



Government Gazette

OF

WESTERN AUSTRALIA

(Published by Authority at 3.45 pm)

No. 93]

PERTH: FRIDAY, 16 SEPTEMBER

[1988

Occupational Health, Safety and Welfare Amendment Act 1987

PROCLAMATION

WESTERN AUSTRALIA } By His Excellency Professor Gordon Reid, Com-
GORDON REID, } panion, of the Order of Australia, Governor of the
Governor. } State of Western Australia.
[L.S.] }

UNDER section 2 of the Occupational Health, Safety and Welfare Amendment Act 1987, I, the Governor, acting with the advice and consent of the Executive Council do hereby fix 16 September 1988 as the day on which the Occupational Health, Safety and Welfare Amendment Act 1987 shall come into operation.

Given under my hand and the Seal of the State
on 13 September 1988.

By His Excellency's Command,
GAVAN TROY,
Minister for Labour.

GOD SAVE THE QUEEN !

OCCUPATIONAL HEALTH, SAFETY AND WELFARE ACT 1984

INSTRUMENT OF DECLARATION (1)

MADE under section 4 (3)

The Minister for Mines and the Minister for Labour hereby jointly declare that all of the provisions of the Occupational Health, Safety and Welfare Act 1984 and the regulations under it, shall apply from the service of this notice until the completion of the work specified in Column 4 of the Schedule to and in relation to the mine or part of the mine specified in columns 1, 2 and 3 at which such work is being carried out.

Schedule

Item No.	WORKPLACE			DESCRIPTION OF WORK
	Name of Company	Location	Mine or Part of Mine	
	Column 1	Column 2	Column 3	Column 4
1	Freepport Bow River Properties Ltd	Bow River	Bow River Alluvial Diamond Operations Process Plant	Construction of a processing plant for diamantiferous gravels, together with associated ancillary works.
2	Mt Newman Mining Co Pty Ltd	Orebody 29 Minesite	Crushing and Screening plant and stockpiles	Construction of iron ore treatment plant consisting of crushing and screening stockpiles area, stacker, reclaimer, loadout tunnel and associated railway trackworks, railway signals, water and power supply, office buildings and all associated ancillary works.
3	Hannans Gold Pty Ltd	Cue	Comet Mine project	Construction of gold treatment plant and associated facilities.
4	Goldsworthy Mining Ltd	Finucane Island Minesite	Beneficiation plant and sections of existing treatment plant.	Construction of an iron ore beneficiation plant, including all stockpile areas, reclaiming tunnels, water tanks, flocculent plant, tailing thickener, conveyors, removal or modification of existing conveyors or other fixed structures in existing crushing and screening plant, office buildings, associated earthworks and all other upgrading works associated with construction of beneficiation plant.
5	Goldsworthy Mining Ltd	Nimingarra Minesite	Minesite facilities generally as shown on Goldsworthy Mining Ltd drawing no.N00/000M-003 and associated drawings	Construction of minesite facilities including primary crusher, crusher services building, conveyor systems, stockpiles and loadout tunnels, radial stackers, transfer towers, electrical substation, trainloader, sample plant laboratory, railway spur line and associated bridges from Goldsworthy-Shay Gap railway line and all associated ancillary works.
6	Rhone-Poulenc Chimie Australia Pty Ltd	Pinjarra	Nagal-Gallium Project	Construction of gallium plant and associated facilities.

Schedule—continued

Item No.	WORKPLACE			DESCRIPTION OF WORK Column 4
	Name of Company Column 1	Location Column 2	Mine or Part of Mine Column 3	
7	North Kalgurlie Mines Limited	North Gidje Lease, 17 km north of Kalgoorlie	North Kalgurlie Satellite Gold Roaster	Construction of roaster processing plant and associated facilities.
8	North Kalgurlie Mines Limited	Fimiston Lease	New Fimiston Mill—expansion project	Construction of the gold ore treatment plant and associated facilities.
9	Australian Consolidated Minerals Ltd	Cue	Golden Crown	Construction of gold recovery plant comprising crushing, screening, balling, thickening and extraction and associated ancillary works and structures.
10	Hampton Aust Ltd	Jubilee Lease Location 48	Jubilee Project	Construction of carbon-in-leach gold treatment plant and associated material handling and storage systems.
11	Worsley Alumina Pty Ltd	Boddington	Boddington Gold Mine Treatment Plant	Installation of four leach tanks, re-grind mill, secondary crusher, hopper, conveyors and ancillary equipment.
12	Associated Minerals Consolidated Ltd	Narngulu	Mineral Processing Plant	Construction of additions and alterations to plant and installation of mineral separating equipment.
13	Western Australian Mint	Newburn	Perth International Gold Refinery	Construction of gold refinery and associated facilities.
14	Alcoa of Australia Ltd	Boddington	Hedges Gold Treatment Plant	Installation of crushers, ball mills, stackers, conveyors, leach tanks and ancillary equipment.
15	Mawson Pacific Ltd	Marvel Loch	Marvel Loch Gold Mine Treatment Plant	Construction of carbon-in-leach gold treatment plant, crushing facility and associated materials handling and storage systems.
16	Channar Management Services Pty Ltd	Channar Minesite	Crushing plant, overland conveyor and associated works and services, generally as shown on Minenco Pty Ltd drawing no. CH-611-00—G-002 Rev. 1 and associated drawings	Construction of minesite facilities including primary and secondary crushers and conveyor systems, overland ore transport conveyor, site access and service roads, high voltage power supply and distribution system, process and potable water supply, sewerage and garbage disposal systems, workshops, service facilities, offices, control rooms, construction accommodation, catering facilities, concrete batch plant and general construction facilities and road-fill borrow-pits; but specifically to exclude overburden removal and pre-production mine development and the development of quarries for concrete aggregates.

Schedule—continued

Item No.	WORKPLACE			DESCRIPTION OF WORK
	Name of Company	Location	Mine or Part of Mine	
	Column 1	Column 2	Column 3	Column 4
17	Hampton Australia Ltd	Jubilee Mine Location 48	Jubilee Mine Treatment Plant	Construction of crushing circuit, fine ore bin, ball mill, two leach tanks, coarse ore stockpile cover.
18	Whim Creek Consolidated NL	Labouchere	Labouchere Project Gold Treatment Plant	Construction of gold treatment plant and associated services.
19	Burmine Ltd	Bullfinch	Copperhead Gold Mine Treatment Plant	Installation of crushing, milling and carbon-in-pulp treatment plant, workshops and offices.
20	Barrack Silicon Pty Ltd	Kemerton	Kemerton Silica Treatment Plant	Installation of furnace, baghouse, materials handling equipment, charcoal retort, workshops and offices.
21	Alcoa of Australia Ltd	Kwinana	Alumina Refinery	Construction of two slurry storage tanks and associated equipment.
22	Hamersley Iron Pty Ltd	Dampier Minesite	Pellet plant and associated buildings (situated within the security fence) as shown on Hamersley Iron Pty Ltd drawing no. HSK027	Demolition of the iron ore pellet plant and associated buildings, facilities and conveyors.
23	Hill 50 Gold Mine NL	Mt Magnet	Boogardie Gold Treatment Plant	Installation of crushing, milling and carbon-in-pulp treatment plant and associated services.
24	Alcoa of Australia Ltd	Wagerup	Wagerup Refinery	Installation of a seed filter building, vertical filter, two digesters and four precipitators.
25	Australmin Holdings Ltd	Cue	Tuckabianna Gold Project	Construction of carbon-in-leach gold treatment plant and crushing facilities, powerhouse and fuel farm, administration, store, workshop, laboratory and amenities buildings and borefield.

GAVAN TROY,
Minister for Labour.

JEFF CARR,
Minister for Mines.

Dated 14 September 1988.

OCCUPATIONAL HEALTH, SAFETY AND WELFARE ACT 1984
INSTRUMENT OF DECLARATION (2)

MADE under section 4 (3).

The Minister for Labour and the Minister for Mines hereby jointly declare that Subdivision 1 of Division 1 of Part 3 of the Occupational Health, Safety and Welfare Regulations 1988, shall apply from the service of this notice until 15 September 1990, to and in relation to any workplace mentioned in Section 4 (2) of the Occupational Health, Safety and Welfare Act 1984.

GAVAN TROY,
Minister for Labour.
JEFF CARR,
Minister for Mines.

Dated 14 September 1988

CERTAIN REGULATIONS CEASE TO BE IN FORCE

IT is notified for public information that, upon the commencement of the *Acts Amendment (Occupational Health, Safety and Welfare) Act 1987*, the following regulations cease to be in force—

1. Regulations under *Factories and Shops Act 1963*—

Abrasive Blasting Regulations 1977;
Factories and Shops (Asbestos) Regulations 1985;
Electric Accumulator Regulations 1963;
Factories (Lead Materials) Regulations 1971;
Factories (Prevention of Fire) Regulations;
Factories (Welfare) Regulations;
Fibreglass Industry Regulations 1977;
Foundry Regulations 1963;
Factories (Poisonous Substances) Regulations 1932;
Polyurethane Industry Regulations 1977;
Factories (Health and Safety) Regulations;
Shops and Warehouses (Health, Safety and Welfare) Regulations;
Spray Painting Regulations 1971;
Superphosphate Industry Regulations 1948;
Welding and Cutting Regulations 1962;
Factories and Shops (Registration Fees) Regulations 1964;
Factories, Shops and Warehouses (General) Regulations.

2. Regulations under *Construction Safety Act 1972*—

Construction Safety Regulations 1973.

3. Regulations under *Machinery Safety Act 1974*—

Machinery Safety Regulations 1978.

4. Regulations under *Noise Abatement Act 1972*—

Noise Abatement (Appointment of Inspectors) Regulations 1976;
Noise Abatement (Hearing Conservation in Workplaces) Regulations 1983.

BRIAN McGUIRK,
Chief Executive Officer.

FACTORIES AND SHOPS ACT 1963
FACTORIES, SHOPS AND WAREHOUSES (GENERAL)
REGULATIONS 1988

MADE by His Excellency the Governor in Executive Council.

Citation

1. These regulations may be cited as the *Factories, Shops and Warehouses (General) Regulations 1988*.

Commencement

2. These regulations commence on the day on which the *Occupational Health, Safety and Welfare Amendment Act 1987* comes into operation.

Form of time and wages book

3. The form set out in Form 1 of the Schedule is prescribed for the purposes of section 44 (1) of the Act.

Form of record of outworkers

4. The form set out in Form 2 of the Schedule is prescribed for the purposes of section 44 (5) of the Act.

Western Australia
Factories and Shops Act 1963
(Section 44 (5))

Form 2

RECORD OF OUTWORKERS

Name of Occupier

Address

Full name and address of outworker	Address where work is done	Certificate Number	Week Ending	Description and Quantity of work for Week	Rate of payment and amount received

By His Excellency's Command,
G. PEARCE,
Clerk of the Council.

WESTERN AUSTRALIA

OCCUPATIONAL HEALTH, SAFETY AND
WELFARE REGULATIONS 1988

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AUSTRALIAN STANDARDS

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OCCUPATIONAL HEALTH, SAFETY AND WELFARE REGULATIONS 1988

MADE by His Excellency the Governor in Executive Council.

PART 1—PRELIMINARY

Citation

101. These regulations may be cited as the *Occupational Health, Safety and Welfare Regulations 1988*.

Commencement

102. These regulations shall come into operation on the day on which the *Occupational Health, Safety and Welfare Amendment Act 1987* comes into operation.

Interpretation

103. (1) In these regulations unless the contrary intention appears—

“acceptable” means acceptable to the Commissioner;

“amusement device” means a device whether mobile or fixed by means of which, or on which, persons may be carried, raised, lowered or supported that is used or designed or intended for use by the public or a section of the public for amusement, games, recreation, sightseeing or entertainment;

“approved” means approved by the Commissioner;

“AS” followed by a designation refers to the Australian Standard having that designation that is published by the Standards Association of Australia and referred to in Schedule 1 and includes—

(a) any amendment thereto made before the reference to the document is included in Schedule 1; and

(b) any amendment thereto specified in Schedule 1;

“asbestos” means fibrous minerals of crocidolite, amosite, chrysotile, anthophyllite, tremolite or actinolite or any material containing any of those minerals;

“boiler” means a vessel in which a liquid is heated or intended to be heated at a pressure exceeding atmospheric pressure to a temperature above that which is 1°C below the boiling point, at atmospheric pressure, of that liquid and includes—

- (a) any economizer or superheater and any feed, blowdown, mountings, fittings, connections, and integral pipelines; and
- (b) any ancillary plant or apparatus,

necessary for the safe and efficient working of the vessel or another thing referred to in this definition, but does not include—

- (c) a sterilizer;
- (d) a steam generator not heated by the products of combustion; or
- (e) a vessel of a kind referred to in Schedule 2;

“breathing zone”, in relation to a person, means the zone that is within a hemisphere in front of the face having a radius of 300 mm measured from the mid point of an imaginary line joining the ears but is outside any respiratory equipment worn by that person;

“building maintenance unit” means a suspended work platform used to gain access to the exterior surfaces of any building or structure for cleaning or maintenance and includes all associated equipment;

“building or structure” includes any erection, edifice, wall, chimney, fence, bridge, dam, reservoir, wharf, jetty, or ship or other floating structure, and includes any part of any of those things;

“classified plant” means any designated plant except—

- (a) a pressure vessel used as a receiver for compressed air or gas, the maximum working pressure of which does not exceed 210 kilopascals, or which has a capacity not exceeding 0.15 cubic metres;
- (b) a pressure vessel designed, constructed and tested in accordance with the requirements of any Part of AS 2030;
- (c) a cafe boiler for hot drink dispensers of the Haros, Espresso or similar type where the maximum working pressure of the boiler does not exceed 240 kilopascals;
- (d) a gas vessel fitted as a fuel container in a motor vehicle;
- (e) any manually operated crane;
- (f) the following types of pressure vessels where the internal surfaces are inaccessible for visual inspection—
 - (i) a vulcaniser;
 - (ii) a platen heater;
 - (iii) a bed heated ironer;
 - (iv) a heating roll;
 - (v) a dimple plate heat exchanger that is not part of other plant that is classified plant;

“construction site” means a workplace where construction work is being carried out and includes any adjoining area where plant or other materials used or to be used in connection with that work are located or kept and over which the main contractor has control for the purpose of carrying out the construction work;

“construction work” means—

- (a) the construction, erection, installation, alteration, repair, maintenance, cleaning, painting, renewal, removal, excavation, dismantling or demolition of, or addition to, any building or structure, or any work in connection with any of those things, that is done at or adjacent to the place where the building or structure is located;
- (b) work on which a hoisting appliance or any scaffolding or shoring is used or intended to be used;
- (c) work in driving or extracting piles, sheet piles or trench sheet;
- (d) work in laying any pipe or work in lining pipe that is carried out at or adjacent to the place where the pipe is laid or to be laid;
- (e) work in sinking or lining or altering, repairing, maintaining, renewing, removing, or dismantling a well or borehole; or
- (f) roadworks, earthworks or reclamation;

“crane” means a structure equipped with mechanical means for moving or placing a freely suspended load and includes—

- (a) the machinery or associated lifting apparatus necessary for operating the crane;
- (b) the supporting structure of the crane and its foundations; and
- (c) electrical conductors and all fittings and other equipment required to be used with the crane,

but does not include—

- (d) a serial hoist, forklift truck, or Class 1 or Class 2 tow truck as defined in the *Tow truck Regulations 1975*; or
- (e) an earth-moving machine or other structure not principally designed for lifting a freely suspended load which is equipped with a boom, jib or hook with a maximum capacity of one tonne or less;

“designated plant” means a boiler, pressure vessel, crane, hoist, lift, escalator or amusement device, but does not include—

- (a) any crane designed for loads not exceeding one tonne;
- (b) a building materials hoist where the travel does not exceed 11 metres;
- (c) a suspended work platform used for the purposes of construction;
- (d) a static or unpowered amusement device, or an amusement device powered by a motor the power of which is not more than 1 kilowatt;
- (e) a pressure vessel that is below the limit, defined by reference to pressure and diameter, under which AS 1210 is expressed as not applying; or
- (f) a pressure vessel referred to in AS 2971 as a serially produced pressure vessel;

“escalator” includes a moving ramp for use by passengers but does not include a conveyor used only for moving goods;

“exhaust system”, in relation to a workplace, means a system whereby dusts, fumes, mists and gases are removed from the atmosphere of the workplace and includes—

- (a) a collecting hood, ductwork or fan;
- (b) an air cleaning filtration system; and
- (c) an associated motor, collector bin or receptacle;

- “exposure standard”, in relation to an atmospheric contaminant mentioned in column 1 of Schedule 3, means the maximum airborne concentration of that contaminant as set out in column 2 of that Schedule and refers to the concentration in the breathing zone of a person determined by reference to either time weighted average in respect of a period of exposure or a peak exposure level at any time;
- “gear” includes a ladder, plank, chain, rope, fastening, coupling, fitting, hoist-block, stay, pulley, hanger, sling, brace or moveable contrivance of a similar kind, used or intended for use on or in connection with construction work;
- “hoist” means a machine, other than a crane, lift, escalator, or conveyor, the principal function of which is the raising or lowering of men, goods, plant or materials, and includes—
- (a) an elevating work platform, a man hoist, a men and materials hoist, a materials hoist, a building maintenance unit, a serial hoist and a vehicle hoist; and
 - (b) all equipment, whether detachable or not, associated with its operation and any part of its structure or the structure supporting it that is stressed by it under operating conditions;
- “lift” means plant for which the Commissioner has given a certificate of inspection that is endorsed under regulation 610 to indicate that the plant was inspected as a lift and includes all plant, supports, enclosures, and associated equipment, whether detachable or not, used for the purpose of operating the lift;
- “locomotive” means a vehicle propelled by its own motive power and running on rails, which is designed and intended for use primarily for hauling or shunting other rolling stock;
- “lower explosive limit” means the minimum concentration of vapour, gas or dust in the atmosphere of a workplace that will propagate a flame;
- “main contractor” means—
- (a) the person for whose direct benefit work carried out at a construction site exists upon its completion; or
 - (b) if the person mentioned in paragraph (a) has engaged another person, other than as his employee, to carry out or cause to be carried out all the construction work at the construction site, the other person so engaged;
- “manufacturing process” means a process in or incidental to the making, assembly, altering, repairing, renovating, preparing, ornamenting, finishing, cleaning, washing or adapting of any goods or of any other articles or part thereof for trade, sale or gain or as ancillary to a business;
- “medical practitioner” means a registered medical practitioner as defined in the *Medical Act 1894*;
- “owner”, in relation to plant, means the person to whom it belongs or the hirer, lessee, borrower, bailee, or mortgagee in possession, of the plant and includes any attorney, agent, manager, foreman, supervisor or other person in charge of, or having control or management of, that plant;
- “platform”, in relation to a construction site, includes a surface of a plank or other material that is used as an accessway or for persons to stand on or load materials or other things onto, or is otherwise used as a working platform;
- “pressure vessel” means a vessel, whether or not open to the atmosphere, that is not a boiler but is or is intended to be subjected to a pressure that, including any pressure due to static head or to the state of compression of any compressible substance, is greater than atmospheric pressure and the term includes all mountings, fittings, pipelines and ancillary equipment associated with the vessel for safe operation but does not include a vessel of a kind referred to in Schedule 2;

“public place” includes a street, way or place which the public use, whether or not on private property;

“respiratory equipment” means respiratory equipment that complies with the relevant requirements of AS 1716”;

“safety warning sign” means a safety sign that complies with AS 1319;

“scaffolding” means any temporary structure, stage or platform that, for the purposes of work referred to in paragraph (a) of the definition of “construction work”, is for the support or protection of persons, plant or other materials;

“serial hoist” means a mass produced self contained machine of a type commonly known as a chain block or winch, either powered or manually driven, that is designed to be attached to an anchor point and used for raising or lowering a suspended load;

“subcontractor” means a person who is engaged by—

(a) a main contractor; or

(b) any other person who is a subcontractor within the meaning of this definition,

to carry out, or cause to be carried out, construction work other than as an employee;

“supply authority” means the statutory authority principally responsible for assisting the relevant Minister in administering a written law relating to the supply of gas, electricity or water, as the case requires;

“vehicle hoist” means a machine specifically designed for lifting a vehicle clear of the ground.

(2) In these regulations, unless the contrary intention appears, technical terms not otherwise defined have the respective meanings ordinarily ascribed to them in the industry in relation to which the term is used.

