

Cominco Ltd./P.O. Box 1979/Yellowknife, N.W.T. X1A 2P5  
Tel. (403) 873-2621 Telex 034-45500



February 5, 1981

Mr. T. D. Daniels, Manager  
Northwest Territories Chamber of Mines  
Box 2818  
YELLOWKNIFE, N.W.T.  
XOE 1H0

Dear Terry:

With respect to the survey proposed by the Government of the N.W.T. (Terry Foster's letter of November 12, 1980), Cominco feels that by adding a section on job categories to the N.W.T. Mining Industry Study the desired information would be compiled, but on an aggregate rather than individual company basis. Cominco is also concerned with the extra paper work generated by these surveys--and in this case there is also a concern about confidentiality of the information reported.

On another matter Hank Giegerich and I both suggest that the Chamber offer assistance to the Government of the N.W.T. in the matter of locating a suitable engineer for the Chief Mining Inspector position. Perhaps this could be discussed at the next Directors' Meeting.

Yours very truly,

W. A. Case  
Senior Mining Engineer

WAC/cr  
cc: HMG

PROSPECTION LIMITED

SUITE 904  
80 RICHMOND STREET WEST  
TORONTO, ONT., CANADA  
M5H 2C7

February 03, 1981

Terry D. Daniels,  
Manager,  
N.W.T. Chamber of Mines,  
P.O. Box 2818,  
YELLOWKNIFE, N.W.T.  
XOE 1H0

Dear Terry:

I have just read your draft presentation to the Mine Managers Meeting. You have emphasized the importance of maintaining a co-operative relationship between the inspection service and management. I whole heartedly agree.

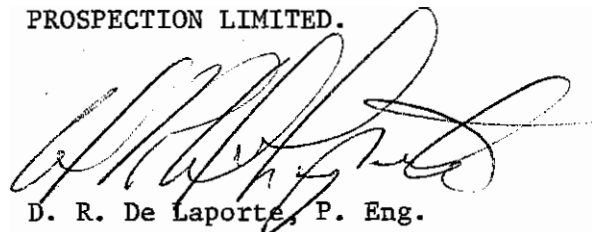
I was doing a consulting job at a mine in the Coeur D'Alener a while ago and there seemed to be a team of M.S.H.A. inspectors underground nearly every day. Different inspectors!

It struck me that they were deliberately trying to develop confrontation over the most picayune things. On questioning the Mine Superintendent about these inspections, I was told that he spent so much time on useless inspections that there was little time left to work on improving safety.

I think you have hit the nail right on the head.

Yours very truly,

PROSPECTION LIMITED.



D. R. De Laporte, P. Eng.

DRDL:1st

cc: C. E. Page

P.O. Box 1500,  
Yellowknife, N.W.T.,  
X1A 2R3  
August 30, 1978.

Government of the Northwest Territories,  
YELLOWKNIFE, N.W.T.  
XGE 1A0

Attention: S.M. Hodgson  
Commissioner

Dear Commissioner Hodgson:-

Revisions to Mining Safety Rules

I enclose some proposed revisions to the Mining Safety Rules. I have circulated them to the mines and unions over the past three months and have received some questions and criticisms which I have answered.

None of the objections were such as to warrant a change of the proposals.

I hereby recommend that the proposed revisions be made to the Mining Safety Rules.

I enclose a copy of the revisions, and the correspondence.

Yours truly,

ORIGINAL SIGNED BY  
M. L. BROWN

M.L. Brown,  
Regional Mining Engineer &  
Mining Inspector.

Brown:eds

Enclosures

C.C.

R. Hornal - Director ✓  
M. Morison - Assistant Director ✓  
R. Hawkes - Chamber of Mines ✓

*Sent 31/08/78 mp*

35. (1) At every mine there shall be maintained a sufficient number of properly constructed stretchers and first aid equipment and supplies for the proper handling and transporting of persons who may be injured in the discharge of their duties about the mine.
- (2) Every mine shall have men trained in First Aid as follows:
- (a) all underground supervision
  - (b) all mine rescue men
  - (c) one half of surface supervision
  - (d) one tenth of the employees



101. (1) A protective hat and boots, manufactured for such service, shall be worn by every person employed:

- (a) underground in any mine
- (b) in any location designated by the Inspector

101. (2) The manager shall take all reasonable measures to ensure that no workmen will be exposed to noise in excess of the levels shown in the table below without suitable protective equipment.

Permissible Noise Exposure

<u>Time (Hours per Day)</u>	<u>Sound Level dBA</u>
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

Note: No exposure in excess of 115 dBA.

TO  
À

M.L. Brown,  
Regional Mining Engineer  
& Mining Inspector

FROM  
DE

E. Bengts,  
District Mining Engineer  
& Mining Inspector

SECURITY - CLASSIFICATION - DE SÉCURITÉ

OUR FILE - N/RÉFÉRENCE

YOUR FILE - V/RÉFÉRENCE

DATE

December 29, 1977

SUBJECT  
OBJET

Re: Ordinance & Rules, Metric Conversion

Attached please find a list stating Rule numbers and the changes to metric measurements.

Whenever possible the metric equivalent has been rounded off. When the measurement is critical the changes approach an exact conversion.

Attached also find a copy of the rules where all changes are noted.

*E. Bengts*  
E. Bengts

Enclosures

*MS* *W*

ORDINANCE RULES, METRIC CONVERSIONCHANGES

<u>RULE</u>	<u>FROM</u>	<u>TO</u>
14	height of eight feet	height of three metres
18 (5)	closer than fifty feet	closer than twenty metres
18 (6)	or one hundred pounds	or fifty kilograms
23 (2)	less than fifty feet	less than twenty metres
25 (1)	within fifty feet	within twenty metres
25 (2)	closer than thirty five feet	closer than ten metres
27 (a)	within seventy five feet	within twenty five metres
28	within fifty feet	within fifteen metres
	nor within one hundred feet	nor within thirty metres
30 (1)	within one hundred feet	nor within fifty metres
32 (1)	over one hundred tons	over one hundred tonnes
39 (3)	than eight hundred cubic feet	than twenty five cubic metres
45 (2)	than fifty feet	than twenty metres
51 (7)	less than fifty feet	less than twenty metres
51 (10)	least six feet above	least two metres above
	twenty five feet distant	ten metres distant
51 (1)	exceeding three hundred pounds	exceeding one hundred fifty kilograms
57	within two hundred feet	within one hundred metres
58 (3)	within fifty feet	within twenty metres
59 (1)	within fifty feet	within twenty metres
59 (2)	within fifty feet	within twenty metres
59 (3)	within fifty feet	within twenty metres
64 (1)	exceed two hundred pounds	exceed one hundred kilograms
66 (F)	more than one hundred fifty pounds	more than seventy five kilograms
66 (M)	in excess of fifty pounds	in excess of twenty five kilograms
	than six inches	than fifteen centimetres
70 (1)	four miles per hour	six kilometres per hour
77 (2)	within six inches	within fifteen centimetres
77 (3)	within five feet	within two metres
77 (4)	within twenty five feet	within eight metres
80	minimum of fifteen feet	minimum of five metres
81	than three feet shall	than one metre shall
	that three feet from	than one metre from

<u>TO</u>	<u>FROM</u>	NWT Archives/NWT & Nunavut Chamber of Mines /N-1999-019
2 (1)	equal to twice the number of feet	equal to six times the number of metres in
3 (1)	first ten feet	first three metres
3 (2)	after twenty five feet	after eight metres
50 (2)	within twenty feet	within ten metres
	within twenty feet	within ten metres
60 (3)	within fifteen feet	within five metres
64 (1)	exceed fifty feet	exceed twenty metres
67 (2)	plus six feet	plus two metres
67 (2)	least six feet	least two metres
112 (1)	than sixty feet	than twenty metres
112 (2)	exceed twenty five feet	exceed eight metres
123 (3)	over forty six feet	over fifteen metres
128 (2)	within fifteen feet	within five metres
128 (4)	twelve inches by twelve inches	thirty centimetres by thirty centimetres
	within four feet	within one metre
132 (1)	exceeding twenty one feet	exceeding seven metres
132 (2)	exceeding twenty one feet	exceeding seven metres
134 (2)	exceeding twenty one feet	exceeding seven metres
134 (3)	exceeding twenty one feet	exceeding seven metres
136	least three feet	least one metre
138 (2)	than twelve inches or less than ten inches	than thirty centimetres or less than twenty five centimetres
	than one half inch	than one centimetre
138 (3)	than four inches	than ten centimetres
141 (2)	exceeds 1000 feet per minute	exceeds five metres per second
142 (1)	than fifty feet	than fifteen metres
143	least fifteen feet	least five metres
146	exceeds three hundred feet	exceeds one hundred metres
170 (1)	least eighteen inches	least forty five centimetres
	of twenty four inches	of sixty centimetres
	every one hundred feet	every thirty five metres
170 (3)	five feet shall	one hundred fifty centimetres
170 (4)	than seven feet	two hundred ten centimetres
	not exceeding one hundred feet	not exceeding thirty five metres

<u>LE</u>	<u>FROM</u>	<u>TO</u>
76 (1)	five feet from	two metres from
81 (2)	than ten feet	than three metres
	exceeds ten feet	exceeds three metres
82 (1)	over sixty five feet in depth	over twenty metres in depth
	than sixty five feet in vertical	than twenty metres in vertical
82 (2)	five feet	two metres
83 (1)	within six feet	within two metres
84 (3)	ten feet in height	three metres in height
87 (2)	within fifteen feet	within five metres
88 (a) (1)	within one foot	within thirty centimetres
88 (a) (2)	within fifteen feet	within five metres
88 (b)	within fifteen feet	within five metres
89 (1v)	estimated yards broken	estimated cubic metres broken
93 (5)	exceeding twenty one feet	exceeding seven metres
95 (11)	within fifty feet	within twenty metres
14 (1)	least five feet six inches	least one hundred sixty five centimetres
14 (2)	over three feet	over one meter
17	at least six feet	at least two metres
19	less than three feet shall	less than one meter shall
20	two feet above or two feet below	sixty centimetres above or sixty centimetres below
22	least five feet above	least one hundred fifty centimetres above
27	than eighteen inches	than fifty centimetres
23	less than six feet between	less than two metres between
232 (1)	least three feet six inches	least one metre
235	than twenty five feet	than seven metres
241 (7)	than 300 c.f.m.	than eight cubic meters per minute
	than 300 c.f.m.	than eight cubic meters per minute
242 (1)	depth of three hundred feet	depth of one hundred metres
245 (1) (a)	three sixteenths of an inch	than five millimetres
245 (1) (b)	one eight of an inch	than three millimeters
	than five feet above	than one hundred fifty centimetres above
245 (1) (c)	five feet above	one hundred fifty centimetres above

<u>RULE</u>	<u>FROM</u>	<u>TO</u>
66 (1)(a)	over sixty inches in	over one hundred fifty centimetres in
66 (1)(c)	greater than one inch	greater than twenty five millimetres
66 (1)(c)	not greater than one inch	not greater than twenty five millimetres
66 (1)(c)	than one inch	than twenty five millimetres
66 (i)(a)	than one inch	than twenty five millimetres
66 (ii)		
67	greater than three hundred feet	greater than one hundred metres
	greater than two hundred and fifty feet per minute	greater than one hundred twenty five centimetres per second
78 (3)	diameter of rope in inches	diameter of rope in millimetres
78 (3)	weight per foot in pounds	weight per metre in kilograms
78 (3)	diameter of wires in decimal of an inch	diameter of wires in millimetres
78 (3)	in pounds per square inch	in kilograms per square centimetre
83 (4)	F of S = $8.0 - 0.0005D$ where "d" is the maximum length of rope suspended below the head sheave in feet	F of S = $8.0 - 0.0016d$ where "d" is the maximum length of rope suspended below the head sheave in metres
88 (1)	less than eight feet in	less than two hundred fifty centimetres

# APPENDIX

A" 2 (c)	than seventy five cubic feet per minute	than one hundred thirty cubic metres per hour
A" 6 (1)(a)	lower than 125 degrees Fahrenheit	lower than fifty degrees Celsius

\* \* \*

AMENDMENT

AID TO INJURED

- Rule 35. (1) At every mine there shall be maintained a sufficient quantity of properly constructed stretchers and first aid equipment and supplies for the proper handling and transportation of persons who may be injured in the discharge of their duties about the mine.
- (2) At every mine
- (a) all persons engaged in underground supervision;
  - (b) all persons engaged in mine rescue;
  - (c) one-half of the number of persons who are involved in surface supervision; and
  - (d) one-tenth of the total number of employees thereat, shall be trained in first aid to a level at least equivalent to the St. John Ambulance standard first aid course.

- Rule 101. (1) A protective hat and boots, manufactured for such service, shall be worn by every person employed.
- (a) underground in any mine,
  - (b) in any location designated by the inspector.
- (2) The manager shall take all reasonable measures to ensure that no workman is exposed, without suitable protective equipment, for the periods in excess of those set out in the first column of the table to this subsection, to noise in excess of the levels shown in the second column of that table.

<u>Table of Permissible Noise Exposure</u>	
<u>Time (hours per day)</u>	<u>Sound level dBA</u>
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

- (3) No noise levels in excess of 115 dBA are permitted in a mine.

AMENDMENT

Section 10. (1) There shall be formed in any mine where more than twenty-five persons are employed, a committee which shall be known as the mine safety committee.

Section 11. No person under the age of sixteen years shall be employed in or about the mine and no person under the age of eighteen years shall be employed underground or at the working face of any open cut working, pit or quarry.



*A BRIEF RESPECTING MINE SAFETY IN THE  
NORTHWEST TERRITORIES PRESENTED TO THE  
GOVERNMENT OF THE NORTHWEST TERRITORIES  
YELLOWKNIFE                      FEBRUARY 16, 1981*

*SUBMISSION*

*by the*

*NORTHWEST TERRITORIES CHAMBER  
OF MINES*

## INTRODUCTION

In response to notification dated December 17, 1980 and signed by Mr. Tom Butters, Executive Member responsible for Justice and Public Services, we are pleased to submit to you our recommendations respecting any changes in the NWT Mining Safety Ordinance that may result from a motion passed by the Legislative Assembly respecting the Mine Safety Ordinance on Thursday, November 6, 1980.

- 1.01 The recommendations and accompanying explanations and comments are of a general nature and do not address the specifics that would result from a clause-by-clause scrutiny of either the existing Ordinance and accompanying regulations or of proposed changes recommended in the Federation of Labour Brief submitted to Mr. George Braden on December 11, 1980 and to the Executive Committee on January 7, 1981.
- 1.02 We believe an in-depth review of individual clauses can only be productive if carried out in a forum that permits frank discussion of specifics by representatives of the Federation of Labour, the Chamber of Mines and Mine Safety Services, Government of the NWT as outlined in the letter of December 22, 1980 addressed to Mr. Butters and signed by the President of the Chamber of Mines, Mr. R.W. Spence.
- 1.03 If the Government of the Northwest Territories is to be successful in achieving much sought-after political, social and financial objectives it is imperative that it encourage the growth of a strong viable economic community. The economic future of the Territory is heavily dependent on the orderly development of mineral resources. Part of that development will require mine safety regulations, environmental controls and health standards that are unbiased, reasonable and technically sound. It will also require that the authority and responsibility of Mine Safety Services and Mine Management not be jeopardized in any way.

## 2. SUMMARY OF RECOMMENDATIONS

Listed below is a summary of the recommendations contained within this brief. All are considered important to the Chamber and therefore the order in which they are listed does not designate any degree of preference placed on them by the Chamber.

1. *That the present spirit of co-operation that exists between Industry and Mine Safety Services in seeking solutions to problems that arise in respect to mine safety be encouraged to continue.*
2. *That recognition be given to the fact that successful accident prevention is primarily dependent on education rather than legislation.*
3. *That in order for substantial progress to be made in the field of occupational health and safety, there must be full commitment by all the parties, the worker, the union, the government and the industry to acceptance of responsibility in an atmosphere of mutual respect and trust. Each person must be ready to say - "I am committed. I accept my responsibility to do my part".*
4. *That the total number of agencies of government to which the Industry must answer should be kept to a minimum. It further recommends that all directives to the Industry must be given in clear and concise language that can be easily understood by labour and management alike.*
5. *That Mine Safety Services should have primary responsibility for all matters related to the safety of workers in the Industry.*
6. *The Senior Mining Engineer will be permitted reasonable access to the Commissioner, Executive Members and Senior Department Heads for the purposes of carrying out his responsibilities.*
7. *The Government give consideration to the creation of a Department of Non-Renewable Resources and take immediate action to identify all responsibilities currently under its jurisdiction, together with additional responsibilities it can expect to assume in future years as the first step in establishing this new department.*

8. *The Senior Mining Engineer be a professional engineer with substantial experience in the Industry.*
9. *All inspection staff will be individuals with demonstrated experience in the Industry and properly qualified to carry out the assigned responsibilities of the respective position.*
10. *All Mine Safety Services staff shall have demonstrated ability to communicate well with associates and Industry personnel.*

3: THE OBJECTIVE OF LABOUR, GOVERNMENT AND MANAGEMENT MUST BE TO CREATE  
A SAFE WORKING ENVIRONMENT FOR ALL EMPLOYEES WORKING IN THE MINING INDUSTRY

- 3.01 At the present time an atmosphere of co-operation based on constructive criticism is encouraged by the Department of IAND in handling all matters related to mine inspection. It is important that this same approach be adopted by the Department of Justice and Public Services. Many problems require the combined expertise of Mine Safety Services and Industry personnel simply because they are unique to a specific situation. Therefore accessibility to all available expertise must be protected in the best interests of correcting unsatisfactory safety or occupational health programs.
- 3.02 The key to a successful accident prevention program is the development of conscious and co-operative attitudes towards safety in the minds of all workers and managers within the work place. It has been clearly demonstrated in other jurisdictions that efforts to "legislate" rather than "educate" in the area of safety have not had the degree of success in preventing accidents that was anticipated by the proponents of the legislation.
- 3.03 This premise is supported by experiences in the 1970's with OSHA regulations in the United States and with the New Safety Ordinance enacted in Saskatchewan. In both jurisdictions enforcements and its accompanying punitive actions did not produce appreciable improvement in safety records. Priority must be given to the identification of the reasons accidents occur and to the development of proper solutions..

THE CHAMBER RECOMMENDS

1. *That the present spirit of co-operation that exists between Industry and Mine Safety Services in seeking solutions to problems that arise in respect to mine safety be encouraged to continue.*
2. *That recognition be given to the fact that successful accident prevention is primarily dependent on education rather than legislation.*
3. *That in order for substantial progress to be made in the field of occupational health and safety, there must be full commitment by all the parties, the worker, the union, the government and the industry to acceptance of responsibility in an atmosphere of mutual respect and trust. Each person must be ready to say - "I am committed. I accept my responsibility to do my part".*

4. JURISDICTIONS UNDER WHICH WORKER HEALTH AND SAFETY ARE REGULATED SHOULD BE KEPT TO A MINIMUM

4.01 To ensure safe, efficient operation of mines it is essential that the number of agencies of government under whose authority a mine must operate are as few in number as possible. At the present time the Industry is subject to regulation by the Workers' Compensation Board, Labour Standards, Occupational Health and Safety, Mine Safety Services and various environmental control agencies. We have a real concern as to how the directives of these various regulatory authorities will be co-ordinated and what mechanism will be in place to prevent directives of a conflicting nature from being given to Industry.

4.02 It has been demonstrated in other jurisdictions notably the United States that when Industry is subject to a diverse collection of regulatory agencies often with conflicting regulations, confusion develops that results in unnecessary delays in taking corrective action. We therefore believe that one point of contact with Government is preferable if management is to be successful in maintaining safe, efficient mining operations and to be up-to-date in compliance with all regulations.

THE CHAMBER RECOMMENDS

*1. That the total number of agencies of government to which the Industry must answer should be kept to a minimum. It further recommends that all directives to the Industry must be given in clear and concise language that can be easily understood by labour and management alike.*

*2. That Mine Safety Services should have primary responsibility for all matters related to the safety of workers in the Industry.*

5. THE MINE SAFETY SERVICES GROUP WITHIN THE TERRITORIAL GOVERNMENT SHOULD BE SO ORGANIZED THAT IT RETAINS ITS DISTINCT IDENTITY AND HAS A HIGH PROFILE WITHIN THE BUREAUCRACY

5.01 Mining has played and will continue to play an important role in the economic growth of the NWT. The priority that the Government gives to Mine Safety Services will reflect in considerable measure the degree of recognition the Government gives to the importance of the Industry.

5.02 We believe that the transfer of Mine Safety Services affords to the Government of the NWT an excellent opportunity to form the nucleus of what would some day represent a complete department responsible for non-renewable resources in the NWT and that therefore, the Senior Mining Engineer should report directly to a member of the Executive Committee.

5.03 If the government should decide that a separate department cannot be justified at this early stage, we believe it is essential that the Mine Safety Services group be kept intact, retain its own distinct identity and that the Senior Mining Engineer should report to no less than a Deputy Minister and that an assessment be made annually to determine whether sufficient responsibilities have accrued to the Government to warrant establishment of a separate department.

5.04

Historically, the Senior Mining Engineer has enjoyed reasonable access to the Commissioner on all matters worthy of his attention. We believe that this practice should continue until such time as changes are made to the NWT Act designating responsibility for the Territorial Mine Safety Ordinance to a Minister or Deputy Minister. It is equally important that Industry personnel continue to enjoy easy access to the staff of Mine Safety Services and that access not become encumbered by unnecessary red tape.

THE CHAMBER RECOMMENDS

1. *The Senior Mining Engineer will be permitted reasonable access to the Commissioner, Executive Members and Senior Department Heads for the purposes of carrying out his responsibilities.*
2. *The Government give consideration to the creation of a Department of Non-Renewable Resources and take immediate action to identify all responsibilities currently under its jurisdiction, together with additional responsibilities it can expect to assume in future years as the first step in establishing this new department.*



6. MINE SAFETY SERVICES MUST BE STAFFED BY COMPETENT, WELL-TRAINED AND EXPERIENCED INDIVIDUALS

- 6.01 We believe the Senior Mining Engineer must be a professional mining engineer who has had considerable experience in the Industry prior to his engagement to this important position. His staff should be individuals who have demonstrated competence and experience through having worked in the Mining Industry.
- 6.02 The quality of expertise that comprise Mine Safety Services will play an important role in the standards of safety that can be expected within the work places of the Industry. It must be recognized that mining, like many other industries, has unique problems that can only be recognized and successfully resolved by highly skilled individuals with the necessary background and experience to deal with them.
- 6.03 Communications between Mine Safety Services and Industry personnel are of vital importance. Irrespective of what the problem may be or the recommended solutions, unless all parties involved are able to communicate easily in all manner of form, the potential for unnecessary delays, frustration and confusion exists. Such an atmosphere is not conducive to improving safety in the work place.

