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**A CRITICAL ANALYSIS OF THE REGULATION OF
WORKPLACE HEALTH
HAZARDS IN NEW ZEALAND**

**A THESIS PRESENTED IN PARTIAL FUFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

at

MASSEY UNIVERSITY

IAN BARCLAY CAMPBELL

1991

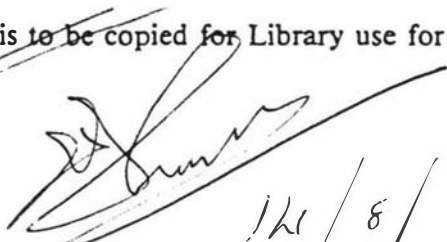
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ABSTRACT

This thesis is concerned with the health problems of the working environment and looks at ways in which these problems may be better controlled by regulation. After considering the historical background, the nature and extent of those problems, they are examined and their source established. Their real extent is unknown and probably much greater than generally appreciated but there is a dearth of reliable data and available statistics. There are thus many instances where the work connection of a disease may be strongly suspected but proof is lacking.

The considerable research undertaken overseas has been examined and it emerges that the effectiveness of regulation is often far from certain with some disappointing results evident from some studies. The current trend to greater self-regulation also brings with it conflict and misunderstanding. The consensus is that though a great deal more must be done within the individual workplace, that does not remove the need for an effective well-resourced enforcement agency ensuring that industry complies with the statutes, regulations and codes of practice. Recognising the limits to the impact the enforcers are able to make and the fact that many injury and disease-provoking situations are not subject to regulation, there is a need for the total workforce to be involved in a positive and informed way. This may be aided by more formal methods with the establishment of joint management-labour health and safety committees and the appointment of workers' health and safety representatives or encouraging the less formal participation of the total workforce.

It is considered that only by the introduction of a participative approach, can the management of health and safety proceed beyond mere compliance with the law, an objective necessary to ensure the most effective influence. Regrettably there still remains considerable reluctance on the part of many managements to accept that view. It is suggested that reasons for this lie in a lack of a true understanding of causation combined with a tendency to blame the victim.

The link between prevention and compensation is also considered. If too demanding standard of proof is required to establish a compensation claim, it is highly likely that preventive measures will not be instituted. The problem of proof raises many difficulties but a compensation authority should approach its task in an investigative manner giving all possible help to the claimant. There is a clear need for a more informed workforce, management and inspectorate. This and better control of hazardous substances and the exposure thereto, will be much improved if a small but well resourced National

Institute of Public Health is established. As hazardous substances are the product of industry, being not only used in industry but also in the wider environment, it is illogical to have a separate Hazards Control Commission as provided in the Resource Management Act 1991.

Of all the measures suggested, possibly the most important would be the intensification of the participative approach embodying adequate education and training. This calls for a change in the stance of many managements and a move to ensuring that workers and managers can negotiate on equal terms; in today's buzz words, on the much vaunted level playing field.

ACKNOWLEDGEMENTS

I wish to acknowledge the considerable assistance that I have received from my supervisors Professor A Vitalis of Massey University and Professor Sir Kenneth Keith of Victoria University of Wellington and President of the Law Commission. I have also received considerable encouragement from my colleague Douglas Hay of the Department of Management Systems, Massey University. Additionally Dr Michael Quinlan of Griffith University, Brisbane made many helpful suggestions. Dr J C J Stoke formerly of the Health Department was another who offered useful advice. Over many years inspiration has been gained from many medical practitioners in the Health Department and in private practice. They are too numerous to mention though perhaps Dr Tom Garland and Dr Douglas Kennedy deserve special mention. However for the statements made and conclusions reached in this thesis I alone accept responsibility. Finally to my wife Barbara for forbearance over many years.

PREFACE

Early acquaintance with Workers' Compensation claims first drew my attention to the problem of prevention and a visit to the BHP steel works and other allied industries in Newcastle, New South Wales in 1937 served to focus my attention on this topic more sharply. Later, during my 22 years with the Workers' Compensation Board, being also closely involved with its sponsored organisation, the National Safety Association, and subsequently as Director of Safety of the Accident Compensation Commission (as ACC was then), this focus remained. However in those days the emphasis was almost entirely on accidents and injury prevention. Fortunately, through the friendship of a small number of dedicated occupational health physicians both in the Department of Health, medical schools and in private practice, the importance of the health problems of the working environment became firmly imprinted on my mind. Inevitably many personal experiences over the intervening years have also been woven into the fabric of this thesis.

Regrettably, even after Dr Bill Glass published his excellent manual in 1974 *People at Work: their health, safety and welfare*, it was still difficult to get the Accident Compensation Commission (now Corporation) (ACC) field staff to give more attention those health problems. The ACC Commissioners were likewise unappreciative of the extent of the problem. It was not until 1979 when assisting in developing the Massey Diploma in Safety Management that I was able to begin to make some impact.