(3) Unless the contrary intention appears, in a provision of these regulations—

(a) a reference to an employer shall be taken to be a reference to the employer in respect of a workplace to which the provision applies but, where used in association with a reference to a workplace or employees, shall be taken to be limited to a reference to the employer in respect of that workplace or the employer of those employees;

(b) a reference to an employee shall be taken to be a reference to the employee who works at a workplace to which the provision applies but, where used in association with a reference to a workplace or an employer, shall be taken to be limited to a reference to the employees who work at that workplace or the employees of that employer; and

(c) a reference to a workplace, where used in association with a reference to—

(i) an employer, shall be taken to be limited to a reference to the workplace in respect of which that person is the employer; or

(ii) employees, shall be taken to be limited to a reference to the workplace at which those employees work;

(d) a reference to plant, where used in association with a reference to a workplace or an employer, shall be taken to be limited to a reference to plant used or likely to be used by the employees who work at that workplace, or the employees of that employer;

(e) where a duty is placed on a main contractor then, unless the contrary intention appears, the duty relates to a construction site in respect of which he is the main contractor; and

- (f) where a duty is placed on a subcontractor then, unless the contrary intention appears, the duty relates to a construction site on which he, as a subcontractor, carries out, or causes to be carried out, construction work except that it does not relate to a matter over which he does not have control and could not reasonably be expected to have control having regard to the work he carries out or causes to be carried out.

(4) These regulations shall be construed in accordance with the objects set out in section 5 of the Act.

Application of Australian Standards

104. Where these regulations provide that a person shall comply with an Australian Standard published by the Standards Association of Australia, that provision shall be taken to require such compliance only to the extent that it is not inconsistent with these regulations.

PART 2—GENERAL

Division 1—Matters prescribed for purposes of the Act

Notification of accidents

201. (1) For the purposes of section 19 (3) (b) of the Act, the kinds of injury to an employee to be notified by an employer to the Commissioner are—

- (a) a fracture of the skull, spine or pelvis;
- (b) a fracture of any bone—
 - (i) in the arm, other than in the wrists or hand;
 - (ii) in the leg other than a bone in the ankle or foot;
- (c) an amputation of a hand or foot;
- (d) the loss of sight of an eye; and
- (e) any other injury that results or, on the basis of medical advice, appears likely to result in the employee being absent from his employment for 10 or more working days.

(2) Notification of an accident referred to in section 19 (3) of the Act shall be made in the form of Form 1 in Schedule 12 but nothing in this subregulation prevents the notification from being communicated by telephone or in any other manner.

(3) The prescribed particulars for the purposes of the notification of an accident referred to in section 19 (3) of the Act are—

- (a) name of employer and his business address;
- (b) name, address, sex and occupation of employee;
- (c) address of the place where the accident occurred;
- (d) date and time of the accident;
- (e) brief description of the accident and the type of machine or equipment, if any, involved;
- (f) nature of the injury or, where applicable, report of death; and
- (g) the place to which the employee has been taken.

Default procedure for resolution of disputes

202. (1) The procedure to be followed by an employer in attempting to resolve an issue under section 24 (1) of the Act in a case where no other procedure has been agreed between the employer and the employees as applying in the workplace concerned is as set out in subregulation (2).

(2) In a case referred to in subregulation (1), upon an issue relating to occupational health, safety or welfare arising at the workplace, the employer shall arrange to meet with—

- (a) where there is a health and safety representative in respect of the workplace concerned, the employees and that health and safety representative; or
- (b) where there is not a health and safety representative in respect of the workplace concerned, the employees or a person authorized by them to represent them at that meeting,

at a time that is as soon after the issue arises as is mutually convenient.

Introductory courses for health and safety representatives

203. (1) This regulation applies where, under section 14 (1) (h) of the Act, the Commission accredits a training course designed for attendance by health and safety representatives, subject to course availability, during the first year of holding office.

(2) In this regulation a course mentioned in subregulation (1) is referred to as an “introductory course”.

(3) A health and safety representative shall, subject to the availability of introductory courses, endeavour to attend an introductory course within the first 12 months of being elected.

(4) A health and safety representative who has not previously attended an introductory course may give to his employer, not less than 21 days, or such shorter period as has been agreed between the health and safety representative and his employer, before the commencement of an introductory course, notice in writing that he wishes to attend the course.

(5) Where a health and safety representative has given notice in accordance with subregulation (4) that he wishes to attend an introductory course, the employer shall, subject to subregulation (7), permit the health and safety representative to take off work, with pay, such time, not exceeding 5 days, as is required for the purpose of attending that course.

(6) An employer who has been given notice under subregulation (4) by a health and safety representative wishing to attend an introductory course may consult with the health and safety representative or the relevant trade union concerning the attendance of the health and safety representative at that course and, in those consultations, due regard shall be given to the need to minimize any adverse effect on the operation of the business of the employer.

(7) If the employer has consulted under subregulation (6) with the health and safety representative or trade union concerned, the employer may decline to permit attendance at the introductory course as wished but instead permit attendance at the next such course available that the health and safety representatives wishes to attend.

(8) The pay to which a health and safety representative is entitled in respect of time he is permitted to take off work to attend an introductory course shall be calculated at his ordinary rate of pay on the time that he would ordinarily have worked had he worked his scheduled work time—

- (a) including—
 - (i) regular over award payments for ordinary hours of work;

- (ii) shift work premiums according to roster or projected roster including Saturday or public holiday shift;
 - (iii) industry allowances;
 - (iv) climatic, regional, and other like allowances;
 - (v) first aid allowances;
 - (vi) tool allowances;
 - (vii) qualification allowances;
 - (viii) service grants made on a regular basis;
 - (ix) experience allowance; and
 - (x) any penalty rates that are paid in relation to actual hours worked or payment of which are guaranteed by a contract of service whether the hours were required to be worked or not;
- (b) but not including—
- (i) overtime payments (except where they form part of the contract of service);
 - (ii) camping allowances;
 - (iii) travelling allowances;
 - (iv) disability rates such as for confined spaces and dirty work;
 - (v) car allowances; or
 - (vi) meal allowances,

but nothing in this subregulation excludes an entitlement to additional payments that may be prescribed in an award order, or industrial agreement that is made by, or registered by, The Western Australian Industrial Relations Commission or the Australian Conciliation and Arbitration Commission or agreed between the employer and the health and safety representative as being applicable.

(9) An employer who, as a result of this regulation, alters the conditions or remuneration of a person who is a health and safety representative to the detriment of that person commits an offence.

(10) Attendance at an introductory course shall be regarded as service for the purposes of ascertaining any entitlement under an award.

Reference of improvement notice or prohibition notice for review

204. A reference of an improvement notice issued under section 48 of the Act for review shall be made in the form of Form 2 in Schedule 12 and a reference of a prohibition notice issued under section 49 of the Act for review shall be made in the form of Form 3 in that Schedule.

Division 2—Administrative provisions

Inspector not to interfere unreasonably

205. An inspector shall so carry out his functions as to avoid unduly or unreasonably interfering with any work or process.

Marking of plant

206. Where an inspector issues an improvement notice or a prohibition notice that relates to any plant at a workplace, he may mark the plant, or any part of it, to indicate that it is not to be used and a person who—

- (a) uses any plant, or any part of it, that is marked to indicate that it is not to be used; or
- (b) without the authority of an inspector to do so, removes, obliterates, or otherwise interferes with the mark,

commits an offence.

Procedure regarding approvals under these regulations

207. A person who applies for any approval under these regulations shall—

- (a) if a test is required by the Commissioner, arrange for the test with the relevant person or body;
- (b) submit the relevant designs and specifications to the Commissioner;
- (c) pay for any test required by the Commissioner; and
- (d) notify the Commissioner at least 3 days in advance of the time of any test required by the Commissioner.

Local authority to notify Commissioner of construction work

208. The town or the shire clerk of each municipality, under the *Local Government Act 1960* shall, within the first week of each month, notify the Commissioner in a form approved of all permits issued by the municipality within the last month in relation to the commencement of construction work in that municipal district.

Inspection of scaffolding and gear

209. The Commissioner shall ensure that, at least once in every period of 3 months during which scaffolding is erected or in use, the scaffolding and all gear used in connection with it is examined by an inspector.

Commissioner to be notified of hire of scaffolding or gear

210. (1) Every person, carrying on the business of hiring any scaffolding or gear shall, within 24 hours of delivery to a hirer of that scaffolding or gear, notify the Commissioner of the hiring and shall specify in the notice—

- (a) the date of delivery of the scaffolding or gear;
- (b) the name of the hirer;
- (c) the address of the construction site where the scaffolding or gear is to be erected;
- (d) the type of scaffolding or gear hired; and
- (e) by whom the scaffolding or gear is to be erected.

(2) A person who contravenes subregulation (1) commits an offence.

(3) A person carrying on business as a partner of a firm does not contravene subregulation (1) in connection with a hiring if another partner of the firm complies with subregulation (1) in connection with the hiring.

Medical examinations

211. (1) The Commissioner may by notice in writing direct an employer to arrange at the expense of the employer a medical examination of an employee, subject to the consent of the employee, and the employer commits an offence if he does not comply with a notice under this subregulation within the time specified in it.

(2) An employer who has arranged a medical examination of an employee under subregulation (1) commits an offence if, upon being requested to do so, he does not arrange for a written report of the results of the examination to be given to the employee.

(3) A medical practitioner who performs a medical examination under this regulation commits an offence if he does not, on written request by the person examined, supply his findings on the examination to a medical practitioner nominated by that person.

Exemption where substantial compliance

212. (1) Where a person or workplace does not fully comply with a requirement of these regulations but the Commissioner is satisfied that there is substantial compliance, he may, in writing, exempt the person or workplace from the requirement, subject to such terms and conditions as he specifies.

(2) Where the Commissioner imposes a condition in relation to an exemption granted under subregulation (1), a person having the benefit of the exemption who contravenes the condition commits an offence.

(3) An exemption granted by the Commissioner under this regulation may be revoked by him at any time.

Exemption where compliance unnecessary or impracticable

213. (1) The Commissioner may by a certificate under his hand grant either absolutely or subject to conditions, exemption from compliance with any requirement of these regulations where he is satisfied that compliance would be unnecessary or impracticable.

(2) Where the Commissioner imposes a condition in relation to an exemption granted under subregulation (1), a person having the benefit of the exemption who contravenes the condition commits an offence.

(3) An exemption granted by the Commissioner under this regulation may be revoked by him at any time.

Exemption from fees

214. Where the Minister is satisfied that plant—

- (a) is owned by a charitable non-profit making institution or organization; or
- (b) is used solely for the purpose of education or instruction,

he may, by notice in the *Government Gazette*, grant to a person who would otherwise be liable to pay a fee under these regulations in relation to that plant, an exemption from that liability.

Division 3—Review of decisions under these regulations

Decisions by Commissioner personally

215. (1) This regulation applies in respect of a decision made under these regulations by the Commissioner personally but does not apply in respect of a decision made by the Commissioner under regulation 216 and does not apply where a decision is made by a person acting as a delegate of the Commissioner.

(2) A person who is aggrieved by a decision of the Commissioner may, within 14 days of receiving notice of the decision, refer the decision to the Industrial Relations Commission for review setting out the grounds upon which a review of the decision is sought and giving to the Commissioner a copy of the reference.

(3) On reference of a decision to the Industrial Relations Commission for review under this regulation, the Industrial Relations Commission shall inquire into the circumstances relevant to the decision and may—

- (a) affirm the decision;
- (b) set aside the decision; or
- (c) substitute for the decision any decision that it considers the Commissioner should have made in the first instance,

and the determination of the matter by the Industrial Relations Commission shall be final.

Other decisions

216. (1) This regulation applies in respect of a decision made under these regulations by a person other than the Commissioner, whether the decision was made by that person as a delegate of the Commissioner or not.

(2) A person who is aggrieved by a decision referred to in subregulation (1) may, within 14 days of receiving notice of the decision, refer the decision to the Commissioner for review setting out the grounds upon which a review of the decision is sought.

(3) On reference of a decision to the Commissioner for review under this regulation the Commissioner shall inquire into the circumstances relevant to the decision and may—

- (a) affirm the decision;
- (b) set aside the decision;
- (c) substitute for the decision any decision that he considers should have been made in the first instance,

and the determination of the matter by the Commissioner shall be final.

PART 3—GENERAL WORKPLACE STANDARDS

Division 1—All workplaces

Application

301. This Division applies in respect of all workplaces.

Subdivision 1—Noise

Interpretation

302. (1) In this Subdivision—

“action level” means an action level referred to in regulation 304;

“audiogram recorded under the repealed regulations” includes a copy of an audiogram so recorded and any written details or information including test results or details of a computer code, relating to, identifying or derived from an audiogram so recorded, other than any statistical summary referred to in regulation 27 of those regulations or a copy of such a statistical summary;

“dB(A)” means decibels of A-weighted sound pressure level;

“dB(lin)” means decibels of unweighted sound pressure level;

“noise exposure” (or LAeq, 8h) means the amount of sound energy a person is exposed to during a representative working day ascertained in LAeq, 8h in accordance with AS 1269;

“noise level” means the A-weighted sound pressure level in decibels as read from approved sound measurement equipment;

“noise report” means a noise report prepared in accordance with regulation 312;

“peak noise level (or L peak)” means the unweighted peak hold sound pressure level in dB(lin) as read from approved sound measurement equipment;

“repealed regulations” means the *Noise Abatement (Hearing Conservation in Workplaces) Regulation 1983*;

“voluntary audiometric testing programme” means a programme voluntarily initiated by an employer to test the hearing of employees, who have voluntarily decided to take part in the programme, by means of audiometric measurements showing the hearing threshold level of an employee as a function of frequency.

(2) Where a duty is placed by this Subdivision on an employer in respect of his employees, the employer shall be under the same duty in respect of any other person at the workplace who may be affected by the work carried on by him and his employees.

All measurements to be as if ear unprotected

303. Where an employee is wearing a personal hearing protector, that employee shall be regarded for the purposes of this Subdivision as receiving the noise that he would be receiving if he was not wearing the personal hearing protector.

Action level for noise

304. In this Subdivision the action level is—

- (a) an L peak of 140 dB(lin); or
- (b) an LAeq, 8h of 90 dB(A).

Employer to reduce noise as far as practicable

305. An employer shall reduce as far as practicable the noise received by each employee at the workplace.

Employer to reduce noise below action level by using certain methods

306. An employer shall reduce as far as practicable the noise received by each employee at the workplace who is receiving, or is likely to receive, noise above the action level by complying with regulation 307.

Methods to be used to reduce noise below action level

307. For the purpose of complying with regulation 306 an employer shall reduce noise—

- (a) as far as practicable, by engineering noise control (that is, reducing noise level or peak noise level); and

- (b) to the extent that it is not practicable to comply fully with regulation 306 by engineering noise control, by limiting the length of time the employee receives noise.

Personal hearing protectors

308. (1) Without limiting any duty to reduce noise placed on him by this Subdivision, if any employee is receiving, or is likely to receive, at the workplace noise above the action level the employer shall—

- (a) provide a personal hearing protector, selected and maintained as approved, to each of those employees; and
- (b) display safety warning signs regarding the wearing of personal hearing protectors.

(2) Notwithstanding subregulation (1) an employer is not required to display safety warning signs or provide a personal hearing protector in respect of a performer or member of an audience at a place being used for a performance or show or a rehearsal for a performance or show.

Employer's duty regarding information, instructing and training as to hearing risks

309. (1) Where this Subdivision places a duty on an employer to—

- (a) provide an employee with a personal hearing protector; or
- (b) limit the length of time any employee receives noise,

then he shall also provide the employee with appropriate information, instruction and training regarding risks to hearing, steps to be taken to reduce these risks and the use and maintenance of personal hearing protectors.

(2) Subregulation (1) does not limit the application of regulation 323.

Noise report to be prepared

310. An employer shall cause a noise report relating to a workplace to be prepared as soon as practicable if, after reducing noise in accordance with regulation 307 an employee at the workplace is still receiving, or is likely to receive, noise above the action level.

Additional noise report

311. Where a noise report relating to a workplace has been prepared the employer shall cause another noise report to be prepared relating to the current noise situation at that workplace as soon as practicable where—

- (a) there is, or is likely to have been, an increase of 5 dB or more in the peak noise level or noise exposure received by an employee at the workplace who was already receiving noise above the action level; and
- (b) at any time after 5 years from the date of the last noise report relating to the workplace, any employee at the workplace is receiving, or is likely to be receiving, noise above the action level.

Noise reports

312. (1) An employer required to cause a noise report to be prepared shall ensure that the report is prepared in the manner and form approved in relation to the workplace or type of workplace.

(2) An employer shall ensure that the noise data on which a noise report is based, or of which a noise report is comprised, is collected by a person approved to collect that data, who shall be known as a noise officer.

(3) A noise officer shall use only approved procedures and approved sound measurement equipment to collect data which is to be used for a noise report.

Duty of employer after noise report prepared

313. (1) As soon as practicable after a noise report relating to a workplace has been prepared the employer shall—

- (a) communicate the contents of the noise report to all employees at the workplace;
- (b) notify the Commissioner in the approved manner that the noise report has been prepared; and
- (c) if requested to do so, make a copy of the noise report available to an inspector or employee.

(2) An employer shall retain at the workplace if practicable, or if that is not practicable at another readily accessible place—

- (a) if only one noise report relating to the workplace has been prepared, that report; or
- (b) if more than one noise report relating to the workplace has been prepared, the last 2 of those reports prepared.

Dealing with audiograms recorded under the repealed regulations

314. (1) Except as provided in subregulation (2), a person shall not communicate—

- (a) the contents of, or any information on the contents of, an audiogram recorded under the repealed regulations; or
- (b) any information which enables or assists a person to gain access to the contents of or any information on the contents of an audiogram recorded under the repealed regulations.

(2) A person may make a communication referred to in subregulation (1) if it is made—

- (a) by, to, or with the written consent of, or at the written request of the person to whom the audiogram relates; or
- (b) in accordance with the written approval of the Commissioner.

(3) A person who contravenes subregulation (1) commits an offence.

Subdivision 2—Other requirements

Access of employees to regulations and other material

315. (1) An employer shall ensure that there are readily available at the workplace for perusal by an employee who requests such material copies of—

- (a) these regulations;
- (b) all Australian Standards referred to in these regulations except where the only reference is in a provision that does not apply in respect of that workplace; and
- (c) all notes issued by the Commissioner for the guidance of employers and employees except those that do not apply in respect of that workplace.

(2) A person who contravenes subregulation (1) commits an offence.

Cleanliness

316. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that the workplace and other areas ancillary to the workplace are maintained in such clean condition as is necessary to avoid hazards to the health, safety or welfare of employees.

(2) A person who contravenes subregulation (1) commits an offence.

Drinking water

317. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall, in accordance with subregulations (2) and (3), cause a supply of clean, cool, potable drinking water to be provided for and to be readily accessible to all employees.

(2) The supply of drinking water shall be so provided that drinking points are within reasonable distance of workplaces and there is not less than one drinking point for every 40 employees or part thereof.

(3) Drinking points shall not be located in a toilet.

(4) Where water unsafe for drinking is provided for use in industrial processes or for fire protection, a person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that conspicuous notices are posted at points of supply clearly marked "UNFIT FOR DRINKING" or with words to a like effect.

(5) A person who contravenes subregulation (1) or (4) commits an offence.

Access to and egress from work stations

318. (1) An employer shall ensure that all plant, structures and materials are located so as to enable safe access to and egress from places where employees are or may be required to work.

(2) A person who contravenes subregulation (1) commits an offence.

Work space generally

319. An employer commits an offence if he does not provide each of his employees with sufficient space in which to carry out his work in safety and without risk to his health.

Confined spaces

320. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that work in a confined space is carried out in compliance with AS 2865.

(2) A person who contravenes subregulation (1) commits an offence.

Warning of hazardous areas

321. (1) Without limiting any other requirement of these regulations for the display of safety warning signs, where in an area of a workplace there is a hazard which may not be readily apparent to a person working in or entering the area, a person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall display safety warning signs in such positions as to be clearly visible to persons working in or entering the area.

(2) A person who contravenes subregulation (1) commits an offence.

Atmospheric contaminants

322. (1) Nothing in this regulation limits regulation 330 or any other provision of these regulations relating to an atmospheric contaminant.

(2) An employer shall ensure that no person at the workplace is exposed to an atmospheric contaminant mentioned in column 1 of Schedule 3 the concentration of which exceeds the level set out in column 2 of that Schedule.