THE CHAMBER RECOMMENDS

1. *Senior Mining Engineer be a professional engineer with substantial experience in the Industry.*
2. *All inspection staff will be individuals with demonstrated experience in the Industry and properly qualified to carry out the assigned responsibilities of the respective position.*
3. *All Mine Safety Services staff shall have demonstrated ability to communicate well with associates and Industry personnel.*

7/ AMENDMENTS TO THE ORDINANCE SHOULD BE CAREFULLY CONSIDERED TO ASSURE THAT THEY ARE  
CLEARLY IN SUPPORT OF THE OBJECTIVE WHICH IS TO IMPROVE SAFETY CONDITIONS IN THE INDUSTRY

7.01 To assist the Government in making revisions to the Ordinance it is imperative that it has available to it the necessary technical expertise to properly assess proposed changes. It is essential that amendments be carefully examined to assure that they are necessary, practical and in support of the overall objective of improved safety in the work places of the Industry. It is therefore of paramount importance that a Senior Mining Engineer be engaged by the Government prior to proceeding to amend the Ordinance. The transfer of existing staff in Mine Safety Services should be completed as well. If the incoming Senior Mining Engineer has an opportunity to study the Ordinance and the proposed changes, there will be less likelihood of errors being made.

7.02 An essential factor in the successful development of a safe and efficient mining industry is the latitude that is extended to the Senior Mining Engineer in interpreting the rules under the Ordinance as they apply to specific situations. Each problem has certain peculiarities and it is reliance on the Engineer's experience and good judgement that offers the best chance for finding the proper solution. We believe the discretionary powers of the Engineer should not be eroded through the writing of rigid legislation that would restrict this flexibility.

7.03 One important component most necessary for the safe operation of any mine is the Mine Safety Committee. Amendments to the Ordinance should not dilute in any way the powers and responsibilities of these committees.

THE CHAMBER RECOMMENDS

1. *The position of Senior Mining Engineer be staffed and that Mine Safety Services be fully operational within the Territorial Public Service prior to commencement of the drafting of amendments to the Ordinance.*
2. *A committee be struck comprising representatives from Mine Safety Services, Labour, both organized and unorganized and Management to review all proposed amendments to the Ordinance.*
3. *Proposed amendments be carefully scrutinized to assure that they are necessary, practical and clearly intended to improve safety.*
4. *Regulations dealing with non-safety items such as hours of work, age and sex must be removed from the Ordinance and if necessary included under more appropriate legislation.*
5. *The powers of the Commissioner and Senior Mining Engineer under the Ordinance be retained and that access by the Senior Mining Engineer to the Executive Committee made responsible for Justice and Public Service, the Commissioner or to Industry personnel not be unnecessarily restricted.*
6. *Matters of an administrative nature should be left in the Ordinance and those items now defined as regulations or rules should remain as regulations or rules.*
7. *Changes in legislation should not impinge on areas that are properly the responsibility of management or in any way impede the ability of management to deal directly with workers safety committees or union managements.*



## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281



April 13, 1981

V.G.P. Irving  
Deputy Minister  
Department of Justice and Public Service  
Government of the NWT  
Yellowknife, NWT

Dear Mr. Irving:

RE: SENIOR MINING SAFETY ENGINEER

We are most interested to learn the results of your recent efforts to recruit a Mine Safety Engineer to assume responsibility for Mine Safety Services in the NWT.

One observation that has come to our attention is, the salary range quoted in advertising material, may not be sufficiently high enough to attract top calibre candidates. Also of interest is the mechanics of selection to be used by your government.

In discussions with Commissioner Parker, shortly after the transfer of responsibility was announced by the Minister, he indicated to me an interest in having a representative from the Chamber of Mines and the Federation of Labour participate with the Federal and Territorial government in the selection process. It was my recommendation to him at that time that Mr. Bill Gibney would be our candidate to this committee. He had served the industry well as Chairman of our Mine Safety Committee.

His untimely demise has made his participation impossible, however his responsibilities have been assumed temporarily, at least, by Mr. Bill Moore, General Manager of Giant and therefore would be an ideal choice to represent us on a selection committee.

Mr. Braden and I have been discussing dates for a possible meeting with the Executive Committee and as you can see from the attached correspondence we are tentatively working towards a date in the week of April 21 - 24. This meeting will coincide with a meeting of all northern Mine Managers and it might prove most useful if you could schedule time while they are in town to bring them up to date on Mine Safety matters at that time.

I look forward to hearing from you and I will advise you of the date of meetings when I have confirmed it with George.

Yours truly,

T.D. Daniels  
Manager

Attachments

1. copy of letter to Mr. George Braden



# Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281



April 13, 1981

George Braden  
Minister of Justice and Public Services  
Government of the NWT  
Yellowknife, NWT

Dear George:

RE: MEETING OF BOARD OF DIRECTORS WITH EXECUTIVE COMMITTEE


Further to our conversation of April 2nd please confirm whether or not the Executive Committee will be available for a meeting with the Chamber during the week of April 21st - 24th.

The primary areas of discussion in so far as the Chamber is concerned are:

1. The brief submitted to your government on Mine Safety
2. Proposed changes to the Mine Safety Ordinance
3. Hiring of a Senior Mine Safety Officer
4. Mine Safety Services organization in relationship to other Territorial Government responsibilities

Please feel free to add any additional topics you may wish to discuss.

Yours truly,



T.D. Daniels  
General Manager

## MINES ACCIDENT PREVENTION ASSOCIATION OF ONTARIO

INJURY COSTSJANUARY - AUGUST - 1980

	Average No. Men	Compen- sation	Cost Per Man	Medical Aid	Cost Per Man	Total Cost Per Man	
						1980	1979
<u>MINING</u>							
<u>GOLD MINES</u>							
Campbell	377	145,087.	384.	25,458.	67.	451.	297.
Dickenson	242	29,384.	121.	7,862.	32.	153.	621.
Dome	680	202,252.	297.	37,506.	55.	352.	412.
Ferr Addison	359	143,683.	400.	27,481.	76.	476.	321.
Parson	1,148	384,495.	334.	83,097.	72.	406.	413.
Wilanour Resources	16	5,328.CR	333.CR	1,847.	115.	218.CR	-
Willroy-Macassa	275	95,602.	347.	10,203.	37.	384.	630.
<b>TOTAL GOLD MINES</b>	<b>3,097</b>	<b>995,175.</b>	<b>321.</b>	<b>193,454.</b>	<b>62.</b>	<b>383.</b>	<b>424.</b>
<u>IRON MINES</u>							
Adams	430	42,007.	97.	12,982.	30.	127.	121.
Algoma	753	204,554.	271.	32,921.	43.	314.	188.
Griffith	505	62,692.	124.	5,170.CR	10.CR	114.CR	161.
Sherman	488	121,066.	248.	11,503.	23.	271.	221.
<b>TOTAL IRON MINES</b>	<b>2,176</b>	<b>430,319.</b>	<b>197.</b>	<b>52,236.</b>	<b>24.</b>	<b>221.</b>	<b>175.</b>
<u>MISCELLANEOUS INDUSTRIALS</u>							
Canada Talc	22	8,276.	376.	4,439.	201.	577.	909.
Canadian Rock Salt	252	23,225.	92.	4,367.	17.	109.	719.
Dontar-Sifto Salt	239	30,788.	128.	3,769.	15.	143.	104.
Bedman	11	-	-	-	-	-	205.
IMC Chemical Group	91	-	-	5.	-	-	46.
Indusmin - Neph.Syen.	134	38,421.	286.	5,127.	38.	324.	199.
Indusmin - Silica	101	18,337.	181.	2,732.	27.	208.	33.
<b>TOTAL MISC. INDUST.</b>	<b>850</b>	<b>119,047.</b>	<b>140.</b>	<b>20,439.</b>	<b>24.</b>	<b>164.</b>	<b>297.</b>

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O'Connell

JANUARY - AUGUST - 1980

Page Two

	Average No. Men	Compensation	Cost Per Man	Medical Aid	Cost Per Man	Total Cost Per Man	
						1980	1979
<u>MINING - (Cont'd)</u>							
<u>MISCELLANEOUS METALS</u>							
Agnico-Eagle	111	19,711.	177.	6,790.	61.	238.	203.
Canadaka	51	1,670.	32.	359.	7.	39.	318.
Chromasco	382	143,976.	376.	20,080.	52.	428.	194.
Falconbridge Copper	97	21,139.	217.	2,123.	21.	238.	78.
Lyon Lake Mine	9	-	-	-	-	-	-
Mattabi	400	61,095.	152.	21,336.	53.	206.	148.
Noranda - Geco	685	264,197.	385.	77,255.	112.	497.	561.
Selco - South Bay	119	19,832.	166.	4,101.	34.	200.	110.
Silverfields	73	22,057.	302.	32,623.	446.	748.	955.
Texasgulf	2,365	187,951.	79.	52,549.	22.	101.	96.
Umex - Thierry	320	42,025.	131.	23,006.	71.	202.	233.
TOTAL MISC. METALS	4,612	783,653.	169.	240,222.	52.	221.	210.
<u>NICKEL MINES</u>							
Falconbridge	3,953	1,384,494.	350.	175,916.	44.	394.	404.
INCO - Pt. Colborne)							
INCO - Sudbury )	15,733	6,885,099.	437.	682,485.	43.	480.	494.
TOTAL NICKEL MINES	19,686	8,269,593.	420.	858,401.	43.	463.	480.
<u>URANIUM MINES</u>							
Agnew Lake Mines	83	57,946.	698.	7,242.	87.	785.	191.
Denison	1,950	794,160.	407.	86,888.	44.	451.	210.
Madawaska	403	50,061.	124.	6,528.	16.	140.	263.
Rio Algom - Quirke	1,500	968,081.	645.	92,619.	61.	706.	462.
Rio Algom - Panel	837	84,116.	100.	37,334.	44.	144.	81.
Rio Algom - Stanleigh	178	-	-	324.	1.	1.	-
TOTAL URANIUM MINES	4,951	1,954,364.	394.	230,935.	46.	440.	278.
TOTAL MINING	35,372	12,552,151.	354.	1,595,687.	45.	399.	384.



JANUARY - AUGUST - 1980

Page Three

	Average No. Men	Compen- sation	Cost Per Man	Medical Aid	Cost Per Man	Total Cost Per Man 1980 1979
<u>CONTRACTORS</u>						
<u>DIAMOND DRILL</u>						
Barron	18	1,190.	66.	185.	10.	76. 51.
Bradley	94	21,221.	225.	3,593.	38.	263. 483.
Dominik	20	19,478.	973.	2,314.	115.	1,088. -
Heath & Sherwood	129	33,820.	262.	10,562.	81.	343. 479.
Longyear Canada Inc.	55	9,475.	172.	1,119.	20.	192. 374.
Morissette	119	49,272.	414.	13,022.	109.	523. 586.
<b>TOTAL DIAMOND DRILL</b>	<b>435</b>	<b>134,456.</b>	<b>309.</b>	<b>30,795.</b>	<b>70.</b>	<b>378. 475.</b>
<u>MINE CONTRACTING</u>						
Aurora Quarrying	18	-	-	-	-	- -
Boart Blasthole	30	1,153.	38.	476.	15.	53. 60.
Canadian Mine Enterpr.	438.	145,800.	332.	21,567.	49.	381. 598.
Cementation	37	-	-	-	-	- 2.
Dravo	43	154,259.	3,587.	15,026.	349.	3,936. 3,585.
Graham Mining	30	-	-	532.	17.	17. -
Patrick Harrison	98	162,499.	1,658	20,467.	208.	1,866. -
A. MacIntyre	20	8,500.	425.	5,127.	256.	681. -
MacIsaac	141	143,959.	1,020.	56,399.	399.	1,419. 2,742.
Masse & Gauthier	23	13,433.	584.	2,671.	116.	700. 2,033.
Mining Corp. of Canada	200	60,585.	302.	4,181.	20.	322. 129.
Raise Contracting	240	225,346.	938.	27,006.	112.	1,050. 612.
Redpath Enterprises	153	34,357.	224.	3,355.	21.	245. 166.
Thyssen Mining Corp.	15	19,480.	1,298.	4,661.	310.	1,608. -
<b>TOTAL MINE CONTRACT.</b>	<b>1,486</b>	<b>969,371.</b>	<b>652.</b>	<b>161,468.</b>	<b>108.</b>	<b>760. 768.</b>
<b>TOTAL CONTRACTING</b>	<b>1,921</b>	<b>1,103,827.</b>	<b>574.</b>	<b>192,263.</b>	<b>100.</b>	<b>674. 707.</b>
<b>TOTAL MINING AND CONTRACTING</b>	<b>37,293</b>	<b>13,655,978.</b>	<b>366.</b>	<b>1,787,950.</b>	<b>47.</b>	<b>413. 397.</b>
<u>MISCELLANEOUS</u>						
PROSPECTORS		104,941.		15,121.		
OTHERS		2,137,922.		303,121.		
<b>TOTAL CLASS 5</b>		<b>15,898,841.</b>		<b>2,106,192.</b>		

JANUARY - SEPTEMBER 1990

	Average No. Emp	Emp. Hrs '000	Lost Time Injuries To date			Lost Time Injuries Per Million Emp. Hrs To Date YEAR		
			Sept	*1930	1979	1980	1979	1979
<u>MINING (cont'd)</u>								
<u>MISCELLANEOUS METALS</u>								
Amnico-Eagle	113	168.1	0	6	1	36	10	33
Canadaka	50	67.0	1	10	11	60	159	136
Coromasco	380	561.9	7	46	51	82	84	101
Falconbridge Copper	96	145.9	3	9	14	62	79	64
Lyon Lake Mine	10	19.9	0	0	0	0	0	0
Mattabi	399	552.2	1	21	8	38	16	20
Noranda-Geco	681	979.8	3	10	15	10	16	14
Selco-South Bay	120	159.1	1	9	3	57	18	24
Silverfields	73	102.6	1	6	4	58	38	28
Texasgulf	2376	4102.1	2	8	21	2	6	5
Therby-Thierry	320	508.2	0	10	25	20	55	45
TOTAL MISC. METALS	4618	7366.8	19	135	153	18	22	24
<u>NICKEL MINES</u>								
Falconbridge Ni.	3943	5203.1	30	263	157	51	40	40
INCO-Pt. Colborne	15656	19724.3	122	1136	458	60	43	44
INCO-SUDBURY								
TOTAL NICKEL MINES	19599	24927.4	152	1429	615	58	42	43
<u>URANIUM MINES</u>								
Arnew Lake Mines	81	179.8	1	8	79	44	112	109
Denison	1955	2843.2	4	65	64	23	25	26
Madawaska	403	596.6	0	7	8	12	14	13
Rio-Algom-Quirke	1500	2409.9	7	99	53	41	22	26
Rio-Algom-Panel	836	1194.0	4	34	28	28	34	32
Rio-Algom-Stanleigh	163	179.7	0	0	-	0	-	-
TOTAL URANIUM	4943	7403.2	16	213	232	43	33	33
TOTAL MINING	35313	48631.0	207	1932	1237	40	32	28

\*Total to date includes injuries which were not previously recorded.

+Frequency estimated from Form 7's received. As Firm report not received at time of printing.

JANUARY - SEPTEMBER 1980

	Average No. Emp	Emp. Hours '000	Lost Time Injuries To Date			Lost Time Injuries Per Million Emp. Hrs. To Date    Year		
			Sept	*1980	1979	1980	1979	1979
<u>CONTRACTORS</u>								
<u>DIAMOND-DRILL</u>								
Bradley	96	163.0	0	3	2	18	25	25
Longyear Canada Inc.	54	111.6	1	6	7	54	102	74
Heath & Sherwood	127	202.2	2	16	6	79	49	65
Barron	24	17.3	1	3	3	173	143	150
Morissette	125	227.9	1	21	15	92	80	90
Dominik	19	32.8	1	5	-	152	-	-
TOTAL DIAMOND DRILL	445	754.8	6	54	33	72	69	72
<u>MINE CONTRACTING</u>								
Aurora Quarrying	18	29.4	0	0	-	0	-	-
Boart Blasthole	30	40.2	1	4	2	75	52	40
Canadian Mine Ent.	435	657.8	2	19	14	29	27	28
Cementation	37	55.5	0	1	3	18	52	39
Dravo	43	72.2	0	7	1	97	19	25
MacIsaac	146	206.7	0	8	3	39	20	20
Masse Gauthier	23	32.3	1	5	5	154	131	100
Mining Corp. of Canada	201	297.2	2	17	13	57	81	73
Raise Contracting	240	364.0	3	30	12	82	44	58
Redpath Enterprises	153	283.9	1	11	4	39	22	30
A. MacIntyre & Assoc.	20	24.5	0	9	8	366	447	337
Graham Mining Ltd.	30	27.6	1	1	-	36	-	0
Patrick Harrison	98	171.2	0	0	-	0	-	-
Thyssen Mining Corp.	15	26.5	1	4	-	151	-	-
TOTAL MINE CONTRACTING	1489	2289.0	12	116	65	51	39	45
TOTAL CONTRACTING	1934	3043.8	18	170	98	56	46	52
TOTAL MINING AND CONTRACTORS	37247	51674.8	225	2102	1335	41	32	34
<u>MISCELLANEOUS PROSPECTORS) OTHER        )</u>								
				71	68			
TOTAL CLASS 5				2173	1403			

\*Total to date includes injuries which were not previously recorded.

+Frequency estimated from Form 7's received. As Firm report not received at time of printing.

FATALITIES

JANUARY - SEPTEMBER 1980

	Avg. No. Emp	Man Hours '000	No. Fatalities To Date		Fatalities per Million Man Hours		
			1980	1979	To Date 1980	1979	Year 1979
Mining	35313	48631.0	13	4	0.27	0.10	0.09
Contractors	1934	3043.8	3	0	0.99	0	0
Miscellaneous			0	0			

Mining

1)	Algoma Ore	Feb. 10	H. Mickusz	Fall down Ore Pass.
2)	Inco Metals Creighton Mine	Mar. 14	R. Ristimaki	Squeezed by Raise Bore Transformer while it was being transported by scooptram.
3)	Rio Algom Quirke	Mar. 22	L. Seguin	Fall down boxhole.
4)	Falconbridge Ni.	May 2	M. Krajewski	Fall of ground while repairing chute.
5)	Inco Metals Garson	May 6	J. Tait	Caught in screen while winding screen into roll for shipping underground.
6)	Inco Metals Creighton Mine	May 20	R. Keith	Caught in blast in stope.
7)	Inco Metals Creighton	May 20	J. Munroe	Caught in blast in stope.
8)	Denison Mines	June 20	N. Debassige	Fall of ground in stope.
9)	Denison Mines	June 20	R. Beauregard	Fall of ground in stope.
10)	Denison Mines	June 20	M. Boutin	Fall of ground in stope.
11)	Inco Metals Copper Cliff Refinery	June 24	S. Mathews	Struck by staging which collapsed.
12)	Inco Metals Levack	July 17	M. Bertrand	Fell 35 feet down mill hole.
13)	Pamour	July 17	T. Labreche	Runover by train underground.

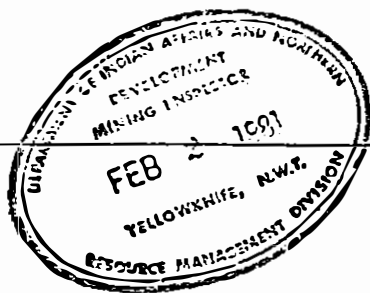
Contractors

1)	A. MacIntyre	Feb. 14	D. Gibson	Delayed to long at scene of blast.
2)	Raise Cont.	Apr. 1	R. Valliquette	Strangled around abdomen by messenger wire
3)	Dravo	June 5	R. Spencer	Struck by clam which toppled over onto worker.

## MINES ACCIDENT PREVENTION ASSOCIATION OF ONTARIO

## MONTHLY INJURY STATISTICS

JANUARY - SEPTEMBER 1980



	Average No. Emp.	Emp. Hrs. '000	Lost Time Injuries To Date			Lost Time Injuries Per Million Emp. Hrs. To Date Year		
			Sept	*1980	1979	1980	1979	1979
<u>MINING</u>								
<u>GOLD MINES</u>								
Campbell	377	509.9	2	6	6	12	12	14
Dickenson	243	333.2	2	11	10	33	28	23
Dome	679	949.0	1	19	35	20	41	34
Kerr Addison	359	508.2	5	10	9	10	13	14
Pamour	1156	1823.3	1	17	12	9	8	7
Willroy-Macassa	274	371.2	1	16	14	43	40	37
Wilanour Resources	18	24.8	1	1	-	40	-	-
TOTAL GOLD MINES	3106	4519.6	13	80	86	18	21	18
<u>IRON MINES</u>								
Adams	445	658.1	0	6	3	9	12	11
Algoma Ore	750	1067.0	1	19	40	18	35	31
Griffith	505	746.0	0	0	12	0	17	16
Sherman	486	728.5	3	11	10	15	13	12
TOTAL IRON MINES	2186	3199.6	4	36	70	11	22	20
<u>MISCELLANEOUS INDUSTRIALS</u>								
Canada Talc	23	32.9	0	1	4	30	133	181
Canadian Rock Salt	253	345.8	1	5	23	14	65	53
Domtar-Sifto Salt	245	332.3	1	5	12	15	35	28
Hedman	11	21.7	0	0	0	0	0	0
IMC Chemical Group	91	127.2	0	0	0	0	0	0
Indusmin-Neph.Syen.	134	199.1	1	4	10	20	48	40
Indusmin-Silica	104	155.4	0	4	5	26	30	34
TOTAL MISC. INDUSTRIALS	861	1214.4	3	19	54	16	30	38

\*Total to date includes injuries which were not previously recorded.

\*Frequency estimated from Form 7's received. As Firm report not received at time of printing.

2/15/81

H.P.P.



## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281

RE: MINE SAFETY

Attached are copies of correspondence that addresses the matters raised during our meeting in Yellowknife on Thursday April 9, 1981.

Subject to confirmation that the Territorial Executive Committee can meet with us we would request the presence of all Managers in Yellowknife for two days April 22nd and 23rd.

In addition to a meeting with the Executive Committee we want to get the necessary direction from you on changes to be written into the Ordinance Draft we are preparing.

Please note we have recommended that Mr. Irving and Mr. Maclean also be available for discussions with us.

We will confirm these dates to you by phone.

