

A REVIEW ON INDUSTRIAL SAFETY AND HEALTH

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ABSTRACT

Progress of the industrial safety and occupational health movements in the United States toward their common goal of protecting the physical welfare of workers is discussed in this article. When these activities and workmen's compensation began, about a half century ago, it was anticipated that they would be "complementary and mutually sustaining." Besides presenting historical accounts of the safety and health movements, the authors evaluate the current problems and relationships among safety, health, and compensation activities. This article constitutes part of a broader study by the authors to be published under the title "Workmen's Compensation and Occupational Disability." (Author's abstract courtesy EBSCO. This Article will examine that historical perspective, covering both state and federal law, and will comprehensively detail the current law relating to occupational safety and health in the State of Washington.)

Keyword: industrial safety and health, occupational, executive

INTRODUCTION

From 1941 to 1989, the Accident Prevention Division (APD) – a division of the state Industrial Accident Commission – regulated workplace safety and health in Oregon. On October 2, 1989, APD became the Oregon Occupational Safety and Health Division. The name change was intended to "help workers and employers identify the division as the state's occupational safety and health enforcement agency and to more accurately reflect its diverse mission.⁵ Nevertheless, there is a strong continuity between APD and Oregon OSHA, linked by the OSEA.

The OSEA, signed into law by Governor Tom McCall on July 22, 1973, was landmark legislation with a purpose to "assure as far as possible safe and healthful working conditions for every workingman and woman in Oregon." Oregon OSHA's status as an independent state-run program became final in 2005 when acting Assistant U.S. Secretary of Labor Jonathan Snare presented the final approval agreement to Governor Ted Kulongoski – 38 years after Tom McCall signed the initial state-plan agreement with the federal government.⁶ Final approval meant that Oregon OSHA could run its own program, for the most part, without federal enforcement authority.

The Health and Safety Executive (HSE) is a non-departmental public body in the United Kingdom. It is the body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, and for research into occupational risks in England and Wales and Scotland. Responsibility in Northern Ireland lies with the Health and Safety Executive for Northern Ireland. The HSE was created by the Health and Safety at Work etc. Act 1974, and has since absorbed earlier regulatory bodies such as the Factory Inspectorate and the Railway Inspectorate though the Railway Inspectorate was transferred to the Office of Rail Regulation in April 2006. The HSE is sponsored by the Department for Work and Pensions. As part of its work HSE investigates industrial accidents, small and large, including major incidents such as the explosion and fire at Buncefield in 2005. Though it formerly reported to the Health and Safety Commission, on 1 April 2008, the two bodies merged.^{1,2}

FUNCTIONS

The Executive's duties are to³

- Assist and encourage persons concerned with matters relevant to the operation of the objectives of the Health and Safety at Work etc. Act 1974.
- Make arrangements for and encourage research and publication, training and information in connection with its work.

- Make arrangements for securing government departments, employers, employees, their respective representative organisations, and other persons are provided with an information and advisory service and are kept informed of, and adequately advised on such matters.
- Propose regulations.

The Executive is further obliged to keep the Secretary of State informed of its plans and ensure alignment with the policies of the Secretary of State, giving effect to any directions given to it.⁴ The Secretary of State can give directions to the Executive.⁵

On 1 April 2006, the Executive ceased to have responsibility for railway safety.⁶

The Executive is responsible for the Employment Medical Advisory Service, which operates as part of its Field Operations Directorate.⁷

Structure and responsibilities

Local authorities are responsible for the enforcement of health and safety legislation in shops, offices, and other parts of the service sector.

Agencies belonging to the HSE include

Explosives Inspectorate

HSE's Explosives Inspectorate enforces the legislation for the classification and transport of explosives. It licenses manufacturing and larger storage sites.