(3) For the purpose of complying with subregulation (2) an employer shall—

(a) as far as practicable, avoid the presence of the contaminant concerned or control the level of the contaminant using—

(i) a ventilation or exhaust system that effectively extracts the contaminant;
or

(ii) other suitable means;

and

(b) to the extent that it is not practicable to comply fully with subregulation (2) by any other means, provide suitable respiratory protective equipment in accordance with Table 3.1 of AS 1715.

(4) A person who contravenes subregulation (2) or (3) commits an offence.

Instruction in use of respiratory equipment and protective equipment

323. An employer commits an offence if he provides protective equipment or respiratory equipment to a person who has not been fully instructed in its use.

Eye protection

324. (1) An employer shall provide for every employee whose eyes are at risk eye protection that complies with the relevant requirements of AS 1336, AS 1337, and AS 1338.

(2) An employer who contravenes subregulation (1) commits an offence.

Fire prevention

325. (1) Where there is a risk of fire and an adequate supply of water is not available, a person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall provide on the site a supply of regularly maintained and efficient fire extinguishers of such a type and capacity as is suitable for the control of any fire likely to arise from the type of work being carried out.

(2) A person who, in the case of a construction site, is the main contractor or, in the case of any other workplace, is the employer shall provide and maintain and keep readily available for immediate use such fire escapes, appliances and equipment as the Commissioner may, after consultation by the Commissioner with the Chief Officer of Fire Brigades appointed under the *Fire Brigades Act 1942* or an officer authorized by the Chief Officer, require.

(3) In all parts of a workplace in which there are goods or materials which in the event of a fire are liable to burn with extreme rapidity or emit poisonous fumes or cause explosions, a person who, in the case of a construction site, is the main contractor or, in the case of any other workplace, is the employer shall display safety warning signs prohibiting a person from smoking or lighting or introducing a naked flame or any other source of ignition into those parts of the workplace.

(4) A person who contravenes subregulation (1), (2) or (3), or a safety warning sign displayed in accordance with subregulation (3) commits an offence.

Emergency evacuation procedure

326. (1) A person who, in the case of a construction site, is the main contractor or, in the case of any other workplace, is the employer shall have an evacuation procedure to be followed in the event of fire or other emergency, and shall ensure that employees are familiar with that procedure.

(2) A person who contravenes subregulation (1) commits an offence.

First aid

327. (1) The employer shall—

- (a) provide one first aid box or cabinet of dustproof design for every 25 employees or part thereof;
- (b) cause each first aid box or cabinet provided under paragraph (a) to be kept in a readily accessible place;
- (c) appoint at least one of his employees to have the control of the use of the contents of every first aid box or cabinet;
- (d) ensure that at least one employee so appointed is at the workplace whenever work is being performed; and
- (e) cause every first aid box or cabinet provided under paragraph (a) to—
 - (i) be stocked with such medical supplies as are appropriate for treating injuries caused or likely to be caused to employees, having regard to the trade or processes carried on in the workplace;
 - (ii) have printed on it or affixed to its inside cover simple instructions for the emergency treatment of simple wounds, minor burns, minor haemorrhages, dust or splash in the eye, and such further instructions as are appropriate for the use of the medical supplies in the box or cabinet; and
 - (iii) have printed on it or affixed to its inside cover information in diagrammatic or other form on expired air resuscitation.

(2) A person who contravenes subregulation (1) commits an offence.

Casualty room

328. (1) Where more than 200 persons are employed at a workplace a person who, in the case of a construction site, is the main contractor or, in the case of any other workplace, is the employer shall provide a casualty room and shall—

- (a) ensure that a person who is appointed by him and has an approved first aid qualification that is current is in control of that room whenever work is being performed at the workplace;
- (b) cause the room to be so equipped as to permit the administering of first aid therein; and
- (c) cause the room and all its fittings and equipment to be kept in a clean state.

(2) A person who contravenes subregulation (1) commits an offence.

Division 2—Workplaces other than construction sites

Application

329. This Division applies only in respect of a workplace that is not a construction site.

Atmosphere quality

- 330.** (1) An employer shall ensure that—
- (a) work practices are arranged so that employees are protected from extremes of heat and cold;
 - (b) if the workplace is in a building or structure, heating and ventilation are provided to enable employees to work in a comfortable environment; and
 - (c) effective measures are taken to control the level of any gases, vapours, dust or other airborne contaminants so that the health or safety of employees is not at risk.
- (2) A person who contravenes subregulation (1) commits an offence.

Lighting

- 331.** (1) An employer shall provide lighting from natural or artificial or both sources to the standards appropriate for the nature of and location in which a task is being performed as set out in AS 1680.
- (2) An employer shall ensure that there is a system of emergency lighting that, in the event of the failure of the lighting required by subregulation (1), is capable of lighting—
- (a) all windowless rooms of workplaces regularly used by employees; and
 - (b) all staircases, passages and like structures which serve as a means of egress and which are not naturally lighted or which are regularly used during hours of darkness.
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Surfaces and floors

- 332.** (1) An employer shall ensure that—
- (a) every surface in a workplace which may release airborne contaminants that may place the health or safety of employees at risk shall be kept in good condition and repair so as to prevent the release of such contaminants into the air;
 - (b) floors in workplaces are even, slip resistant and free from any obstruction that may cause an employee to trip or fall; and
 - (c) where molten metal is poured or carried the floor is at a uniform level.
- (2) A person who contravenes subregulation (1) commits an offence.

Seating

- 333.** (1) An employer shall provide and maintain seating complying with subregulation (3) for the use of his employees whose work is to be performed from a sitting position.
- (2) Where practicable, an employer shall provide seating complying with subregulation (3) for the use of employees whose duties permit them to sit from time to time without detriment to their work.
- (3) Seating provided shall be strongly constructed, stable and appropriate for the task or purpose for which it has been provided.
- (4) A person who contravenes subregulation (1) or (2) commits an offence.

Electrical equipment and heaters

334. (1) An employer shall ensure that electrical wiring of plant complies with AS 3000 and that the use of portable electrical equipment and heaters in hazardous areas as referred to in section 9 of AS 3000 complies with that standard and AS 1076.

(2) A person who contravenes subregulation (1) commits an offence.

Toilets

335. (1) Where more than 9 persons work at a workplace, the employer shall provide separate toilets for the use of those persons of each sex, containing such number of cubicles as is set out in the following table:

Number of persons (both sexes)	Proportion of cubicles to female persons (Number or part thereof)	Proportion of cubicles to male persons (Number or part thereof)
More than 9 but more than 100	1 to 20	1 to 25
More than 100 but not more than 200	1 to 25	1 to 30
More than 200	1 to 25	1 to 40

(2) Where not more than 9 persons work at a workplace, the employer shall provide a toilet for the use of those persons that contains at least one cubicle but does not contain a urinal.

(3) In a workplace in which more than 12 males work, the employer shall provide, in the toilets for the use of males, urinals in the proportion of one stall or 600 mm of urinal for each 30 male persons or part thereof.

(4) The employer shall ensure that toilets required by this regulation are situated within reasonable distance of all work areas and are easily accessible to the persons for whom they are provided.

(5) The employer shall cause toilets to be kept in a clean state.

(6) Any toilets provided by an employer that are open to or available for use by members of the public shall not be taken into account for the purpose of determining whether an employer has complied with this regulation or regulation 336.

(7) An employer shall ensure that—

- (a) toilet paper is available at all times in each cubicle; and
- (b) a sanitary disposal facility is provided in each toilet set aside for females.

(8) A person who contravenes this regulation commits an offence.

Common toilets

336. (1) Where 2 or more workplaces are contained within one building, or abut one another, the employers in relation to those workplaces, or any number of those workplaces may provide for the persons who work at the workplaces concerned such toilet facilities as would be required by regulation 335 if the workplaces were one workplace at which all of those persons worked.

(2) Where toilet facilities are provided under subregulation (1) for the persons who work in a workplace, those facilities shall be taken to be provided in accordance with regulation 335 and subregulations (5), (6) and (7) of that regulation apply accordingly in respect of the employer of each of the workplaces concerned.

Washing facilities

337. (1) Every employer shall provide for the use of his employees washing facilities consisting of wash basins, wash fountains with sprays, or industrial troughing in accordance with subregulations (2) and (3) that are provided with a sufficient water supply by means of, in the case of wash basins, a tap located over each basin or, in the case of industrial troughing, taps located at intervals of not less than 600 mm.

(2) The ratio of wash basins, or their equivalents, shall be not fewer than one basin to each 20 employees or part thereof, and where industrial troughing or wash fountains are provided, each 600 mm of troughing or 600 mm of circumference of wash fountains shall be taken to be the equivalent of one washbasin.

(3) The hand washing facilities shall be separate from any trough, sink or basin used in connection with any process in the occupation carried on in the workplace and shall be situated within a reasonable distance of all work areas and be easily accessible to the employees for whom they are provided.

(4) An employer shall provide adequate supplies of soap or other hand cleaning agent and hand drying facilities.

(5) Nothing in this regulation derogates from the provisions of these regulations relating to the provision of hand washing facilities, where special tasks or processes are carried on or special conditions exist.

(6) In an occupation where the nature of work performed means that employees reasonably need to shower, an employer shall provide shower facilities with hot and cold water.

(7) A person who contravenes subregulation (1), (4) or (6) commits an offence.

Facilities for eating or drinking

338. (1) The employer shall provide a separate area for eating and drinking by employees where the workplace—

(a) is a workplace in respect of which—

(i) any Division of Part 7;

(ii) Subdivision 2 of Division 1 of Part 8; or

(iii) Division 2 of Part 8,

applies; or

(b) although not referred to in paragraph (a), is a workplace in which eating or drinking by employees other than in an area provided in accordance with this regulation may constitute or cause a hazard to their health or safety.

(2) Where an employer provides an area under subregulation (1), he shall ensure that—

(a) foodstuffs and crockery are stored in the area in cupboards so as to be protected from dust and vermin;

(b) a garbage bin fitted with a vermin proof lid is provided in the area;

(c) the area provided is not used for any process in the occupation carried on in the workplace or for the storage of goods connected with any such process;

(d) it is air locked from any part of the workplace containing toilets; and

(e) measures are taken to exclude insects from the area.

(3) An employer shall ensure that employees do not eat or drink in a workplace where to do so may cause a hazard to their health or safety.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Facilities where change of clothing necessary

339. (1) The employer shall provide for each employee separate facilities for keeping clean and dirty clothes where the workplace—

- (a) is a workplace in respect of which—
 - (i) any Division of Part 7;
 - (ii) Subdivision 2 of Division 1 of Part 8; or
 - (iii) Division 2 of Part 8,

applies; or

- (b) although not referred to in paragraph (a), is a workplace in which employees are subject to wet or dirty conditions or other hazards that render changes of clothing necessary.

(2) In occupations where working clothes or boots become wet, the employer shall provide drying facilities.

(3) Where the nature of work performed by employees means that they are normally required to change clothes, the employer shall provide a change room.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Rest area

340. (1) Unless a fully equipped casualty room is provided in accordance with regulation 328, the employer shall provide a rest area with adequate facilities and equipment in a secluded, well-ventilated place.

(2) A person who contravenes subregulation (1) commits an offence.

Emergency exits

341. (1) An exit complies with the requirements of this subregulation for an emergency exit if it consists of an internal or external stairway, a ramp, a fire-isolated passage, a gangway or a doorway, or any combination of those things, that leads to the street or to an open space leading to a street.

(2) An employer shall ensure that—

- (a) an emergency exit complying with subregulation (1) is provided from any place where an employee may be required to work, and emergency exits required by these regulations to be provided and areas of approach to, and immediately outside, those emergency exits are kept free from obstruction;
- (b) doors of those emergency exits are vertically hinged, open readily in the direction of egress, and are fitted with a quick release mechanism enabling the door to be opened without the use of a key;
- (c) doorways of those emergency exits are at least 800 mm wide and have a minimum headroom of 2 metres;
- (d) those emergency exits are clearly identified with a sign bearing the word "EXIT" affixed to the wall above the door; and
- (e) where more than one such emergency exit is required by these regulations to be provided, the exits are located at positions which are as far apart and as uniformly distributed as practicable within the area that they service.

(3) A person who contravenes subregulation (2) commits an offence.

Division 3—Construction sites

Application

342. This Division applies only in relation to a construction site.

Safety helmets

343. (1) Subject to subregulation (2), a person at a construction site where construction work is being carried out that—

- (a) exceeds or is likely to exceed a height of at least 6 m above ground level or surface water level;
- (b) includes scaffolding erected to a height of at least 6 m;
- (c) is being carried out at a depth exceeding 2 m below ground level; or
- (d) involves demolition,

commits an offence if he does not wear a safety helmet that conforms to the requirements of AS 1801 and which has a clean head harness.

(2) A person is not required to wear a safety helmet if—

- (a) he is working under permanent overhead protection; or
- (b) he has a certificate signed by a medical practitioner, registered under the *Medical Act 1894*, to the effect that wearing a safety helmet would be injurious to his health.

(3) The main contractor in relation to a construction site where any construction work referred to in subregulation (1) is being carried out shall ensure that there is displayed at the main entrance to the site a safety warning sign bearing the words "SAFETY HELMET AREA. HELMETS MUST BE WORN AT THIS SITE".

(4) A main contractor who contravenes subregulation (3) commits an offence.

(5) An employer who does not provide a safety helmet of the type required by this regulation to an employee who is required by this regulation to wear one commits an offence.

Footwear

344. A person at a construction site who does not wear substantial footwear that completely covers the feet commits an offence, unless the type of work undertaken otherwise requires.

Safety belts

345. (1) A main contractor or subcontractor who requires a person to carry out construction work on a platform or in any other precarious position at a height exceeding 3 metres, where there is no guard rail meeting the requirements in regulation 351 (2), commits an offence if he does not provide for that person's use a safety belt or harness that complies with the requirements of AS 1891 and that is attached to a safe anchorage.

(2) Subregulation (1) does not require the provision of a safety belt or harness for the use of a person who is—

- (a) erecting or dismantling scaffolding;
- (b) carrying out rigging work as defined in regulation 1001; or
- (c) working on trestles at a height that does not exceed 4.5 metres.

Fumes and dust

346. (1) A main contractor or subcontractor commits an offence if he does not take effective measures to suppress or control the presence of gas, fumes, vapour and dust on a construction site.

(2) An employer commits an offence if he does not provide a respiratory device that complies with the requirements of AS 1716 to every employee whose respiratory system is at risk due to any construction work.

(3) An employer who provides the respiratory device referred to in subregulation (2) commits an offence if he does not ensure that it is selected and maintained in accordance with the requirements of AS 1715.

(4) A person on a construction site who uses a compressor to supply air to a face mask or hood assembly commits an offence unless the air intake is so located that there is no possibility of the compressed air being contaminated by atmospheric contaminants.

Gases, liquids, vapours and other harmful substances

347. (1) Where work is to be carried out in a place in which noxious gases, flammable liquids or vapours or any harmful matter are present or are likely to be present in or near the work the main contractor shall carry out tests to ascertain the air quality.

(2) Where a test carried out under subregulation (1) reveals the presence of any of the matters mentioned in that subregulation, the main contractor shall—

- (a) ensure that no person is permitted to enter the work area, unless that person—
 - (i) is equipped with an efficient air supplied respirator and life-line attached to his body; and
 - (ii) is attended by some other person;
- (b) provide an efficient mechanical extractor to disperse or expel any matter present in the air in or near the work; and
- (c) display a safety warning sign bearing the words “DANGER—KEEP CLEAR”.

(3) A main contractor who contravenes subregulation (1) or (2) commits an offence.

Lighting

348. (1) Where sufficient natural lighting is not available, an employer shall ensure that—

- (a) electric lighting is provided; and
- (b) an emergency lighting system is provided that will operate automatically if the normal lighting system fails and will, for at least one hour, give sufficient light to enable safe evacuation of the area.

(2) A person who contravenes subregulation (1) commits an offence.

Water, gas and electricity supply to be made safe

349. (1) A person who is the main contractor or a subcontractor shall enquire, or ensure that enquiry has been made, to the appropriate supply authority regarding the location and nature of any gas, water or electricity service on the construction site before any construction work is carried out on the site.

(2) A person who is the main contractor or a subcontractor shall not allow any construction work to be carried out if on the construction site—

- (a) it is intended to erect metal scaffolding within 4.5 m of electric wires;
- (b) it is intended to use any gear within 3 m of electric wires; or
- (c) it is possible for a person, through any medium, to come into contact with electric wires,

that have not been adequately insulated or effectively shielded or otherwise made safe, until the supply authority has been notified and any action required by the supply authority to make the wires safe has been taken.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

**Particular duties of main contractor—
hole covers, guard rails etc.**

350. (1) The main contractor shall ensure that—

- (a) all holes or openings with dimensions greater than 200 mm diameter or 200 mm x 200 mm in floors or elsewhere are guarded or covered and, in the case of a hole or opening which has dimensions not exceeding 2 metres in any direction in the floors of a concrete building or structure other than a lift shaft, stair well or the like, are guarded with wire mesh that—
 - (i) has wire with a diameter of at least 4 mm;
 - (ii) has maximum apertures of 100 mm x 100 mm;
 - (iii) is embedded, at least 200 mm in the edges of the surrounding concrete;
 - (iv) is embedded in the upper half of the slab with a minimum concrete cover of 20 mm or, if approved, is embedded in the lower half of the slab with a minimum cover of 30 mm;
 - (v) is not used as a working platform; and
 - (vi) has only the minimum area removed for the installation of services immediately prior to the installation of such services;
- (b) all covers are securely fixed and marked in clearly legible lettering not less than 75 mm in height with the words “DO NOT REMOVE—HOLE BENEATH”;
- (c) the movement and speed of vehicles are controlled;
- (d) places on the site where work is carried out are provided with safe means of access and egress that are adequate for the number of people working at that place;
- (e) access ladders are provided that are secured and that protrude at least 1 m beyond a landing or a working platform;
- (f) the construction site is provided with accessways, or other means of communication that—
 - (i) are at least 450 mm wide; and
 - (ii) where consisting of boards, are bolted together, if necessary, in a manner that will prevent unequal sagging;
- (g) adequate natural or artificial lighting is provided to all accessways and places of work;
- (h) all floors, landings, runs, accessways, platforms, scaffolding or places where scaffolding is to be erected or where persons are required to work, are cleared and kept cleared of rubbish and any material not required for immediate use; and

- (j) all accessways having a slope in excess of 1 m vertical in 8 m horizontal—
 - (i) where the slope does not exceed a slope of 1 m vertical in 2.7 m horizontal, are provided with cleats on the accessway; and
 - (ii) where the slope exceeds 1 m vertical in 2.7 m horizontal, consist of steps.
- (2) A main contractor who contravenes subregulation (1) commits an offence.

Guard rails and fender boards

- 351.** (1) The main contractor shall ensure that at every open edge of—
- (a) a stair, landing, or shaft opening;
 - (b) any other platform that is at a height exceeding 3 metres; or
 - (c) any other platform that is at a height exceeding 1.5 metres on which a wheelbarrow is used,

there is provided and maintained a guard rail that meets the requirements of subregulation (2) or otherwise is as approved.

- (2) The requirements of a guard rail referred to in subregulation (1) are that it—
 - (a) be constructed—
 - (i) of aluminium or steel tubing that meets the requirements of clause 3 or 4 of Schedule 6 or is metal of equivalent strength; or
 - (ii) of 75 mm x 50 mm hard wood timber or timber of equivalent strength;
 - (b) be at a height of not less than 800 mm and not more than 1 metre above the surface of the platform, stair or landing or the surface adjacent to the shaft opening, as the case requires;
 - (c) have standards or vertical supporting members spaced at intervals not exceeding 3 metres; and
 - (d) where fixed in a position beyond the open edge, be not more than 75 mm from that edge.
- (3) Subregulation (1) does not apply where—
 - (a) scaffolding is being erected or dismantled;
 - (b) rigging work as defined in regulation 1001 is being carried out; or
 - (c) work is being carried out on trestles at a height that does not exceed 4.5 metres.
- (4) The main contractor shall, unless otherwise approved, ensure that at every open edge of a platform that is at a height exceeding 3 metres there is provided and maintained a fender board that—
 - (a) consists of a platform plank, or other material of equivalent strength;
 - (b) extends to a vertical height of not less than 200 mm from the surface of the platform; and
 - (c) is situated around the outer edges of the platform,
 - and where a greater measure of safety is necessary, shall ensure that the vertical space between the guard rails and the platform plank is enclosed by netting or sheeting.
- (5) A main contractor who contravenes subregulation (1) or (4) commits an offence.

Scaffolding only removed or altered with authority

352. A person who removes or alters a part of scaffolding on any construction site without the authority of the main contractor commits an offence.