Yours truly,

T.D. Daniels  
General Manager



## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281

George Braden  
Minister of Justice and Public Services  
Government of the NWT  
Yellowknife, NWT

Dear George:

RE: MINE SAFETY SERVICES

On behalf of Industry I want to express my appreciation for the opportunity to meet with you on April 22nd to discuss Mine Safety in the NWT. As you are aware the Industry places a good deal of emphasis on Operating Mines that are as accident free as is humanly possible and share with you and your Government a vested interest in assuring that the NWT continues to have good mine safety legislation and a professional well organized mine safety service to enforce that legislation.

I am pleased with the manner in which you propose to handle drafting of the new legislation and that the Industry through the Chamber of Mines will have an opportunity to discuss it before it goes to the Assembly.

Effective May 1st we have engaged the services of Mel Brown who will begin work immediately to prepare for me material that will prove most useful in this exercise. I have asked him to include in his recommendations to me information on legislation in jurisdictions all across Canada. I will be pleased to make any of this material or information available to you or members of your staff at any time.

Of particular concern to us at the present time is the growing list of indications that we may soon be faced with a situation wherein the north does not have an effective Mine Safety Inspection Service due to the fact that not all employees of the current service under the jurisdiction of IAND will transfer to the GNWT on your target date of June 1, 1981.

When the Honourable John Munro announced the transfer, the north was blessed with the presence of a reasonably satisfactory

professional organization to carry out the responsibilities of Mine Safety Inspections. Nine months later indications are as follows:

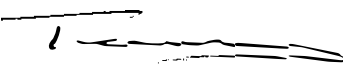
1. Mel Brown - Chief Mining Engineer - refused employment by the GNWT
2. Erland Bengts - being considered for position of Chief Mining Engineer
3. Don Irwin - present indications are that he will refuse to transfer
4. Deric Cormier - Accepted a job in the Yukon
5. Ken Lieshman - requesting transfer to Geology
6. Ed Costello - will accept transfer
7. Dorenn Smith - will not transfer
8. Marilyn Price - resigned

It is our opinion that the strength of this unit will reach a critical level of capability in coming weeks and we seek your assurance that a strong competent service will be maintained.

We believe your government erred when it refused to accept Mr. Brown as Senior Mining Engineer and we do not believe that the candidate you are now considering for the job is the one for it and urge you to consider the recruitment of an engineer from outside the existing mine safety service for this important position.

I want to reiterate our desire to co-operate with your government in anyway we can to recruit a good candidate for this position.

Yours truly,

  
T.D. Daniels  
General Manager





## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281

April 13, 1981

John D.C. MacLean  
Chairman  
Workers' Compensation Board  
Box 8888  
Yellowknife, NWT

Dear Mr. MacLean:

RE: MINE SAFETY SERVICES AND THE WCB

From time to time there has been suggestions that Mine Safety Services should become the responsibility of the Workers' Compensation Board.

The Chamber of Mines can appreciate many of the arguments advanced in support of this idea, however we do have some grave concerns about such an arrangement should it become a reality. We believe they should enjoy a close working relationship, however each must retain it's own identity and function as separate units.

Perhaps an area where the accident prevention concerns of the WCB can be best accommodated in so far as the mining industry is concerned would be to consider a closer working relationship with the Territorial Mine Accident Prevention Association.

I understand such a relationship exists in the Province of Ontario and is currently being studied as a model for possible use in Alberta.

I am asking for more information on the Ontario model from my colleagues in Ontario and Alberta and would be pleased to share it with you when it is available.

Yours truly,

T.D. Daniels  
General Manager



Northwest Territories Chamber of Mines

Box 2818 Yellowknife, N.W.T. X0E 1H0 Phone 873-5281



Hornal  
Tellier  
Faulkner



## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281

### RE: MINE SAFETY SERVICE IN THE NWT

On behalf of the Chamber I must express my gravest concern for the maintenance and continuation of competent Mine Safety Inspection Services in the NWT. When it was announced by your minister in mid 1980 that Mine Safety Service would be transferred to the Government of the NWT we offered our support to assure in every way that this transfer took place in as smooth and professional manner as possible.

At the time of this announcement the north was fortunate in that it had a competent functioning Mine Safety Service under the direction of your department. Now some nine months later it would appear to us that the north may be without an effective service entirely as a result of the way the take over is being handled by the Government of the NWT.

Details of the current problem are outlined in the attached letter to Mr. George Braden, the bottom line of which is only an extremely small percentage of the present staff can be expected to transfer and the person being considered for Chief Inspector is not of the calibre we believe necessary to do the job properly.

I must further impress upon you the serious nature of the implications for both government and industry should this service be allowed to deteriorate further. Surely the unfortunate experiences of recent accidents in both

Quebec and Alberta are enough to convince us that the maintenance of this service staffed by competent, well trained people is a matter of the highest priority and therefore seek your assurance that this service will not be allowed to deteriorate further before proper action is taken.

Yours truly,

T.D. Daniels  
General Manager

K. C. WILSON, P. ENG.  
MINING ENGINEER  
329-55TH STREET  
DELTA, BRITISH COLUMBIA

604-943-2819

October 29, 1980

The Northwest Territories Chamber of Mines  
P.O. Box 2818  
Yellowknife, N.W.T.  
JOE LHO

ATTENTION: T.D. Daniels, Manager

Gentlemen:

I refer to the "Debates on Mine Safety" at the Baker Lake Sitting, June, 1980; Mrs. Sorensens statements re: - accidents.

Mrs. Sorensen states that most Provinces have legislation that make it mandatory for miners to work in pairs - presumably she means not alone. I am not aware of such legislation and would appreciate confirmation re:- the Provinces that have such legislation.

From my personal recollection, I can recall several fatalities that resulted when more than one man was present where there would not have been a fatality if the miner had been working alone. For example: some years ago, a miner was operating a two-boom, crawler mounted G.D. jumbo in a stope when he ~~deteriorated~~ missed a hole when drilling: the helper, who was some distance away, was killed, the miner uninjured.

At one time, I asked Louis-George Tanguay, Chief Mining Inspector for Quebec to check the Provincial records to determine if such fatalities were more common than believed. As I recall, his study confirmed that there was only one debatable case, and all other fatalities would not have been prevented by the presence of a second person.

Based on the above, I cannot agree with Mrs. Sorensen findings; if I am correct than her whole argument is not based on fact. The above is a personal opinion only, and does not necessarily reflect the belief of any Company or other groups with which I may be associated.

Any comments which you may care to make, will be welcome.

Yours truly,

*K.C. Wilson*  
K.C. Wilson

Copies to: Sorensen  
MacQuarrie  
Braden  
Butters  
Parker  
Hornal  
Morrison

GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

349-8

PLEASE QUOTE

YOUR FILE

35-5

N-7740-90-7

MAY 2

1980

Yellowknife, N.W.T.,  
X1A 2L9

May 26, 1980.

Mr. Mel Brown,  
Regional Mining Engineer,  
Mining Inspector,  
D.I.A.N.A.,  
P.O. Box 1500,  
YELLOWKNIFE, N.W.T.

Dear Mr. Brown;

Please find enclosed copies of the proposed monitoring program for lead exposure at Con Mine, Cominco Ltd. This program is in reply to the request of the Mill Superintendent Dave Whittall to Dr. George Gibson, Medical Advisor, Occupational Health Section, Safety Division. The enclosed information is for your files.

Sincerely yours,

Laurie Nowakowski, Head,  
Occupational Health Section,  
Safety Division,  
Dept. of Justice and Public  
Services.

Enclosure

LN/f



GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

PLEASE QUOTE

YOUR FILE

8082-35-5

Yellowknife, N.W.T.,  
X1A 2L9

May 26, 1980.

Mr. Dave Whittall,  
Mill Superintendent,  
Con Operations,  
Cominco Ltd.,  
P.O. Box 2000,  
YELLOWKNIFE, N.W.T.

Dear Mr. Whittall;

Thank you for your recent request for information regarding an Occupational Health Program for workers exposed to lead in industry. As discussed, workers in the Assay Office and in the Refinery at Con Mine are exposed to litharge as a dust and possibly lead fumes. From Occupational Health information we do know that inhalation and ingestion of lead and lead compounds can be harmful to health.

The Occupational Health and Safety Division of the Government of the N.W.T. have examined the regulations on lead exposure from other provinces. We propose using the B.C. regulations with regards to this matter as their regulations are practical, up to date and the present model for our proposed N.W.T. Occupational Health and Safety regulations. We have consulted with Dr. B. Dimock of Trail, B.C. who has outlined the reporting of the results.

Our recommendations for monitoring at Con are as follows:

1. Upon commencement of employment (Assay Office and Refinery) a Medical Investigation specific for lead exposure workers will be completed. A blood test and urine sample shall be taken for lead analysis.
2. Copies are enclosed of Schedule I (Lead in Urine) and Schedule II (Lead in Blood) which will be used for any additional analysis. The Medical Doctor will inform the workers of their results, and their significance. With the consent of the worker the employer will be given a general interpretation of the results but not the specific values of the analysis.

- 2 -

3. The monitoring of blood and urine will occur annually. The medical examination will be done initially and only repeated if there is a problem.

To initiate this program we propose:

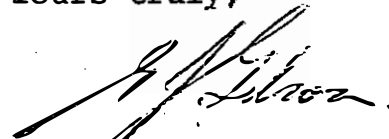
1. The present employees (Assay Office and Refinery) have an initial blood sample and random urine sample taken at the Clinical Laboratory in the Medical Arts Building in Yellowknife.
2. The Medical Advisor for Occupational Health, Dr. Gibson, will perform the Medical Investigation. Dr. Gibson and the Head of the Occupational Health Section, Safety Division, will explain to the employee the significance of the testing and the procedure for reporting results. The doctor will discuss with the workers lead exposure and will answer any questions the worker may have.

To set up a working schedule we request you provide the list of workers involved and their day of choice the week of June 23-26. We would suggest 4:30 to 6:30 p.m. at the Clinic.

The above program will function as an Occupational Health monitoring program. We encourage and support the continued environmental monitoring of the Assay Office and/or Refinery as the renovation to the ventilation occurs.

Do not hesitate to contact myself or Occupational Health if you have any questions or comments.

Yours truly,



Dr. G. Gibson,  
Medical Advisor,  
Occupational Health Section,  
Safety Division,  
Dept. of Justice and  
Public Services.  
Gov't of the N.W.T.

cc: Mr. Mel Brown  
Laurie Nowakowski

Enclosure

GG/f





Minister of State  
Mines

Ministre d'État  
Mines

MAR - 5 1981

Mr. C.A. Born  
President and Chief Executive Officer  
Canada Tungsten Mining Corp. Ltd.  
Box 12525 - Oceanic Plaza  
Suite 1600 - 1066 West Hastings Street  
Vancouver, B.C.  
V6E 3X1

Dear Mr. Born:

Our office was recently approached by a female geology student with a request for a clarification of the legal restrictions on women working underground. It appears that during a job interview, a Canada Tungsten interviewer informed her that it is illegal for women to work underground in the Northwest Territories.

A member of my staff spoke to Mr. Terry Daniels, Manager of the Northwest Territories Chamber of Mines, and Mr. Doug Thompson, General Manager of Canada Tungsten. They were both under the impression that the restriction on female employment, contained in Section 11 of the Mining Safety Ordinance, Chapter M-13 of R.O.N.W.T., 1974, is still in force. No

I am pleased to inform you that this restriction was removed in 1978. The "Ordinance to amend certain ordinances and thereby remove certain discrimination on the basis of sex and provide for a chief coroner", Chapter 2 of the Ordinances of the Northwest Territories, 1978, (Second Session), assented to on 17 May, 1978, repealed Section 11

.../2

of Chapter M-13 of R.O.N.W.T., 1974, and replaced it with:

"-no person under the age of 16 years  
shall be employed in or about a mine  
-no person under the age of 18 years  
shall be employed underground or at  
the working face of any open cut  
workings, pit or quarry"

Thus there are no longer any restrictions on women working in a mine.

In these times of skilled labour shortages, felt especially acutely in remote locations, I am certain that the management of Canada Tungsten will be happy to know that they can now draw upon all of the Canadian labour force.

Yours sincerely

Original Signed by  
Originais signée par  
JUDY EROLA

Judy Erola

c.c. Hon. Lloyd Axworthy  
Minister of Employment and Immigration

Hon. John Munro  
Minister of Indian Affairs & Northern Development

John L. Bonus  
Managing Director  
Mining Association of Canada

Terry Daniels  
Manager  
Northwest Territories Chamber of Mines



January 13, 1981

Mr. Terry Daniels, Manager  
N.W.T. Chamber of Mines  
Box 2818  
YELLOWKNIFE, N.W.T.  
X0E 1H0

Dear Terry:

Re: Changes to Mining Safety Ordinance

The following are my personal thoughts on changing the Ordinance.

*Mike Hewitt has it!*  
Section 3(b) - The Registry should be in the Northwest Territories--maybe with the W.C.B. as they are the body which use the records when claims arise.

*correct!*  
Section 12 - This section should be deleted. Hours of work are not a matter of safety any longer. Maintaining safe and healthy working conditions is the approach to take. Matters like hours of work should be (and are) in the Labour Standards Ordinance.

*Discrimination because of age!*  
Section 13 - Hoistmen over 45 years of age should have medical examinations every six months. This practice is followed with Commercial Pilots.

*in which case, they would be eligible for Workers Compensation?*  
Section 17(2) - Persons found to have any abnormal condition of the lungs or bronchial tract should not have their Miner's Certificate renewed until the condition has cleared up. This would mean removing them from a "dust exposure occupation".

Terry Daniels, Manager  
N.W.T. Chamber of Mines  
Yellowknife

- 2 -

January 13, 1981

Section 19(1) - Chest x-rays should be given every second  
*16(2)?* year unless the medical office has reason  
to suspect an incipient abnormal chest  
condition.

Section 28, - The wording should be updated to include  
*Remove!* all diesel powered equipment used underground.  
*See Appendix 'A'*  
Section 40(3) - The additional penalty presently applies only  
*may be* to a person who "might have endangered the  
safety of persons...". It should be amended  
to also cover persons who "did endanger the  
safety of persons...".

In addition consideration should be given to the following:

1. The right of the Commissioner to appoint a competent, professional person to conduct an inquiry into special situations concerning Mine Safety and Health. eg. Mine disasters.
2. The establishment of a "Task Force" every four years to review the Ordinance and the whole matter of Mine Safety and Health in the N.W.T. This task Force would be made up equally of representatives of employers and labour with the Chairman appointed by the Commissioner. The Task Force would report to the Commissioner.
3. Under "Other Health Measures" there should be included a section on "Occupational Health Hazards" other than silica dust and radioactive materials. What I envisage is something which permits the Commissioner to make Regulations respecting such hazards.

In closing I wish to make you aware that some people feel that the Mine Inspectorate, W.C.B. and Occupational Health and Safety Department should be merged. If that is not the feeling of the Mine Operators, then convincing arguments should be prepared.

Yours very truly,

  
W. A. Case  
Senior Mining Engineer

WAC/cr

3. Re-Establishment of Basic Compensation Principles & Priorities

The Company does not believe that the present system has deviated from basic principles.

4. W.C.B. and Industrial Health & Safety

- i) The Company feels that the W.C.B. should continue to be active in:
  - education, posters
  - first aid support
- ii) The W.C.B. could arrange to have a resident examiner for audiometry technicians, or have one come to Yellowknife annually, for this purpose.
- iii) The W.C.B. should arrange for calibration of audiometers.
- iv) This Company does not believe that the W.C.B. should get into the field of occupational health or safety inspections.

5. The Current Levels of Compensation and The Manner In Which They Are Set

- i) The Company feels that 75% of the workers average remuneration is an adequate level of benefit payments.
- ii) In 1981 the Company was advised that the new year Maximum Assessable Remuneration was to be increased from \$16,800 to \$20,400 or an increase of 21.4%.

The Company feels that the new level of Maximum Assessable Remuneration is probably higher than the average wage in the N.W.T. and should not be changed for some time.

6. The Processing of Claims & Costs of Replacement Income Compensation

The Company does not hear at present from the W.C.B. on a monthly basis, as to the benefits paid the employee, and cannot comment.

The Company does not understand how the Replacement Income Compensation is calculated, or the method of determining the amount paid. The principle is good.

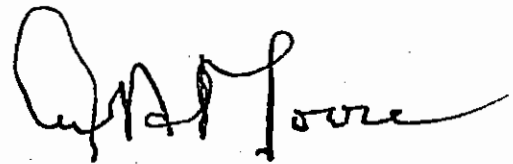
7. The Rehabilitation of Workers

The Company feels that rehabilitation of the injured employee should be done at a special clinic with proper equipment and staff. Later, light duty work on the job is valuable to further fit the employee for full duty. The Company supports the principle of light duty work whole heartedly.

8. W.C.B. in Other Jurisdictions

The Company feels that the W.C.B. - N.W.T. is based on the best ideas of workers compensation from other jurisdictions now, and should not be changed without consultation between labour, management and government groups.

Feb. 21/81



W. A. Moore  
General Manager

*Ch. 12*  
*Parker*  
*I. Daniels*

November 24, 1980

*Cop*

Mr. John H. Parker  
Commissioner of the  
Northwest Territories  
Government of the N.W.T.  
YELLOWKNIFE, N.W.T.

Dear Mr. Parker:

This is a formal request for your office to investigate the removal of Section 12 of the Northwest Territories Mining Safety Ordinance.

Section 12 reads:

\*Hours of work

12. (1) Except as otherwise provided in this section, no person shall

- (a) remain or be permitted to remain underground in any mine, or
- (b) operate or be permitted to operate, either on the surface or underground, any hoisting engine in a shaft,

for more than eight hours in any consecutive twenty-four hours, which eight hours shall be computed from the time he arrives at his place of work in the mine to the time he leaves that place.

Exemptions in cases of emergency, etc.

(2) Subsection (1) does not apply

- (a) to a foreman, pumpman, caretender or any person engaged solely in surveying or measuring;

Commissioner John H. Parker

- 2 -

November 24, 1980

- (b) in cases of emergency where life or property is in danger; or
- (c) in cases where repair work is necessary.

**Exemption for Saturday shift**

(3) A Saturday shift may work longer hours for the purpose of avoiding work on Sunday or changing shift at the end of the week or giving other employees a part holiday.

**Exemption for hoistmen where one absent**

(4) Where one of the regular hoistmen is absent from duty and no competent substitute is available, the remaining hoistmen may work extra time not exceeding

- (a) four hours each in any consecutive twenty-four hours, or
- (b) with the approval of an inspector, eight hours each in any consecutive forty-eight hours,

for a period not exceeding ten consecutive days.

**Exemption for hoistmen where non-continuous shifts**

(5) Where work at a mine or in any particular shaft is not carried out continuously on a three shift daily basis, a hoistman may work the extra time necessary for hoisting or lowering, at the beginning and end of each shift, the workmen employed on a shift.

R.O., c.70, s.11; 1967 (1st), c.16, s.9."

We feel this provision in the Act does not meet the needs of mining operations for our Polaris Mine, or for any mine in a remote area.



Commissioner John E. Parker

-3-

November 24, 1980

As you are aware, the Government of the N.W.T. discourages the establishment of new townsites in remote areas, and as a result we can expect future mining developments to follow the pattern of Polaris, i.e. single status operations which rotate workers whose place of residence is elsewhere in Canada. Workers are cut off from their families and the lifestyle associated with the "normal community".

The motivation for workers to work in this environment is the ability to earn substantially more than they can in a southern setting. The present working in the N.W.T. Mining Safety Ordinance does not allow this to happen. Also, such restrictions will make it difficult to recruit underground personnel.

Another consideration which must be born in mind in operating in isolated areas is that excessive leisure time is not wanted by the employees and becomes counterproductive. When an employee is moved from his family and normal social life he needs to be kept busy.

We recognize that the intent of the Mines Safety Ordinance is to ensure that mines are operated with a concern for the safety of the worker and we are convinced that the removal of Section 12 from the Ordinance would have no effect upon the safe operation of the mine.

Perhaps our position on Mines Safety could be elaborated:

We recognize that fatigue caused by long hours of work is a contributing factor in worker safety; however, in an isolated area this factor is mitigated by the following:

- 1) Workers are in an isolated situation, access to alcohol is restricted and a "normal" social life is not possible. Therefore, employees are more likely to get proper rest in the camp atmosphere than otherwise.
- 2) At Polaris we will have recreational facilities which will reduce tension and provide a break from fatigue. These facilities include:

swimming pool  
gymnasium  
jogging track  
lounge areas  
music room  
crafts room

Commissioner John H. Parker

- 4 -

November 24, 1980<sup>a</sup>

- 3) The rotation system allows employees a substantial break. We plan to operate Polaris on a 10 weeks in, two weeks out rotation with a two week Christmas shut-down.
- 4) Even with the recreation facilities we have available 16 hours per day of leisure time is excessive, and depression and other counter-productive results of excessive leisure will reflect on the job.

At Polaris we would like to operate the underground operation as follows:

The hours of work for an underground miner would be 11 hours per day. This day would be worked as follows:

- 1) A 5 hour work period with a 15 minute personal break midway in this period.
- 2) One hour for lunch. Employees would be taken from the work place to surface for this lunch break.
- 3) A second 5 hour period with a 15 minute break.
- 4) An organized recreational programme will be available in the off hours.
- 5) All rooms will be single rooms with private bath to ensure workers get a good rest.
- 6) The mine will operate six days per week with Sunday off. A recreational programme will be available on the day off.

We recognize that the purpose of the Mining Safety Ordinance is to protect the workers. We do not feel that limiting the hours of work in a mine is the approach to take to achieve this objective. It is our opinion that the way to do this is to maintain the conditions in the work place at an acceptable level and Cominco fully intends to strive towards this end. Nevertheless we accept that there must be regulations pertaining to health hazards, but we submit that such regulations should be contained in the Mining Safety Rules rather than in the Ordinance itself.

Accordingly we would suggest that the Mines Safety Ordinance be amended, by dropping Section 12, and that length of time spent underground be included in the regulations under Section 6 g. In this way the safety of the worker could be protected by legislation and at the same time under Section 6 (c) (d) and (e), and Section 7(1) the mines inspectorate and the Commissioner would be empowered to adapt these rules to individual mines.

Commissioner John H. Parker


- 5 -

November 24, 1980

In closing I would like to make the point that a restriction on hours of work very much works against the interests of northerners who are working on a shortened rotation. In the case of Polaris where we are running a 10 week in 2 week out rotation for southern employees and a 6 week in 4 week out rotation for northerners, the severe restriction on overtime serves as a detriment to those northerners working in the short schedule.

This has been a lengthy letter and I thank you for bearing with me. If you require more information or would like to discuss this in detail, please contact me.

