiar with safety rules, even if experienced. It is very important that everyone in the workplace be familiar with safety on the job, especially inspectors. “It is tough to enforce regulations unless you know why they are there.”

A well run company has good health and safety. It should not be an item on a “to do list”, rather it should be part of the job specification. “Better there than in a safety manual or on a shelf”, said a long time worker in the health and safety field. He suggested integrating all that is in a health and safety manual into job specifications. “Why should you have to look out for something? - that should be part of the operating manual” “Health and safety involves knowledge of basic engineering principles, such as accident causation.”

In **Nova Scotia**, the 1984 Report emphasized the need for education and training for health and safety committees at mines, thereby providing a greater degree of self-regulation, while easing the workload of government inspectors. In **Saskatchewan**, when

the OH Act, 1972, came into force, all mine regulations which were previously administered by the Department of Mineral Resources were transferred to the OH Act.

An inspector, with years of experience in both mining and inspection, “believes that most accidents occur because managers fail to instill in their workplace a high standard of performance.” “They are prepared to accept something less than what they should.” He further stated that, “safety performance starts at the top of the organization. If you have the right person and the right philosophy leading it, you will have a safe operation.”

### **COMMITTEES**

In most provinces and territories, tripartite committees have been established. Their role is to review occupational health and safety regulations on a regular basis, ranging from every 2 to 5 years, and to make recommendations to the minister. These committees, which range in size, are composed of representatives from management, labour [workers], and government. The **Nova Scotia** tripartite committee felt that training programs provided by industry and by government inspectors also should be included in the review of regulations. The OH&S Division under the DOL in Nova Scotia compiles an annual report which is submitted to the Advisory Council. Council then determines whether any revisions and/or improvements are necessary and makes recommendations to the minister.

All provinces and territories are required under their regulations to have Joint Health Safety Committees [JHSC]. One prominent labour union involved in the mining industry stated that “where joint health and safety committees function properly...concerns about occupational exposures can be dealt with effectively.” In **Ontario**, it is believed that the JHSC will play a larger role now that the MOL is shifting responsibility to the workplace taking a stronger role in health and safety. In **Nova Scotia**, their Working Group was of the opinion that “when properly trained, consulted and supported, the importance of this joint problem-solving body cannot be over estimated.”

### **FUNDING**

Funding for mine inspection, health and safety varies depending on the province or territory. In **BC**, since 1996, these services are funded by industry and administered by the Mines Branch. Whereas, in **Saskatchewan**, mines inspection, health and safety are funded by their WCB. WCB has what is called a 25% good boy fee which applies to the mining industry as well. All workplace health and safety is funded 95% by WCB in **Manitoba**. The mining industry pays a per diem to WCB, to fund these services, including an assessment for compensation claims. In the **North West Territories**, the former mines inspection branch expenses came out of general funds; however, these services are now paid by industry under WCB. In the **Yukon**, prior to the transfer, the federal government paid for these services; however, since the mines department’s transfer to the OH&S branch, a division of WCB, these services are paid through an assessment by

industry, covering approximately 80-90% of the cost. In **Ontario**, the mining companies are levied an assessment to pay for MOL services, about \$35 million per year. However, in 2 to 3 years, payment will shift, so that these services will be fully paid by WCB.

Generally speaking, there is a trend across the country to move costs from the taxpayer to the employer. A committee in **Nova Scotia** recommended that funding for these services should come from mineral royalties or other assessments on the mining industry.

### **INTERNAL RESPONSIBILITY SYSTEM [IRS]**

IRS means that the responsibility for identifying occupational health and safety problems and solving them rests on the shoulders of the people in the workplace, as opposed to a system where people do nothing until ordered to do so by a government inspector. It is a philosophy of work.

This subject, although arguably on the surface does not appear directly relevant to the writer's investigation, soon loomed large in most discussions. It became apparent that this system is linked to health and safety, and not just to the mining industry. The debate on the merits of the system is still a controversial issue; however, it is a trend that most provinces seem to be moving towards, if not already adopted, such as in **Ontario**. **BC** appears to be one of the few holdouts, although the concept may be practiced without the name being attached.