Lifting and lowering on construction site

353. (1) In working on a construction site every person shall—

- (a) carefully lower any scaffolding, formwork, falsework or gear;
- (b) properly secure any material or gear that is being raised, suspended or supported;
- (c) use—

- (i) an approved hoisting appliance; or

- (ii) a completely enclosed chute discharging either into disposal hoppers or into an area that is completely enclosed by a hoarding at least 2 m in height,

for the removal of material or debris;

- (d) where the area is open to the public or where an inspector so requires, lift or lower material from or onto an area that is fitted with an approved boom gate that—

- (i) has an effective width of 2 m and a height of 1 m;

- (ii) is painted white;

- (iii) is fitted with a safety warning sign bearing the words “CRANE WORKING OVERHEAD”; and

- (iv) is hinged and is capable of being locked in the working and non-working positions;

- (e) store rubbish, building material and plant away from footpaths and roadways;

- (f) where a pipeline used for supplying or discharging air, water, concrete or other material crosses a thoroughfare, provide the pipeline with an adequate non-slip ramp; and

- (g) not throw or drop any scaffolding, formwork, falsework or gear from any building or structure.

(2) A person who contravenes subregulation (1) commits an offence.

Certain drums or vessels to be covered

354. (1) A person who is the main contractor or a subcontractor shall ensure that every drum or vessel containing liquid and capable of holding 200 litres or more of liquid at a construction site which is not secure from unauthorized entry has a lid which is locked firmly in position to seal the drum or vessel at the end of work on the construction site each day.

(2) A person who contravenes subregulation (1) commits an offence.

Work near water

355. (1) Where a construction site has in or near it water to a depth greater than 1.5 metres that gives rise to risk of injury or drowning, the main contractor shall provide life jackets or a life buoy and line, as referred to in subregulation (2), that are maintained ready for use.

- (2) A life buoy and line provided under subregulation (1)—
 - (a) shall be of an approved type; and
 - (b) shall be placed in a readily accessible position.
- (3) A main contractor who contravenes subregulation (1) commits an offence.

PART 4—GENERAL REQUIREMENTS RELATING TO PLANT

Overloading of plant

401. (1) For the purposes of subregulation (2), the safe working load or safe working capacity of plant is as specified by the manufacturer unless the Commissioner otherwise specifies in which case it is as specified by the Commissioner.

(2) The owner of any plant shall not load, or permit the loading of, the plant beyond its safe working load or safe working capacity.

(3) An owner who loads or permits the loading of plant contrary to subregulation (2) commits an offence unless he does so, with approval of the Commissioner, for the purposes of testing the plant.

Precautions for dangerous parts of plant

402. (1) The owner of any plant shall ensure that every dangerous part of the plant is securely fenced or guarded unless it is so positioned or constructed that it is as safe as it would be if securely fenced or guarded.

(2) Where by reason of the nature of the operation being carried out, subregulation (1) cannot reasonably be complied with, such compliance is not required if a fail safe or other device is provided that automatically prevents a person coming into contact with the dangerous part.

(3) The employer shall ensure that every part of a material or thing being worked on using plant that projects in any direction beyond the extremities of the plant is securely fenced or guarded unless it is so positioned or of such a nature that it is as safe as it would be if securely fenced or guarded.

(4) A fence, guard, or safety device is not sufficiently provided for the purposes of this regulation unless it is of substantial construction and constantly maintained.

(5) The employer shall ensure that—

- (a) any fence or guard provided for the purposes of this regulation is kept in position while the plant is operated except where, and to the extent that, by reason of any examination, lubrication or adjustment of the plant that is required, it is not reasonably practicable to do so; and
- (b) where plant is stopped and a fence or guard provided for the purposes of this regulation is removed in order to facilitate cleaning, examination, lubrication, maintenance or adjustment of the plant, the plant is locked out or tagged out so as to prevent it from being started before it is safe to do so.

(6) A person contravening subregulation (1), (3) or (5) commits an offence.

Roll-over protection for certain rural tractors

403. Where, by reason of section 33 (2) of the *Acts Amendment (Occupational Health, Safety and Welfare) Act 1987* and the repealed provisions to which it refers, a protective cab or frame would be required to be provided on a tractor if it had been manufactured later than 1 September 1979, the same requirements also apply in respect of the tractor if, although not manufactured later than 1 September 1979, it was sold as a new tractor, on or after 1 September 1978.

Safety of passengers on tractors

404. A person driving a tractor who permits another person to ride on the tractor as a passenger commits an offence unless—

- (a) the tractor, irrespective of when it was manufactured or sold, is provided with a protective cab or frame that meets the requirements referred to in regulation 403;
- (b) the passenger is sitting on a seat of adequate strength that—
 - (i) is so located that the passenger is completely within the space protected by the protective cab or frame;
 - (ii) either is fitted with a backrest or is so shaped to prevent a person from slipping from the seat; and
 - (iii) is fitted with a seat belt;
 and
- (c) has adequate and convenient foot rests and hand holds.

Hydraulic rams

405. (1) The owner of plant that incorporates a load bearing hydraulically controlled ram shall ensure that—

- (a) the ram is equipped with an acceptable device to maintain effective control of the load in the event of the failure of the pressurising line to the ram—
 - (i) where the plant is a crane or an elevating work platform, except where otherwise approved by the Commissioner; and
 - (ii) in the case of any other plant, where required by the Commissioner;
 and
- (b) where more than one hydraulic ram is applied to work simultaneously, an equalising device is incorporated in the system.

(2) A person who contravenes subregulation (1) commits an offence.

Notice of proposed use of certain cranes and hoists

406. A person who uses, or causes or permits the use of—

- (a) a crane other than a mobile crane;
- (b) a builder's hoist having more than 11 metres of travel; or
- (c) a power driven hoist,

on a construction site commits an offence if notice has not been given to the Commissioner, in writing, at least 7 working days before that use.

PART 5—SAFETY IN USING CERTAIN TYPES OF PLANT*Division 1—Boilers and pressure vessels***Testing of gas cylinders**

501. (1) A person who fills a pressure vessel that is a gas cylinder commits an offence if he has not first ensured that according to the markings stamped on the cylinder, the cylinder has been inspected and tested, at intervals not exceeding—

- (a) in the case of a self contained underwater breathing apparatus air cylinder, one year;

- (b) in the case of a liquefied petroleum gas cylinder, 10 years;
- (c) in a case not mentioned in paragraph (a) or (b), the interval respectively specified in Part 1 of AS 2030,

at a test station approved under Part 1 or 3 of AS 2337.

(2) A person bringing gas cylinders into the State commits an offence if he does not, upon being required by the Commissioner to do so, make one or more of those cylinders, as required, available for testing.

Branding and manufacturer's report

502. (1) A person who manufactures, imports or supplies a boiler or pressure vessel that is classified plant shall ensure that—

- (a) it is branded as required by the Commissioner; and
- (b) if required by the Commissioner, a manufacturer's data report relating to that boiler or pressure vessel, in a form determined by the Commissioner, is furnished to the Commissioner.

(2) A person contravening subregulation (1) commits an offence.

(3) A person who, without approval, disfigures, destroys, or conceals, or attempts to disfigure, destroy or conceal, any brand referred to in subregulation (1) (a) commits an offence.

Fittings

503. The owner of a boiler or pressure vessel commits an offence unless he ensures that it has fittings that are suitable for its safe operation having regard to the pressure, temperature and contents for which it is designed and are, as applicable, in accordance with AS 1228, AS 1797, AS 1210, or Part 1, 2, or 4 of AS 2030.

Safe working pressure

504. (1) Where a boiler or pressure vessel is connected to another boiler or pressure vessel and the maximum allowable safe working pressure of any one is greater than that of any other to which it is connected, the owner commits an offence unless—

- (a) there is fitted between them a pressure reducing valve and, on the low pressure side of it, a safety valve and pressure gauge; or
- (b) the working pressure of the boiler or pressure vessel with the greater maximum allowable safe working pressure is restricted so that it cannot exceed the maximum allowable safe working pressure of the other.

(2) A pressure vessel that is connected to a safety valve and pressure gauge as referred to in subregulation (1) (a) is deemed to comply with the requirements of regulation 503 in relation to safety valves and pressure gauges if—

- (a) no means of isolating the vessel from the safety valve and pressure gauge is provided; or
- (b) where a means of isolating the vessel from the safety valve and pressure gauge is provided, the pressure of the contents is not capable of being increased beyond the maximum allowable safe working pressure of the vessel and the Commissioner approves of it for the purposes of this paragraph.

(3) Where two or more pressure vessels with the same maximum allowable safe working pressure are connected and there is not an isolation valve between them, the vessels are deemed to comply with the requirements of regulation 503 in relation to safety valves and pressure gauges if a single safety valve and pressure gauge is provided for the system.

(4) Where there is a steam supply line from a boiler to a pressure vessel that is intended to contain a fluid substance detrimental to boilers, the owner commits an offence if a non-return valve is not provided in the steam line.

Attendance, checking, testing and maintenance of boilers

505. (1) The owner of a boiler shall ensure that it is attended, checked, tested and maintained in accordance with a set of requirements shown in columns 5 to 9 of Schedule 8 that is opposite a description of the boiler, as set out in columns 2, 3 and 4, that is applicable to that boiler.

(2) Where more than one description applies to a particular boiler, subregulation (1) only requires compliance with one of the sets of requirements as to its attendance, checking, testing and maintenance shown in the Schedule.

(3) A fire tube boiler shall not be regarded as of a type referred to in column 2 of Schedule 8, in paragraph (b) of the attendance category referred to as limited attended operation, if plain tubes in either of the top 2 rows of the boiler are welded at either end.

(4) In Schedule 8—

“approved boiler maintenance contractor” means a person approved under subregulation (5) to be an approved boiler maintenance contractor for the purposes of this regulation;

“certificated boiler attendant” means a person who holds the appropriate certificate of competency in respect of the boiler concerned;

“continually”, in column 6, refers to attendance that is not necessarily continuous but is such that, in the event of a malfunction or other circumstance requiring action, the action required is able to be taken in sufficient time;

“normal boiler checks”, in column 7, refers to the checks that are, in accordance with the manufacturer’s recommendations, normally required to be made;

“trained”, in column 5, refers to a person who has received instruction on the safe operation of boilers of the class concerned and is conversant with—

- (a) the fittings of such a boiler and the purpose of those fittings;
- (b) the periodic tests required to be carried out; and
- (c) the correct procedures to be followed in the event of malfunction of the boiler or any part of its equipment.

(5) The Commissioner may approve a person to be an approved boiler maintenance contractor for the purposes of this regulation if that person—

- (a) makes application to the Commissioner to be so approved in a form determined by the Commissioner;
- (b) submits to the Commissioner such information and documentation as the Commissioner may require in support of the application; and
- (c) pays an application fee of \$200,

and the Commissioner is satisfied that the applicant meets the relevant requirements of AS 2593.

(6) The testing and maintenance required in column 9 of Schedule 8 is—

- (a) in respect of paragraphs (a) and (b) of the attendance category referred to as limited attended operation—
 - (i) periodic testing and maintenance in accordance with clauses 9.3.3, 9.4.2 and 9.5.1 of AS 2593 at not more than 3 monthly intervals; and

- (ii) yearly maintenance in accordance with clause 9.5.2 of AS 2593;
- and
- (b) in respect of the attendance category referred to as unattended operation, other than paragraphs (c) and (d) of that category—
 - (i) periodic testing and maintenance in accordance with clauses 9.3.3, 9.4.2 and 9.5.1 of AS 2593; and
 - (ii) yearly maintenance in accordance with clause 9.5.2 of AS 2593.

Division 2—Cranes

Requirements for cranes

506. (1) The owner of a crane capable of being operated with various lengths of boom or jib with or without a fly boom or fly jib and designed for lifting at variable radii shall ensure that the crane has—

- (a) a capacity chart or set of capacity charts, of metallic or other durable material, that—
 - (i) shows the safe working load at any radii at which the crane is designed to operate according to the length of boom, jib and fly boom or fly jib;
 - (ii) includes all instructions necessary for the safe operation of the crane; and
 - (iii) defines all areas of loading based on strength of materials;
- (b) a boom angle indicator to depict the boom elevation, graduated in degrees with the graduations numbered at least at every 5 degrees; and
- (c) where the crane is fitted with a variable length boom, a boom length indicator.

(2) The owner of a mobile crane with a safe working load of 15 tonne or more or a tower crane shall ensure that, in addition to complying with subregulation (1), the crane is fitted with a load indicator conforming to AS 1418 as an operator's aid.

(3) The owner of a tower crane shall ensure that the crane is fitted with an anemometer with an indicator located at the station of the operator.

(4) The owner of a crane designed for a constant capacity at all attainable lifting positions shall ensure that the crane has for the use of the operator a notice clearly displaying—

- (a) the maximum safe working load; and
- (b) the safe working load of each hoist.

(5) A person contravening subregulation (1), (2), (3) or (4) commits an offence.

Multi-crane hoisting

507. (1) The owner of a crane commits an offence if it is used for multi-crane hoisting except where—

- (a) the physical dimensions and mass of the load prevent it being handled by any single crane that is readily available; and
- (b) the hoisting is supervised by a person assigned by the owner.

(2) The owner of a crane used for multi-crane hoisting commits an offence if the safe working load of the crane, for the required boom or jib length and operating radius, does not exceed the calculated share of the load to be taken by the crane by at least—

- (a) where 2 cranes are used, 20%;
- (b) where 3 cranes are used, 33%; and
- (c) where more than 3 cranes are used, 50%.

Controls to be identified

508. The owner of a crane commits an offence unless every lever, handle, switch, push button or other device for controlling the operation of the crane has on or adjacent to it at all times clear markings to indicate its purpose, but arrows alone shall not be adequate.

Safety latches, hooks and chains

509. (1) The owner of a crane commits an offence if it is not fitted with acceptable safety latches or safety hooks to prevent inadvertent displacement of the load slings or load attachment from the hook unless approval has been given for the crane to not be so fitted.

(2) The owner of a crane commits an offence if—

- (a) any chain or terminal fitting is attached by means of welding; or
- (b) any hook is used that has not been type tested and stamped with the safe working load.

(3) The safe working load of a chain used on a crane shall be regarded for the purposes of these regulations as being one fifth of its guaranteed breaking load.

Communication between operators

510. (1) Where the distance between 2 working cranes is such that either crane or its load could inadvertently strike the other crane or its load, the owner of each crane shall ensure that an acceptable means is provided for the crane operators to communicate.

(2) A system of radio communication is not sufficient for the purposes of subregulation (1) unless it is kept free from interference from any other radio system and enables clear communication at all times.

(3) An owner contravening subregulation (1) commits an offence.

Carriage of hazardous substances

511. The owner of a crane used for the movement of molten metal or other hazardous substances commits an offence if the crane does not have—

- (a) an additional brake on the hoisting motor; or
- (b) the designed hoist unit capacity reduced by 20%,

and have such other features as the Commissioner may require.

Safety of passengers

512. (1) A person who rides as a passenger or causes or permits a person to ride as a passenger on a crane commits an offence unless the person riding as a passenger sits in a seat of adequate strength.

(2) A person who, not being the driver of a crane, uses it as a means of transportation commits an offence unless—

- (a) it is necessary for the person to be transported in order to assist with the working of the crane; or
- (b) he is under instruction from the driver of the crane.

Riding in man-cage

513. A person who rides suspended from the hook of a crane commits an offence unless he is in a man-cage and—

- (a) the use of another method of access or movement to the place to which he is riding is impracticable;
- (b) the crane is designed by the manufacturer for use as a personnel hoist;
- (c) the crane has drive-up and drive-down controls on both the hoisting and luffing motions and these are used;
- (d) a safety hook or shackle is used to attach the crane's hoist rope to the man-cage;
- (e) the man-cage has acceptable hand and head protection, infill sides and a solid floor and is constructed to the requirements of—

- (i) AS 1657; and
- (ii) AS 1250 or AS 1664;

and

- (f) where the person riding is an employee, his employer has given to him and to the driver of the crane written instructions for such use, setting out conditions of use, and those instructions were signed by the employer and has been countersigned by the health and safety representative or, where a health and safety representative has not been appointed, the proposed use has been approved by an inspector.

Division 3—Lifts and escalators

Provision and maintenance of aids

514. The owner of a passenger lift, passenger-goods lift, goods lift, service lift or escalator commits an offence if there is not provided and maintained in good order—

- (a) in the machine room—
 - (i) at least one set of all keys, diagrams, winding devices, and other equipment necessary for the purposes of maintenance, safe running, inspection and emergency procedures; and
 - (ii) a suitably protected and legible wiring diagram appropriate to the installation;

and

- (b) in a secure but readily accessible location, such additional sets of keys as are necessary for use by an inspector or other person with authority to act for the purposes of emergency procedures, security or installation.

Certificates to be available to inspector

515. The owner of a lift or escalator commits an offence if—

- (a) he does not have a certificate of test or a specification relating to—
 - (i) any hoisting and compensation rope for a lift that is intended to be installed initially or by way of replacement;
 - (ii) any governor rope that is intended to be installed initially or by way of replacement;
 - (iii) any ram and cylinder for an electro-hydraulic lift;
 - (iv) any reinforced concrete floor on which a machine is or is to be supported; and
 - (v) any other component part to which the Commissioner orders that this regulation shall apply; or
- (b) he fails to produce any certificate or specification referred to in paragraph (a) to an inspector who requests him to produce it.

Number identification

516. (1) The owner of a building that contains more than one unit of a particular type referred to in subregulation (2) commits an offence unless the units of each type are identified by consecutive numbering and the number of each unit is displayed—

- (a) in the case of a passenger lift, passenger-goods lift, or goods lift—
 - (i) on or adjacent to the control panel in the car; and
 - (ii) on all major sections of the lift equipment in a conspicuous place;
- (b) in the case of a service lift, on all major sections of the lift equipment in a conspicuous place; and
- (c) in the case of an escalator, at the start switch and emergency stop button station.

(2) The units mentioned in each paragraph of subregulation (1) constitute a separate type for the purposes of that subregulation.

(3) A person who, without approval, disfigures, destroys or conceals, or attempts to disfigure, destroy or conceal, a number displayed in accordance with subregulation (1) commits an offence.

Use of extra devices

517. (1) The owner of a lift or escalator shall ensure that any circuit, feature, appliance, or component used on the lift or escalator or in the lift well that is not required for the operation or safety of the lift or escalator (in this regulation referred to as “an extra device”) is acceptable and that—

- (a) any inspection or test required by the Commissioner has been carried out as required; and
- (b) all circuits, connections and switches for those extra devices are enclosed, terminated, protected and marked so that they are clearly identifiable and are shown to be—
 - (i) equipment additional to that required for the normal operation of the lift or escalator; or
 - (ii) equipment which may be active whether or not the lift or escalator circuit breaker is open.

(2) An owner contravening subregulation (1) commits an offence.

Access in certain areas

518. The owner of a lift or escalator commits an offence if any area containing the controlling mechanism and equipment or any other machinery relating to the lift or escalator is not designed in accordance with the relevant requirements of AS 1735.

Means of entry to lift well

519. The owner of a passenger lift, passenger-goods lift, or goods lift commits an offence unless a means of entry to the lift well, by an acceptable unlocking device or other acceptable means, is provided in the lift well enclosure so as to enable entry at all times at the first level served above an express section of the lift well.

Equipment for passenger-goods lifts

520. A reference to a passenger lift in a provision of these regulations relating to equipment in lifts includes a reference to a passenger-goods lift.

Authority to work lifts

521. (1) A person who, not being authorized by the owner to do so, operates a passenger lift, passenger-goods lift, or goods lift that is not automatically controlled commits an offence.

(2) Where the Commissioner, in the interests of safety, directs that a lift shall not be operated unless driven by a suitable attendant, the owner of the lift commits an offence if it is operated contrary to that direction.

(3) For the purposes of a direction under subregulation (2), a person is not a suitable attendant unless that person—

- (a) has attained the age of 18 years; and
- (b) is conversant with all controls within the lift car and with emergency procedures in relation to the lift.

Unlawful operation of, or interference with mechanism of, lift

522. Except in the case of an accident or emergency, a person who is not a worker engaged in erecting, repairing or maintaining equipment associated with a lift commits an offence if he—

- (a) operates a lift other than by the normal operating controls provided in the car;
- (b) operates a lift where the normal controls in the car are arranged for operation only by a person authorized by the owner;
- (c) interferes with any part of the lift mechanism, or any enclosure, door, gate or fastening; or
- (d) attempts to work a lift in a manner other than the manner in which it was designed to work.