Yours very truly,



C. F. Lambert  
Manager, Personnel and Administration

CFL/cr

cc: SML.



24 November 1980

PERSONAL AND CONFIDENTIAL

Mr. M. L. Brown,  
Mining Inspector,  
Department of Indian and Northern Affairs,  
P.O. Box 1500,  
Yellowknife, N.W.T.

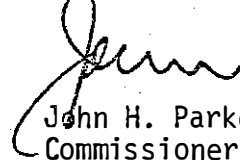
Dear Mel:

Further to our meeting and telephone conversation of last week when we discussed the transfer of the Mine Safety function from the Department of Indian and Northern Affairs to the Territorial Government, I have come to the conclusion that we will not be making a job offer to you. This decision was not lightly taken, in fact it was a most difficult one. Had I not been assured that you have an offer of continuing employment with the Department at work which will be interesting to you and in a field which is of vital concern to us, we would have proposed a transfer to you and made a job offer.

As you have only two years before retirement, it seems sensible to me that we should recruit a head of the Mine Safety unit to whom we can look for leadership for a substantial number of years. I realize that you have a tremendous background of knowledge and experience and I am hoping sincerely that you will permit us to call upon this experience from time to time.

In my estimation you have been an excellent Mining Inspector, balancing the demands of labour and management to the mutual good of both groups. Although the transfer is some months away, please accept at this time my thanks for this excellent work.

Yours sincerely,



John H. Parker,  
Commissioner.

c.c.: Mr. R. Hornal  
Mr. T. H. Butters



GOVERNMENT OF THE NORTHWEST TERRITORIES  
CANADA

PLEASE QUOTE

YOUR FILE

14-50-010

Yellowknife, N.W.T.,  
X1A 2L9.

February 17th, 1981.

Mr. T. D. Daniels,  
General Manager,  
Northwest Territories Chamber  
of Mines,  
P.O. Box 2818,  
YELLOWKNIFE, N.W.T.

Dear Mr. Daniels:

Re: Transfer of Mine Safety

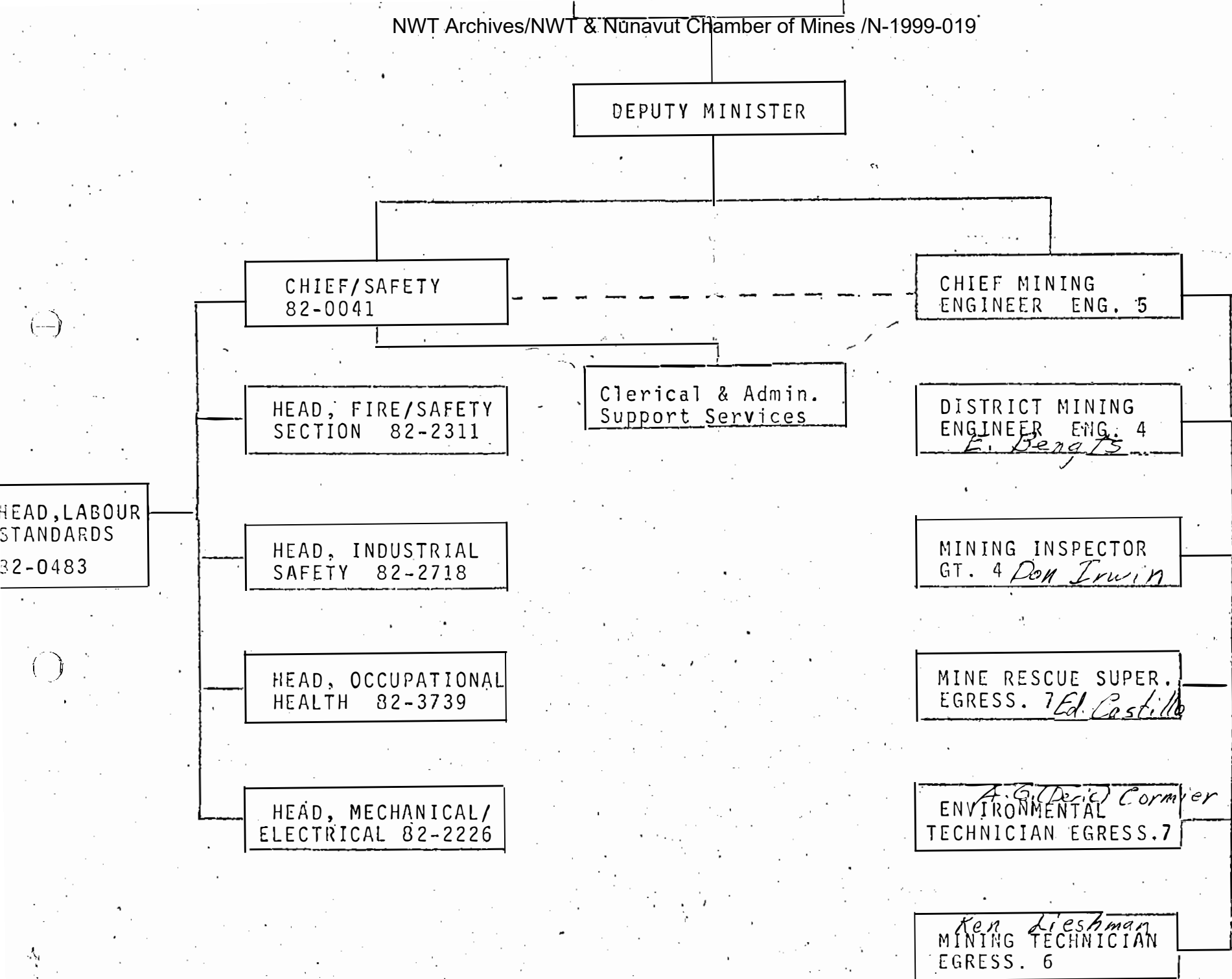
Further to your letter of February 10th, 1981,  
the following information applies:

1. Date of transfer - June 1st, 1981.
2. Proposed location - Northway Building.
3. Staffing commenced by Government of the Northwest Territories Department of Personnel, for position in both Northern and Southern Canada.
4. The original Mine Safety Unit is being transferred. This is not a new Unit.
5. Current strength is 7 employees.
6. Organization Chart attached.

Yours truly,

V. G. P. Irving,  
Deputy Minister,  
Department of Justice  
and Public Services.

Attachment



Notes from Mel Brown to R.D. Daniels

RE: BRIEF TO GNWT ON MINE SAFETY DATED FEBRUARY 16th, 1981

1. Introduction - says that it is in reponse to a motion respecting ammendments to the Mining Safety Ordinance. The title of this brief and the contents show concern for mine safety in general. I believe that this is right. Ammendments to the Ordinance are a small, but important part of mine safety.  
Reference is made in the brief to "Mine Safety Services". DIAND has called the group "Mining Inspection Services". They are much more than that. We should try to get GNWT to adopt "Mine Safety Services".  
I agree with the wording of 1.02, but suggest that, initially, the Chamber try to get together with the Federation of Labour and present a mutually agreeable package of ammendments to Mine Safety Services and the GNWT. If this could be done, we should expect no opposition from either of the above.
2. Objective - In 2.03, I would delete the reference to Saskatchewan WCB. The assets of WCB's are more dependent on assessment procedures than on safety legislation.
3. Jurisdiction - Recommendation 2. The word "matters" should be changed to "regulations". Management must retain the primary responsibility for safety in the Industry.
4. Organization - I agree with this.
5. Staffing - We should certainly insist on competent, experienced people in the mining inspection group, but I have some reservations about specifying "professional engineers". There is some engineering work to be done, and there should be at least one engineer in the group. However, I believe that the Senior Mining Inspector should be chosen more for his experience, his character and his leadership qualities than for his engineering abilities. This may help us when we negotiate later for more flexilibility in the requirements for Mine Managers, shift bosses, electricians, mechanics etc.

6. Ordinance - 6.03. The duties, responsibilities and procedures of the Mine Safety Committees are not clear to management, inspector, unions or the committees. This should be discussed in the amendments to the Ordinance.
7. Summary - Recommendation 2. When we talk of "safety working conditions" we should add "actions" or "procedures", or just specify "safety", which consists of safe attitudes, safe conditions and safe procedures.  
Recommendation 4. The primary responsibility for safety remains with management.  
Recommendation 7. Review with managers if they wish to retain the specification of "Professional Engineer".

Mel Brown



*Henry Daniels*  
P.O. Box 1500,  
Yellowknife, N.W.T.  
X1A 2R3

August 26, 1980.

Government of the Northwest Territories,  
YELLOWKNIFE, N.W.T.  
X1A 2L9

Attention: John H. Parker,  
Commissioner

Dear Commissioner Parker:-

In reply to your letter of August 20, 1980, I would like to further appeal for some lenience on paragraph 12 (1) (a) of the Mining Safety Ordinance. I am not persuing this topic just for Camlaren but also for other requests from mining companies and anticipated requests. With present methods of mining the rule seems inappropriate. The Ordinance in paragraph 6 (e) states "The Commissioner may suspend the operation of any rule or regulation either with respect to any period of time or with respect to any particular mine". I see no statement in the Ordinance stating you cannot amend or suspend a paragraph or section of the Ordinance.

However, if I am in error, I request that section 12 (1) (a) be removed from the Mining Safety Ordinance, at the earliest session of Council.

This section greatly effects the mines when trying to obtain miners i.e. Nanisivik contractors, Polaris contractors, Cullaton Lake, Cadillac, Camlaren and Lupin, to mention some of the immediately affected mines.

I am enclosing a copy of files on Nanisivik and Arvik as to how this problem has been handled in the past.

Yours truly,  
ORIGINAL SIGNED BY  
*IRWIN*  
D.G. Irwin,  
Mine Inspector.

IRWIN:mp

Enclosures

*gl* *6* *My* *WCH*



Northwest  
Territories Commissioner

Yellowknife, N.W.T.  
X1A 2L9

AUG 20 1980

Mr. D.G. Irwin,  
Mine Inspector,  
Department of Indian and Northern Affairs,  
P.O. Box 1500,  
YELLOWKNIFE, N.W.T.  
X1A 2R3

Dear Mr. Irwin:

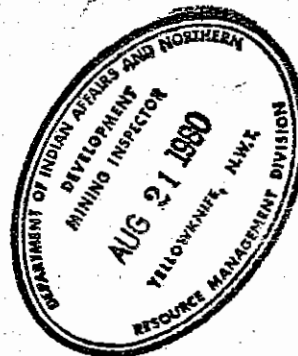
In reply to your letter of July 31, 1980, I regret that I am unable to suspend the operation of paragraphs 12(1)(a) and (b) of the *Mining Safety Ordinance* concerning Mining Corporation's operations at Camlaren Mine.

My authority to suspend extends only to the suspension of the operation of any rule or regulation made pursuant to the *Mining Safety Ordinance* and not to a provision of the Ordinance itself.

Yours sincerely,

A handwritten signature in cursive script, reading "John H. Parker".  
John H. Parker,  
Commissioner.

c.c. Mr. M. Maki,  
Project Manager,  
Camlaren Project.



P.O. Box 1500,  
Yellowknife, N.W.T.,  
December 7, 1972.

Arvik Mines Ltd.,  
Cominco Ltd.,  
Resolute Bay, N.W.T.

Attention: L. Rietveld,  
Superintendent

Dear Mr. Rietveld:

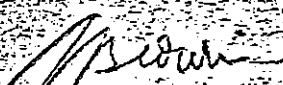
Hours of Work, Underground

In reply to your request and under Section 7 (1) of the Mining Safety Ordinance, I hereby suspend Section 11 (1) (a) of the Mining Safety Ordinance until 6 February 1973.

I shall apply to the Commissioner under Section 7 (2) of the Mining Safety Ordinance to have this section suspended until 1 June 1973.

This will allow you to complete initial development operations on regular 12 hour shifts.

Yours truly,

  
M.L. Brown,  
Mining Inspector

Brown:eds

C.C. Commissioner  
Government of the Northwest Territories



P.O. Box 1500,  
Yellowknife, N.W.T.,  
December 7, 1972.

Commissioner of the Northwest Territories,  
YELLOWKNIFE, N.W.T.


Attention: S.M. Hodgson

Mining Safety Ordinance

I enclose a copy of a letter to Arvik Mines, giving them permission to work 12 hour shifts underground. I request that this permission be extended to 1 June 1973 under Section 7(2) of the Mining Safety Ordinance.

Arvik Mines, on Little Cornwallis Island is in the initial development stage. All crews are working 12 hour shifts. The underground men come up to surface for coffee breaks in the forenoon and afternoon and have one hour off for a hot meal on surface in the middle of the shift. They are not underground for more than 3 hours in any one time and do not spend over 10 hours per day underground.

Brown's  
Enclosure (1)

  
M.L. Brown,  
Mining Inspector

86 048 069

OFFICE OF THE COMMISSIONER  
NORTHWEST TERRITORIES  
CANADA

Yellowknife, N.W.T.

DEC 15 1972

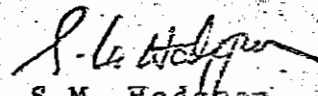
Mr. M.L. Brown,  
Mining Inspector,  
Indian & Northern Affairs,  
P.O. Box 1500,  
Yellowknife, N.W.T.

Dear Mr. Brown:

This will acknowledge receipt of your letter of December 7, 1972 and the attached copy of your letter of the same date addressed to Arvik Mines Ltd., c/o Cominco Ltd., Resolute Bay, N.W.T. in which you suspended the provisions of Section 11(1) of the Mining Safety Ordinance until 6 February, 1973.

As you requested, this letter is confirmation that I concur in the extension of the suspension of Section 11(1) to June 1, 1973.

Yours sincerely,

  
S.M. Hodgson,  
Commissioner





GOVERNMENT OF THE NORTHWEST TERRITORIES

CANADA

Yellowknife, N.W.T.,  
XOE:150.

June 29, 1976.

DIRECTOR,  
DEPARTMENT OF PUBLIC SERVICES.Underground Working Hours  
Manisivik Mines Limited

On June 28, I discussed the underground working hours for the above noted with Mining Inspector, Mel Brown. We came to the following conclusions:

There is no objection to amending the ordinance to allow this change. The amendment should cover more than just this one mine. It should reflect the principle that where extenuating circumstances require longer hours of underground work by any mine especially mines located in remote areas that a procedure for application be provided. The control should be at the commissioner level but the application should come through the mining inspector.

A copy of this letter to Mel Brown confirms my telephone conversation with him.

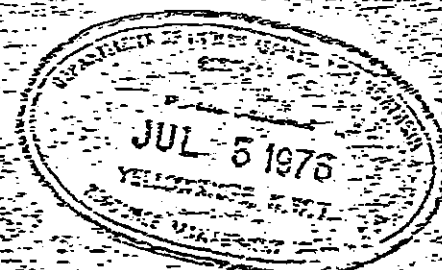
I presume Jim Slaven's Division will draft the amendment.

J.W.M. BROWN  
YELLOWKNIFE

*L. Adrian*  
L. Adrian,  
Chief,  
Safety Division,  
Department of Public Services

ADRIAN/ab

cc Mel Brown, Mining Inspector



NORTHWEST TERRITORIES  
FEDERATION  
OF LABOUR



P.O. BOX 2787, YELLOWKNIFE, N.W.T. X0E 1H0  
(403) 873-3695



December 11, 1980

Mr. George Braden  
Government of the N.W.T.  
Yellowknife, N.W.T.

Dear Mr. Braden:

RE: MINING SAFETY ORDINANCE AMENDMENTS

Please find attached a copy of the amendments from the N.W.T. Federation of Labour and the United Steelworkers Area Council.

We believe that it is imperative that the present Ordinance be amended as soon as possible, therefore we have drafted our proposed amendments in such a way that they could be presented to the Legislative Committee of the Assembly immediately.

We trust that you will see the wisdom of this course of action.

Sincerely,

E. McRae  
Vice-President  
North Great Slave

EM:MAJ

*T. G. Smith*  
Manager

*This Document has just been obtained. Your response will be most helpful to us in preparing our response. I expect to report to you on Friday of Mel Brown first week in January. He is out of town until Jan 3. I believe time is of the essence*

*Mine Managers:*

*Dec 29, 1980*

Northwest Territories Chamber of Mines  
Box 2818 Yellowknife, N.W.T. X0E 1H0 Phone 873-5281



The Mining Safety Ordinance is amended by repealing Section 1. and substituting therefor the following:

Short Title

1. This Ordinance may be cited as the Mining Safety and Health Ordinance.
2. By adding thereto, immediately following subsection 3 (c) the following subsections:
  - (d) appoint any person for the purpose of this Ordinance or to investigate, advise, direct, regarding any process in and around any mine in the Northwest Territories with the view of ensuring the safety and health of all employees; and
  - (e) appoint a "Mine Safety and Health Board", whose function shall be to advise the Commissioner regarding any aspects of this Ordinance or on any matter affecting the safety and health of all employees in and around a mine, exploration or development project. The Board will consist of an equal number of representatives of mine employees and management with the Chairman to be appointed by the Commissioner. The Board will be empowered to advise the Commissioner regarding any deletion or addition to the rules and regulations pursuant to this Ordinance. The Board will be empowered to recommend from time to time changes in the Ordinance and shall hold any hearings or investigations either in its own right or as directed by the Commissioner.



3. By repealing subsection 5 (b) and substituting therefor the following:

(b) give notice in writing to the manager of the particulars of any matter, thing or practice in, about or concerning a mine or mining that, in the opinion of the inspector, is dangerous, defective or contrary to this Ordinance or the rules and regulations made thereunder, and shall require the matter, thing, or practice to be remedied within the time named in the notice;

- (1) such time not to exceed a period of one month;
  - (2) to give written notice to the inspector of the completion of any work; and
  - (3) copies shall be forwarded to the local union concerned or the employee safety committee,
- and a copy of such notice shall be posted in a conspicuous place at or near such mine;

4. By repealing subsection 5 (c) and substituting therefor the following:

(c) enter, inspect and examine at least once each month any mine or portion thereof by day or night in any manner that will not unreasonably or unnecessarily impede or obstruct the working of the mine;

5. By adding thereto, immediately following subsection 5 (f), the following subsection:

- (g) be accompanied during each mine inspection by an employee representative of the mine safety committee.

6. By repealing subsection 5 (5) and substituting therefor the following:

- (5) The owner or manager of a mine in respect of which a notice has been given or an order made pursuant to paragraph (1) (b) or (d) may, within three days from the day the order was made or the notice given, serve on the Commissioner a notice of objection to the said order or notice setting out the reasons for the objection. Copies of such notice shall be forwarded to the local union or safety committee involved.

7. By repealing subsection 5 (6) and substituting therefor the following:

- (6) Upon receipt of the notice of objection the Commissioner shall forthwith reconsider the order or notice and quash, confirm or vary the said order or notice and he shall thereupon notify the inspector, the owner or the manager, the local union or safety committee involved of his decision.

8. By repealing subsection 7 (2) and substituting therefor the following:

(2) Suspension or variation of a rule by an inspector under sub-section (1) shall cease to have effect after one month has elapsed from the date of such suspension or variation, unless sooner cancelled or confirmed by the Commissioner.

9. By repealing subsection 7 (3) and substituting therefor the following:

(3) An inspector who suspends or varies a rule under this section shall forthwith report the particulars thereof to the Commissioner and the local union or safety committee involved.

10. By repealing sub section 8 (1) and substituting therefor the following:

(1) Subject to the approval of the Commissioner, the manager of a mine may make rules, not inconsistent with this Ordinance or any rule or regulation made under it, for the safe operation of a mine under his management and for the maintenance of order and discipline in the mine, and such rules shall have the same effect as if they were a part of this Ordinance.

11. By repealing sub section 8 (2) and substituting therefor the following:

(2) Upon approval by the Commissioner of any rule made under subsection (1), the rule shall be posted in a conspicuous place in or about the mine by the manager of the mine and shall come into force seven days after it is so posted or at such earlier time as the Commissioner may direct. A copy of such rules shall be forwarded to the local union or the safety committee prior to such rules coming into force.

12. By repealing Section 9 and substituting therefor the following:

(1) The owner, operator, or manager, individually or severally as the case may be, are responsible for:

- (a) the observance, performance and enforcement of this Ordinance and regulations; and
- (b) protecting the safety and health of workers engaged or employed in or about any mine which they own, operate or manage.

(2) The manager of mine shall ensure that:

- (a) all work at the mine is done by competent workers;
- (b) all operations at the mine are adequately supervised;

## 12 (continued) Section 9:

- (2) (c) work of unusual hazard is personally supervised by a supervisor or a competent assistant, and that only persons who have been thoroughly instructed as to the hazards and proper procedures shall be assigned to do the work; and
  - (d) shall certify to the Commissioner as to the competency of his subordinate supervisors in their knowledge of the N.W.T. Mine Safety and Health Ordinance and Regulations, Mine Rescue procedures, including knowledge of ways and means of evacuating an underground mine in case of emergency, and Industrial or Advanced First Aid.
- (3) Each and every supervisor at any mine shall:
- (a) have a thorough knowledge and understanding of this Ordinance and Regulations, be proficient in his/her knowledge of mine rescue procedures, and Industrial or Advanced First Aid;
  - (b) enforce this Ordinance and regulations, and ensure the safety and health of employees during the course of their employment;
  - (c) ensure that, with respect to the work in which every worker under his/her authority is engaged, the worker
    - (1) is acquainted with the regulations that apply,

12 (continued) Section 9 (3).