Spawned by numerous fatalities in the mining industry in **Ontario**, pre-1970s, a number of mining people, working through their mining association and mines, developed procedures to train safety in the workplace. This became known as the "*modular training system*" which was introduced to all mines in the province one at a time, and soon became "the law of the land." In the eyes of one individual responsible for this undertaking, "it remains today the single best program in the world and should be at the heart of anything to do with safety and workers compensation." He further commented, that "based on more than 40 years in the industry, modular training is the heart and soul of making health and safety in the workplace, the best." It is for everybody in the industry, and similar training should be in place for engineers, geologists, etc. The 1976 Ham Commission [HC] in Ontario, recommended the use of the modular training system [appendix C]. The writer was informed that the "USWA accept responsibility for much of what was in the Ham Report." "The HC Report and recommendations are as relevant to the workplace today, as they were in 1976."

Through its investigations, "the commission [HC] has become convinced that participative responsibility in the act of work is, and will remain, a key to accident prevention." It was noted that, "the great majority of accidents arise out of the act of work itself - hence the responsibility system." The commission made it abundantly clear of the importance of the worker, shift boss, union and management working together to restore a "sense of natural responsibility for working conditions." The commission

emphasized the importance of “management’s underlying responsibility to see that the internal responsibility system is in place, and in particular, that there is open understanding among all parties of their duties and responsibilities in the performance of their work.” The Report further stated that an external audit would keep the basic internal system “alert and responsive.” However, such a system would not be substituted for basic internal integrity which rests on knowledge, training, experience and commitment of management, supervisor and worker. “All parties have an obligation to eliminate unsafe working conditions.” The Report stated that, “the mines inspectorate in effect acts to monitor”, and goes on to say, “it is not feasible for the inspectorate to police exhaustively the technical detail of the Mining Act. It is the responsibility of the IRS continuously to detect and remove anomalous conditions throughout the operations.”

The HC recognized the importance of qualifications of mines inspectors, recommending that “mines inspectors, not only be persons of professional experience in mining and related fields of engineering, but this expertise be supplemented by special training in occupational health and safety.”

The IRS is the foundation of **Ontario**’s approach to occupational, health and safety in the workplace, since the establishment of the OH&S Act in 1979. The reform process now underway is intended to strengthen the IRS to ensure that employers and employees take greater responsibility for health and safety in their workplace. The intent of the new Workplace Safety and Insurance Act [Jan/98] is to support voluntary initiatives and encourage employees to excel in their own workplace health and safety management. “Ontario mining industry has the lowest lost-time injury record in the country. These amendments strengthen the IRS of the industry and ensure that health and safety remain top priorities.” Industry believes it is the “outcome that counts” [performance], as opposed to “how you get there” [prescriptive]. The former allows far more flexibility which in turn puts more responsibility on the employer [IRS]. Subsequent Ontario commissions, Berkett and Longren, both endorsed the Ham Report. “Ham was right”, “IRS is right, it’s working.”

**Nova Scotia** has embraced the IRS and has made it stronger, thus making companies more self-reliant. Workers, supervisors and managers are required to discharge their roles and responsibilities through collaborative action to establish and maintain a safe and healthy workplace. However, roles must be defined, including government’s. If standards are well-defined, there will be no perceived conflict. The JHSC is a key element of the IRS. Nova Scotia’s OH&S Act clarifies the roles of the various workplace parties. For the first time, owners, professional engineers, architects and suppliers of health and safety services are included. In the 1993 Discussion Paper on the OH&S Act, it stated that, “IRS was the best means of ensuring a safe workplace.” Extensive consultation followed and resulted in a report released in 1995, entitled “Taking Responsibility.”

**New Brunswick**, also, has adopted the IRS principle. Back in the early 1980s, inspectors spent a great deal of time at mine sites and felt that companies were relying on the inspector to make decisions. Government began downsizing, putting resources where they were most needed, and gave the message, as to whom was ultimately responsible for

health and safety. Government believes that the mining industry is a responsible employer. However, the importance of each party in the workplace, including inspectors, understanding their respective roles was emphasized.