Use of lift equipment for other purposes

523. (1) A person who, except as approved, uses passenger lift, passenger-goods lift, or goods lift equipment for a purpose for which it was not designed, commits an offence.

(2) The Commissioner may, where he is satisfied that all safety requirements have been met, approve the use of passenger lift, passenger-goods lift, or goods lift equipment for—

- (a) a men and materials hoist; or
- (b) any other use he considers appropriate.

(3) Application for approval under subregulation (2) may be made in writing to the Commissioner not less than 14 days before it is wished to put the lift equipment to the use for which approval is sought, and shall—

- (a) include a clear statement setting out which of the emergency and safety equipment that would be required for the use of the equipment for a lift, if any, is inoperative;
- (b) include details of—
 - (i) proposed safety measures to be adopted by reason of the equipment mentioned in paragraph (a) being inoperative; and
 - (ii) the period for which the equipment is to be used in the manner for which approval is sought;
- and
- (c) be supported by such other information as the Commissioner may require.

Reporting of hazards

524. The owner of a lift commits an offence if he does not forthwith report to the Commissioner any—

- (a) failure or seizure of an essential part of the winding gear;
- (b) failure or seizure of a sheave, shaft, spindle or bearings of the lift or the equipment;
- (c) failure of a rope or its attachment;
- (d) jamming of the cage in the shaft;
- (e) failure of safety gear to act when required or action of safety gear when not required;
- (f) failure of an enclosure door, lock or electrical interlock to function correctly;
- (g) movement of the lift in a hazardous manner;
- (h) material damage caused by seismic disturbance or fire;
- (i) failure of brake effectiveness; or
- (j) failure of overwinding limit switches to act when required, that results or is likely to result in a hazardous situation.

Division 4—Hoists

Operating or riding

525. An employer who operates or rides a hoist or causes or permits a person to do so commits an offence unless that hoist is designed to be operated or ridden by a person.

Marking of hoists

526. (1) Unless he is exempted under subregulation (2), the owner of a hoist commits an offence if—

- (a) the marking required by regulation 612. (3) (b) is not marked at the lowest operating level of the hoist;
- (b) the hoist is not marked at each operating level with—
 - (i) the maximum capacity of the hoist that is acceptable; and
 - (ii) in the case of a hoist that is not designed to be ridden, a warning that riding the hoist is an offence;
- or
- (c) the hoist is not otherwise marked as the Commissioner may, in a particular case, require.

(2) The Commissioner may, in making a requirement under subregulation (1) (c), exempt the owner from any requirement of subregulation (1) (a) or (b).

Controls

527. The owner of a hoist commits an offence if—

- (a) any set of controls on the machine, bucket or platform of the hoist are capable of being operated simultaneously with any other set of controls except the stop button;
- (b) the interlocking is by means other than a key operated change over switch; or
- (c) the voltage of any controls on the hoist exceeds 32 volts alternating current to earth or 115 volts direct current to earth.

Other safety requirements

528. (1) The owner of a hoist commits an offence if—

- (a) the hoist incorporates a guided platform or support arms on or under which a person may be required to stand or travel during the working of the hoist and a means is not provided that is effective under all load conditions to retard any descent of the platform due to failure of the supporting medium; or
- (b) a brake on the hoist is not capable of exerting 50% more torque than the design torque capable of being transmitted to it.

(2) A self sustaining gear system shall not be regarded as a brake for the purposes of subregulation (1) (b).

(3) Where the Commissioner considers it necessary, he may require the owner of a hoist to ensure that acceptable safety latches or safety hooks are fitted to prevent inadvertent displacement of the load slings or load attachment from the hook of a hoist and the owner of the hoist commits an offence if he does not comply with that requirement.

Isolating switch for certain hoists

529. The owner of an electrically-powered hoist commits an offence if it is not fitted with an isolating switch that—

- (a) is capable of being locked in the open position only;
- (b) isolates all phases of power; and
- (c) is marked "HOIST ISOLATOR".

*Division 5—Amusement devices***Display of notice**

530. The owner of an amusement device commits an offence if it does not have prominently displayed on it a notice specifying—

- (a) the maximum number of persons approved by the Commissioner to ride on the device; and
- (b) the maximum acceptable speed of operation.

Control of operation

531. (1) The owner of an amusement device commits an offence if he permits it to be operated or supervised by a person other than a competent operator who—

- (a) has attained the age of 18 years; and
- (b) has adequate knowledge of the use and function of all normal emergency operation controls and of the proper use of the device.

(2) The owner of an amusement device commits an offence if he does not ensure that a person who may operate it in accordance with subregulation (1) is in the immediate vicinity of the operating controls at all times during its operation and that no other person handles those controls during normal operation.

(3) Subregulations (1) and (2) do not apply to an amusement device designed to be operated or controlled by a passenger.

(4) Where the Commissioner requires the owner of an amusement device to ensure that reasonable supervision is provided during the operation of the device, the owner commits an offence if he does not comply with the requirement.

Emergency brakes and devices

532. The owner of an amusement device commits an offence if he does not ensure that it is provided with—

- (a) such emergency brakes as are necessary to prevent collision between components of the amusement device upon failure of normal controls; and
- (b) where the amusement device uses inclined tracks, automatic anti-rollback devices to prevent backward movement of any passenger carrying units upon failure of the propelling mechanism.

Signal systems

533. The owner of an amusement device commits an offence if he does not ensure that—

- (a) where the operator of the device does not have a clear view of the point at which passengers are loaded or unloaded, a signal system for the starting and stopping of the device is provided and used;
- (b) any code of signals adopted is printed and kept posted at the stations of the operator and signalman; and
- (c) signals for the movement or operation of the device are given only when all passengers and other persons who may be endangered by such movement or operation are in a position of safety.

Protection of public

534. The owner of an amusement device commits an offence if—

- (a) it is used or operated while a person is so positioned as to be endangered by it; or
- (b) any area in which persons present may be endangered are not fenced, barricaded, or otherwise guarded against entry by the public.

Emergency hand winding

535. The owner of an amusement device commits an offence if it is not provided with a means for moving it, whether by hand winding or otherwise, so that all persons can disembark from it safely in the event of power failure or malfunction.

Division 6—Miscellaneous types of plant

Subdivision 1—All workplaces

Interpretation

536. In this Subdivision “nail gun” means a tool which by the use of compressed air, is capable of discharging a nail, spike or other fastener in excess of 25 mm in length, into or through a substance.

Application

537. This Subdivision applies in respect of all workplaces.

Some nail guns not to be brought onto, or used at, workplaces

538. A person who brings onto a workplace or uses at a workplace a nail gun that is capable of being discharged by applying a force of less than 50 N or 1.5 times the mass of the gun, whichever is the greater, to the springs of the muzzle bracket commits an offence.

No free firing

539. A person who intentionally or as a result of negligence fires a nail gun so that the nail, spike or other fastener fired from the gun flies free commits an offence.

Notices to be displayed

540. (1) No person shall use a nail gun unless one or more safety warning signs bearing the words “WARNING—NAIL GUN IN USE—KEEP CLEAR” are displayed so as to be clearly legible to all persons who are at or near that part of the workplace where the gun is being used.

- (2) A person who contravenes subregulation (1) commits an offence.

Eye protection

541. (1) The employer shall provide a person using, or assisting another person to use, a nail gun with spectacles which comply with the requirements of AS 1337 or another device that adequately protects the eyes of that person from injury.

- (2) A person who contravenes subregulation (1) commits an offence.

Portable ladders

542. (1) Subject to subregulation (2), a person shall not bring a portable ladder to, or use a portable ladder at, a workplace unless—

- (a) where the ladder is of timber, it complies with the requirements of AS 1688 and 1689;
- (b) where the ladder is of metal—
 - (i) it complies with the requirements of Part 1 of AS 1892; and
 - (ii) it does not exceed a height of 9 m, in the case of a single ladder, or a height of 15 m, in the case of an extension ladder.

(2) Subregulation (1) does not apply in respect of such special timber or aluminium ladders as may be approved.

(3) A person shall not bring a portable steel ladder to, or use a portable steel ladder at, a workplace unless it is of an approved design and construction.

(4) A person shall not bring ladder brackets to, or use ladder brackets at, a workplace.

(5) A person who contravenes subregulations (1), (3) or (4) commits an offence.

Splicing

543. (1) A person shall not use a wire rope sling unless—

- (a) where it has been hand spliced, the splice has not less than 3 tucks with each whole strand of rope, and 2 tucks with one half of the wires cut out of each strand under and over against the lay of the rope; or
- (b) the method of splicing is approved or conforms with a method referred to in Appendix C of AS 1666.

(2) A person shall not use wire rope that is mechanically spliced or has terminal fittings unless it is made and used in an approved manner.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Load of wire rope

544. (1) A person shall not use wire rope to hold a load greater than—

- (a) in the case of permanent standing guys, one-quarter of the guaranteed breaking strength load; and
- (b) in any other case—
 - (i) where any person is lifted, one-tenth; and
 - (ii) where a person is not lifted, one-fifth, of the guaranteed breaking strength load.

(2) A person who contravenes subregulation (1) commits an offence.

Clamps

545. A person who uses a lifting clamp commits an offence unless it—

- (a) has been approved; and
- (b) is clearly and permanently marked with the safe working load.

Hooks

546. A person who uses a hook for raising or lowering on any crane or hoisting appliance other than a hoist block commits an offence unless it is fitted with an acceptable safety latch or safety hook that prevents the displacement of the sling or load from the hook or approval has been given in accordance with regulation 509 for it not to be so fitted.

Slings

547. (1) A person shall not raise or lower or suspend a load on—

- (a) a knotted chain or a knotted wire rope; or
- (b) a chain that has been shortened or joined to another chain by bolts and nuts.

(2) A person who uses a multiple legged sling that is lifted by a single hook, other than a double legged sling having an included angle of less than 60 degrees under the hook, shall ensure that it is attached to the hook by a shackle, ring or link with a strength that is adequate for the load to be lifted by the hook.

(3) A person who operates or loads a sling shall—

- (a) by packing or other means, prevent the sling from coming into contact with any sharp edge of a load; and
- (b) take such other measures as are necessary to prevent the load from damaging the sling, rope or brace.

(4) A person shall not—

- (a) so use a sling that its safe working load is exceeded; or
- (b) arrange the sling legs at an angle that would induce in the sling leg a tension exceeding the safe working load of the sling.

(5) A person who contravenes subregulation (1), (2), (3) or (4) commits an offence.

Explosive powered tools to comply with AS 1873

548. (1) A person shall not bring onto a workplace or use at a workplace an explosive powered tool as defined in AS 1873 other than one which complies with the requirements of and is used in accordance with, that Australian Standard.

(2) A person who contravenes subregulation (1) commits an offence.

*Subdivision 2—Construction sites***Application**

549. This Subdivision applies only in respect of construction sites.

Appliances on scaffolding

550. (1) A person shall not attach to or mount on scaffolding a pipeline for pumping concrete or any other appliance or machine, that is used for lifting or moving material unless—

- (a) the scaffolding is constructed in such a manner that it can withstand the maximum additional forces that may arise during the operation of the pipeline, appliance or machine; and
- (b) the pipeline, appliance or machine is tied securely to the scaffolding.

(2) The main contractor shall not mount on scaffolding an appliance or machine mentioned in subregulation (1) with a safe working load in excess of 260 kg unless it has been shown to the satisfaction of the Commissioner that the strength of the scaffolding conforms to the requirements of subregulation (1).

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Use of drums

551. A person who uses a drum as scaffolding commits an offence unless—

- (a) the height of the platform supported by the drum does not exceed the height of one drum placed on end;
- (b) each drum is placed on end; and
- (c) each drum is placed on the ground or on an internal floor.

Lift boxes

552. (1) A person shall not use a lift box to carry a load exceeding 3 tonnes.

(2) A person shall not use a lift box that is designed to carry a load of 3 tonnes unless—

- (a) it is constructed of either—
 - (i) 50 mm timber properly framed together; or
 - (ii) welded steel with a strength equivalent to that of 50 mm timber; and
- (b) it has 2 carrying straps that—
 - (i) are of mild steel flat bar not less than 75 mm by 15 mm passing under the bottom and up the two sides of the box;
 - (ii) are either secured to the timber with 15 mm diameter bolts or, in the case of a steel box, welded to the box; and
 - (iii) have eyelet holes formed in their top ends to receive the slings.

(3) A person shall not, by mechanical means, lift bricks or other similar material at the site unless the container for lifting and the manner of the lifting are approved.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Landing platforms

553. A person who uses a landing platform in conjunction with a hoisting appliance commits an offence unless the use of that hoisting appliance in conjunction with that landing platform is approved and he does so in accordance with the approval or—

- (a) in the case of a platform that is intended to carry a load not exceeding 1 tonne, the platform—
 - (i) has an outboard area not exceeding 3.5 m² and has a projection not exceeding 2 m;
 - (ii) is supported by 2 rolled steel joist outriggers not less than 178 mm x 89 mm x 22 kg per metre not less than 5.5 m in length;
 - (iii) has outriggers secured to the supporting structure by propping or bolting to provide a safety factor of 4 and so that there is no lateral movement;
 - (iv) has floor beams of not less than 102 mm x 51 mm x 10 kg rolled steel channel spaced at distances not exceeding 560 mm measured from centre to centre;

- (v) has a decking either of 235 mm by 32 mm karri planks fixed to each floor beam with 9 mm diameter cup-head bolts or of 6 mm checker plate welded all round with 75 mm runs at 300 mm centres;
 - (vi) has decking so constructed as to prevent the passage of dust or other materials;
 - (vii) has at least 6 mm continuous all round fillet welds joining the floor beams to outriggers;
 - (viii) has cross bracing of mild steel flat bar of not less than 64 mm x 6 mm between the outrigger beams welded to, and flush with, the top of the floor beams; and
 - (ix) has a notice indicating the safe working load of the platform secured in a conspicuous position;
- (b) in the case of a platform that is intended to carry a load not exceeding 3 tonnes, the platform—
- (i) has an outboard area not exceeding 6 m² and has a projection not exceeding 2.5 m;
 - (ii) is supported by 2 universal beam outriggers not less than 310 mm x 125 mm x 46 kg per metre not less than 7.25 m in length;
 - (iii) has outriggers secured to the supporting structure by propping or bolting to give a safety factor of 4 and so that there is no lateral movement;
 - (iv) has floor beams of not less than 152 mm x 76 mm x 18 kg per metre rolled steel channel spaced at—
 - (A) centres not exceeding 450 mm apart in the case of decking made of karri planks; or
 - (B) centres not exceeding 575 mm apart in the case of decking made of checker plate,
 and has a decking either of 235 mm x 32 mm karri planks that are fixed to each floor beam with 9 mm diameter cup-head bolts or of 9 mm checker plate that is welded all round with 75 mm runs at 300 mm centres;
 - (v) has decking so constructed as to prevent the passage of dust or other materials;
 - (vi) has at least 10 mm continuous all round fillet welds joining the floor beams to the outriggers;
 - (vii) has a cross bracing of mild steel flat bar of not less than 75 mm by 6 mm between the outrigger beams welded to, and flush with, the top of the floor beams; and
 - (viii) has a notice indicating the safe working load of the platform secured in a conspicuous position.

PART 6—DESIGNATED PLANT

Division 1—Review of design

Design

601. (1) A person who designs, manufactures, imports or supplies any designated plant for use at a workplace shall ensure that, before the plant is used—

- (a) it conforms with a design that has been accepted by the Commissioner in accordance with this Division; and

- (b) any testing required by the Commissioner in giving his acceptance has been carried out in accordance with that requirement.
- (2) A person who modifies or repairs any designated plant shall ensure that, before the plant is used, it conforms with the design for the plant that was accepted by the Commissioner in accordance with this Division.
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Application for acceptance of design

602. Application may be made to the Commissioner for the design of designated plant to be accepted and the application shall be in a form determined by the Commissioner and shall be accompanied by—

- (a) detailed drawings of the construction of the plant;
- (b) design calculations;
- (c) operating instructions in the English language; and
- (d) an application fee of \$20.

Acceptance

603. (1) On receiving an application under regulation 602 for the design of designated plant to be accepted, the Commissioner may, in writing—

- (a) accept the design if he is satisfied that it is in accordance with section 23 (1) (a) of the Act; or
- (b) advise the applicant that the design is unacceptable, giving reasons for his decision.

(2) The Commissioner may, without requiring the submission of any further application or the payment of any further application fee, permit the applicant to modify any design and any drawings, calculations or instructions that accompanied it.

(3) The Commissioner shall not make a decision under subregulation (1) until—

- (a) the Commissioner has made a review and an assessment of the design and accompanying particulars and the applicant has paid to the Commissioner a fee equal to the cost, calculated at the rate of \$50 per hour, of the review and assessment; or
- (b) with the consent of the Commissioner, a review and an assessment of the design and accompanying particulars have been made by an independent person acceptable to both the Commissioner and the applicant and have been submitted to the Commissioner,

and the Commissioner may have regard to such an assessment when making the decision.

(4) The acceptance by the Commissioner of a design may be subject to such type-testing, operational testing, or other testing as the Commissioner sees fit to require in the acceptance.

Alteration of design

604. The requirements of this Division apply in relation to designated plant the design of which is altered from a design that has been previously accepted under this Division, notwithstanding the acceptance of the previous design, as if the altered design were a new design.

Confidentiality of design information

605. Documentation relating to design information supplied to the Commissioner shall be used for the purposes of administering the Act and these regulations only and a person who makes any such information available to a person outside the Commission or Department, other than a coroner, commits an offence unless he does so under written authority of the person who supplied the information or the Commissioner.

Division 2—Classified plant

Interpretation

606. In this Division a reference to the inspection of classified plant shall be taken to include such testing of the plant as is considered necessary by the Commissioner.

Certificate of inspection required

607. (1) A person who—

- (a) owns or keeps classified plant that is capable of being used; or
- (b) uses classified plant or causes or permits classified plant to be used,

commits an offence unless a certificate of inspection has been given under this Division in respect of that plant and the period that has elapsed since that certificate was given is not more than the period specified in the certificate as the period after which it expires, but the period specified in the certificate shall not exceed the period prescribed in Schedule 4.

(2) Where during the period of 28 days immediately following the expiry of a certificate of inspection a person would otherwise commit an offence against subregulation (1), it is a defence for that person to show that an application for a further certificate of inspection had been made.

(3) A person who uses or causes or permits the use of classified plant otherwise than in accordance with any limitation, restriction or condition endorsed on the certificate of inspection relating to that plant commits an offence unless such use has been authorized in writing by an inspector.

Application for certificate of inspection

608. (1) Application may be made to the Commissioner for the issue of a certificate of inspection in respect of any classified plant.

(2) Where an application made under subregulation (1) relates to classified plant that is intended to be subject to these regulations as a lift, the application shall so specify accordingly.

Inspection upon application

609. (1) On application being made for the issue of a certificate of inspection in respect of classified plant, the Commissioner shall arrange for the plant to be inspected subject to the applicant meeting the costs of or incidental to the inspection, other than the cost of so much, if any, of the inspector's time as is during his normal working hours.

(2) An applicant shall be given at least 14 days' notice of the time when an internal inspection of a boiler or pressure vessel is to be carried out, and the time specified may be at any reasonable time of the day or night.

(3) Unless the plant to be inspected is suitably cleaned and otherwise prepared in readiness for an inspection of which the Commissioner has given notice in accordance with this regulation, the inspection may be postponed and the cost of the inspector's time in carrying out such a postponed inspection shall, notwithstanding subregulation (1), be met by the applicant unless the Commissioner otherwise approves.

(4) For the purposes of subregulation (3), preparation of a boiler or pressure vessel for inspection includes, if required by the Commissioner, causing the boiler or pressure vessel to be emptied, cooled and dried and where applicable, all manhole doors and mudhole doors to be taken off, and all furnace bars and all brick or stone bridges to be taken out, and the interior of the boiler or pressure vessel to be freed from incrustation, oil or other deposits.

(5) When required by the Commissioner for the purposes of inspection, brick work or other material in which a boiler or pressure vessel is set shall be taken down.

(6) Unless such assistance is rendered as is required by the person carrying out the inspection and, where necessary, all furnaces, flues and uptakes connected with a boiler or pressure vessel are swept clean, and all safety valves or other fittings are dismantled, this regulation applies as if the plant had not been prepared in readiness for the inspection.

Certificate of inspection

610. (1) Upon the completion of an inspection the Commissioner shall give a certificate of inspection in the form determined by him and, unless he has previously done so, assign to the plant an identification number.