- (3) (c) (2) is instructed of hazards that may be involved,
  - (3) uses the safety devices and equipment required for the protection of persons performing such work;
  - (d) any condition that has been found to be, or has been reported to be unsafe, or not in compliance with this Ordinance, and that has not been corrected by the end of the shift during which it was so reported, shall be reported to and recorded in the supervisor's daily log;
  - (e) the report in the supervisor's daily log shall be read and countersigned by the responsible person on the oncoming shift, and corrective action indicated before persons are permitted to resume work in the area specified in the report.
- (4) Every supervisor shall:
- (a) inspect each working place and all equipment he/she is responsible for as often as the nature of the work requires to ensure that safe conditions exist and equipment is in safe operative condition and in the case of underground mines at least twice each shift and at least once each shift in other types of operations;
  - (b) takes measures necessary for the correction of any condition that is unsafe;

## 12 (continued) Section 9 (4).

- (4) (c) when unsafe conditions cause or are likely to cause imminent danger to any person, withdraw all persons from the danger area except those workers required to correct the unsafe condition.
- (5) A supervisor or other designated person shall:
  - (a) be on duty whenever persons are working in a mine;
  - (b) check in and out on each shift, all persons working in a mine;
  - (c) not permit an unauthorized person to enter or remain in a mine.
- (6) Every person at or in each mine shall:
  - (a) be familiar with the regulations that apply to the work in which he/she is engaged;
  - (b) examine his/her working place and equipment to ensure that they are safe for any work required to be done and are in compliance with this Ordinance;
  - (c) take precautions to ensure his/her own safety and the safety of his/her fellow workers during the course of his/her employment; and
  - (d) at all times when the nature of his/her work requires, use all devices, and wear all articles of clothing designated for his/her protection, or required to be used and worn by him/her under this Ordinance or regulation;

## 12 (continued) Section 9. (6).

- (6) (e) where an employee or employees in or about a mine has or have reason to believe, and believe that conditions exist that are dangerous to his/her or their health or safety in the performance of work and has or have reported those conditions to and examined the site with his/her or their supervisor or person in a responsible capacity at the mine, if the conditions remain uncorrected he/she or they shall in writing report the conditions to an inspector. The employee or employees shall have the right when reporting or inspecting an unsafe condition to be accompanied by representatives of the local union or the safety committee;
- (f) where an inspector receives a report under subsection (e) he/she shall forthwith make an examination and inquiry and make such order as he/she deems necessary to achieve the remedying of the conditions;
- (g) no employer of employees in or about a mine shall dismiss, discharge, suspend, transfer, layoff, or otherwise discriminate against an employee or employees for the reason:
- (1) that the employee or employees made a report under 9 (6) (e); or
  - (2) that the employee or employees refused to work or continue to work under the condition that he/she or they reported under subsection (e) and where a report



12 (continued) Section 9. (6).

- (6) (g) (2) of an inspector made under subsection (f) indicates that the employee or employees had reasonable and probable grounds for believing that those conditions were dangerous to health and safety:
- (h) where an owner or operator or a supervisor or a person in a responsible capacity at a mine knows or ought to have known that any condition exists at the mine that is dangerous to the health and safety of the employee or employees, he/she shall not require or permit the employee or employees to engage in, carry on or continue to work at the mine under that condition;
- (i) any person mentioned in subsection (h) who violates the provisions of that subsection is guilty of an offence and in addition to any penalty to which he/she may be subject, he/she shall not work in a supervisory capacity at any mine for a period of six months from the date of his/her conviction or admission of fault;
- (j) where an employee or employees take unfair advantage of this section for frivolous reasons he/she or they may be subject to such discipline as is available to be imposed upon him/her or them by his/her or their employer subject to the contractual relationship between the employer and the employee or employees, or a bargaining agent on behalf of the employee or employees.

## Section 9 (continued):

- (7) (a) No person shall be assigned to perform work alone in any place where a recognized hazard to his/her safety may exist by virtue of his/her being without direct communication with another person.
- (b) All persons working alone who do not have access to direct communication with some other person shall be contacted at least every hour by someone so authorized.

By repealing subsection 10 (2) thereof and substituting therefor the following:

- (2) Every mine safety committee shall be composed of a minimum of four persons; half of whom shall be appointed by the manager of the mine, and half of whom shall be selected from the employees by the employees.

By repealing subsection 10 (3) (b) thereof and renumbering subsection 10 (3) (c) as subsection 10 (3) (b). By adding thereto, immediately following subsection 10 (3) (b) the following subsections:

- (3) (c) A copy of the report shall be filed with the owner, agent, or manager, in the office of the mine inspector and with the local union or safety committee involved.

Subsection 10 (3) (continued):

- (3) (d) Inspect all relevant logs and reports.

By repealing subsection 10 (4) thereof and substituting therefor the following:

- (4) The owner, agent or manager and all persons in the mine or works shall afford the persons so appointed every facility for the inspection.

By adding thereto, immediately following subsection 10 (4) the following subsection:

- (5) The company shall reimburse all monies lost to employees who lose time from work by virtue of being a member of a safety committee, while performing their duties under this Ordinance or regulations.

By repealing subsection 11 (1) thereof and substituting therefor the following:

11. No person under the age of sixteen years shall be employed in or about a mine and no person under the age of eighteen years shall be employed underground or at the working face of any open cut workings, pit or quarry.

By repealing subsections 11 (2) and 11 (3).

By amending the definition of subsection 19 (1) to now read:

Medical examinations, both preplacement and annual shall include:

By adding thereto, immediately following subsection 19 (3) the following subsections:

(4) Preplacement and annual medical examinations and medical history shall include:

- (a) a careful examination of the skin;
- (b) palpation of superficial lymph nodes;
- (c) complete blood count, including differential count;
- (d) hair and urine sampling for heavy metals and arsenic count;
- (e) electromyographic sensory and motor testing of all limbs.

By repealing subsection 20 (b) thereof and substituting therefor the following:

- (b) by the Workers' Compensation Board of the Northwest Territories.

By adding thereto, immediately following subsection 20 (c) the following subsections:

- (d) to the person to whom such x-ray photographs, particulars of occupational and medical history and medical reports and opinions relate.
- (e) each person examined by a medical officer under this Ordinance shall, on request, be entitled to a statement of his physical condition as determined by the examination.

By repealing subsection 25 (1) and subsection 25 (2): By renumbering all following sections numerically in order to replace the repealed Section 25.

By repealing the present Section 26 thereof and substituting therefor the following:

- (1) The owner of a mine shall take such measures as are required to protect the health of employees where any process concerning the mining, exploration, development, transporting, milling, concentrating, leaching, smelting or refining of any ores cause or are likely to cause a health hazard to workers by contamination of the work environment with gases, vapours, fumes, dust or other contaminants. To reduce and control the contamination at a level equal to or below the threshold limit values recommended by the American Conference of Governmental Industrial Hygienists and published as the Threshold Limit Values of Airborne Contaminants. These shall be reviewed.

## Section 26 (continued):

- (1) annually and revised in the light of industrial experience, published scientific and medical research data or on recommendation by the American Conference of Governmental Industrial Hygienists or other authoritative organizations including the International Labour Organization so as to continually reduce any hazard and protect the workers.
  - (a) Where any hazard exists or is likely to exist, or any area of the mine designated by the mines inspector or the safety committee, the company shall cause tests to be taken at least once each month and shall report the results to the mine inspector and the safety committee.
  - (b) In any travel way or working place, the oxygen content in the atmosphere shall be not less than 18% by volume.
- (2) An owner of a mine at which radioactive materials are mined, concentrated or treated shall supply and install such equipment and ensure that such medical tests are carried out as are required for the protection of the employees at the mine, and shall otherwise take all precautions to protect the employees engaged in mining, milling, transporting, or treating such materials in accordance with the Atomic Energy Control Regulations of Canada, regulations made under applicable Federal Legislation or on direct order of the Commissioner.

## Section 26 (continued):

(3) Employees shall not be exposed to noise in excess of the Threshold Limit Values recommended by the American Conference of Governmental Industrial Hygienists in their publication "Threshold Limit Values of Physical Agents for 1972", amended from time to time. These standards of levels shall be reviewed annually and revised according to scientific and medical experience and compared with standards recommended by any authoritative safety agency.

(a) When employees are required to work in areas in which noise levels exceed the criteria for permissible noise exposure, the employer shall first take appropriate measures to reduce the noise intensity, and if it is not practicable to reduce the noise to approved levels, or isolate the workers from the noise, the worker shall be supplied and shall wear approved personal equipment which will effectively protect his hearing.

(b) No person shall remain in any work place where the work atmosphere is not in accordance with the standards referred to in 26 (1), 26 (1) (b) and 26 (2).

By repealing Section 28 thereof and substituting therefor the following:

No person shall operate an internal combustion engine underground or in an enclosed structure unless its operation has been authorized by an inspector.

By repealing subsection 31 (b) thereof and substituting therefor the following:

- (b) plans of each underground level showing all underground workings, including shafts, tunnels, diamond drill holes, dams, bulkheads and pillars.

By adding thereto, immediately following subsection 40 (b) the following:

- (c) knowingly makes a false statement to an inspector while the inspector lawfully carries out his duties under the Ordinance or regulations; or
- (d) knowingly makes a false entry in any document, book, record, plan or section recorded or kept in compliance with the Ordinance or regulations or knowingly acquiesces in or orders the making of any such false entry; or
- (e) obstructs an inspector or officer of the department in the execution of his/her duties; or
- (f) being the owner or operator of a mine refuses or neglects to furnish to an inspector or officer of the department, the means necessary for making an entry, inspection, examination or inquiry in relation to any issue under this Ordinance or regulations;

is guilty of an offence and on summary conviction is liable to a fine not exceeding one thousand dollars.



By adding thereto, immediately following Section 41 the following Sections and subsections:

42 Notwithstanding the above any person may lay information in respect of any offence or alleged offence against this Ordinance or regulations.

43 CORONER'S INQUEST:

(1) An Inspector, any person authorized by him on his behalf, a representative of the union or mine safety committee, a representative of mine management are entitled to be present and to examine or cross examine any witness at any inquest held concerning a death caused by an accident in or about a mine.

(2) If the Inspector or someone on his behalf or if representatives of the union or safety committee, or representatives of mine management are not present at the inquest, the coroner, unless he has been notified by any of the above parties that he or they do not intend to be represented at the inquest, shall adjourn the inquest and give to the above named parties not less than one week's notice of the time and place at which the evidence is to be taken.

(3) The jury summoned to inquire into the death at the inquest, where practicable, shall be composed wholly or in part of persons familiar with the type of work the deceased was doing at the time of the accident.

- (4) No person involved in the management of the mine in or about which the accident occurred, no person injured by the accident, and no relative of such person is qualified to serve on the jury.

AFFILIATED  
TO  
CONFEDERATION  
OF  
CANADIAN UNIONS



A S A W

Room 208, Bromley Bldg. Mailing Address P.O. Box 1628, Yellowknife, NWT Telephone 873-4528

A BRIEF  
on  
CHANGES AND AMENDMENTS  
To The  
MINING SAFETY ORDINANCE  
Of The  
NORTHWEST TERRITORIES

Presented to The  
GOVERNMENT AND COMMISSIONER  
OF THE  
NORTHWEST TERRITORIES

by

THE CANADIAN ASSOCIATION OF SMELTER AND ALLIED WORKERS  
LOCAL NUMBER FOUR,  
AFFILIATED WITH THE  
CONFEDERATION OF CANADIAN UNIONS

February, Nineteen Eighty-One

Thank you for the privilege of supplying our input on changes we feel to be necessary in the Mining Safety Ordinance of the Northwest Territories. Certainly there are numerous areas that need substantial revision.

In this submission, we make no real attempt to re-draft the actual wording of the Ordinance, since such legislation is altered and rewritten many times before being finalized. In some cases, where our changes are relatively minor, we have changed a few words in existing sections to indicate the direction we would like the amendments to take.

A major priority should be the formation of a committee to oversee all matters connected with the safe operation of mines in the N.W.T. This committee could be known as the N.W.T. Mining Board to differentiate from each mine's Mine Safety Committee. We propose that its structure comprise equal membership from senior mining management, selected by the Chamber of Mines, and senior labour representatives selected by major mining unions operating in the N.W.T. The chairman, who should have tie-breaking capability, would be appointed by the Commissioner.

This Board should evaluate changing conditions and techniques within the mining industry and decide upon pertinent rule changes, inspection procedures and any other matters falling within its area of competence in mining. This Board should not be charged with disciplinary or supervisory functions, but act instead as an interested body of technically qualified source personnel for the guidance of the Legislative Assembly and the Commissioner. Due to the expert nature of such a Board, its terms of reference should be as broad as possible, and mechanisms should be put in place to allow maximum implementation of their recommendations, and particularly, since safety considerations are involved, some occasions will also call for a degree of speed.

Any physical, technological, financial or safety condition in mining, existing or new, should be within the sphere of the Board to consider and act upon. Its balanced structure should

create sound policies and certainly would provide interested guidance to a concerned government.

Some items not presently covered adequately in the present Ordinance need legislative attention to protect worker health. We suggest consideration be given to setting carefully studied limits on such work factors as maximum dust levels, minimum lighting, maximum and minimum temperatures, and reasonable ventilation requirements.

Obviously, some jobs and some workplaces will not be amenable to outright control of the above factors. In such cases, there should be requirements for protective equipment or auxiliary lighting, heating, cooling or whatever the particular situation may demand.

Following are numerous specific items we propose changing. If detail is insufficient in any case, we are prepared to amplify, substantiate, and/or justify any of them. Please feel free to request further details.

Sec. 2(b)      Add new subparagraph (iv):

*Safety Rules.*

A paragraph defining a maximum figure for dust concentrations acceptable under the varying conditions of available worker protection, and the agents contained in the dust, should be included.

*Yes. Try that!*

Sec. 2(d)      Add some requirements for technical qualification of mining inspectors.

Sec. 2(i)      Same modification as 2(d) above.

Sec. 3(a)      Insert a requirement for qualification of inspectors.

Sec. 3(c)      As in 3(a) add requirement for qualification.

*They do!*      Sec. 5(1)(a)      Inspectors should inspect on a regular basis and more frequently than scheduled if required.

Sec. 5(1)      Add a paragraph empowering employee Mine Safety Committee members to accompany inspectors on mine inspections. The Mine Safety Committee should have the authority to require an immediate inspection of specific problems.

*Why?*

*You do your job*

*We will do ours.*

*Who pays?*

NOTE: We feel full inspections should be made on at least a monthly basis.

Sec. 5(1)(b)

*Some take more time than others*

Inspection notices should be given to both management and the Mine Safety Committee. More emphasis should be given to requiring rapid correction of faults. Wider distribution of inspection reports (bulletin boards) will heighten employee awareness of problems and corrective action required or taken.

Sec. 5(1)(c)

*All should be done without prior notification.*

Delete all after ". . . by day or night." Some inspections should be done without prior notice to avoid the tendency to part-time safety programs.

Sec. 5(1)(g)

*Sounds O.K. New*

The inspector shall meet with the Mine Safety Committee involved to discuss and analyze circumstances surrounding serious or fatal accidents, with a view to avoiding recurrences. Such meetings shall take place within one week of the occurrence.

Sec. 5.5

*You can't do anything at Nanisivik or Cantung in that time.*

Sec. 5.6

*yes*

We propose that objections be filed as soon as possible but not later than 3 days. (*new 14 days*)

Notification under this section should be extended to the Mine Safety Committee involved.

Sec. 6(h)

*yes*

NEW. Any alteration, suspension, approval or cancellation of any rule(s) shall be circulated to the Mine Safety Committee involved.

Sec. 7.4

*yes*

NEW. Any suspension or alteration of rules under this section shall be reported to the Mine Safety Committee concerned.

Sec. 9

*Why just U.G.*

GENERAL: We disagree with having people working underground alone. If this must be done, voice communication should take place at least hourly. If such communication is impossible, workers should not be working alone.

*Anyone, at any time can declare a workplace unsafe. But this does not make it safe or unsafe!*

Sec. 10.3(a)

*Why*

Further, a worker should be able to declare the workplace unsafe, and in this case representatives of the Mine Safety Committee should immediately view the workplace to determine its condition.

Sec. 10.3(d)

*What records.*

Have access to records concerning subjects under inspection.

Sec. 11.1

*has been done*

"No one under the . . . ." "and no one under the age of eighteen . . . ."

Sec. 11.2

*"*

Sec. 11.3

Delete. } *female*

Sec. 12.1

*This would not allow overtime U.G.*

". . . eight hours shall be computed from the time of leaving the surface to time of return to surface. In the case of hoist operators, eight hours at the workplace shall comprise a normal shift."

Sec. 12.2(c)

Delete. (*rap. & 14.4.4.4*)

Sec. 12.3

Delete.

Sec. 12.4 and 12.5 Renumber as 12.3 and 12.4 respectively.

Sec. 13.1(a) "is under the age of twenty-one years AND,  
(b) no change

OK

- shall operate or be permitted to operate any hoisting engine at a mine shaft in which persons are carried. A trainee operating under the direct supervision of an instructor shall be exempt from (b) above. Such instructor shall bear responsibility for safe operation of the hoist.

Sec. 14.1(a) Insert the word "miner's" before "certificate".

Rules.

(b)

NEW. No person shall work in dust levels exceeding Threshold Limit Values without proper training and protective equipment.

Why Sec. 14.2 ?

Delete. see original. should retain.

Sec. 16.1

OK

"... shall, within thirty days prior to the date of expiry of the certificate, be notified by the employer, who shall apply to a medical officer ... " etc.

Sec. 17.2  
Why this ?

"... where the applicant is free from respiratory diseases."

Sec. 18.2

As in 17.2 above.

Sec. 19.1 ✓

Misprint "photograph".

Sec. 19.4

True

New

Consideration should be given to requiring special examinations for specific local hazards (eg: arsenic at Giant, radon at Echo Bay, heavy metals at various operations).

Yes Sec. 19.5 New

Any individual shall have full access to personal medical history as recorded under this Ordinance.

Sections 21, 22, 23

Maybe Dr Stewart

We propose deletion of these sections, and replace them with sections empowering the Workers' Compensation Board or the Occupational Health Unit to carry out the functions therein.

? Sec. 25.1 and 25.2

Delete (exemption if no silica)

Sec. 26(a)  
What.

"An owner of a mine at which radioactive materials are, were, or could potentially be mined ? . . . "

They are now Sec. 26(b) New

Regulations of Atomic Energy Canada concerning workers in related fields shall apply.

Sec. 28

Delete - Rules

"... has been authorized in writing by an inspector."

Sec. 30.3

Why joint?

NEW. Joint inspection by the Mine Safety Committee and the inspector shall be carried out on new installations before use, or before reactivation of a closed area or property.

- Sec. 34.2 ✓ And "... and the Mine Safety Committee concerned."
- Sec. 35.2 *(Have removed RCMP ?)* *Yes* NEW. The Mine Safety Committee, together with an inspector, shall carry out an independent investigation of the circumstances surrounding the accident.
- Sec. 35.3 *OK* Change "photographs or drawings" to "photographs and accurate scale drawings". Add a last sentence. "Photographs and drawings are to be made available to the Mine Safety Committee and the inspector."
- Sec. 36.1 *OK* "... send notice in writing and in duplicate, to an inspector and the relevant Mine Safety Committee of such occurrence, and shall also furnish these parties with such particulars as they may require."
- Sec. 37.1 *OK* "... a mine in which underground operations have commenced, i.e. - from shaft collar down."
- Sec. 37.1(b) Delete. *(See original)*
- Sec. 40.1 ? "... liable on summary conviction to a penalty as imposed by the courts." ?
- Sec. 40.2 ? "... to a fine for each day not exceeding ten thousand dollars." *now 7000,*

Perusal of the above recommendations will show that we would require much more from both the Mine Safety Committees and the Mining Inspection branch of government. It is entirely possible that the inspection staff would have to be expanded. Indeed, we feel that the roles of both the above parties, and the companies as well, have to bear a greater load if the avowed goals of safety in the mines is to be achieved.

Certainly, the increased costs must be considered, but so must the hoped-for reductions in death, injury, Compensation payments and company insurance costs.

Even if net higher costs were recorded, kindly be reminded that this is one of extremely few truly PRODUCTIVE economic sectors in the N.W.T., and a relatively minor administrative cost increase is little enough to pay for a healthier mining industry.

If major action is not taken along these lines, could it not be said that we are paying only lip service at best to the vital subject of employee and employer well-being?



①  
GIANT

A BRIEF RESPECTING  
MINE SAFETY IN THE NORTHWEST TERRITORIES

PRESENTED TO THE GOVERNMENT OF THE NORTHWEST TERRITORIES  
YELLOWKNIFE                      FEBRUARY 16, 1981

SUBMISSION

By The

NORTHWEST TERRITORIES CHAMBER OF MINES

INTRODUCTION

In response to notification dated December 17, 1980 and signed by Mr. Tom Butters, Executive Member responsible for Justice and Public Services, we are pleased to submit to you our recommendations respecting any changes in the N.W.T. Mining Safety Ordinance that may result from a motion passed by the Legislative Assembly respecting the Mine Safety Ordinance on Thursday, November 6, 1980.

1.01

The recommendations and accompanying explanations and comments are of a general nature and do not address the specifics that would result from a clause-by-clause scrutiny of either the existing Ordinance and accompanying regulations or of proposed changes recommended in the Federation of Labour Brief submitted to Mr. George Braden on December 11, 1980 and to the Executive Committee on January 7, 1981.

1.02

We believe an in-depth review of individual clauses can only be productive if carried out in a forum that permits frank discussion of specifics by representatives of the Federation of Labour, the Chamber of Mines and Mine Safety Inspection Services, Government of the N.W.T. as outlined in the letter of December 22, 1980 addressed to Mr. Butters and signed by the President of the Chamber of Mines, Mr. R.W. Spence.

1.03

If the Government of the Northwest Territories is to be successful in achieving much sought-after political, social and financial objectives it is imperative that it encourage the growth of a strong viable economic community. The economic future of the Territory is heavily dependent on the orderly development of mineral resources. Part of that development will require mine safety regulations, environmental controls and health standards that are unbiased, and reasonable, and technically sound. It will also require that the authority of ~~the Mine Inspection Services~~ <sup>Safety</sup> and ~~of the Mine Management~~ <sup>responsibility</sup> not be jeopardized in any way.

Noted NWT Archives/NWT & Nunavut Chamber of Mines /N 1099-019  
as the NWJ. All are considered important to the  
Chamber and therefore the order in which they are listed  
does not designate any degree of preference placed on them  
by the Chamber.

## 2. SUMMARY OF RECOMMENDATIONS

~~In this submission the Northwest Territories Chamber of Mines recommends~~  
as follows:

- ~~and~~ 1. That the present spirit of co-operation that exists between Industry and Mine Safety Services in seeking solutions to problems that arise in respect to mine safety be encouraged to continue.
- ~~2.~~ 2. That recognition be given to the fact that successful accident prevention is primarily dependent on education rather than legislation.
3. That the total number of agencies of government to which the Industry must answer should be kept to a minimum and that all directives to the Industry must be given in clear and concise language that can be easily understood by labour and management.
4. The Mine Safety Service should have primary responsibility for all matters related to the safety of workers in the Industry.
5. The Senior Mine Inspector will be permitted easy access to the Commissioner, Executive Members and senior officials of Government and Industry for the purposes of carrying out his responsibilities.
6. The Government give serious consideration to the creation of a Department of Non-Renewable Resources and take immediate action to identify all responsibilities currently under its jurisdiction, together with additional responsibilities it can expect to assume in future years as the first step in establishing this new department.
7. The Senior Mining Inspector will be a professional mining engineer with substantial expertise in the Industry.