**Manitoba** recognizes the significance of the IRS, as the underpinning of the health and safety system in the province. The DOL sees IRS coming into play. More and more onus is being put on industry to comply with regulations, as departments downsize and duties change. However, Manitoba is far from adopting Ontario's position, as yet. Mining industry sees companies and labour moving towards more self-regulation, which "puts the onus on the people it needs to." However, such a move would require a change in legislation. A view was expressed that "the mining industry is grown up enough to do it ourselves." In some mines, for example, 'accident rates have been cut by 50%. Why? - everyone is working together, committed to do it, especially from the top down."

In **Alberta**, the IRS is evident through the diminishing requirements for approvals and permits. The employer is responsible for ensuring "things are done in the proper way, thus making them accountable" The trend is for government to become more of a regulator, performance-based, thereby shifting responsibility for operations, health and safety to the employer.

**Yukon** favours the IRS philosophy and probably will move more and more in that direction. It would appear that the system has taken root, in that the onus is on the employer to comply with regulations; the inspectors monitor compliance.

**Quebec**, through its devolution of responsibility to the employer, is knowledgeable about the concept of IRS. They are looking at what Ontario is doing. An interest was expressed in incorporating all aspects of health and safety in job descriptions, but they have yet to take that step.

IRS integrates health and safety as part of the job description. The writer was informed that a good example of where this ethic has been stimulated is at the Dupont and Toyota plants in Ontario where they have achieved spectacular results in health and safety. "The mining industry had it right in the first place in Ontario. People in the mining branch kept working in this direction. Best way to do it."

"There are three good reasons that still exist, since 1976, for adopting IRS, as the governing philosophy in occupational, health and safety"

1. IRS takes advantage of the knowledge of people in the workplace. No government inspector wandering among diverse workplaces can ever know enough about the machines, processes, materials and people, in any given situation.
2. IRS takes advantage of personal motivation. It's your life, your health, and the life and health of your co-workers. This has to be a more reliable basis for action than the interest of a government agent.

3. IRS is much cheaper than a “command-and-control” system. More than 300,000 workplaces exist in Ontario [1995]. How many inspectors would be needed for checking daily? Weekly? Monthly?

“A proper IRS makes the right to refuse largely irrelevant, if the duty to report and the duty to respond are taken seriously.”

### **TRANSFER**

Where transfer/consolidation of mine inspection, health and safety has taken place, there appears to be a solid acceptance of the justification for doing so. However, it is important to keep in mind that consolidation does not imply moving to WCB. Some provinces moved these services to other departments, such as DOL or MOL. Although, some individuals indicated during the initial stages there were growing pains. However, most [industry and government] felt that it was a good move; that the workers’ health and safety, in the long term, was better served, especially through improved training and services in health and safety. In provinces, such as **Ontario**, where significant changes have occurred, it may be too soon to give a proper assessment, although industry and government departments seem favourably disposed to these changes.

Several province and territories, upon being asked their opinion regarding **BC**’s position, felt that BC should be under WCB. “It is our own experience that it is an effective way of doing it.” There were others who said, “if it is working, why change it?” Another comment was that “the workers would benefit” to a move under WCB, and in the long term, “mines would welcome the move.” Also, that WCB [BC], in his experience, could offer far more, “WCB has the equipment and supplies”, and a “bigger library of training.”

Some suggested that before a decision is made, look to see if it is in the workers’ best interest. Where there was unanimity, consolidation or status quo, was the importance of having qualified inspectors. A suggestion from **Quebec** was that, if you [BC] go ahead with a recommendation to amalgamate, “you must sell the concept really well to the mining industry, so that they see the benefits, that the transfer is not going to complicate issues.” The amalgamation [CSST] has worked well in Quebec; “the workers and mines are better served.” However, it was pointed out that, if a political stand in 1981 had not been taken to amalgamate, Quebec mines probably would be operating under a similar jurisdiction as B.C. One of the reasons for **Ontario**’s transferring responsibilities to MOL was the need to control costs, to be more flexible, less red tape and to be more thoughtful about what government’s role really is.

A long time member of the mining industry, felt that a move to WCB should occur. It would provide: regulatory efficiency, rationalize focusing on better training systems; and, be good for the individual inspectors as well, prepare them to have more transportable skills. However, he pointed out that from long experience, there could be difficulties, unless there is an advocate on the mining side to embrace the concept.