The Health and Safety Laboratory (HSL)

Based in Buxton, Derbyshire, it employs over 350 people including scientists, engineers, psychologists, social scientists, health professionals and technical specialists. The services they provide include:

- Research and development
- Specialist advice and consultancy
- Forensic investigation into the causes of accidents
- Environmental and biological monitoring
- Assessment of levels of risk and investigation of their control
- Establishing realistic requirements for standards, and processes for meeting those standards
- Validation and certification

Nuclear Directorate

The Nuclear Directorate was one of the bodies merged into the Office for Nuclear Regulation on April 1, 2011. Largely based in Buxton, the Nuclear Directorate had four main functions:

- nuclear safety and radioactive waste management of civilian and defence sites - Nuclear Installations Inspectorate

- security of civilian nuclear sites and nuclear transport - The Office for Nuclear Security (transferred to HSE April 2007)
- safeguarding civilian nuclear material to prevent diversion to weapons - UK Safeguards Office (transferred to HSE April 2007)
- a nuclear safety research programme

Criticism

The HSE has been criticised. Some of the criticism has been that its procedures are inadequate to protect safety. For example, the public enquiry by Lord Gill into the Stockline Plastics factory explosion criticised the HSE for "inadequate appreciation of the risks associated with buried LPG pipework ... and a failure properly to carry out check visits."⁸ However, most criticism of the HSE is that their regulations are over-broad, suffocating, and part of a nanny state.⁹ The Daily Telegraph, a right-wing broadsheet, has also been claimed that the HSE is part of a "compensation culture," that it is undemocratic and unaccountable,¹⁰ that its rules are costing jobs.¹¹ However, the HSE denies this,¹² saying that much of the criticism is misplaced because it relates to matters outside the HSE's remit. The HSE has also responded to criticism by publishing a "Myth of the Month" section on its website which it describes as "exposing the various myths about 'health and safety'^{13,14} This has become a political issue in the UK. The Lord Young report, published in October 2010, recommended various reforms aiming "to free businesses from unnecessary bureaucratic burdens and the fear of having to pay out unjustified damages claims and legal fees."¹⁵

Areas of Regulation

The HSE focuses regulation of health and safety in the following sectors of industry:

- Agriculture
- Air transport
- Armed forces
- Catering and hospitality
- Construction industries
- Crown establishments
- Chemical manufacture and storage industries
- Professional diving
- Dockwork
- Education sector e.g. schools
- Engineering sector
- Entertainment and leisure industry
- Fire service
- Food and drink manufacture
- Footwear and leather industries
- Haulage
- Health Services e.g. hospitals
- Gas supply and installation; Gas Safe Register
- Laundries and dry-cleaning
- Mining
- Motor vehicle repair
- Nuclear installations; Nuclear Installations Inspectorate (aka NII)
- Office work
- Offshore Oil and Gas Installations
- Paper and board manufacturing industry
- Pesticides
- Police force
- Printing industries
- Public services
- The quarry industry
- Recycling and waste management industries
- Textiles industries

General duties

Duties of employers

Section 2 states that "It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his/her employees", and in particular that such a duty extends to:

- Provision and maintenance of plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health;
- Arrangements for ensuring, so far as is reasonably practicable, safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;
- Provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of his employees;
- So far as is reasonably practicable as regards any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks;
- Provision and maintenance of a working environment for his employees that is, so far as is reasonably practicable, safe, without risks to health, and adequate as regards facilities and arrangements for their welfare at work.

Section 3 states the duty of all employers and self employed persons to ensure, as far as is reasonably practicable the safety of persons other than employees, for example, contractors, visitors, the general public and clients.

Employers must also prepare and keep under review a safety policy and to bring it to the attention of his employees (s.2 (2)). Trade unions may appoint safety representatives and demand safety committees. The representatives have a right to be consulted on safety issues (ss.2 (4), (6) and (7)). Since 1996 employers have had a duty to consult all employees on safety matters.^{9,10} No employer may charge an employee for provision of health and safety arrangements (s.9).