8. All inspection staff will be individuals with demonstrated expertise and knowledge in the Industry and properly qualified to carry out the assigned responsibilities of their respective positions.
9. All Mine Safety Service staff have demonstrated ability to communicate well with associates and Industry personnel.
10. The position of Senior Mining Engineer should be staffed and the Mine Safety Service should be made fully operational within the Territorial Public Service prior to commencement of the drafting of amendments to the Ordinance.
11. A committee should be struck comprising representatives from Mine Safety Services, labour, both organized and unorganized and management to review all proposed amendments to the Ordinance.
12. Amendments be carefully scrutinized to assure that they are necessary, practical and clearly intended to improve safety.
13. Regulations dealing with non-safety items such as hours of work, age and sex be removed from the Ordinance and if necessary included under more appropriate legislation.
14. The powers of the Commissioner and Senior Mine Inspectors under the Ordinance be retained and that access by the Senior Mine Inspector to the Commissioner or to Industry personnel not be further restricted.
15. Matters of an administrative nature should be left in the Ordinance and those items now defined as regulations or rules will remain as regulations or rules.
16. Changes in legislation should not impinge on areas that are properly the responsibility of management or in any way impede the ability of management to deal directly with its workers, safety committee or union management.

3

THE OBJECTIVE OF LABOUR, GOVERNMENT AND MANAGEMENT MUST BE TO CREATE  
A SAFE WORKING ENVIRONMENT FOR ALL EMPLOYEES WORKING IN THE MINING INDUSTRY

3.01

At the present time an atmosphere of co-operation based on constructive criticism is encouraged by the Department of IAND in handling all matters related to mine inspection. It is important that this same approach be adopted by the Department of Justice and Public Services. Many problems require the combined expertise of both <sup>Mine Safety Services</sup> ~~the Inspection Service~~ and Industry personnel simply because they are unique to a specific situation. Therefore <sup>accessability to</sup> ~~the ability to utilize~~ all available expertise must be protected in the best interests of correcting unsatisfactory safety or occupational health programs.

3.02

<sup>✓ prevention</sup>  
 The key to a successful accident program is the development of conscious and co-operative attitudes towards safety in the minds of all workers and managers within the work place. It has been clearly demonstrated in other jurisdictions that efforts to "legislate" rather than "educate" in the area of safety have not had the degree of success in preventing accidents that was anticipated by the proponents of the legislation.

3.03

This premise is supported by experiences in the 1970's with OSHA regulations in the United States and with the New Safety Ordinance enacted in Saskatchewan. In both jurisdictions enforcements and its accompanying punitive actions did not produce appreciable improvement in safety records. ~~In Saskatchewan, the Compensation Board had a 5 million dollar surplus prior to implementation of the new act which quickly slipped to a 4 million dollar deficit two years after enactment of the new legislation.~~ Priority must be given to the identification of the reasons accidents occur and to the development of proper solutions.

THE CHAMBER RECOMMENDS

1. That the present spirit of co-operation that exists between Industry and Mine Safety Services in seeking solutions to problems that arise in respect to mine safety be encouraged to continue.
2. That recognition be given to the fact that successful accident prevention is primarily dependent on education rather than legislation.
3. That in order for substantial progress to be made in the field of occupational health and safety, there must be full commitment by all the parties, the worker, the union, the government and the industry to acceptance of responsibility in an atmosphere of mutual respect and trust. Each person must be ready to say - "I am committed. I accept my responsibility to do my part."

5/ JURISDICTIONS UNDER WHICH WORKER HEALTH AND SAFETY ARE REGULATED SHOULD BE KEPT TO A MINIMUM

4.01

To ensure safe, efficient operation of mines it is essential that <sup>number</sup> ~~the areas of~~ ~~of agencies of government~~ ~~jurisdiction~~ under whose authority a mine must operate are as few in number as possible. At the present time the Industry is subject to regulation by the Workers' Compensation Board, Labour Standards, Occupational Health and Safety, Mine Safety Inspection Services and various environmental control agencies. We have a real concern as to how the directives of these various regulatory authorities will be co-ordinated and what mechanism will be in place to prevent directives of a conflicting nature from being given to Industry.

4.02

It has been demonstrated in other jurisdictions notably the United States that when Industry is subject to a diverse collection of regulatory agencies often with conflicting regulations, confusion develops that results in unnecessary delays in taking corrective action. We therefore believe that one point of contact with Government is preferable if management is to be successful in maintaining safe, efficient mining operations and to be up-to-date in compliance with all regulations.

THE CHAMBER RECOMMENDS

1. That the total number of agencies of government to which the Industry must answer should be kept to a minimum. It further recommends that all directives to the Industry must be given in clear and concise language that can be easily understood by labour and management alike.
2. That ~~the~~ Mine Safety ~~Inspection~~ Service <sup>yes</sup> should have primary responsibility for all matters related to the safety of workers in the Industry.

5. THE ~~NEW~~ MINE SAFETY SERVICES GROUP WITHIN THE TERRITORIAL GOVERNMENT SHOULD BE SO ORGANIZED THAT IT RETAINS ITS DISTINCT IDENTITY AND HAS A HIGH PROFILE WITHIN THE BUREAUCRACY

5.01

Mining has played and will continue to play an important role in the economic growth of the N.W.T. The priority that the Government gives to Mine Safety and ~~Inspection~~ Services will reflect in considerable measure the degree of recognition the Government gives to the importance of the Industry.

5.02

We believe that the transfer of Mine Safety ~~Inspection~~ Services affords to the Government of the N.W.T. an excellent opportunity to form the nucleus of what would some day represent a complete department responsible for non-renewable resources in the N.W.T. and that therefore, the ~~Senior Mine Inspector~~ <sup>Senior Mining Engineer</sup> should report directly to a member of the Executive Committee.

5.03

*If the government should decide that a separate department cannot be justified*  
~~In recognition of the possibility that such a move as this is not possible at this early stage, we believe it is essential that the Mine Safety Services group be kept intact, and retain its own distinct identity. We further believe~~  
 and that the Senior ~~Mine Inspector~~ <sup>Mining Engineer</sup> should report to a Deputy Minister. and that  
 no less than

*an assessment be made annually to determine whether sufficient responsibilities have accrued to the Government to warrant establishment of a separate department.*

F.04

Historically, the Senior Mining <sup>Engineer</sup> ~~Inspector~~ has enjoyed ~~easy~~ <sup>reasonable</sup> access to the Commissioner on all matters worthy of his attention. We believe that this practice should continue until such time as changes are made to the N.W.T. Act ~~which designate~~ <sup>designate</sup> responsibility for the Territorial Mine Safety Ordinance to a Minister or Deputy Minister. It is equally important that Industry personnel continue to enjoy easy access to the staff of ~~the~~ Mine Safety Service, and that access not become encumbered by unnecessary red tape.

THE CHAMBER RECOMMENDS

1. The Senior <sup>Mining Engineer</sup> ~~Mine Inspector~~ will be permitted ~~easy~~ <sup>reasonable</sup> access to the Commissioner, Executive Members and Senior <sup>Department Heads</sup> ~~officials of Government~~ for the purposes of carrying out his responsibilities.
2. The Government give consideration to the creation of a Department of Non-Renewable Resources and take immediate action to identify all responsibilities currently under its jurisdiction, together with additional responsibilities it can expect to assume in future years as the first step in establishing this new department.



6

MINE SAFETY SERVICES MUST BE STAFFED BY COMPETENT, WELL-TRAINED  
AND EXPERIENCED INDIVIDUALS

6.01

*Mining Engineer*

We believe the Senior ~~Mine Inspector~~ must be a professional mining engineer who has had considerable experience in the Industry prior to his engagement to this important position. His staff should be individuals who have demonstrated competence and experience through having worked in the Mining Industry.

6.02

The quality of expertise that comprise the Mine Safety ~~and Inspection~~ Services <sup>play an important role in</sup> division will ~~help to determine~~ the standards of safety that can be expected within the work places of the Industry. It must be recognized that mining, like many other industries, has unique problems that can only be recognized and successfully resolved by highly skilled individuals with the necessary background and experience to deal with them.

6.03

*Mine Safety Services*

Communications between ~~Inspection staff~~ and Industry personnel are of vital importance. Irrespective of what the problem may be or the recommended solutions, unless all parties involved are able to communicate easily in all manner of form, the potential for unnecessary delays, frustration and confusion exists. Such an atmosphere is not conducive to improving safety in the work place.

THE CHAMBER RECOMMENDS

*Mining Engineer*

1. The Senior ~~Mine Inspector~~ <sup>will</sup> be a professional engineer with substantial experience in the Industry.
2. All inspection staff will be individuals with demonstrated experience in the Industry and properly qualified to carry out the assigned responsibilities of the respective position.
3. All Mine Safety Services staff <sup>v shall</sup> have demonstrated ability to communicate well with associates and Industry personnel.

7. AMENDMENTS TO THE ORDINANCE SHOULD BE CAREFULLY CONSIDERED TO ASSURE THAT THEY ARE CLEARLY IN SUPPORT OF THE OBJECTIVE WHICH IS TO IMPROVE SAFETY CONDITIONS IN THE INDUSTRY

7.01

To assist the Government in making revisions to the Ordinance it is imperative that it has available to it the necessary technical expertise to properly assess proposed changes. It is essential that amendments be carefully examined to assure that they are necessary, practical and in support of the overall objective of improved safety in the work places of the Industry. It is therefore of paramount importance that a Senior ~~Mine Inspector~~ <sup>Mining Engineer</sup> be engaged by the Government prior to proceeding to amend the Ordinance. The transfer of existing staff in ~~the~~ Mine Safety Services should be completed as well. If the incoming Senior ~~Inspector~~ <sup>Mining Engineer</sup> has an opportunity to study the Ordinance and the proposed changes, there will be less likelihood of errors being made.

7.02

An essential factor in the successful development of a safe and efficient mining industry is the latitude that is extended to the Senior ~~Mine Inspector~~ <sup>Mining Engineer</sup> in interpreting the rules under the Ordinance as they apply to specific situations. Each problem has certain peculiarities and it is reliance on the ~~Inspector's~~ <sup>Engineer's</sup> experience and good judgement that offers the best chance for finding the proper solution. We believe the discretionary powers of the ~~Inspector~~ <sup>Engineer</sup> should not be eroded through the writing of rigid legislation that would restrict this flexibility.

7.03

One important component most necessary for the safe operation of any mine is the Mine Safety Committee. Amendments to the Ordinance should not dilute in any way the powers and responsibilities of the ~~s~~committees.

THE CHAMBER RECOMMENDS

1. The position of Senior Mining Engineer ~~should~~<sup>that</sup> be staffed and ~~the~~ Mine Safety Service, ~~should~~ be ~~the~~ fully operational within the Territorial Public Service prior to commencement of the drafting of amendments to the Ordinance.
2. A committee be struck comprising representatives from Mine Safety Services, Labour, both organized and unorganized and Management to review all proposed amendments to the Ordinance.
3. Proposed amendments be carefully scrutinized to assure that they are necessary, practical and clearly intended to improve safety.
4. Regulations dealing with non-safety items such as hours of work, age and sex be removed from the Ordinance and if necessary included under more appropriate legislation.
5. The powers of the Commissioner and Senior ~~Mine Inspector~~<sup>Mining Engineer</sup> under the Ordinance be retained and that access by the Senior ~~Mine Inspector~~<sup>Mining Engineer</sup> to the Commissioner or to Industry personnel not be ~~further~~<sup>unnecessarily</sup> restricted. *responsible for Justice and Public Services* *The Executive Committee must*
6. Matters of <sup>an</sup> administrative nature should be left in the Ordinance and those items now defined as regulations or rules should remain as regulations or rules.
7. Changes in legislation should not impinge on areas that are properly the responsibility of management or in any way impede the ability of management to deal directly with ~~the~~ workers, safety committees or union management.



P.O. BOX 2787, YELLOWKNIFE, N.W.T. X0E 1H0  
(403) 873-3695



December 11, 1980

Mr. George Braden  
Government of the N.W.T.  
Yellowknife, N.W.T.

Dear Mr. Braden:

RE: MINE SAFETY BRIEF

Further to our telephone conversations, please find attached a copy of the joint submission of the N.W.T. Federation of Labour and the United Steelworkers Area Council. It is our understanding that the meeting to officially present this brief will be held on January 7, 1981. Your co-operation in notifying the other members of the Executive Committee and the Commissioner is appreciated.

We believe that the brief is self explanatory and while we certainly appreciate the opportunity of presenting this brief, we do stress that the time is long overdue that this ordinance was substantially amended.

Sincerely,

E. McRae  
Vice-President  
North Great Slave

Attachment

EM;MAJ

A BRIEF ON SAFETY IN THE MINING INDUSTRY  
OF THE NORTHWEST TERRITORIES

TO

THE COMMISSIONER & EXECUTIVE COMMITTEE  
OF THE GOVERNMENT OF THE NORTHWEST TERRITORIES

PRESENTED JOINTLY

BY

NORTHWEST TERRITORIES FEDERATION OF LABOUR

&

NORTHWEST TERRITORIES AREA COUNCIL OF THE  
UNITED STEELWORKERS OF AMERICA

JANUARY 7, 1981

YELLOWKNIFE, N.W.T.

INTRODUCTION:

This brief will attempt to summarize the efforts of the Labour movement to win a safe environment for their members in the mining industry. We draw upon files, news clippings and contracts, however the major source of the movements struggle cannot be cited in footnotes or photo-copies. — the unwritten story.

The struggle for mine safety has been waged on the job by workers whose efforts have seldom been acknowledged. These workers have always been concerned about safety, mainly from a sense of self-preservation. However, they have had to balance their instincts to stay alive against company demands for production and their own need for wages.

The concerns of miners and their unions for health and safety have usually been ignored by management and government. The result has been a sense of frustration and for many a sense of fatalism. Sometimes this frustration manifests itself in direct action.

When workers are forced to take such drastic actions, they aren't simply acting for their own safety, they are taking on companies over established management rights. Companies have fought hard to maintain total control of their employees (they are acting on a common-law tradition that can be traced to the historical master-slave relationship). <sup>1</sup>

Workers have made sacrifices and taken risks to challenge this management right. Indeed the formation of unions and the establishment of union safety committees was and still is today an attempt to democratize the workplace. This contribution is difficult to measure in hours or days. A work stoppage over safety might require every workers' commitment for a week. Testimony at an inquest may mean only 15 minutes from one worker with the courage to speak out. Miners who are known as safety activists may pay for their effort by being denied promotions and by being assigned the

dirtiest or less desirable jobs. It is impossible to calculate or quantify the labour movement's contribution in Occupational Health in mere time and money. The movement's existence testifies loudly to our commitment to safe working environments.

Far too often we find that companies are prepared to set out safety programs and give out safety awards, but when it comes to the actual cost of safety, then they begin to hesitate in implementing their own program.

For workers in North America, the primary means of improving their life and achieving some influence in the working conditions is through the collective bargaining system. By maintaining the right to strike, workers can bargain with management on a more equal basis. Whatever progress has been made in working conditions and benefits has resulted from collective bargaining between unions and employers. Bargaining is a creative process that has served the interests of this Country and its workers. That is why unions strive to enhance and protect free collective bargaining.

But bargaining involves compromise, and in the field of health and safety it seems wrong that workers should be forced to settle for less than the necessary protection. This situation arises because the attitudes of powerful companies do not consider a safe workplace to be a worker's right. Governments have not seen fit to challenge this area of "management's rights". Only the labour movement is doing so. It's time for government to act.

#### BACKGROUND:

Fredric Le Play, a distinguished French Sociologist and Inspector General of the Mines in France in the nineteenth century, said the most

important thing to come out of the mine is the miner.

We share his conviction and add to it that the miner must come out of it in as good health both mentally and physically as when he went into it.

In 1967, a delegation from the Northwest Territories Area Council of the United Steelworkers of America appeared before the Territorial Council on the matter of the Mine Safety Ordinance and the Rules and Regulations made thereunder. Some of the suggestions made by them were incorporated into the Ordinance. However, it took almost five years to finish discussions and amend the Rules and Regulations.

We believed that if it took five years to draft Rules and Regulations then either those responsible were complacent of their need or it was a very good example of indifference to a very important matter. Frankly, we believed that both factors were involved. We do not see much to change our mind, that the same situation doesn't exist today.

There have been only two changes to the present Ordinance in the last 13 years. One of these changes made provision for a Mine Safety Committee and the other made provision for the metric conversion. Hardly what one would call earth-shattering changes.

We take this opportunity to point out that we have made several representations over the past 13 years to try and impress upon you, the need for substantive changes to ensure the health and safety of workers in the mines.

Besides presenting several briefs to the Executive Committee of the Northwest Territories Government, we even went as far as to present to the Legislative Committee, the mine inspection branch, and the mining companies a complete and comprehensive draft of what we believed the Ordinance should contain.



As a result of our action a meeting was held between our representatives, the mine inspection branch, officials of the Territorial Government, representatives of the mining companies and representatives of the Legislative Committee.

In every case, almost without exception, opposition was voiced to every proposal by almost everyone else in attendance. It is significant to note that not one suggestion was adopted by the Territorial Council. Some of the highlights of our proposals were:

- (A) The right to refuse to work in unsafe conditions without fear of reprisals;
- (B) The duties of owners, managers, supervisors and employees to be properly and explicitly spelled out;
- (C) The right to accompany the mines inspector on his inspections;
- (D) That maximum threshold limit values be set and enforced;
- (E) That the Ordinance and Regulations be strictly enforced.

We fail to see how any reasoned person could not agree with the preceeding proposals.

THE PROBLEM:

In North America, mining fatalities and serious injuries have been increasing at an alarming rate. In Ontario and Quebec, the fatality rate has doubled this year.

We note that in the period of 1950 to 1964 a total of 11 persons were killed in the N.W.T. Mines. During the next two years a total of 12 persons were killed and this prompted the Territorial Council to make much needed amendments to the Mine Safety Ordinance. During the period 1967 to 1974, a further 13 persons were killed. From March 1975 to September 1977 12 persons were killed in mining or related activities. In 1979 a further 2 persons were killed and so far in 1980, another 3 persons have been killed.

What this means is that since 1950 to present day a total of 53 persons have been killed in mining or related activities. Hardly a record that the industry can take pride in.

The past has seen some concern about the direct physical hazards of working in the mines, but little attention has been paid to the medical and environmental hazards involved.

Generations of dead or dying miners, their lungs damaged beyond repair by inhaled dust and fibers, have been the price of neglect.

Whatever the reasons for the deaths and serious injuries, the lingering tragedies of men afflicted by silicosis, asbestosis, lung cancers, and other respiratory ailments of their trade, it is a price that can no longer be paid.

#### PHYSICAL HAZARDS:

There is no question that there are a number of physical hazards involved in the modern mining process.

One of the first and probably most noticable is noise. Noise so loud that if miners don't wear ear muffs they will go deaf. Noise so loud that the warning sounds of an imminent cave-in are impossible to hear. This is one of the realities of modern mining.

The modern mining process starts with the drilling of at least one and as many as forty holes. Sticks of dynamite or powdered explosives are then placed in the holes. The blasting area is cleared and the charges detonated. This is the second danger point in the mining sequence. Danger from the blast, the dust and the smoke.

And then there is the darkness, another danger. Although miners learn to adapt to the lack of light, their eyes must strain to see and sight is the most important human sense a miner uses.

Heavy equipment is a must in modern mining. Scooptrams, locomotives, and slushers are used to muck out stopes, carry ore and change the face of the environment. These powerful machines can and have been deadly in the hands of inexperienced operators.

The dangers below the surface are ever present. There are many of them and they are increased by the fact that each time a miner blasts and mucks out he re-shapes the world he works in.

One of the most significant things about the mining industry is that you are constantly working in a changing environment. If you work on an assembly line you find that you go there every day and the stool is in the same place, your tool chest is in the same place. The whole job in mining is to change the environment. You go to work, you drill and you blast. That obviously changes the work environment that you are in. You are constantly facing new hazards and new conditions.

On surface workers face many of the same hazards such as moving machinery, large pieces of heavy equipment, areas of extreme high noise, areas of dust exposure and the ever present fumes, gases and toxic chemicals and compounds, such as arsenic, lead and radiation.

It is our understanding that approximately 1000 new chemicals are introduced into the work place each year and almost none are ever tested to determine their effect upon the human body prior to their introduction.

#### CONTRIBUTING FACTORS:

The entire motivation of the mining industry is to make money, that's what mining companies are interested in. They're not interested in making sure that safety takes precedence over production. The motivation is production. The companies always say they are doing all they can. However, ask any miner and he will reply, "I think that supervision has to listen to the men a lot more" or "They ask us for an opinion and they don't do anything".

Some people say that the incentive or bonus system causes injuries and deaths. The system works something like this. Miners normally make about \$20,000. a year. If they are skilled and work in an incentive program they are paid in proportion to the amount and quality of ore they get to the surface. Put simply, if a miner can get a lot of ore mined during his regular eight hour shift, he can make as much as \$30,000. or more depending on his output.

Critics of the bonus system argue that the price to make the incentive sometimes causes miners to take short cuts, and that safety doesn't always remain a priority. Others say that the people who make the bonus are more dexterous or are better at planning their schedules. Quite frankly, we

believe a little of all is involved.

Regardless, the bonus system can't be scrapped as it won't be accepted by the companies or the miners themselves. The companies need it as the carrot before the nose or the temptation to drive the miner. The miners want it retained, because they earn more money and they always dream of making the really big money.

Inexperience is another problem. New workers must be taught on the job. New miners make mistakes. We must remember that the majority of people entering the industry have grown up on the push-button T.V.'s and radios. They walk into the plant and it's a hostile environment, going back 10, 15 or 20 years. A lot of the younger people have no concept of that hostile environment. Life changes for them.

Training is a necessity, and that training must be learned from fully skilled and qualified teachers. If you learn how to do something from someone with poor work habits, you pick up the same bad habits.

Many a miner will tell you that when they went underground they put him on a jackleg and told him one lever was the air for the leg and one lever was the air for the machine. The hole was usually collared and he was told to drill the rest. The person started drilling and after about 5 minutes he was told, "You're qualified".

#### MINES INSPECTION:

The underlying basis of Mine Safety, and indeed any safety program, is reasonable safety laws, rules and regulations, maintenance of established procedures and their strict enforcement. A lackadasical or indifferent attitude in this regard undermines completely any safety program. Safety

education and the whole approach to safety. The common reaction on the part of miners when this takes place is expressed in the phrase "we will only have safety if it doesn't cost money".