(2) Where it was specified in the application for a certificate of inspection that the plant is intended to be subject to these regulations as a lift, the Commissioner shall endorse the certificate to indicate that the plant was inspected as a lift unless the applicant varies his application by specifying that the plant is to be subject to these regulations as a hoist.

(3) The Commissioner, when giving a certificate of inspection, may endorse on it any limitation, restriction or condition that he sees fit in relation to the use of the classified plant to which the certificate relates.

Extension of certificate in certain cases

611. (1) Where a certificate of inspection relating to classified plant will expire within 28 days and the plant has not been re-inspected, the owner may apply in writing to the Commissioner for a further certificate of inspection and the application shall be accompanied by a statement signed by the owner specifying—

- (a) any repairs, alterations or additions which have been made to the plant since the date on which the certificate of inspection then current was given;
- (b) any unintended stoppages in the plant which have occurred and the attributed reasons; and
- (c) whether or not the owner is satisfied that the plant is fit to be used with safety for the purpose for which it is intended.

(2) Where a certificate of inspection relating to classified plant will expire within 60 days and the Commissioner is of the opinion that re-inspection of the plant before the expiry of the certificate would involve undue difficulty, he may request the owner of the plant to provide to the Commissioner a statement signed by the owner specifying the matters referred to in subsection (1) (a), (b) and (c).

(3) If an owner—

- (a) makes an application under subregulation (1) accompanied by a statement in accordance with that subregulation; or

- (b) upon being requested under subregulation (2) to do so, provides the Commissioner with a statement in accordance with that subregulation,

the Commissioner may, without a re-inspection having been carried out but having regard to the statement and any other matters he considers relevant, by notice in writing extend the period for which the relevant certificate of inspection is in force for a period ending not more than 6 months after the time when the certificate would otherwise expire.

(4) Notwithstanding the relevant period prescribed in Schedule 4 an extension under subregulation (3) shall have effect according to its tenor, and regulation 612 applies in relation to notice of any such extension as if it were a part of the certificate continued in force.

Display of certificate of inspection and marking of identification number

612. (1) The owner of classified plant in respect of which a certificate of inspection is for the time being current, commits an offence if he does not ensure that the certificate or a legible copy of it is displayed in a conspicuous place where it can be seen by all persons working at or with that plant.

(2) Where it is not practicable to display a certificate or a copy of it as required by subregulation (1), the owner is taken to comply with that requirement if he ensures that the certificate is kept in a secure location and is produced upon request to a person working at or with that plant or an inspector.

(3) The owner of classified plant in respect of which a certificate of inspection is for the time being current commits an offence if the identification number assigned to that plant by the Commissioner is not—

- (a) in the case of a boiler or pressure vessel, legibly stamped on it; or
- (b) in any other case, legibly marked on it in accordance with AS 1319.

(4) A person who, without approval, disfigures, destroys, conceals, or attempts to disfigure, destroy, or conceal, the identification number stamped or marked on plant in accordance with subregulation (3) commits an offence.

Reporting of incidents affecting classified plant

613. (1) Where an incident causes or is suspected of causing breakage, distortion, damage or failure of classified plant—

- (a) the person who is operating or in charge of the plant at the time of the incident shall forthwith give particulars in writing of the incident—
 - (i) if he is an employee, to his employer;
 - (ii) in any other case, to the Commissioner and, where he is not the owner, to the owner of the plant;
- (b) an employer who has been given particulars of the incident in accordance with paragraph (a) (i) shall forthwith give particulars in writing of the incident to the Commissioner and, where he is not the owner, to the owner of the plant; and
- (c) the owner of the plant, upon becoming aware that breakage, distortion, damage or failure of the plant has been, or is suspected of having been, caused, shall ensure that it is not used until it has been found to conform, or made to conform, with the design for the plant that was accepted by the Commissioner in accordance with Division 1 of this Part.

(2) A person contravening subregulation (1) commits an offence.

PART 7—CERTAIN WORK PROCESSES

*Division 1—Fibreglass***Interpretation**

701. In this Division unless the contrary intention appears—

“catalyst” means the chemical methyl ethyl ketone peroxide or any chemical that is added to resin for the purpose of initiating polymerisation of a resin;

“fibreglass manufacturing process” means any manufacturing process involving the reaction of a resin with a catalyst whether or not the product made by the process is reinforced by glass fibres or any other material;

“flammable liquid” means a liquid with a flash point of or below 61°C when determined in accordance with AS 2106;

“hazard area” means any part of the workplace in which a catalyst, promoter or resin is used for laminating or spraying and any part of the workplace in which a solvent is used for cleaning equipment;

“promoter” means the chemical cobalt naphthenate or any other chemical that assists a catalyst in a fibreglass manufacturing process;

“resin” means a solid, semi-solid or liquid organic material which normally has an indefinite and high molecular weight and which is used as a base in a fibreglass manufacturing process;

“solvent” means acetone, ethyl acetate, ethyl alcohol or any other chemical used for dissolving other chemicals used in a fibreglass manufacturing process.

Application

702. This Division applies only in respect of a workplace in which a fibreglass manufacturing process is carried out.

Maximum size of workplace

703. (1) An employer shall not carry on a fibreglass manufacturing process in a workplace other than a construction site where the undivided floor area of that workplace, excluding office and showroom areas, exceeds—

(a) in the case of a building of Class I, II or III as defined by the *Uniform Building By-laws 1974*—

(i) 3 500 m² where a fire sprinkler system is not provided; or

(ii) 5 500 m² where a fire sprinkler system is provided;

(b) in the case of a building of Class IV as defined by the *Uniform Building By-laws 1974*—

(i) 3 000 m² where a fire sprinkler system is not provided; or

(ii) 4 500 m² where a fire sprinkler system is provided;

or

(c) in the case of a building of Class V as defined by the *Uniform Building By-laws 1974*—

(i) 2 000 m² where a fire sprinkler system is not provided; or

(ii) 2 800 m² where a fire sprinkler system is provided.

(2) A person who contravenes subregulation (1) commits an offence.

Ventilation

704. (1) An employer shall, where it is practicable to do so, prevent the exposure standard for styrene monomer or the lower explosive limit from being reached by means of a mechanical means of ventilation that is—

- (a) arranged so as to exhaust the air into the external atmosphere and prevent re-circulation of the exhaust air into the workplace; and
- (b) maintained in operation in an area that has been a hazard area for not less than 15 minutes after cessation of the fibreglass manufacturing process.

(2) Where it is not practicable by mechanical means of ventilation as referred to in subregulation (1) to prevent the exposure standard for styrene monomer or the lower explosive limit from being reached, the employer shall provide adequate respiratory equipment to all persons in the work area and ensure that it is used in accordance with AS 1715.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Depositor guns

705. (1) An employer shall ensure that—

- (a) a depositor gun is properly cleaned after each use;
- (b) a bin containing water is provided during preparation and cleaning of a depositor gun so as to enable effective collection of solvents and residues;
- (c) where a leakage of a catalyst, solvent or resin from a depositor gun or a fitting occurs, that gun or fitting is dismantled immediately in accordance with the manufacturer's instructions;
- (d) only a person authorized by the employer operates or repairs a depositor gun; and
- (e) all the hoses of a depositor gun are inspected by a person authorized by the employer at intervals not exceeding 28 days and any defective hose or other component is repaired or replaced before the gun is again used.

(2) A person who contravenes subregulation (1) commits an offence.

Storage of flammable liquids

706. (1) Nothing in this regulation derogates from the requirements of the *Flammable Liquids Regulations 1967*.

(2) An employer shall ensure that any catalyst not required for immediate use is stored—

- (a) separately from promoters, resins and other chemicals;
- (b) in the same container in which it was received by the employer;
- (c) within the temperature ranges that conform to the recommendations of the manufacturer of the catalyst; and
- (d) in a part of the workplace that is separate from the production area of the workplace.

(3) An employer shall ensure that the amount of catalyst brought into and stored in the production area of the workplace does not exceed the amount necessary for one day's production and that the catalyst is held in a container that is sealed at all times except when material is being drawn from it, and kept not less than 2 metres from any container holding a promoter, resin or any other chemical.

(4) A person who contravenes subregulation (2) or (3) commits an offence.

Workplace cleanliness

707. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that in any part of the workplace in which a fibreglass manufacturing process takes place—

- (a) the floors are kept clean of waste material and that any spillage of a catalyst, promoter or resin is cleaned up immediately;
 - (b) there are kept non-combustible bins for the depositing of waste that are marked to show the class of waste to be stored therein and that waste collected following a spillage or otherwise is deposited into the correct bin;
 - (c) not less than one dry waste bin is provided for each 50 m² of the floor area;
 - (d) for each 50 m² of the floor area not less than 2 wet waste bins are provided of which—
 - (i) at least one is for disposal of material contaminated by catalyst;
 - (ii) at least one is for the disposal of material contaminated by resin or promoter;
 - (e) bins provided under this regulation have sufficient capacity to receive waste of the kind for which they are respectively provided and are kept at a safe distance from each other;
 - (f) wet waste material collected in bins is kept covered by water; and
 - (g) materials used for cleaning a spillage of a catalyst are clean before being so used.
- (2) A person who contravenes subregulation (1) commits an offence.

Emergency exits

708. (1) The employer shall ensure that every emergency exit required by regulation 341 is clearly identified, in addition to the sign above the door that is required by that regulation, with a sign bearing the word “EXIT” affixed to the wall adjacent to the door of the exit at a height of 1.3 metres above the level of the floor.

- (2) A person who contravenes subregulation (1) commits an offence.

*Division 2—Polyurethane***Interpretation**

709. In this Division unless the contrary intention appears—

“curing agent” means a chemical substance or energy source that is added to another substance or a process to change the nature of that other substance or the process and in the course of which the chemical substance or energy source is itself changed in character and wholly or partly incorporated into that other substance or process;

“isocyanate” includes toluene diisocyanate, hexamethylene diisocyanate, diphenyl methane diisocyanate, naphthalene diisocyanate, polymethylene polyphenyl diisocyanate, isocyanurate or any chemical commonly known as an isocyanate or derivative thereof;

“polyhydroxy compound” includes any chemical commonly known as a polyhydroxy compound or polyol that reacts with an isocyanate to form polyurethane;

“polyurethane manufacturing process” means any manufacturing process involving the reaction of an isocyanate or blend of differing isocyanates with a polyhydroxy compound;

“promoter” means the chemical cobalt naphthenate or any other chemical that assists a catalyst in a polyurethane manufacturing process;

“resin” means a solid, semi-solid or liquid organic material which normally has an indefinite and high molecular weight and which is used as a base in a polyurethane manufacturing process.

Application

710. This Division applies only in respect of a workplace in which a polyurethane manufacturing process is carried out.

Subdivision 1—Polyurethane generally

Application

711. This Subdivision applies in respect of all workplaces to which this Division applies.

Handling of isocyanates

712. (1) The employer shall not handle or use or cause or permit a person to handle or use an isocyanate or any substance containing an isocyanate—

- (a) in a form in which atomization of such a substance is carried out by means of pouring, injecting or spraying;
- (b) in a form in which the temperature of such a substance is above 600°C; or
- (c) in a confined space,

unless the person is wearing adequate eye and skin protective equipment and respiratory equipment.

(2) The employer shall not enter or cause or permit a person to enter any area that is known to be or is suspected of being contaminated with an isocyanate vapour unless the person is wearing adequate eye and skin protective equipment and respiratory equipment.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Sealing of containers

713. (1) The employer shall ensure that every drum or other container used for storing any isocyanate is sealed and protected so as to prevent the entry of moisture or water into the container.

(2) Where moisture or water has penetrated an isocyanate container, the employer shall ensure that—

- (a) prior to re-sealing of the container, an attachment containing silica gel or other suitable drying agent is fixed to the container so as to prevent the entry of moisture; and
- (b) the container is taken to a well ventilated area for decontamination or transfer of the contents to another container,

and in such a manner that the exposure standard of neither the isocyanate nor carbon dioxide is exceeded.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Decontamination of containers

714. (1) The employer shall ensure that an empty container used for storing any isocyanate that has contained—

- (a) toluene diisocyanate or hexamethylene diisocyanate, is decontaminated with decontaminants specified in regulation 717. (1) (a) (i) and (ii); and
- (b) any other isocyanate, is decontaminated with a decontaminant specified in regulation 717. (1) (b).

(2) A person who contravenes subregulation (1) commits an offence.

Decanting of isocyanates

715. (1) Where an isocyanate is decanted a person involved in the operation—

- (a) shall wear adequate eye and skin protective equipment and respiratory equipment for protection against hazards resulting from a spillage;
- (b) shall not, under any circumstances, apply positive pressure to the isocyanate container; and
- (c) shall not commence siphoning by the use of the mouth.

(2) Where the isocyanate being decanted is toluene diisocyanate or hexamethylene diisocyanate, a person shall not carry out decanting by hand unless the capacity of the container from which the material is being decanted does not exceed 4 litres.

(3) A person shall not heat a container of isocyanate unless it is vented to the external atmosphere.

(4) A person shall ensure that when decanting has been completed all buckets, beakers, flasks and other utensils used in the process are decontaminated immediately in accordance with regulation 714 as if they were containers to which that regulation applied.

(5) A person who contravenes subregulation (1), (2), (3) or (4) commits an offence.

Spillages

716. (1) The employer shall display in a conspicuous place a statement of the procedures to be followed by employees in the event of a spillage of a curing agent, promoter or resin.

(2) The employer shall ensure that for each 50 m² of the floor area of the workplace not less than 2 wet waste bins are provided of which—

- (a) at least one is for disposal of material contaminated by curing agents; and
- (b) at least one is for disposal of material contaminated by resins or promoters.

(3) The employer shall ensure that—

- (a) a spillage of a curing agent, promoter or resin or any other chemical is cleaned up immediately and deposited in the appropriate bin required by subregulation (2); and
- (b) materials used for cleaning spillages of a catalyst are clean,

and shall arrange—

- (c) for the contents of every bin containing a mixture of an isocyanate and decontaminant or sawdust or sand obtained after cleaning up a spillage to be disposed of at a sanitary landfill site in accordance with the *Health Act 1911*.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Decontaminants

717. (1) The employer shall ensure that the following decontaminants are used to clean up a spillage of isocyanate—

- (a) in a spillage of toluene diisocyanate or hexamethylene diisocyanate—
 - (i) a solid decontaminant, composed of a mixture of sawdust, 20% by weight; Kieselguhr (technical) or china clay or Fuller's Earth 40% by weight and a breakdown solution conforming to paragraph (a) (ii) 40% by weight; and
 - (ii) a liquid decontaminant composed of a mixture containing 90% water by volume, non-ionic surfactant 2% by volume and concentrated ammonia (S.G. = 0.880) 8% by volume;
- (b) in a spillage of any other isocyanate a solid decontaminant of—
 - (i) sawdust; or
 - (ii) sand.

(2) The employer shall ensure that the decontaminant referred to in subregulation (1) (a) (i) is stored, when not required, in covered, open top drums.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Subdivision 2—Workplaces other than construction sites

Application

718. This Subdivision applies only in respect of a workplace to which this Division applies that is not a construction site.

Requirements of workplace

719. (1) An employer shall not carry out a polyurethane manufacturing process involving the use of toluene diisocyanate or any blend of isocyanates that has toluene diisocyanate as a constituent, unless—

- (a) the workplace is divided into separate areas for the following purposes—
 - (i) administration and amenities;
 - (ii) bulk stores for raw materials that are polyhydroxy compounds;
 - (iii) bulk stores for raw materials that are isocyanates;
 - (iv) polyurethane manufacture;
 - (v) curing area;
 - (vi) bulk store for manufactured foam; and
 - (vii) the making of any product derived from the process;
- (b) the areas of the workplace referred to in paragraph (a)—
 - (i) are each situated in a separate building not less than 6 metres from any other such area; or
 - (ii) if the workplace is situated in a single building, are separated from each other by walls having a fire resistance rating, as defined by the *Uniform Building By-laws 1974*, of not less than 2 hours;
- (c) the areas referred to in paragraph (a) (ii) to (vii) are in a building or buildings having not more than one storey;

- (d) each area referred to in paragraph (a) (ii) to (vii) has not less than 2 emergency exits complying with regulation 341 so situated that there is at least one of those exits within 20 metres of any part of the area;
 - (e) there is a fire hydrant of the Fire Brigades Board established under the *Fire Brigades Act 1942* within 90 metres, or such other distance as is approved by that Board, of each part of the workplace;
 - (f) every building used for the storage of an isocyanate or polyhydroxy compound at the workplace—
 - (i) is constructed of non-combustible materials and has a smooth impervious concrete floor;
 - (ii) is constructed so as to provide protection from direct exposure to the sun for the materials stored therein; and
 - (iii) if constructed with closed sides and used for the storage of toluene diisocyanate, is mechanically ventilated to ensure that the exposure standard is not exceeded;
- and
- (g) every building in the workplace used for the purpose of curing polyurethane foam is constructed of non-combustible materials, has a smooth impervious concrete floor and is fitted with an approved automatic type of fire vent.
- (2) A person who contravenes subregulation (1) commits an offence.

Emergency exits

720. (1) The employer shall ensure that every emergency exit required by regulation 719 (1) (d) is clearly identified, in addition to the sign above the door that is required by regulation 341 (2) (d), with a sign bearing the word "EXIT" affixed to the wall adjacent to the door of the exit at a height of 1.3 metres above the level of the floor.

- (2) A person who contravenes subregulation (1) commits an offence.

Emergency respiratory equipment

721. (1) The employer shall ensure that there are available for use 2 complete sets of approved self contained breathing apparatus each with an air bottle filled to at least 75% of its capacity attached and a spare air bottle filled to 100% of its capacity.

- (2) A person who contravenes subregulation (1) commits an offence.

Curing of polyurethane foam

722. (1) The employer shall ensure that for not less than 6 hours immediately after producing polyurethane foam from toluene diisocyanate it is placed in the curing area so that—

- (a) the exits of the curing area are not obstructed; and
- (b) there is sufficient ventilation to ensure the dispersal of heat and fumes from the curing area.

- (2) A person who contravenes subregulation (1) commits an offence.

Exhaust systems

723. (1) The employer shall ensure that—

- (a) an efficient exhaust system is provided for any area where polyurethane foam produced from toluene diisocyanate is cut into buns so as to prevent employees being exposed to isocyanates in excess of the exposure standard; and
- (b) every exhaust system provided discharges in such a manner as to prevent re-circulation of atmospheric contaminants.

(2) The employer shall have an effective programme for the maintenance of exhaust systems and particulars of this programme and of maintenance carried out shall be made available by the employer to any health and safety representative, member of a health and safety committee, or other employee who requests such particulars.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

*Division 3—Foundries***Application**

724. This Division applies only in respect of a workplace that contains a foundry.

Furnace areas

725. (1) A person shall not in any foundry carry on moulding or casting operations within 3 metres of any part of a furnace or of any part of a receiver used in connection with a furnace while the furnace is in use.

(2) The person in charge of a foundry shall constantly maintain or cause to be constantly maintained at a uniform level a safe operating area which he shall also cause to be kept clear of materials, stock and articles or matter which obstruct or prevent the safe use of that area.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Cupola charging platforms

726. (1) The employer shall not use or permit or cause a cupola charging platform to be used unless—

- (a) the platform is of sufficient dimensions to permit safe and unimpeded handling of raw materials by furnace operators;
- (b) the floors of the platform are—
 - (i) constructed of heavy timber or of steel plate that is firmly fixed to the decking;
 - (ii) of sufficient strength to support any load they are required to bear;
 - (iii) surrounded by a wall of sound construction of a height not less than 760 mm above the floor, so as to prevent objects falling from the platform; and
 - (iv) maintained in a level and safe condition;
- (c) a properly constructed access stair or ramp, fitted in either case with handrails, is provided to give access to the platform;
- (d) the working area of the platform is covered by a roof; and
- (e) the platform is adequately ventilated.

(2) A person who contravenes subregulation (1) commits an offence.

Pit furnace

727. (1) The employer shall ensure that a pit furnace is well ventilated and dry and covered by a strong and substantial grating at the point at which metal is removed from the furnace.

(2) A person who contravenes subregulation (1) commits an offence.

Pouring pit

728. (1) In this regulation “pouring pit” means a pit in which a ladle or box part is placed while receiving molten metal from a furnace or ladle.

(2) The employer shall ensure that—

- (a) a pouring pit is well ventilated and of such dimensions as are ordinarily sufficient to leave a distance of at least 300 mm between all the sides of the pit and any part of a ladle or box part placed therein; and
- (b) the opening of a pouring pit is protected by a strong and substantial grating or guard rails when not in use.