The Act does not apply to domestic servants (s.51).

Duties of persons having control of premises

Section 4 defines a duty of occupiers of premises, for example commercial landlords, managers of serviced office accommodation, and also maintenance contractors, towards people who use those premises for work. Those premises, and the means of entry and exit, must be, as far as reasonably practicable, safe and without risks to health.

Duties towards articles used at work

An "article for use at work" is any (s.53 (1)

- Plant designed for use or operation, whether exclusively or not, by persons at work, and
- Article designed for use as a component in any such plant.

Section 6(1) defines the duty of any person who designs, manufactures, imports or supplies any article for use at work to:

- Ensure, so far as is reasonably practicable, that the article is so designed and constructed that it will be safe and without risks to health at all times when it is being set, used, cleaned or maintained by a person at work;
- Perform such testing and examination as may be necessary to ensure safety;
- Take such steps as are necessary to secure that persons supplied with the article are provided with adequate information about the use for which the article is designed, or has been tested, and about any conditions necessary to ensure that it will be safe and without risks to health at all times, including when it is being dismantled or disposed of; and

- Take such steps as are necessary to secure, so far as is reasonably practicable, that persons are provided with all such revisions of information as are necessary by reason of its becoming known that anything gives rise to a serious risk to health or safety.

A person may rely on testing done by others so long as it is reasonable for him to do so (s.6(6)). A person may rely on a written undertaking by another person to ensure the safety of an item (s.6(8)) Designers and manufacturers must carry out research to identify and eliminate risks, as far as reasonably practicable (s.6(2)). Erectors and installers have responsibilities to ensure, as far as reasonably practicable, that an article is so erected and installed that it will be safe and without risks to health at all times when it is being set, used, cleaned or maintained by a person at work (s.6(3)).

Section 6 was extended by the Consumer Protection Act 1987 to cover fairground equipment and its use by persons at work and enjoyment by members of the public.¹¹

Duties towards substances used at work

Section 6(4) defines the duty of any person who manufactures imports or supplies any substance for use at work to:

- Ensure, so far as is reasonably practicable, that the substance will be safe and without risks to health at all times when it is being used, handled, processed, stored or transported by a person at work or in work premises;
- Perform such testing and examination as may be necessary to ensure safety;
- Take such steps as are necessary to secure that persons supplied with the substance are provided with adequate information about the any risks to health or safety to which the inherent properties of the substance may give rise, about the results of any relevant tests which have been carried out on or in connection with the substance and about any conditions necessary to ensure that the substance will be safe and without risks to health at all such times as are mentioned in paragraph (a) above and when the substance disposed of; and
- Take such steps as are necessary to secure, so far as is reasonably practicable, that persons are provided with all such revisions of information as are necessary by reason of its becoming known that anything gives rise to a serious risk to health or safety.

A person may rely on testing done by another so long as it is reasonable for him to do so (s.6 (6)). A person may rely on a written undertaking by another person to ensure the safety of an item (s.6 (8)) Manufacturers must carry out research to identify and eliminate risks, as far as reasonably practicable (s.6 (5)).

Exceptions in respect of supply of articles and substances

The duties only extend to persons in business or acting by way of trade, even though not for profit, and only to matters within their control (s.6 (7)). Persons who import into the UK are not relieved of liability for activities such as design and manufacture that took place outside the UK and over which they had control.¹² Finance companies who supply articles or substances by way of hire purchase or credit agreement have no duties under section 6 (s.6(9)).

Duties of employees

Under section 7 all employees have a duty while at work to:

- Take reasonable care for the health and safety of him/herself and of other persons who may be affected by his/her acts or omissions at work; and
- Co-operate with employers or other persons so far as is necessary to enable them to perform their duties or requirements under the Act.

Duties of persons in general

Section 8 requires that "no person shall intentionally or recklessly interfere with or misuse anything provided in the interests of health,

safety or welfare in pursuance of any of the relevant statutory provisions."