A difficult problem with work-related illness has always been proving that an illness was indeed work-related and, if so, in which particular employment the offending exposure occurred. While that may be unfortunate for the prospective compensation claimant unable to provide such proof, it is also equally likely that lack of proof would also preclude the possibility of any preventive action being instigated. With this in mind I prepared a draft paper and among those to whom I gave it to evaluate was Fred Gerbic MP, then Opposition spokesman on Accident Compensation. Shortly after, the 1984 Election occurred. The Associate Minister of Labour, to whom Mr Gerbic had passed the draft, advised me that he, in turn, had given the paper to ACC seeking their views. Within a week I had a lengthy reply from the Minister of Labour, reflecting a little interest in my views on the compensation aspects but making no comment about the all-important prevention issue. Subsequently, that paper slightly amended was published in the *New Zealand Journal of Industrial Relations*.¹ Without the rejection of the

¹ Campbell, I B, Occupationally related illness: its compensation and its prevention, (1985) 10 *NZ Journal of Industrial Relations*, 1-14.

suggestion of the important link between compensation and prevention, this thesis may never have been written.

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LIST OF ABBREVIATIONS

AC	Appeal Cases (UK)
ACC	Accident Compensation Commission (to 31/12/1980) Accident Compensation Corporation (from 1/1/1981)
ACGIH	American Conference of Government Industrial Hygienists
ACOSH	Advisory Committee on Safety and Health
ALJR	Australian Law Journal Reports
All ER	All England Reports
CLR	Commonwealth Law Reports (Australia)
CPSC	Consumer Products Safety Commission (US)
EC	European Community
EPA	Environmental Protection Agency (US)
F	Federal Reporter (United States)
FDA	Food and Drug Administration (US)
HSC	Health and Safety Commission (UK).
HSE	Health and Safety Executive (UK).
ILO	International Labour Organisation
IRLG	Interagency Regulatory Liaison Group (US)
KB	King's Bench Reports (England)
M & W	Meeson & Welsby's Reports
MAC	Maximum allowable concentrations
MCD	Magistrates Court Decisions (NZ)
MMMF	Man-made mineral fibres
NE	North Eastern Reporter (United States)
NIOSH	National Institute of Occupational Safety and Health (USA)
NZACR	New Zealand Accident Compensation Cases
NZAR	New Zealand Administration Reports
NZLR	New Zealand Law Reports
OEL	Occupational exposure limits
OSH	Occupational Safety and Health
OSHA	Occupational Safety and Health Act Occupational Safety and Health Administration
QB	Queen's Bench Reports (England)
SANZ	Standards Association of NZ
SC	Session Cases (Scotland)
SRSCR	Safety Representatives and Safety Committees Regulations (UK)
TELARC	Testing Laboratory Registration Council
TLV	Threshold limit value
US	United States Supreme Court Reports
WHO	World Health Organisation

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GLOSSARY

ACC:	Accident Compensation Commission (to 31/12/80) Accident Compensation Corporation (from 1/1/81)
ANGIOSARCOMA:	A cancer of the liver linked with exposure to vinyl chloride.
ASBESTOSIS:	A form of pneumoconiosis caused by the inhalation of asbestos dust
BRUCELLOSIS:	A remittent febrile disease caused by infection with bacteria of the genus <i>brucella</i> . Spreads from animal to man or animal to animal but rarely from man to man.
CARCINOGEN:	Any cancer producing substance or agent.
CARRIER:	An American term for an insurance company.
COHORT STUDIES	Involve the study of a group of individuals over time. They may be prospective or retrospective when it is possible to identify a group in the past and study their history up to the present.
HAZARD	has been defined as the potential in an activity (or condition or situation) for sequence(s) of errors, oversight, changes and stresses to result in an accident causing personal injury, death, property damage, disease, or other detriment to the enterprise; a source of risk or peril.
IDIOPATHIC DISEASE:	A primary disease; one not the result of any other disease but of spontaneous origin,
IN VITRO:	In glass; referring to a process carried out in a test tube, culture dish, etc.
IN VIVO:	In the living organism.
LEPTOSPIROSIS:	A disease which can be transmitted from animals being a feverish type of illness characterised by headaches, malaise, vomiting muscular aches, etc. There are many types though in New Zealand only 6 have been identified.
MESOTHELIOMA:	A cancer of the membrane lining of the abdomen or chest.
MUTAGEN:	An agent that causes a process whereby detectable and heritable changes in genetic material arise.
NONIDIOPATHIC DISEASE:	A disease having a definite start time point established by evidence which may include those which traumatic in origin.
OOS:	Occupational overuse syndrome
PHTHISIS:	1. An old term for tuberculosis, especially pulmonary tuberculosis. 2. Old term for any disease characterized by emaciation and loss of strength, especially diseases of the lungs. Miner's Phthisis was defined in s 47 of the Social Security Act 1964 as meaning: pneumoconiosis or tuberculosis of the lungs.
PNEUMOCONIOSIS:	Includes tuberculosis of the lungs, any other disease of the respiratory organs commonly associated with or a sequel to pneumoconiosis.
RISK:	Mathematically; expected loss; the probability of an accident multiplied by the quantified consequence of the event caused by the hazard.
RSI	Repetitive strain injury or occupational overuse syndrome.

- SYNERGISM:** The combined effect of two agents such as the exposure of workers to asbestos who also smoke.
- TERATOGEN:** An agent or factor which causes malformation in the developing embryo.
- ZOONOSES:** Parasitic diseases which are transmissible under natural conditions between vertebrate animals and man and may be found in both wild and domestic animals.

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