(3) A person who contravenes subregulation (2) commits an offence.

Ladles

729. (1) The employer shall not use or cause or permit a person to use in a foundry—

- (a) a ladle of a holding capacity of 500 kilograms or more unless it is fitted with a safety worm gear or other equivalent safety device to regulate its position; or
- (b) any other type of ladle which is not carried by hand unless it is fitted with safety clips.

(2) The employer shall not lift or move by hand or cause or permit a person to lift or move by hand—

- (a) when using a single-handled ladle, a weight greater than 27 kilograms; or
- (b) when using a double-handled ladle, a weight greater than a weight calculated on the basis of 38 kilograms per person operating the ladle.

(3) The employer shall regularly inspect or cause to be inspected all parts of a ladle used in foundry operations and shall maintain them in good condition and working order.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Work under suspended castings etc.

730. (1) A person shall not work, and the employer shall not require or permit a person to work, in a foundry under any moulding boxes, cores, or castings unless they are securely supported on a trestle or on a support of a similar kind.

(2) A person who contravenes subregulation (1) commits an offence.

Moulds or chills for spare metal

731. (1) The employer shall provide for use in foundry operations, sufficient moulds or chills into which spare metal may be poured.

(2) A person who contravenes subregulation (1) commits an offence.

Mould drying

732. (1) Where moulds or ladles are dried inside a foundry during working hours, the employer shall—

- (a) cause adequate measures to be taken to prevent fumes or other impurities from entering, or remaining in, the atmosphere of the foundry; and
- (b) cause all kettles to be prepared outside the foundry and ensure that they are not used in position until a clear fire is burning.

(2) A person who contravenes subregulation (1) commits an offence.

Ventilation and temperature control

733. (1) The employer shall, where practicable, provide adequate ventilation for all cooling racks and all fixed sources of heat by means of suitably designed hoods with flues extending to the open air.

(2) A person who contravenes subregulation (1) commits an offence.

Washing facilities

734. (1) The employer shall provide basins with hot and cold water for use by employees engaged in foundry operations in the ratio of one basin to every 5 employees or part thereof.

(2) A person who contravenes subregulation (1) commits an offence.

*Division 4—Welding and cutting***Interpretation**

735. In this Division unless the contrary intention appears, “welding or cutting” includes gas welding or cutting, electric arc welding or cutting, friction welding or cutting, and resistance welding.

Application

736. This Division applies only in respect of a workplace in which welding or cutting of metals is carried out.

Hazardous locations

737. (1) An employer shall ensure that any welding or cutting that takes place in or near a hazardous location as defined in section 1.4.4 of AS 1674 complies with that Standard and, where it takes place in a hazardous location, as so defined, that is also a confined space as defined in section 1.4.2 of AS 2865, also complies with that Standard.

(2) An employer who contravenes subregulation (1) commits an offence.

Protective equipment to be supplied

738. (1) A person shall not carry out welding or cutting unless that person is wearing—

- (a) fire resistant gauntlets or gloves;
- (b) goggles, face shields or helmets that are fitted with filter lenses that comply with the requirements of AS 1336 and AS 1337; and
- (c) where necessary, fire resistant aprons.

- (2) An employer shall provide the equipment referred to in subregulation (1).
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Safety checks

739. (1) Immediately before welding or cutting is carried out on or in any container, drum or tank, the employer shall, in accordance with section 7.3 of AS 1674, ensure that there is no danger of fire or explosion.

- (2) An employee shall not carry out welding or cutting on or in any container, drum, or tank until he is advised that subregulation (1) has been complied with.
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Air supply

740. (1) In a workplace where—

- (a) a person is engaged in—
 - (i) welding or cutting lead or cadmium or their alloys, or iron or steel that is painted, coated, or plated with lead or cadmium; or
 - (ii) flame treatment of lead painted surfaces; or
- (b) lead, mercury or cadmium or their compounds are present,

the employer shall provide local exhaust extraction to supply each person engaged in welding or cutting with a minimum rate of 10 cubic metres of air per minute.

(2) Where it is not practicable to supply local exhaust extraction in accordance with subregulation (1), the employer shall provide appropriate respiratory equipment and an employee shall use that equipment in accordance with AS 1715.

- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Equipment and screens

741. (1) A person who carries out any welding or cutting commits an offence unless—

- (a) all regulators, tubing, blow-pipes, handpieces, cables, leads and ancillary equipment are—
 - (i) undamaged and free from all defects; and
 - (ii) of a type specified by the manufacturers as suitable for use with the welding equipment being used;
- (b) where the welding or cutting is being carried out in an elevated position, persons below that elevated position are effectively protected from sparks, slag and particles of hot metal; and
- (c) the place where the welding or cutting is being carried out is, where practicable, screened to protect persons in the vicinity from radiation.

(2) A person who uses an electric arc welding machine commits an offence unless the electric arc welding machine and all ancillary equipment attached to and used in connection with the welding machine are used and maintained in accordance with the requirements of AS 2745.

Gas cylinders to be secured

742. A person who—

- (a) by mechanical means, lifts or lowers a gas cylinder that is not contained in an appropriate type of box or is secured in a cradle; or
- (b) uses a gas cylinder that is not secured in an upright position and protected from the weather,

commits an offence.

Oxygen equipment to be clean

743. A person working with or handling oxygen equipment who does not, at all times, keep that equipment free of grease and oil commits an offence.

Prohibited uses of oxygen

744. A person who uses oxygen to dust or dry clothing or work, or as a substitute for compressed air, commits an offence.

*Division 5—Spray painting***Interpretation**

745. In this Division unless the contrary intention appears—

“flammable paint” means any paint or other liquid with a flash point of or below 610C when determined in accordance with AS 2106;

“powder paint” means any solid powder coating capable of being ignited;

“spray painting” means the application, either alone or in combination, of flammable paint, toxic paint or powder paint to an object by a spray painting process, whether carried out manually, mechanically or automatically;

“spray painting hazardous area” means—

- (a) the area within a spray booth, its exhaust ducts and the area within 2 metres in any direction of an entrance to the spray booth;
- (b) where a spray painting process is conducted outside a spray booth, the area within 6 metres in any direction horizontally from and to a height of 2 metres above the object being sprayed;

“spray painting process” means spray painting by one of the following methods—

- (a) airless—whereby flammable paint, toxic paint or powder paint, either alone or in combination, is ejected from a spray nozzle under hydraulic pressure;
- (b) compressed air—whereby a mixture of air and flammable paint, toxic paint or powder paint, either alone or in combination, is applied under pressure;
- (c) electrostatic—whereby an object and flammable paint, toxic paint or powder paint, either alone or in combination, are electrically charged at opposite polarities; or
- (d) any combination of the processes referred to in paragraphs (a), (b) and (c);

“toxic paint” means a paint, solvent, liquid or other material which contains a substance referred to in an item in Schedule 5, in the quantity and, where applicable, calculated in the manner, specified in that item.

Application

746. This Division applies only in respect of a workplace in which a spray painting process is carried out.

Spray painting inside and outside of booth

747. (1) An employer or employee shall not carry out spray painting other than in a booth complying with regulations 748 to 750 except in accordance with subregulation (2).

(2) Where the characteristics of the object to be spray painted are such that it is not practicable to comply with regulations 748 to 750, spray painting may be carried out outside a booth in such a way as not to affect the health and safety of any person subject to the conditions that—

- (a) spray painting is carried out within the limits of the spray painting hazardous area which is delineated by signs stating—SPRAY PAINTING AREA—AUTHORIZED PERSONS ONLY;
- (b) the spray painting hazardous area has adequate natural ventilation and it is so situated or controlled that overspray or contamination from the process is not carried into contact with unprotected persons;
- (c) no electrical equipment or other source of ignition is used unless certified in accordance with AS 1076 for use in spray painting hazardous areas; and
- (d) suitable fire extinguishers are provided in the immediate proximity of the spray painting process and all employees engaged in that process have been instructed in their use.

(3) A person shall not smoke or light or introduce a naked flame or any other source of ignition in a spray painting hazardous area.

(4) A person who contravenes subregulation (1) or (3) commits an offence.

Construction of booth

748. (1) An employer shall ensure that a booth used for spray painting—

- (a) is constructed of non-combustible material;
- (b) has, where glass is used in its construction, only toughened safety glass, laminated safety glass, or safety wired glass manufactured to the requirements of Sections 2, 3, 4 and 5 of AS 2208; and
- (c) if longer than 8 metres, has not less than 2 emergency exits complying with regulation 341.

(2) Where a booth is designed to be fitted with a filter, an employer shall ensure that the booth is fitted with a filter made of a high heat resistant material and that the filter is maintained in good condition.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Ventilation of booth

749. (1) An employer shall ensure that a booth is fitted with a mechanical ventilation system that provides the following levels of air velocity at any point within the breathing zone of the operator—

- (a) subject to paragraphs (b) and (c), not less than 0.5 linear metres per second;
- (b) where spray painting is by an electrostatic method, subject to paragraph (c), not less than 0.4 linear metres per second;
- (c) in the case of a system of down-draught ventilation, not less than 0.3 linear metres per second,

and, in any event, not less than the air velocity necessary to ensure that the exposure standard for any atmospheric contaminant referred to in Schedule 3 is not exceeded.

(2) An employer shall ensure that the ventilation system of a booth is kept in operation so as to provide the air velocity required by subregulation (1)—

- (a) during the whole time spray painting is carried on;
- (b) for at least 5 minutes after cessation of spray painting; and
- (c) at any other time when any person is in the booth.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Exhaust ducts in booth

750. (1) An employer shall ensure that a booth is fitted with a metal duct extending to the external air into which all overspray shall be discharged.

(2) An employer shall ensure that—

- (a) the duct referred to in subregulation (1) is not less than 2 metres above the highest part of the roof and of a height sufficient to prevent re-entry of overspray into the workplace or the creation of a nuisance to other premises; and
- (b) where flexible connections are used in the duct, the material in those connections complies with Part 1 of AS 1668.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Electrostatic spray painting

751. (1) An employer shall ensure that where spray painting is carried out by an electrostatic process—

- (a) all electrical equipment complies with AS 1076, AS 2268 and AS 3000;
- (b) the equipment has automatic controls that operate, without delay, to give audible warning and to disconnect the power supply to any high voltage transformer being used in the event of a failure of the ventilation system or stoppage of any conveyor carrying objects through the high voltage field used in the process;
- (c) objects being painted are maintained in effective metallic contact with the conveyor or other earthed support and all hooks are kept clean to ensure maintenance of this contact; and
- (d) where practicable, sharp points or knife edges and points of contact are shielded from random spray or are so located as not to collect spray material during normal operations.

(2) A person who contravenes subregulation (1) commits an offence.

Storage and handling of flammable paints and materials

752. (1) An employer shall ensure that all flammable paints and materials for use in spray painting are kept in containers provided with covers that are tightly closed at all times except when the cover is removed for placing materials in or taking materials from the container or for other necessary purposes.

(2) An employer shall ensure that all flammable paints and materials are kept in a well ventilated area separated from an area where spray painting is carried out, except such quantities as are reasonably necessary for not more than one day's work.

(3) An employer shall ensure that an employee mixing or preparing paints carries out the work in a well ventilated area or, where that is not practicable, wears skin protection and eye protection and uses respiratory equipment.

(4) An employer shall ensure that containers with close fitting lids are provided at convenient places and used for the deposit of cotton waste, cleaning cloths and similar materials that have been used in connection with spray painting and that the contents of the containers are disposed of in a safe manner and at a safe distance from every booth, at the end of the job or each day or shift.

(5) An employer shall ensure that where supplies of flammable paint or materials are decanted from containers by way of a tap, the tap shall be drip and leak proof.

(6) A person who contravenes this regulation commits an offence.

Precautions against ignition

753. (1) While spray painting is being carried on, a person shall not—

- (a) smoke;
- (b) light or introduce a naked flame or any other source of ignition; or
- (c) move any motor vehicle by its own power or start or set in motion the engine of any motor vehicle or other equipment the motive power of which could produce a source of ignition,

within the spray painting hazardous area concerned.

(2) An employer shall ensure that heating of booths while spray painting is in operation is limited to the use of steam, hot water or warm air, and that heating or preheating equipment for the warming of spray painting materials is not capable of causing ignition of the materials.

(3) Where heating or pre-heating equipment for spray painting is electrical, the employer shall ensure that it complies with AS 1076 and AS 3000.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Respiratory equipment

754. (1) Respiratory equipment shall be provided by an employer and used by employees in accordance with AS 1715.

(2) Where spray painting with 2 or more component epoxy or 2 or more component polyurethane paints is carried out by an employee he shall wear—

- (a) respiratory equipment of an airline type; and
- (b) full length chemically resistant overalls and gloves.

(3) A person shall not enter an enclosed booth where a vapour curing process or gas curing process is in operation unless he is using, in accordance with AS 1715, respiratory equipment of an airline type.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Cleaning of booths

755. (1) An employer shall ensure that all booths, floor areas surrounding booths and the ventilation system of booths are thoroughly cleaned at intervals not exceeding one week or as directed by the Commissioner.

(2) A person who contravenes subregulation (1) commits an offence.

Division 6—Abrasive blasting

Interpretation

756. In this Division unless the contrary intention appears—

“abrasive blasting” means the cleaning, smoothing, roughing or removing of part of the surface of an object by the use, as an abrasive, of sand, metal, shot, grit or other material, propelled by a blast of compressed air, water, steam or by a wheel;

“abrasive material” means any substance, including sand, metal shot, metal grit or slag, used or intended to be used as an abrasive for abrasive blasting;

“blasting chamber” means a structure in which at least one person is present while engaged in abrasive blasting;

“blasting enclosure” means a structure used for abrasive blasting and into which entry is not required during blasting;

“compressed air wet abrasive blast cleaning” means abrasive blasting where water is added to the abrasive material at least 3 metres before the nozzle exit of the propellant (or 100 mm before the nozzle exit when a venturi is used);

“dry abrasive blasting” means abrasive blasting conducted without the addition of water to the abrasive material or its propellant;

“pressurized liquid blast cleaning” means the cleaning of an object using water that is compressed or pressurized;

“siliceous dust” means an airborne dust which contains more than 5% Quartz (SiO₂) by mass;

“wet abrasive blasting” means compressed air wet abrasive blast cleaning or pressurized liquid blast cleaning;

“wet blasting inhibitor” means a substance added to water used in wet abrasive blasting to reduce the susceptibility of the cleaned surface to flash corrosion.

Application

757. This Division applies only in respect of a workplace in which abrasive blasting or pressurized liquid blast cleaning is carried out.

Prohibited materials

758. (1) An employer shall not use the following abrasive materials in abrasive blasting—

- (a) any material containing more than 5% free silica (crystalline silicon dioxide) if used for dry abrasive blasting;
- (b) any material containing more than 2% of any one of the substances arsenic, beryllium, lead, cadmium, nickel, antimony, cobalt, chromium or tin;
- (c) any material containing any radioactive substance as defined in the *Radiation Safety Act 1975*; or

(d) in the case of dry abrasive blasting, any recycled material which has not been treated to remove respirable dust and any other material likely to affect the upper respiratory tract of a person.

(2) A person who contravenes subregulation (1) commits an offence.

Wet blasting inhibitors

759. (1) An employer shall ensure that wet blasting inhibitors containing—

- (a) chromate;
- (b) nitrate; or
- (c) nitrite,

are not used in any wet abrasive blasting.

(2) A person who contravenes subregulation (1) commits an offence.

Blasting equipment

760. (1) An employer shall ensure that abrasive blasting equipment has—

- (a) under the direct control of the nozzle operator a positive fast acting mechanism or system to prevent the flow of abrasive material when the mechanism or system is intentionally activated or the abrasive blasting nozzle is released in an emergency;
- (b) hose whip checks or hose coupling safety locks or both;
- (c) in the case of equipment used for dry blasting, an efficient means for the discharge of static electrical charge from the abrasive blasting nozzle; and
- (d) in the case of equipment used for wet blasting, a water flow rate sufficient to prevent dust.

(2) A person who contravenes subregulation (1) commits an offence.

Blasting chambers and enclosures

761. (1) An employer shall ensure that every blasting chamber or blasting enclosure—

- (a) is constructed of hard wearing non-combustible materials;
- (b) is designed—
 - (i) to prevent the escape of dust; and
 - (ii) to minimize internal projections on which dust may settle;
- (c) has every window or inspection port—
 - (i) fixed in a metal sash; and
 - (ii) maintained so as to permit effective inspection of operations;
- (d) has glass, if any, in windows or inspection ports which is toughened safety glass, laminated safety glass or safety wired glass manufactured to the requirements of sections 2, 3, 4, and 5 of AS 2208;
- (e) has minimum illumination of 200 lux, measured on a horizontal plane situated one metre above the floor;
- (f) has electrical installations conforming to the requirements of AS 1076 and of AS 3000 in relation to hazardous areas as referred to in section 9 of AS 3000;

- (g) has ducts in the ventilation system fitted with inspection ports and cleaning ports at places where dust may accumulate; and
 - (h) has an efficient mechanical ventilation system that—
 - (i) is so constructed and maintained that air extracted is passed through a filtering or cleaning device for the removing of airborne contaminants before being discharged;
 - (ii) in the case of a blasting chamber within a building, discharges air to the open air not less than 2 metres above the highest part of the roof of the workplace or at a height sufficient to prevent it from re-entering the workplace or contaminating other premises;
 - (iii) in the case of a down-draught air flow blasting chamber, produces a minimum air velocity of 0.3 linear metres per second; and
 - (iv) in the case of a cross-draught air flow blasting chamber, produces a minimum air velocity of 0.4 linear metres per second in the direction of extraction.
- (2) The employer shall ensure that—
- (a) the door of the emergency exit from a blasting chamber that is provided in accordance with regulation 341 is additional to, and positioned at the furthest position in the chamber from, the primary entrance;
 - (b) the blasting chamber, blasting enclosure and ventilation system are so constructed and maintained as to keep the surrounding workplace free from dust hazard; and
 - (c) the mechanical ventilation system is kept in continuous operation at all times when—
 - (i) abrasive blasting is carried out within a blasting chamber or blasting enclosure and for a minimum period of 5 minutes after the abrasive blasting has ceased; or
 - (ii) cleaning, maintenance or repair is being carried out on a blasting chamber or blasting enclosure, except when operation of the ventilation system may create a hazard, in which case effective alternative means of ventilation may be provided.
- (3) The employer shall ensure that all blasting chambers, blasting enclosures, ventilating system ducts, filtering or cleaning devices, abrasive blasting equipment, skin and foot protective equipment and respiratory equipment are inspected at intervals not exceeding 3 months.
- (4) A person making an inspection under subregulation (3) shall, no later than one day following the day on which the inspection concluded, furnish the employer with a written report which—
- (a) lists the components that were inspected;
 - (b) gives details of the results of the inspection of each component; and
 - (c) makes any necessary recommendation for the maintenance or replacement of any components,
- and shall, where immediate repair or replacement of any component is necessary, forthwith orally inform the employer.
- (5) Where an employer is orally informed under subregulation (4) that immediate repair or replacement of a component is necessary, he shall forthwith stop any abrasive blasting from being conducted until the necessary repair or replacement is effected.

(6) The employer shall ensure that—

- (a) all doors of a blasting chamber or blasting enclosure are kept closed when abrasive blasting is being carried out; and
- (b) all doors of a blasting enclosure other than those which are opened as part of an automatic process for the conveying of articles into or out of the enclosure are interlocked to prevent blasting from taking place in the enclosure while the doors are open.

(7) An employer or employee shall not carry out in a blasting chamber or blasting enclosure work other than abrasive blasting, work immediately incidental to abrasive blasting and the cleaning, maintenance and repair of the blasting chamber or blasting enclosure and equipment therein.

(8) A person who contravenes this regulation commits an offence.

Blasting outside a blasting chamber or enclosure

762. (1) Where abrasive blasting is carried on other than in a blasting enclosure or blasting chamber—

- (a) the employer shall ensure that the process is carried on in such a manner that—
 - (i) no siliceous or toxic dust from the process can be carried into contact with any person; and
 - (ii) where practicable, all siliceous and toxic dust is contained in an area that will substantially reduce any incidence of airborne dust; and
- (b) where the abrasive blasting is carried on at a construction site near a public place, the main contractor shall adopt adequate precautions to trap any abrasive overspray and prevent general pollution of the air.

(2) The employer shall ensure that residue from abrasive blasting carried on outside a blasting chamber or blasting enclosure is cleaned from all surfaces, as soon as practicable after cessation of the process, in such a manner as to prevent the risk of inhalation of siliceous or toxic dusts.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Washing facilities

763. (1) An employer shall provide for the use of employees engaged in or assisting in abrasive blasting—

- (a) basins with hot and cold water in the ratio of one basin to every 5 or part thereof of those employees; and
- (b) showers.