We believe that the present setup of the mines safety enforcement is out of step with reality. While the present Ordinance has allowed the Commissioner to appoint persons as mine inspectors since 1967, the Commissioner has appointed the present federal inspectors instead of persons who would be under the direct control of the Territorial Administration. Under the present system the actual administrative responsibility is in the hands of the Chief Mines Inspector of the Department of Indian Affairs and Northern Development resident in Ottawa and to say the least somewhat insulated from events in the N.W.T. Consequently, we welcome the recent announcement from your government that you are finally going to exercise your option under the Ordinance and appoint inspectors who will be Territorial Government employees and come under the full scope of the Territorial Administration.

While we don't like to rehash old news, we could not leave this very important area without commenting on the quality of the present inspection service.

An examination of the circumstances surrounding the death of Alfred Daina, who died of carbon monoxide poisoning while working in the #9 raise of the third level at Giant Mine, could only lead one to believe that a mine can get away with murder. The story that unravelled from the many witnesses shocked people including the jury, as to the procedures that were and in some cases weren't being followed by Giant Mine management and so-called experienced mine rescuers. Mel Brown, mining inspector for the Federal Government testified that the ventilation system was sufficient but he was "not satisfied that it was working at anytime". Brown also testified that all raises constructed at any angle of over 50 degrees was to be compartmentalized and must have more than one air line for ventilation

purposes. The mine supervisor readily admitted that the raise Daina died in was at an angle of 55 degrees, it was not compartmentalized and it had only one air line.

During the rescue operation two separate teams of men had to turn back because they had difficulty breathing with the equipment. None apparently knew how to use the equipment. The man was eventually reached by a shiftboss who tried to administer air but found that both bottles were empty. At this time the man to be rescued still had a pulse. By the time he was rescued, the man was dead.<sup>2</sup>

In this particular case, we had a situation arise where an additional six men could have been lost during the rescue. In addition we have a clear admission on behalf of the mining inspector that he wasn't sure the ventilation system was working, yet he did nothing to stop work there. The Jury at the inquest found that "numerous existing mining rules under the N.W.T. Mining Ordinance have been neglected". No one was ever charged for breaking the law.

On September 28, 1975 Thomas Hare died from suffocation in an ore bin in the mill at Echo Bay Mines. Evidence at the inquest showed that not only was Hare working alone in the bin, a clear violation of the rules made under the Mine Safety Ordinance, he did not have a life line on as required. The evidence showed that it was standard procedure at this mine to work without life lines.

You would think that following the investigation, the mines inspector would have laid charges. This did not happen. Following several meetings between the Crown Prosecutor and officials of the Steelworkers Union, the Crown finally charged the mine. For the first and only time a Northwest Territories mine was found guilty of contravening the Mining Safety Ordinance. They were fined \$200.00, hardly a deterrent to other companies that cut corners on safety.

As far as we know this is the only time that a company has ever been charged under the N.W.T. Ordinance.

Finally, what can you say about a mining inspector who has publically stated that he doesn't think the transfer of inspection should take place because it is politically motivated. He has publically stated that it would have little effect on the quality of mine safety in the N.W.T. and he has publically attacked the unions because they are not concerned with safety because accidents do not cost them anything. He has even gone so far as to state that he is the representative of the workers on safety, because he was appointed to the job. <sup>3</sup>

We in turn subscribe to the position of your Director of Public Services who is reported to be in favour of hiring a professional engineer to head up the mining inspection department. We not only agree with that statement we also agree with his statement that once this is done he would beef up the department with additional inspectors. We believe that these additional inspectors should come from the ranks of qualified and experienced workers.

Let the professional engineer do the paper work and the general planning, and let the experienced worker do the inspections.

#### THE SOLUTION:

While the problem is diverse and in some cases fairly complicated, the solution is fairly simple. A number of things can and should take place in order that we achieve a safer workplace.

1. There should be a complete revision of the present Ordinance with a view to bringing it into the



modern era. We believe that basic rights should be spelled out such as the right to refuse to work in unsafe conditions without fear of reprisals, that hazardous substances are labelled, and monitored, that the duties and responsibilities of managers, supervisors and employees are explicitly spelled out and that the maximum threshold limit values be established. We also believe that a Mining Safety & Health Board, made up from equal representation from the workers and the companies be established to monitor and give direction where needed.

We believe that this review should take place immediately and consequently, we have already prepared a draft submission for your consideration. We will be prepared to discuss our proposals with you as soon as a meeting can be arranged.

However, we want to impress upon you that we feel very strongly that this Ordinance should be substantially amended prior to your government taking over full responsibility for enforcement. This should not be taken to mean that we agree to delay the transfer until after the Ordinance is amended. Even the present inadequate Ordinance, if strictly and properly enforced would be a vast improvement.

2. We believe that there should be a major overhaul to the present Rules and Regulations in order to bring them into line with modern day technology. We have been working on this for some time now and we will

be prepared to present to you, our views on all the existing rules very early in the New Year.

We would point out that under the present Ordinance the Commissioner can make rules for the purpose of ensuring the safe operation of mines by all persons employed in or about a mine. In other words if the Commissioner believes that a rule is necessary, he has the legal authority to implement it. He does not have to get it passed by the Legislative Assembly. There is no reason why appropriate rule changes cannot be implemented almost immediately.

We would be prepared to discuss our suggested changes almost immediately after presentation with a view to have them implemented as soon as possible.

3. There should be no further delays in the so-called transfer of the inspection services. The Government should hire a young, professional engineer to head up the inspection branch and contact worker representatives to suggest candidates who would be considered for inspectors. We would suggest that a person familiar with underground operations, a person familiar with heavy duty equipment and a person familiar with milling operations be hired to fill out the inspection branch.

We believe that with the number of new mines being brought on stream next year and the possibility that several more will be developed in the next few years, that mines inspection will become more and more important.

4. The power of the unions to deal with health and safety issues is determined by the effectiveness of its health and safety committees, and the strength of the various locals in collective bargaining. Our mining locals have had safety committees for years and they will continue to push the companies to improve safety procedures. But what a safety committee can accomplish depends on more than an agreement on paper. The economic conditions in a community or industry can affect safety and can determine how much progress unions can make in bargaining. The attitudes of managements differ from mine to mine.

Our member unions will continue to publicize and in general try to educate their members to observe all safety rules and to report unsafe conditions. They will continue to use whatever means at their disposal to correct unsafe conditions and in general protect their members from unsafe conditions.

Over the years the labour movement has learned the importance of communicating with the public. Often the labour movement provides the only voice that can offset the company's domination of public opinion. We have learned that if the feelings of the average citizen can be motivated on issues such as health and safety, the chances of legislative reform are increased.

We will continue to be vigilant and we shall do all in our power to awaken the public conscience.

5. There must be strict enforcement of the Ordinance and the rules and regulations made thereunder. It should be self-evident that the best and most progressive piece of legislation will be only another piece of paper if it is not enforced.

CONCLUSION:

We believe that we are doing our part to bring about a safe operation in the mines of the N.W.T.

We believe that it's about time that the government did their part by passing appropriate legislation and by providing adequate enforcement.

Today is not too soon to act.

1. G.R.C. Atherley et. al. "Workers' Involvement in Occupational Health and Safety in Britain" International Law Review, Volume III, Number 6 June 1975 Page 475.
2. News Story - The Yellowknifer, Thursday, November 28, 1974 - Page 10 & 11.
3. News of the North - Friday, July 25, 1980 - Page A 3.



## Northwest Territories Chamber of Mines

Box 2818

Yellowknife, N.W.T. X0E 1H0

Phone 873-5281



February 23, 1981

George Braden  
Minister of Justice & Public Services  
Government of the Northwest Territories  
Yellowknife, NWT

Dear George:

Please find attached our brief on Mine Safety in the NWT. The Board of Directors of the Chamber believe that it would be of considerable value to have a meeting with you and members of your executive to discuss this brief and related matters at an early date.

If you concur that such a meeting would be of value we would suggest the week of April 6th through 10th as being the opportune time. Mining Days 1981 are scheduled for April 8th and 9th and all Directors are planning to be in Yellowknife that week.

If this time period should not be convenient to you we will do our best to meet any date you might suggest.

Yours truly,

T.D. Daniels  
General Manager

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The Quinnuyooaq Society School exists now because it is being funded by federal programs as a way of preventing juvenile delinquency. It is a school for those children who, despite all the efforts of our educators, cannot fit into the existing school system with its emphasis on academics. However, it is much more than a school, it is recreation, it is child welfare, it is an education in survival on the land and a life. Where else could you learn how to read the weather in the Inuktitut ways and respect for parents in the traditional ways, Inuit legends as parables and methods of living? How to skin an animal for various uses. Mr. Speaker, this school will run out of federal funds this summer and will the territorial government, I want to know, be able to continue this school when funds run out? No one in the Government of the Northwest Territories wants to admit it exists because it is hard to fit in to a particular program. It may be social services, it may be corrections, it may be education but we have got to find a place for these things because they are important to a segment of our community.

#### Disposal Of Mine Wastes

Now, I would like to briefly address the few other concerns, Mr. Speaker, of mine. I am very much looking forward to the report of the Science Advisory Board this session as requested on the possible dangers of uranium mining and exploration. I know from my own studies that this mining produces very hazardous tailings or wastes, and the resultant radiation, some of it gaseous and some of it in the form of solids, causes cancer, birth defects and, most seriously, it will spread very easily in the Arctic environment by natural dispersal and through caribou and the food chain. I understand there are at present no regulations in Canada on the disposal of these tailings which result from mining, because there may be no safe way to dispose of them. This is a matter of great concern to me and my colleagues who live in the Keewatin which is now crawling with uranium explorers, and I very much look forward to that report because I think we need good advice at this point in time before we threaten our future generations with possible deadly poison.

I am a Member of this special committee on education, Mr. Speaker, and I urge Members to take our report seriously. We are going to recommend immediate relief for students who need it, and I urge that we take action at this session.

Mr. Speaker, some of these problems that I have addressed with regard to my own constituency, which is so far away from the western capital, can be solved. Now, some people say that the proposal for a Nunavut territory is an implied criticism of the present system, but this is not a denunciation of the present system, we are asking or proposing a territorial form of government. This is giving credit to what has been done by the existing territorial government despite these impossible burdens of distance. We are not asking for a new school system, or for an Inuit government or for an ethnic parliament or a new structure, a new structure for government, we are asking for the same public territorial form of government that all of us understand quite well.

#### English Language In Present Government

Now, many people feel, I know, Mr. Speaker, that we must wait until our own communities fully understand the proposal for a new territory. However, Mr. Speaker, particularly in this part of the world they do not understand the government very well now. One of the reasons is that in spite of the efforts of our interpreters and efforts at translating materials, this is a government that operates in English. The Nunavut territory, its first language will be Inuktitut and the Nunavut territory would be able to have

from Patterson's  
speech in response  
to Comm. Address  
Wed. Oct. 22

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From *Edwards*  
Sat. Nov. 8

MR. SPEAKER: Thank you. To the amendment. Mr. Braden.

HON. GEORGE BRADEN: Mr. Speaker, can I have that read out again? It sounds a little confusing.

MR. SPEAKER: Yes, well what I have is here and I will begin on the fourth line beginning with the word immediately, "immediately with the community councils and COPE to begin work in establishing a Western Arctic regional municipality to develop the details for the Western Arctic regional municipality in accordance with the obligations of government under section 18 of the Inuvialuit agreement in principle" and delete the last paragraph. To the amendment. Mr. Patterson.

Deadline Must Be Imposed To Get Work Done

MR. PATTERSON: I am going to have some difficulty supporting this amendment, Mr. Speaker. The motion asks that the Executive Committee, Department of Local Government and the MLA from the Western Arctic, working with community councils and COPE, develop a detailed plan. It would give them a year to do so. Now, it may well be that that is a big task to complete in a year. However, the Member from the Western Arctic herself has proposed this motion and has proposed this timeframe undoubtedly because she believes that it is possible to accomplish this goal in a year. Undoubtedly if it is not possible, we will hear about that at the fall session of 1981.

However, if it is possible we would have made, we would have continued to make incredible strides in accomplishing the goal of political evolution in the Northwest Territories and personally I feel that in all human affairs if one is able to set a deadline, set a goal, work toward the goal then the work is paced accordingly and often there is a much better chance of accomplishing a given amount of work when there is a deadline. It simply guarantees that the work will be done, that the pressure is on and Mr. MacQuarrie is proposing that we remove that pressure and that deadline and that timeframe and accordingly I see it as likely to simply slow the work down. So I think I will not support the amendment since I believe in setting these kinds of goals. Now, if the work cannot be done, it cannot be done and we will find out, but let us not shrink away from accomplishing such a task within a year. So I will not support the amendment for those reasons, Mr. Speaker. Thank you.

Amendment To Motion 66-80(2): Development Of A Western Arctic Regional Municipality, Defeated

MR. SPEAKER: Thank you, Mr. Patterson. To the amendment. Did I hear question being called. The question on the amendment. All those in favour of the amendment? One. Opposed? Seven. The amendment is defeated.

---Defeated

Motion 66-80(2): Development Of A Western Arctic Regional Municipality, Carried

To the motion, Motion 66-80(2). Are you ready for the question? The question being called. All those in favour, ten. Opposed, one. Motion 66-80(2) has been carried.

---Carried

Motion 67-80(2). Mr. Patterson.

*Start*

Motion 67-80(2): Gordon Edwards To Appear As Witness

MR. PATTERSON: Thank you, Mr. Speaker. This motion is seconded by the Member for Keewatin North, Mr. Noah. I neglected to mention that earlier. Mr. Speaker:



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WHEREAS there has been a document tabled in this Assembly, November 3, 1980, entitled "Uranium Exploration in the Northwest Territories" prepared by the Science Advisory Board of the Northwest Territories;

AND WHEREAS significant uranium exploration has taken place and will take place in the Northwest Territories, particularly in the Keewatin;

AND WHEREAS Members of this Assembly are concerned about the possible hazards of uranium exploration and mining in the sensitive environment of the Northwest Territories;

AND WHEREAS the Science Advisory Board report acknowledges that uranium is potentially hazardous to health, must be handled with suitable precautions at all times, and that there is a need for regulations in the Northwest Territories to protect drilling crews, protect members of the public from exposure and to contain radioactive dust and contaminated ground waters, and further acknowledges that the problem of safe permanent disposal of mine wastes has not yet been solved;

AND WHEREAS Dr. Gordon Edwards, chairman of the Canadian Coalition on Nuclear Responsibility is an acknowledged Canadian expert on disposal of uranium tailings, occupational, environmental health and is familiar with experience gathered in the field of uranium exploration and mining in Canada and other parts of the world;

NOW THEREFORE, I move that Dr. Gordon Edwards be invited to appear as a witness at the next session of the Legislative Assembly in Yellowknife.

MR. SPEAKER: The motion is in order, Mr. Patterson. To the motion.

MR. PATTERSON: Thank you, Mr. Speaker. I would like to briefly outline...

MS. COURNOYEA: Mr. Speaker, it is my understanding that when we are in formal session smoking is not allowed and I seem to detect some kind of aroma in this Assembly and I am wondering where it is coming from.

MR. SPEAKER: Sergeant-at-Arms, would you check to see that there is no smoking during formal session, please? Proceed, Mr. Patterson.

#### Background Of Dr. Gordon Edwards

MR. PATTERSON: Speaking of pollution, Mr. Speaker, I would like briefly firstly to give some kind of an outline, some kind of background on Dr. Gordon Edwards. Dr. Edwards graduated in 1961 with a gold medal in math and physics at the University of Toronto. He later obtained a master's degree in both English literature and mathematics at the University of Chicago and a Ph.D. in math from Queen's University. He has worked for the Science Council of Canada, taught science and mathematics at many universities including the University of Chicago, University of Toronto and University of British Columbia. He is now a professor of mathematics at Vanier College in Montreal and adjutant professor of science and human affairs at Concordia University. Starting in 1970 Dr. Edwards edited an international ecology magazine called Survival which had subscribers in 13 countries. In 1974 he was asked by Pierre Berton to debate nuclear power with Edward Teller, the father of the H bomb. This was shortly after the Indian H bomb explosion and there was a great deal of public interest in the subject of nuclear power.

Following that debate, Dr. Edwards received indications of interest from all parts of Canada on the subject of nuclear energy and in July 1975, he was a founder with others of the Canadian Coalition on Nuclear Responsibility. That organization is an umbrella organization for about 300 groups from across Canada, churches, unions, wildlife groups. I would like to stress, having discussed this with Dr. Edwards, that the Canadian Coalition on Nuclear Responsibility is not necessarily an antinuclear group. The purpose of the coalition is twofold: firstly, to persuade or try to persuade the federal government to have a national inquiry on nuclear power before the nuclear industry develops further and, secondly, to share information and promote public education on the subject of nuclear energy in general.

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Dr. Edwards is chairman of the coalition and has appeared extensively throughout Canada at various inquiries and commissions on the subject of mining, nuclear power and I mention a few. In 1977 he appeared for some six weeks at the Saskatchewan Beta inquiry as principal intervener on behalf of a number of groups who were opposed to uranium mining. He appeared extensively at the Porter commission on power in Ontario which dealt fairly extensively with uranium mining, among other things. In 1978 he appeared at the Ontario environmental assessment hearings which were held by the Ontario government following the negotiation of a seven billion dollar uranium supply contract by Dennison Mines. He has appeared before the Ontario select committee on hydro affairs to discuss nuclear matters.

#### Dr. Edwards Aware Of Canadian Issues

Dr. Edwards has a very good grasp of what is going on in Canada, what the issues are, what various bodies have found out and what are the unresolved problems. He knows something about caribou migration and is interested in the particular problems of potential pollution of the watershed in Canada's Arctic and its relation to caribou migration and a process called biological magnification whereby animals can accelerate the distribution of nuclear radiation. Dr. Edwards informed me that he has just, for example, received a 1980 report from the U.S. Geological Survey. This is a group of professional geologists in the United States who have extensively and recently analyzed methods of disposing of wastes from uranium mines and generally, the report, according to Dr. Edwards, shows that there are more questions than there are answers on this serious problem of disposing of uranium wastes permanently. So far methods have been discovered which may be safe for 20 or 30 years but with uranium that is not nearly good enough.

Dr. Edwards who recently was heard on CBC's Sunday morning program debating nuclear issues has a knack for explaining things in simple terms and he has had a lot of experience speaking to the public and with public education. He is very willing to appear before this Assembly should he be invited. I might mention that I have discussed the matter with him and he said that not only would he be willing to appear but he would be willing to take a look at our Science Advisory Board and circulate comments and a paper well in advance to Members of the Assembly for the benefit of interpreters so that when it comes time for him to appear he will be sure of being understood. I will not comment on the Science Advisory Board report except to say that I am happy that it has been prepared on such short notice with all the other busy activities. I am particularly happy because I know Mr. Noah raised questions about uranium mining in Baker Lake this summer and I was absolutely astonished to see that there were no less than 59 companies operating out of Baker Lake actively searching for uranium, while we were in session there this summer.

#### Problem To Be Dealt With Immediately

Mr. Speaker, this is a problem that we are going to have to deal with now, this problem of permanent disposal of mining wastes. I think it is very important that this Assembly and the people of the Northwest Territories know what we are getting into if uranium mining is to take place in the Northwest Territories and that there be a thorough public debate and discussion on the risks and possible solutions to those problems. Dr. Edwards will facilitate that discussion, I believe, and that is why I suggested that we invite him to appear as a witness. I had in mind that he would appear while we discuss the Science Advisory Board paper which we are obviously not going to have time to deal with this session. Those are the reasons why I am asking for support for this motion, Mr. Speaker. Thank you.

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MR. SPEAKER: Thank you, Mr. Patterson. Do you wish to speak at this time?

Mr. Noah, you have seconded this motion.

#### Information On Uranium Disposal

MR. NOAH: Yes, Mr. Speaker. I am not a mad scientist or anything. In fact I cannot even speak the national language clearly but if you can bear with me I have gathered some information from the experts on uranium disposal and I would like to quote some, if you do not mind. Findings on Uranium Tailings and Nuclear Waste Disposal Status Report: Water Pollution in the Serpent River Basin, Ontario Ministry of the Environment, 1976, and I quote: "This disturbing document describes the extensive contamination of the Serpent River system including some 18 lakes as a result of radioactive and non-radioactive contaminants from uranium tailings. Throughout the river system downstream from Elliot Lake the water is contaminated with radium to such an extent that it is unfit for human use and all the fish life has been killed off."

Part of my quotation on the "Effect of 22 from Uranium Mining" is by Robert O. Pohl, volume seven, number eight, Search, August 1976. In this article Dr. Pohl uses figures from a 1973 study done by U.S. Environmental Protection Agency entitled "Environmental Analysis of the Uranium Fuel Cycle." The EPA study calculates the extra lung cancer cases to be expected among the general public within a 2000 mile radius of a uranium tailings pile. Dr. Pohl shows that this works out to about 400 extra deaths from each year of operation of a 1000 megawatt nuclear power plant, although most of these deaths would occur long after the plant has been shut down. The extra deaths would be caused by the breakdown of gas given off by the tailing piles, a very heavy exchange causing carcinogenic gas that stays close to the ground and can travel 1000 miles in four days with a ten mile per hour wind. The latency period -- I do not know what the word is but anyway -- for it to appear following radon exposure, is about 20 years. As long as the uranium ore is undisturbed deep down underground not much radon diffuses to the surface. But when the uranium ore is brought to the surface radon is released into the atmosphere where it can be inhaled.

#### Disposing Of Radioactive Wastes

Part of my quotation here, compiled by Dr. Gordon Edwards, "Growth of nuclear power in the United States is threatened by the problem of how to safely dispose of radioactive wastes, potentially dangerous to human life. Nuclear power critics, the public, business leaders and government officials concur that a solution to the disposal problem is critical to the continued growth of nuclear energy. Radioactive wastes, being highly toxic, can damage or destroy living cells, causing cancer and possibly death depending upon the quantity and the length of time individuals are exposed to them. Some radioactive waste will remain hazardous for hundreds of thousands of years. Decisions on what to do with them, what to do with this waste will affect the lives of generations to come. To safeguard present and future generations, locations must be found to isolate these wastes and their harmful environmental effects. A program must be developed for present and future waste disposal operations that will not create unwarranted public risk, otherwise nuclear power cannot continue to be a Practical source of energy."

Still part of my quotation, "August 8, 1980. Mr. Maurice Foster, MP, House of Commons, Ottawa," written by Dr. Gordon Edwards, and if I may quote from his letter. "Later, in 1979, 17 extra lung cancers per 1000 was given impetus by Dr. Victor Archer, MD, medical director of the United States National Institute for Occupational Safety and Health in Salt Lake City, Utah, and one of the world's outstanding experts in the field of lung cancer, caused by radon gas. Using his own independent data Dr. Archer calculated between 18 and 42 extra lung cancer deaths per 1000 population, assuming 17 hours a day occupancy and a 0.02 w.l. Standard. Whether you accept Dr. Muller's tables or my analysis or

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Dr. Archer's independent analysis it is obvious to me that we are flirting with...