**BC WORKERS' COMPENSATION BOARD**

There are many similarities between WCB's and the Mines Branch's approach to inspection and health and safety. Both agencies are concerned for the health and safety of workers at the worksite, and use whatever measures available to ensure that industry complies with the regulations. The Prevention Department of WCB states that, "by giving employees and workers more information, they can assist in creating exemplary safe and healthy workplaces." Like their mining counterparts, WCB inspectors do give advice and consult. Up to 1/3rd of their time is spent in the area of education and consultation.

The new OH&S Regulation to be enacted in April, 1998, consolidates disparate regulation documents into one package which is organized into 3 sections. The third section would apply to the mining industry: "industry specific requirements - apply only to select industries."

The recently released study, "Administration Inventory of Prevention Activities of WCB [1997]" made a number of comments relative to the issue of consolidation: The Study pointed out that WCB has a "deserved reputation as one of the more exemplary health and safety systems in North America." The Study indicated that, "both workers and employer representatives involved in the Regulation Review Process acknowledged the need for and importance of a system of internal responsibility system in BC workplaces, based on a joint collaboration between workers and their employers at the worksite." However, it was pointed out that "any programs that seek to advance internal responsibility system and self-management where decreased inspection is tied to performance, must ensure labour participation." The Study confirmed the "necessity of maintaining a highly qualified and competent inspectorate, with sufficient real-world industrial experience." WCB has a long history of conducting certification programs. "Engineering services have played and continue to play a significant role in providing engineering solutions for regulatory compliance."

WCB has informed the writer that it does not have a position on whether mines inspection, health and safety should be transferred to their jurisdiction

**APPENDIX C**

**Ham Commission  
Internal Responsibility System  
for the  
Performance of Work**

TABLE 51

## Internal responsibility-system for the performance of work

Responsibilities	Occupation level					
	Workman	1st-line Supervisor	2nd-line Supervisor	Superintendent	Manager	President and Chief Executive Officer
Nature of work	Process material	Assign tasks	Schedule work	Interpret objectives Plan operations	Determine objectives	Establish purposes
Responsibility for people	Direct helpers	Instruct and develop workmen	Develop supervisors Allocate workforce	Select and develop supervisors Provide workforce	Select and develop staff	Select manager
Responsibility for work performance	Use knowledge and skill Exercise initiative	Direct work performance within clearly defined job specifications	Specify duties and responsibilities Define authority	Assign duties and responsibilities Delegate authority	Determine functions Delineate spheres of responsibility Delegate authority	Delegate operating authority
Responsibility for direction of work	Carry out work in a manner consistent with approved practices and procedures	Carry out duties in a manner consistent with policies and procedures and philosophy of enterprise	Carry out duties in a manner consistent with policies and procedures and philosophy of enterprise	Interpret policies and procedures in light of business philosophy in administration of business activities	Establish business philosophy Develop operating policies Standardize administrative procedures	Determine business philosophy and procedures
Responsibility for relations with people	Work co-operatively with others	Co-ordinate performance of tasks	Co-ordinate work programme	Co-ordinate supporting services	Conduct the operation of the enterprise in a manner compatible with legislated requirements and social trends	Determine policies to make the purposes of the enterprise compatible with legislated requirements and social trends
Responsibility for facilities and equipment	Use facilities, equipment, machine and tools	Provide adequate tools and equipment	Provide adequate services and machines	Make provision for necessary facilities, machines, and equipment	Obtain capital goods	Authorize capital expenditure

Responsibility for conditions of work	Maintain standardized condition	Implement standardized condition	Provide facilities for standardized conditions	Set standards of work performance and working conditions	Determine standards of work performance and working conditions	Determine policies for the operation of the enterprise
Responsibility for accounting	Inspect facilities of workplace, machines, and working conditions Inspect work and report on task accomplishment or reason for not doing so Report on condition of machines, workplace and work environment	Report on work progress and workplace requirements Report anomalous conditions	Report on workforce, workload, and anomalous conditions, and facility requirements	Report on department activity and anomalous conditions	Develop effective audit system Account for the state of enterprise in terms of business viability and security of employment	Account to owners on state and progress of enterprise and to public on discharge of responsibility of trusteeship

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