Reasonably practicable

What is reasonably practicable is a question of fact. The Court of Appeal held in 1949 that^{13,14}

In every case, it is the risk that has to be weighed against the measures necessary to eliminate the risk. The greater the risk, no doubt, the less will be the weight to be given to the factor of cost. And Reasonably practicable is a narrower term than 'physically possible' and seems to me to imply that a computation must be made by the owner in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk (whether in money, time or trouble) is placed in the other, and that, if it be shown that there is a gross disproportion between them - the risk being insignificant in relation to the sacrifice - the defendants discharge the onus on them.

Where a criminal prosecution arises from a breach of duty and the accused's defence is that it would not have been practicable or reasonably practicable to act otherwise, the burden of proof falls on the defendant (s.40). The prosecution have the burden of showing beyond reasonable doubt that certain acts were done or omitted to provide a prima facie case against the accused. Only if the prosecution succeed in this does the defendant have the burden of proving that the alternative was not practicable or reasonable practicable, but only on the balance of probabilities.¹⁵ The Court of Appeal held in 2002 that this requirement was compliant with article 6(2) of the European Convention on Human Rights (ECHR) as to presumption of innocence. The Court of Appeal noted that the "reverse burden" applied to purely regulatory breaches, rather than genuine criminal offences potentially punishable by imprisonment.¹⁶ However, the Health and Safety (Offences) Bill 2007,¹⁷ seeks to extend the sentences available for these offences to include imprisonment for two years. The Department for Work and Pensions has expressed the opinion that, should the Bill become law, it will still be compliant with the ECHR as it "strikes a fair balance between the fundamental right of the individual and the general interests of the community".¹⁸

In 2005, the European Commission challenged the defence as noncompliant with Directive 89/391/EEC, which states that (Art.5 (1) and (4)):

"The employer shall have a duty to ensure the safety and health of workers in every aspect related to the work." but that "This Directive shall not restrict the option of Member States to provide for the exclusion or the limitation of employers' responsibility where occurrences are due to unusual and unforeseeable circumstances, beyond the employers' control, or to exceptional events, the consequences of which could not have been avoided despite the exercise of all due care."

The Commission argued that the "reasonably practicable" defence was much broader than allowed under the directive but in 2007 the European Court of Justice found for the UK that the defence was in fact compliant.¹⁹

Development risks defence

Section 6(10) was added by the Consumer Protection Act 1987²⁰ disapplying duties as to articles and substances used at work where a risk "is shown to be one the occurrence of which could not reasonably be foreseen". This is known as the development risks defence.^{21,22}

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Section 2 states that "It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his/her employees", and in particular that such a duty extends to:

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- Provision of such information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety at work of his employees;
- So far as is reasonably practicable as regards any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks;
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- Ensure, so far as is reasonably practicable, that the substance will be safe and without risks to health at all times when it is being used, handled, processed, stored or transported by a person at work or in work premises;
- Perform such testing and examination as may be necessary to ensure safety;
- Take such steps as are necessary to secure that persons supplied with the substance are provided with adequate information about the any risks to health or safety to which the inherent properties of the substance may give rise, about the results of any relevant tests which have been carried out on or in connection with the substance and about any conditions necessary to ensure that the substance will be safe and without risks to health at all such times as are mentioned in paragraph (a) above and when the substance disposed of; and
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CONCLUSION

Work-related information serves the labour force and the working society as a source of important data to improve production and the national economy. Systematic work-related research and an unbiased collection of data through extensive field investigation are very important, not only for an increase in production, but also for

the need of decreasing accidents and injuries and protecting workers' health and safety. It is therefore necessary to identify the correct measures to eliminate an eventual biasing effect. In the future, professionals, academicians, practitioners and other organisations should carry out extensive field surveys instead of having to use the conventional methodology applied in the case studies.

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