MR. FRASER: Mr. Speaker, are we talking to a point of motion or what are we discussing?

MR. SPEAKER: Yes, he is speaking to the motion with relevant quotes to the problem at hand on uranium problems that exist in areas. It is a technical question and he is giving a technical answer so I presume that he is in order. Go ahead, Mr. Noah.

#### Possible Public Health Disaster

MR. NOAH: Thank you, Mr. Speaker, this is from the past and is for the sake of our future. It has never been solved so we do not want to make the same mistake and I am just trying to clarify what has been done from the past. "It is obvious to me that we are flirting with the possibility of public health disaster and a major political scandal if the present situation is not corrected." goes on to say "I would be happy to consider in the countervailing evidence which you may have to show that my apprehensions are unfounded. It would be, indeed a great relief." Part of my quotation here, "At the very least I believe that careful epidemiological...", I do not know if I pronounced it right, "...studies should begin starting now to monitor the subsequent history of lung cancer among the people who will be living in these contaminated homes. In view of the evidence anything less would be totally irresponsible in my opinion. Ideally, however, I would favour correcting the situation now so we do not have to count corpses later." Mr. Speaker, this is the end of my quotation from Dr. Gordon Edwards' letter to Mr. Foster and part of his experience. (Translation) I would also like to speak in Inuktitut, Mr. Speaker, if that is possible.

MR. SPEAKER: Yes.

MR. NOAH: (Translation) It is unfortunate that these experts, that it is almost impossible for me to read it in the English language, but it is in my mind that we have to think seriously about the future.

MR. SPEAKER: I am sorry, Mr. Noah, the translators missed a piece and you will have to back up a piece. You are going a little too fast for the translators. They are having some difficulty. Will you back up just a few sentences.

#### Mining Uranium Around Baker Lake

MR. NOAH: (Translation) Around Baker Lake the company from West Germany is operating around the Baker lake area. I have asked them what quantities of uranium they have found in their exploration area. I have asked their manager. He has been giving me very good answers and they had found uranium around Baker Lake, but he could not give me the estimation of the tonnage of the uranium. If there is a mine established it would be very, very expensive and as soon as they have enough funding they might go ahead and mine the uranium around the Baker Lake area. I am afraid that there are hazards down in the United States and in Canada and I am particularly afraid of uranium tailings. The uranium contaminants can be around some 25,000 to 80,000 years and uranium is a very extremely dangerous substance. Once you are affected with the radiation you cannot do anything about it and really the Legislative Assembly has to very seriously think of the danger of the uranium. The people in Baker Lake do not know how dangerous uranium is and that it could affect their lives very seriously. For the lack of knowing the danger of uranium the residents of Baker Lake might think of employment before the possibility of danger, due to the lack of knowledge of uranium. It is pretty close in the Northwest Territories

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MR. SPEAKER: Just a moment, please, Mr. Noah. You are going a little too fast again. Would you back up a little? The translators are having trouble.

MR. NOAH: I must be getting expert in Inuktitut. (Translation) Around Ottawa there are five to seven feet of tailings and in the Keewatin in the spring, when the spring thaw washes into the lake, it would be extremely dangerous with the contaminants. If they start mining around the Baker Lake area, I feel that there is a possible danger in this area. Thank you, Mr. Speaker.

MR. SPEAKER: Thank you, Mr. Noah. Mr. MacQuarrie.

Amendment To Motion 67-80(2)

MR. MacQUARRIE: Yes, Mr. Speaker. I would like to move an amendment to the motion which would simply be a comma after the word "Yellowknife", in the resolution, and an addition which says: "and further, that Dr. David Green, a nuclear physicist with the Atomic Energy of Canada Limited and a man well qualified to offer a moderate alternative view be invited to attend as well." That is: "and further, that Dr. David Green, a nuclear physicist with the Atomic Energy of Canada Limited and a man well qualified to offer a moderate alternative view be invited to attend as well."

MR. SPEAKER: Mr. Clerk, have you got that all copied down right? To the amendment, Mr. MacQuarrie.

MR. MacQUARRIE: Thank you, Mr. Speaker. This is a very serious subject. I certainly do not take it lightly at all. Mr. Patterson has stated that we ought to have thorough public debate and discussion, and I agree with that. But I know that if Dr. Edwards were in the Assembly making statements about nuclear energy, nuclear waste, I just would not have the ability to know whether what he was saying was absolutely verified in the scientific community or not. I do not think that any one of us here would be. I believe that it is important to have someone as well who would be able to act as a check or balance on any statements that might be made. I have heard this gentleman speak on a previous occasion. He is certainly not a zealot or, you know, somebody who is trying to foist nuclear energy on people, but he seems to be a very thoughtful and knowledgeable man, and I think that his comments and responses to questions might be very valuable in this public discussion as well.

SOME HON. MEMBERS: Question.

MR. SPEAKER: I am sorry, Mr. MacQuarrie. I did not get a seconder on that. Mrs. Sorensen. Thank you. To the amendment, Mr. Patterson.

Information On Dr. David Green

MR. PATTERSON: Mr. Speaker, I would like to know a little bit more about this man.

MR. SPEAKER: Mr. MacQuarrie.

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MR. MacQUARRIE: My apologies. I cannot tell you a great deal more. I was not aware until, I guess, yesterday that a request was going to be made to invite the other gentleman. I assure you that he is not -- what could I say? I do not think he is a fascist or a warmonger or anything like that. He is a reputable scientist. He seemed to be a very decent gentleman, and he would simply be able to respond more meaningfully than I could, or any other Member in this Assembly, to statements that might be made. I would not want to see his view promoted particularly either because the gentleman you are inviting would be able to act as a check and balance on him too, but I would just like to hear thoughtful opinions -- an interplay of thoughtful and knowledgeable opinions. It is only then that I would feel that I could make an adequate decision about the matter.

MR. SPEAKER: Mr. MacQuarrie, that is twice.

MR. MacQUARRIE: I am sorry. I thought I was responding to the question.

MR. SPEAKER: You do get carried away. The request was quite simple. He wanted to know something about the man, not your opinions.

MR. MacQUARRIE: I apologize.

MR. SPEAKER: The motion as amended would read -- yes, Mr. Fraser.

MR. FRASER: I would like unanimous consent to go back to Item 2 now that I see the Member is here.

HON. ARNOLD McCALLUM: Nay.

MR. SPEAKER: The motion as amended, then, would read: "Now therefore, I move that Dr. Gordon Edwards be invited to appear as a witness at the next session of the Legislative Assembly in Yellowknife; and further, that Dr. David Green, a nuclear physicist for the Atomic Energy of Canada Limited and a man well qualified to offer a moderate alternative view, be invited to attend as well." To the amendment -- you just asked a question, Mr. Patterson. Do you wish to speak now? Proceed.

#### Objective Opinions On Risks Of Mining Disposal

MR. PATTERSON: Thank you, Mr. Speaker. I have no hesitation at all in promoting a healthy debate. I believe that Dr. Edwards is an objective person and is not an antinuclear fanatic. I believe however, that he will give us the risks objectively and I believe as an objective man he may well be convinced that particularly the problem of disposing of uranium tailings permanently means that mining should not go ahead until this problem is solved. I am sure that many of the hon. Yellowknife Member's constituents who are connected with the mining industry and who stand to gain substantially from uranium mining in the Northwest Territories would undoubtedly want to see that kind of opinion challenged. I would not be afraid to encourage that at all. I just wonder out loud how much a nuclear physicist might know about mining and exploration because that is the subject of the Science Advisory Board's report. Mr. MacQuarrie assures us that the man is, as he put it, well qualified to offer an alternative view. I hope we are not getting into the debate about nuclear power and nuclear generation of electrical power because that is not the subject of my concern and that is not a current public issue in the Northwest Territories. This man works for Atomic Energy of Canada and if he is going to discuss nuclear power with us I think we will be injecting another issue.

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Opinions Must Be Expert

So I will ask Mr. MacQuarrie for some clarification on that. Does the man know about uranium exploration and mining? If so, I would welcome his attendance. If not, then perhaps some research should be done as to who might be an expert in that field, that particular field who could offer an alternative view, because I think it is important to have the most well informed people available as possible. I would like some assurances from Mr. MacQuarrie that Dr. Green is an expert, not only on nuclear power, but knows something about the problems we have to deal with in the areas of exploration and mining. If I get that assurance, I will not hesitate to vote for the amendment, but I have some concerns that this is a man Mr. MacQuarrie heard give a talk, who he was impressed with, but I wonder if we should not have more qualifications before we make a decision.

MR. SPEAKER: Ms. Cournoyea. You will have time to reply in your summation, Mr. MacQuarrie. Ms. Cournoyea.

MS. COURNOYEA: Mr. Speaker, just on principle, I cannot support the amendment because I do not know anything about Dr. Green. The presentation by Mr. Patterson and Mr. William Noah clearly identified the topic of discussion. This is a Legislative Assembly and I think there should be more concern taken when amendments are made to motions to include additions to motions and since Mr. MacQuarrie knew about this yesterday he could have sought out whether this Dr. Green is qualified in the areas of concern that have been identified by Mr. Patterson and Mr. William Noah. I feel I cannot support this amendment because I think it has no relevance to the topic that is being put forward.

MR. SPEAKER: Thank you, Ms. Cournoyea. Is there any further discussion on the amendment? You do not have the right to speak twice to the amendment but inasmuch as there was a question, Mr. MacQuarrie, I will permit you to answer the question.

MR. MACQUARRIE: Thank you, Mr. Speaker. I see Mr. Patterson's point that it should be somebody who is well qualified, and so somewhere along the way I would try to ensure that this is the case. If this man proved not to be -- I cannot give you the undertaking that he is entirely well qualified in the specific areas that you mentioned, but I do know that he is very knowledgeable about the risks associated with radiation hazards, and that he is prepared to discuss that aspect of the whole nuclear issue, because the talk I heard him give did in fact deal with that kind of thing. So I just cannot give you that undertaking, but he would deal with that sort of thing, there is no doubt about that.

SOME HON. MEMBERS: Question.

MR. SPEAKER: The question being called.

MRS. SORENSEN: A recorded vote.

Amendment To Motion 67-80(2): Gordon Edwards To Appear As Witness, Carried.

MR. SPEAKER: A recorded vote being called. To the amendment. All those in favour? Mr. Clerk, a recorded vote. All those in favour?

CLERK OF THE HOUSE (Mr. Remnant): Mr. Patterson, Mr. Appapaq, Mr. McCallum, Mr. Wah-Shee, Mr. Braden, Mr. Butters, Mr. Nerysoo, Mr. McLaughlin, Mrs. Sorensen, Mr. MacQuarrie.

MR. SPEAKER: Against?

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CLERK OF THE HOUSE (Mr. Remnant): Mr. Tologanak, Ms. Cournoyea, Mr. Noah.

MR. SPEAKER: Abstentions.

CLERK OF THE HOUSE (Mr. Remnant): Mr. Arlooktoo, Mr. Kilabuk.

MR. SPEAKER: The amendment was carried ten to four and I believe three abstentions.

---Carried.

MR. SPEAKER: The motion as amended. Mr. Butters.

HON. TOM BUTTERS: On a point of order, Mr. Speaker, if the motion is approved, which I expect it will be, it implies that on the agenda for the winter session will be the Northwest Territories Science Advisory Board paper "Uranium Exploration in the Northwest Territories". If that is the case, then I think that we should attempt to provide a day certain during that session so that witnesses can be informed when it is that they would be expected to appear. I would imagine also that it is possible that some members of the Northwest Territories Science Advisory Board would wish to be present also since the paper was produced by that body.

MR. SPEAKER: That is another point and a point well taken, Mr. Butters, but really it is relevant to the motion but it is not part of it.

SOME HON. MEMBERS: Question.

MR. SPEAKER: The motion as amended. All those in favour?

MR. FRASER: Mr. Speaker, was the motion amended?

MR. SPEAKER: Yes, my records show that there were ten for the amendment, three against and three abstentions. The motion as amended. All those in favour? Mr. Patterson.

MR. PATTERSON: Mr. Speaker, I believe I have the last word and I would like very briefly to speak. I do want to report to the House on an interesting report that was just made to the Hon. Hazel Newhook, Minister of Consumer Affairs and Environment in the Newfoundland government. The report was made April 10, 1980, by an environmental assessment board which was commissioned by the honourable minister to look into a proposed Kitts-Michelin uranium development product by Brinex Newfoundland exploration and the provincial environmental assessment board sat in Labrador and heard from interveners on all aspects of the proposed uranium development, including Dr. Gordon Edwards. Incidentally, I would very briefly like to read the board's conclusions just to show how important this subject is for us in the Northwest Territories. I am quoting from the reports.

MR. FRASER: A point of order, Mr. Speaker, the motion is that they want to invite Dr. Edwards. That is the motion. I believe the motion is to invite him to this Assembly in the next session. Maybe we can read this in when we get him in front of us, if he does come.

MR. SPEAKER: Basically your point of order I think is well taken. On the introduction of your motion, Mr. Patterson, by way of showing who this person was, but in continuation -- really your motion is to invite these two people here and I feel that you have done really an adequate job on explaining who they are and why they are coming.

MR. PATTERSON: Thank you, Mr. Speaker. I get the message. Perhaps I can table the report of the environmental assessment board which did find that there was no solution.



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MR. FRASER: A point of order.

MR. SPEAKER: Yes, Mr. Fraser, your point of order. Tabled documents I think are listed under Item 5. I am fully aware of that, Mr. Fraser. I just have to remind Mr. Patterson that he would have to have unanimous consent to go back to Item 5 and he will have an opportunity to do that later.

MR. PATTERSON: I trust that the chorus indicates that my motion will proceed and I trust that Mr. Fraser is only objecting to my verbosity and on that I will conclude.

Motion 67-80(2): Gordon Edwards To Appear As Witness, Carried As Amended

MR. SPEAKER: Motion 67-80(2) as amended, all those in favour? The motion is carried. Is there any opposition? There was one abstention.

---Carried

The motion is carried as amended. The hour being 11:30, the House will recess until 1:00 p.m. for lunch.

HON. TOM BUTTERS: Mr. Speaker, unless I am colder than others in this room it seems to me that it is very uncomfortable. It seems to be a few degrees less than we have been experiencing over the past two weeks. Is there any way in which the heat might be increased?

MR. SPEAKER: We will see what we can do. Probably the heat of debate will warm things up this afternoon.

MR. PATTERSON: Mr. Speaker, we have been trying to encourage the Minister of Education to make more money available for operation and maintenance of schools and now he knows why.

MR. SPEAKER: The House stands recessed until 1:00 p.m.

---LUNCHEON ADJOURNMENT



Indian and  
Northern Affairs

Affaires indiennes  
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February 3, 1981.

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## ACCIDENTS REPORTED IN THE N.W.T. - 1980

The Mining Safety Ordinance requires the mines to report serious and fatal injuries and accidents involving hoisting, bulkheads, fires, explosives, gases etc. even if no injuries occur. This is a summary of these incidents, including a statistical report of injuries.

### Incidents - Fatalities

1. A dozer operator was run over by his machine in an open pit. The machine was hung up on a muck pile with the tracks running in reverse and the throttle open. The body was found 200 metres away in an area where the dozer had been working. There was no reasonable explanation why the operator was out of the cab when the machine was moving.
2. A diamond driller, working alone underground was crushed when his machine fell on him. His bit got stuck in the hole, and he was trying to free it by prying with a two-metre drill steel. The upright bar dislodged and he was trapped under the machinery.
3. A motorman was crushed between a battery locomotive and a ventilation doorframe. He had only been working at this mine for a few days, but had extensive underground mining experience elsewhere. He was mucking at a draw point and tramming to an ore pass. The door was partly open, resting against the cab. He may have tried to open the door while in motion, and fell partly out of the cab. There was no catch on the door. It was held shut against the ventilation by a counterweight. There was 15 cm. clearance between the motor and doorframe.

### Incidents - Hoisting

1. An electrical malfunction dogged the cage at 350 metres, resulting in a kinked hoisting rope. Five metres was cut off the rope.
2. A skip tender dumped a load of muck down the shaft causing damage to the tail rope dividers. The skip indicating light was burned out, the proximity switch was manually by-passed

Hoisting - con't

- by the skiptender, and a pocket of muck dumped into the open shaft. A new set of operating procedures were posted which will prevent this from happening in the future. The next day, the skip was double-filled, and had to be hard-mucked in order to hoist, but no spill went down the shaft.
4. During routine inspection one lay length of tail rope of a friction hoist was found to be displaced. It was beat back into place with a hammer and subsequent inspections were satisfactory.
  5. A descending skip caught on the station timber and dogged. One hundred and thirty meters of hoisting rope was coiled on the bale. The rope was re-spooled without damage. The skip was adjusted and two guides replaced.
  6. During routine testing of hoist safety devices, the pinion brake failed and the ascending conveyance hit the sheave. The bearing timbers, secured only by drift-pins, popped up allowing timbers, sheave wheels and bracing to slide down the hoisting ropes and come to rest on the ground between the hoist room and the depacitated headframe. Two carpenters were working at the top of the headframe, sheeting it for winter operations. They fell to the ground, sustaining shoulder injuries.
  7. A double drum hoist was being used with one bucket and a counterweight for shaft sinking. The drum end of the hoisting ropes were anchored with a loop around the shaft. The loop pulled tight and wore a groove in the shaft when the drum was checked out. The shaft had to be replaced.
  8. The above hoist was being used to dewater the shaft using the sinking bucket. Ice completely filled the groove in the counterweight sheave. The rope came off, lodged between the sheave hub and pillow block and broke in two. The counterweight lodged in the muck at the shaft bottom. Damage was minimal, except for the loss of the rope.

#### Incidents - Gas

1. Two occurances of gas, believed to be methane were reported from diamond drill holes from the lower levels of a gold mine. Concentration was not in the explosive range.
2. A decline, driven in permafrost in the high arctic in 1973 was sealed to prevent ice formation. When it was reopened this summer, air samples 100 metres from the collar showed 3½% Carbon Dioxide, 9½% Oxygen and 87% Nitrogen. This atmosphere may be due to chemical combination of Oxygen from the air with sulphides in the rock and release of carbon dioxide from the carbonate rock.

Gas - Con't

3. Several reports were received of suspected methane from diamond drilling on deep holes. Underground diamond drill crews are issued with explosive gas detectors.

Incidents - Fires

1. A small fire occurred in an arc welder in a battery charging station underground. The welder tried two extinguishers in the station and neither worked. When he was away hunting for another one, the fire went out by itself. The extinguishers were found to be full of powder but the gas cylinders were empty. They will be checked and initiated monthly in future.
2. The mechanics were installing an acetylene tank for an atomic absorption spectrophotometer in an assay lab. They left a valve open, causing an excess of gas. This was ignited by a similar machine operating nearby. The resulting explosion caused a fire in the assay office. Damage was caused by both explosion and fire. Three technicians were slightly injured.
3. A small fire started in the electric wiring in a truck which was idling in an underground shop. The fire was put out with damage to the insulation and the oil gauge hose.
4. A small electrical fire damaged the wiring leading to a compressor house near the entrance to an underground mine. It was put out by the mechanics, using hand extinguishers. Damage was estimated at \$10,000.
5. Sparks from a welding torch lit on a paper towel, which spread to some grease near the drive belt of an underground crusher. It was put out without extensive damage. The crusher operator and welders were alerted to housekeeping improvements.
6. A small fire started in a conveyor drive belt at the top of a fine ore bin underground. The belts were replaced and re-tensioned.
7. A fire started in the brakes of an underground ore truck when they did not release completely. Damage was confined to the brake lining.
8. A fire started in the brakes of an underground lift truck when they failed to release completely. Damage was confined to the brake lining. These two similar fires occurred at the same mine a few months apart.

Incidents - Mobile Equipment

1. A scoop-tram upset due to running over a rock with one tire. It was decided that this particular machine was inherently unstable. ROPS canopy and seat belt was installed.

### Incidents - Explosives

1. An explosive delivery truck, loaded with NCN failed to report at the main gate. He got lost on company roads and encountered a low hanging 2300 volt power line. No explosion or fire resulted, but union, public and media outcry was extensive.
2. A drift runner intersected a bootleg while drilling a round. The explosion resulted in facial lacerations to his partner.
3. Shortly after loading an open pit bench, smoke was seen coming from a hole. It was loaded with NCN, a primacord down line and two boosters. The primacord was immediately disconnected from the rest of the holes and the pit guarded. After two days there appeared to have been a small blast, the stemming was blown out of the hole. The bench was then blasted without any problem. It is believed that a sulphur fire was burning in the hole when loading started, and was not noticed.

### Incidents - Electrical

1. An explosion occurred in a nickel-cadmium battery charging bank. It was attributed to overcharging and lack of ventilation. Damage was confined to the batteries which were destroyed.
2. The main power cable to an auxiliary hoist ruptured. The hoist was out of service for two days.
3. The D.C. generator of an M.G. set supplying power for a friction hoist burned out due to overload or underdesign or both. Production was disrupted for ten days. Auxiliary hoist permitted some mine services to continue.

### Incidents - Fall of Ground

1. A miner was rock-bolting in a stope when a large piece of loose fell from the back. He suffered a broken leg and extensive bruises.
2. A miner was loading explosives in a drift when a large piece of loose fell from the face. He suffered broken vertebrae and extensive facial injuries.
3. A jumbo operator was drilling at the face of a crosscut. He left the operators position, to line up a cut hole while the other machine was drilling above. Loose fell from the face resulting in a fractured skull and hip.
4. A decline had been driven in permafrost during the winter. Underground diamond drilling was continuing. During the summer, there was signs of failure at the collar. Work was stopped and the crews taken out of the mine. About 100 tons of rock fell from the brow, almost covering the entrance.

Incidents - Miscellaneous

1. The mine services building for a mine in the arctic islands showed signs of settling. Drilling revealed several large ice lenses under the foundation. Warm mill solutions were melting the ice. Drifts were driven under the building, the ice was removed and replaced with concrete pillars. The mill was shut down for three months.
2. A drill rod stuck in the face of a decline in permafrost. While trying to free it, the boom arm broke, allowing the weight of the machine and boom to lie on the steel. A mechanic was sent down to cut the steel with a torch. When cut, the end of the steel hit the mechanic in the chest and face causing multiple fractures, bruises and lacerations.

G. Beagle for

M.L. Brown,  
Regional Mining Engineer  
& Mining Inspector.