(2) A person who contravenes subregulation (1) commits an offence.

Protective equipment and respiratory equipment

764. (1) The employer shall provide for every person engaged in abrasive blasting—

- (a) an airline respirator of the hood or helmet type complying with section 12 of AS 1716, fitted with—
 - (i) an inner bib; and
 - (ii) a shoulder cape, jacket or protective suit; and
- (b) skin and foot protection to the extent that such protection has not been provided under paragraph (a).

(2) Where a person is engaged in cleaning, maintaining or repairing—

- (a) a blasting chamber or blasting enclosure; or
- (b) an area which has been used for abrasive blasting outside a blasting chamber or blasting enclosure,

the employer shall provide that person with respiratory equipment complying with sections 2, 3, 4, 9 and 10 of AS 1716.

(3) Every employee to whom protective equipment or respiratory equipment has been provided under subregulation (1) or (2) shall wear and make proper use of that equipment.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Air from respiratory equipment

765. (1) An employer shall ensure that air breathed from airline respiratory equipment is supplied at a minimum rate of 170 litres per minute and contains not less than 19.5% and not more than 22% oxygen and that the air so supplied has been first passed through—

- (a) an efficient purifying device to ensure the air—
 - (i) does not have an objectionable or nauseous odour; and
 - (ii) if measured at 150 Celsius and 100 kilopascals, would contain not more than 11 mg/m³ of carbon monoxide, not more than 900 mg/m³ of carbon dioxide, and not more than 1 mg/m³ of oil;
- (b) an efficient conditioner to ensure the air is supplied—
 - (i) at a temperature not less than 15° Celsius and not more than 25° Celsius; and
 - (ii) within a humidity range not less than 20% and not more than 85%;
- (c) an efficient condensate trap fitted with a drain cock to remove any condensed liquid; and
- (d) an efficient ring circuit or controlled leak-off to eliminate stale air.

(2) A person who contravenes subregulation (1) commits an offence.

Equipment for supply of breathing air

766. (1) An employer shall ensure that equipment for supplying air to breathe is maintained in efficient working order and—

- (a) is kept in a place where it will not be contaminated;
- (b) has a thermostatically controlled interlock to cut off the air supply to the equipment should the equipment overheat beyond the manufacturer's specifications; and
- (c) has fittings that are not capable of connection to other compressed air equipment, if any, at the workplace.

(2) A person who contravenes subregulation (1) commits an offence.

Medical examinations

767. (1) If abrasive material containing more than 5% silica (crystalline silicon dioxide) is used, an employer shall, subject to the consent of the employee, arrange at his expense a medical examination, in accordance with subregulation (2), of each employee engaged in or directly assisting in that abrasive blasting—

- (a) within 90 days of the employee commencing that abrasive blasting unless the employer has reasonable grounds for believing that the employee has been medically examined within the previous 3 years on account of having performed work in relation to abrasive blasting; and
- (b) at intervals thereafter not exceeding 3 years for so long as the employee continues to be so engaged.

(2) The medical examination referred to in subregulation (1) shall include—

- (a) an occupational history of any work in relation to abrasive blasting;
- (b) a clinical examination;
- (c) a chest radiograph; and
- (d) a lung function test.

(3) If as a result of a medical examination under subregulation (1) the examining medical practitioner considers there is a need for further medical examination in relation to the employee's occupation, the employer shall, subject to the consent of the employee, arrange at his expense for such examination.

(4) A medical practitioner who performs a medical examination under this regulation shall within 14 days after the examination—

- (a) notify the employer and the employee, in writing, as to whether or not the employee is medically fit to continue to work at abrasive blasting; and
- (b) notify the Commissioner, in writing, if the employee is found to be suffering from silicosis.

(5) A medical practitioner who performs a medical examination under this regulation shall on written request by the person examined supply his findings on the examination to a medical practitioner nominated by that person.

(6) A person who contravenes this regulation commits an offence.

Retention of medical notification by employer

768. (1) An employer shall retain the latest notification received under regulation 767 (4) (a) in respect of an employee and shall make it available for examination by an inspector on request.

(2) A person who contravenes subregulation (1) commits an offence.

ART 8—CERTAIN HAZARDOUS SUBSTANCES*Division 1—Asbestos***Interpretation**

801. In this Division unless the contrary intention appears—

“asbestos dust” means airborne dust consisting of or containing a time weighted average fibre concentration of asbestos, in excess of the exposure standard, when measured by the membrane filter method as approved by the National Health and Medical Research Council in October 1976;

“asbestos material” means—

- (a) loose asbestos fibre;
- (b) material containing loose asbestos fibre for use in an asbestos process; and
- (c) waste material containing asbestos fibre that has been collected in a workplace;

“asbestos process” means any manufacturing process involving the use or handling of asbestos or any substance containing asbestos, and includes—

- (a) the sawing, cutting and sanding of asbestos materials;
- (b) the repair, maintenance and replacement of asbestos surfaces;
- (c) the cleaning and disposal of asbestos materials; and
- (d) the mixing and application of asbestos shorts, cements, grouts, putties and similar compounds;

“asbestos processing area” means an area of a workplace in which an asbestos process is carried out.

Subdivision 1—Asbestos generally

Application

802. This Subdivision applies in respect of all workplaces.

Maintenance of asbestos surfaces

803. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that—

- (a) every asbestos surface is kept in good condition;
- (b) any repair or sealing necessary to prevent the breaking up of asbestos or the release of airborne asbestos is done promptly; and
- (c) maintenance, replacement, removal or repair of an asbestos cement surface is carried out in the approved manner.

(2) A person who contravenes subregulation (1) commits an offence.

Storage and disposal of asbestos

804. (1) A person who, in the case of a construction site, is the main contractor or a subcontractor or, in the case of any other workplace, is the employer shall ensure that—

- (a) asbestos when stored, moved or removed for disposal is contained in a receptacle so designed as to prevent the contents escaping into the atmosphere of the workplace; and
- (b) a receptacle referred to in paragraph (a) is, when no longer required, disposed of in an approved manner.

(2) A person who contravenes subregulation (1) commits an offence.

Sealing or removal of insulating material

805. (1) Where asbestos-based thermal acoustic insulating materials have been used for any purpose in a workplace the Commissioner may issue a written notice to the employer requiring him to remove or seal the insulating material in such manner and within such time as the Commissioner directs.

(2) Where the Commissioner issues a notice to an employer under subregulation (1) the employer commits an offence if he does not comply with the notice and, where removal is required, engage the services of an asbestos removalist licensed under regulation 823 to carry out the work in the approved manner.

Prohibition on use of compressed air etc.

806. (1) A person shall not use or cause or permit to be used compressed air, dry brushing or a dry sweeping method in any work involving the use or handling of asbestos or any material containing asbestos.

(2) A person who contravenes subregulation (1) commits an offence.

Spraying processes

807. (1) A person shall not use or cause or permit to be used asbestos or any material containing asbestos in a spraying process.

(2) A person who contravenes subregulation (1) commits an offence.

Crocidolite and amosite

808. (1) A person shall not use or handle or cause or permit a person to use or handle crocidolite or amosite or a product containing crocidolite or amosite.

(2) A person who contravenes subregulation (1) commits an offence.

*Subdivision 2—Asbestos processes
not on construction sites*

Application

809. This Subdivision applies only in respect of a workplace in which an asbestos process is carried out that is not a construction site.

Duties of employer

810. (1) Subject to subregulation (2), an employer shall ensure that his workplace is kept free from asbestos dust by—

- (a) the use, during an asbestos process, of an efficient exhaust system incorporating a dust collector;
- (b) not commencing an asbestos process unless the exhaust system is fully operational; and
- (c) where a dust collector or other component of an exhaust system becomes deficient during an asbestos process, immediately stopping the asbestos process and not resuming it until the deficient component is repaired or replaced.

(2) In circumstances where it is not practicable to have an exhaust system, an employer shall ensure that—

- (a) employees engaged in the process are provided with and use non-powered tools or tools which incorporate suitable dust suppression or dust extraction attachments; and
- (b) employees and other persons in the workplace exposed to asbestos dust are—
 - (i) provided with respiratory equipment and use it in accordance with AS 1715; and

- (ii) provided with and wear protective coverall clothing which is waterproof, disposable or made of reusable polyester cotton blend or similar material so as to ensure that they are adequately protected from the asbestos dust.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Dust collectors

811. (1) An employer shall ensure that the dust collector in an exhaust system provided in accordance with regulation 810 (1) (a) is—

- (a) installed in an enclosure designed to prevent the escape of asbestos;
- (b) replaced forthwith whenever the likelihood of a leakage of asbestos occurs; and
- (c) not emptied, cleaned, agitated or reconditioned except by mechanical or other means such that asbestos dust does not escape back into the atmosphere of the workplace.

(2) A person who contravenes subregulation (1) commits an offence.

Maintenance of exhaust systems

812. (1) An employer at whose workplace an exhaust system is provided under regulation 810. (1) (a) shall have an effective programme for the maintenance of the exhaust system and particulars of this programme and of maintenance carried out shall be made available by the employer to any health and safety representative, member of a health and safety committee, or other employee who requests such particulars.

(2) A person who contravenes subregulation (1) commits an offence.

Treatment of protective clothing

813. (1) An employer shall ensure that all articles of protective clothing worn by his employees during an asbestos process are cleaned—

- (a) at least daily if worn in a processing area where asbestos dust is present;
- (b) at least weekly if worn in a processing area where asbestos dust is not present,

and that such cleaning is carried out at a commercial laundry or within the workplace if it has approved facilities for cleaning.

(2) An employer shall not permit an employee of his to remove from the workplace an article of protective clothing worn during an asbestos process except for despatch to a commercial laundry for cleaning and he shall ensure that all clothing removed for this purpose is thoroughly wetted and sealed in impermeable bags which are clearly marked to show that they contain asbestos contaminated material.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Duties of employees

814. (1) An employee working in an asbestos processing area shall—

- (a) use any tools and other equipment provided in accordance with regulation 810 (2); and
- (b) handle asbestos material in such a manner as to minimise the release of airborne asbestos during the asbestos process.

(2) An employee working in an asbestos process for whose use protective coverall clothing and respiratory equipment has been provided shall wear the clothing and wear and make proper use of the respiratory equipment in compliance with sections 4 and 5 of AS 1715.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Cleaning of workplace

815. (1) Without derogating from regulation 316, an employer shall ensure that his workplace is maintained in a clean condition and, in particular, shall ensure that—

- (a) all machinery, apparatus, equipment, work benches, furniture and other fittings used for the purpose of an asbestos process;
- (b) the external surfaces of any exhaust system and vacuum cleaning equipment; and
- (c) the floor, walls, ceilings or inside part of the roof and other interior surfaces,

are kept as far as practicable free of asbestos and other waste materials.

(2) Without derogating from the requirements imposed by subregulation (1), an employer shall ensure that cleaning is carried out for the purposes of subregulation (1)—

- (a) on completion of an asbestos process or at least daily; and
- (b) by means of approved vacuuming equipment or some other suitable method so that so far as practicable asbestos is not discharged into the atmosphere of the workplace.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Warning signs

816. (1) An employer shall ensure that a safety warning sign with the words “DANGER—ASBESTOS” is prominently displayed at each entry to every asbestos processing area.

(2) A person who contravenes subregulation (1) commits an offence.

Subdivision 3—Asbestos on construction site

Interpretation

817. In this Subdivision “asbestos removal work” means construction work involving the removal or sealing of installed thermal or acoustic installation materials which consists of, or contains, asbestos.

Application

818. This Subdivision applies only in respect of a construction site.

Asbestos not to be sprayed

819. A person who sprays asbestos or causes asbestos to be sprayed commits an offence.

Asbestos cement building materials

820. (1) Where any construction work involving the use or cleaning of asbestos cement building materials is to take place every person carrying out the work shall ensure that it is carried out in compliance with the Code of practice entitled "Working with Asbestos Cement (Fibrocement) Building Material" published by the National Health and Medical Research Council in 1979 as amended at the 91st Session of the Council in June 1981.

(2) Every person carrying out work involving the use of asbestos cement building materials shall—

- (a) not use any tools other than non-powered hand tools or approved portable power tools that incorporate approved dust suppression or dust extraction attachments;
- (b) use approved respiratory equipment when, by the nature of the work, the person may be exposed to airborne asbestos fibres or dust;
- (c) where possible work in the open air or a well ventilated area;
- (d) use approved vacuum cleaning equipment to collect dust and chips or wet the area before sweeping;
- (e) ensure that persons in the vicinity of the work are not exposed to asbestos dust as a result of the work; and
- (f) clean asbestos cement building materials in an approved method.

(3) Every person engaged in the demolition or removal of asbestos cement building material shall—

- (a) ensure that dust levels are kept to a minimum by the use of water or other measures that are practical under existing working conditions;
- (b) use approved respiratory equipment; and
- (c) ensure that persons in the vicinity are not exposed to asbestos dust as a result of the work.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Incidental exposure to asbestos dust

821. (1) Before any construction work is commenced, a person who is the main contractor or a subcontractor shall determine if there is any thermal or acoustic insulating material containing asbestos in close proximity to the proposed work.

(2) Where there is thermal or acoustic insulating material containing asbestos within close proximity to the proposed work but the proposed work does not include the removal of that material, a person who is the main contractor or a subcontractor shall, if asbestos fibres are or may be dispersed into the atmosphere as a result of that work, ensure that—

- (a) approved respiratory equipment is provided for the use of the persons carrying out the work and is maintained in accordance with the relevant requirements of AS 1715 and those persons are instructed to use it in accordance with the relevant requirements of that Standard;
- (b) approved protective coverall clothing of one of the following types is provided to be worn by the person carrying out the work—
 - (i) disposable;
 - (ii) reusable polyester cotton blend; or
 - (iii) waterproof; and
- (c) persons in the vicinity of the work are not exposed to asbestos dust as a result of that work.

(3) On completion of any work to which subregulation (2) applies a person who is the main contractor or a subcontractor shall ensure that the work area is left in a clean and safe condition either by washing or vacuuming and that any material containing asbestos is not left in such a state that asbestos fibres may be dispersed into the atmosphere.

(4) The Commissioner may direct a person to carry out tests to ascertain if asbestos is present in the workplace and the costs of such tests shall be borne by that person.

(5) A person who contravenes subregulation (1), (2), (3) or (4) commits an offence.

Asbestos removal work

822. (1) A person carrying out asbestos removal work shall maintain the standard of personal hygiene and use such protective equipment as is required by section 8 of the Code for the Safe Removal of Asbestos—Based Thermal/Acoustic Insulating Materials published by the National Health and Medical Research Council in 1979 as amended by the 91st Session of the Council in June 1981.

(2) A person who contravenes subregulation (1) commits an offence.

Asbestos removalist licence

823. (1) A person who carries out, or causes or permits another person to carry out, asbestos removal work commits an offence unless—

- (a) the person actually carrying out the work is licensed under this Subdivision as an asbestos removalist or he does so as an employee of a person so licensed;
- (b) the approval in writing of the Commissioner to commence the work has been given; and
- (c) the work is carried out in accordance with the licence.

(2) A person may apply to be licensed as an asbestos removalist by submitting to the Commissioner an application in the approved form, accompanied by a fee of \$2 000 that shall be refunded if the application is refused.

(3) On an application made in accordance with subregulation (2), the Commissioner may, if he is satisfied that the applicant is able to carry out asbestos removal work in a safe and proper manner, issue to the applicant a licence as an asbestos removalist.

(4) A licence may be issued under subregulation (1) subject to such conditions, if any, as the Commissioner sees fit and endorses on the licence.

(5) A licence under this regulation has effect for 2 years from its issue unless it is sooner cancelled or suspended under subregulation (6).

(6) If a licensee—

- (a) commits an offence against these regulations; or
- (b) in the opinion of the Commissioner—
 - (i) breaches a condition of his licence; or
 - (ii) is unable to comply with a condition of his licence or a provision of these regulations,

the Commissioner may, by notice in writing, cancel or suspend the licence.

Register

824. (1) The holder of a licence under regulation 823 commits an offence unless—

- (a) on being issued with the licence, he notifies the Commissioner of the name, address, and date of birth of every person employed by him to do asbestos removal work; and

- (b) within 7 days of the commencement or termination of the employment by him of a person as an asbestos removalist, he notifies the Commissioner of the name, address, and date of birth of that person.
- (2) The Commissioner shall maintain a register of the details of which he is notified under subregulation (1) and shall keep those details for at least 40 years.

Code and licence to be available

825. The holder of a licence under regulation 823 commits an offence unless, at each place at which asbestos removal work is carried out under the authority of his licence—

- (a) a copy of the licence; and
 - (b) a copy of the Code mentioned in regulation 822,
- are available for inspection and are produced upon reasonable request.

Division 2—Lead

Interpretation

826. In this Division unless the contrary intention appears—

“damp” means sufficiently moist to prevent the escape of dust;

“lead burning” means the melting of lead by an oxy-gas flame or otherwise so as to induce metal to flow for the purpose of tacking or joining metals and includes the melting of lead for the purpose of the repair or construction of lead vats;

“lead material” means material containing metallic lead or an inorganic lead compound in an amount such that the lead content of the anhydrous material is in excess of 5% by weight;

“lead process” means any process involving—

- (a) the use or handling of lead material;
- (b) the storage, manipulation, movement, or other treatment of lead material whether by means of any furnace, melting pot, retort, condensing chamber, flue, or other container;
- (c) the melting or casting of lead or a lead material;
- (d) the cleaning or demolition of any furnace, melting pot, retort, condensing chamber, flue, or container in which lead material has been processed or contained;
- (e) the recovery of lead, including the breaking up of lead storage batteries;
- (f) lead burning; or
- (g) any other work that exposes a person to dust or fumes from lead material,

but does not include the handling of metallic lead in circumstances that do not give rise to lead dust or lead fumes.

Application

827. This Division applies only in respect of a workplace, in which a lead process is carried out.

Duties of employer

828. (1) In this regulation "efficient exhaust draught" means local ventilation by heat or mechanical means for the removal of gas, vapour, fumes and dust so as to prevent, as far as practicable under atmospheric conditions usually prevailing, such contaminants from escaping into the workplace and the concentration of lead from exceeding the exposure standard, but the term does not include an exhaust draught which fails to remove smoke generated at the point where such contaminants originate.

(2) An employer shall ensure that—

- (a) where a lead process is carried on so as to give rise to dust, unless it is in a foundry or it is not practicable to do so—
 - (i) the floor is constructed of bricks, concrete or other material impervious to fluids, is kept drained and is maintained in a damp state and in such condition as to minimize impregnation into it of lead material; and
 - (ii) the floor, except such portion as is permanently set apart for the deposit of lead material, is washed down with water once a day;
- (b) no lead material (other than metallic lead) is stored or allowed to remain on any part of the floor not permanently set apart for the purpose other than for the minimum time necessary for the lead process being carried out;
- (c) lead material (other than metallic lead) handled or moved is—
 - (i) under an efficient exhaust draught;
 - (ii) so enclosed as to prevent the escape of dust into the atmosphere of any place where work is carried on;
 - (iii) except in a foundry, damp; or
 - (iv) where compliance with an appropriate condition prescribed in subparagraph (i), (ii) or (iii) is not practicable, handled or moved by persons wearing suitable respiratory equipment to filter out harmful dust or fumes;
- (d) where a process involving—
 - (i) melting old or dirty scrap lead;
 - (ii) heating lead material so that vapour containing lead is given off; or
 - (iii) the assembly of lead accumulators,
 is carried on, an efficient exhaust draught is provided or other measures are taken that prevent the escape of gas, vapour, fumes or dust from the process into any place where work is carried on;
- (e) no container or sack which has contained lead material is cleaned and no lead material is broken up, crushed or ground unless such container or sack or lead material is damp, or is placed in an apparatus so enclosed as to prevent the escape of dust;
- (f) protective clothing which has been provided for a person employed in a lead process is washed, cleaned or renewed once a week or more frequently where necessary to protect the health or safety of employees;
- (g) except where the process is on a construction site, basins with hot and cold water are provided in the ratio of one basin to every 5 or part thereof employees engaged in a lead process;
- (h) except where the process is on a construction site, showers are provided for the use of employees engaged in a lead process;

- (i) except where the process is on a construction site, the area for eating and drinking provided under regulation 338. (1) is air locked from any room in which a lead process is carried on and that there is no door or other means of entry directly from such room into the area set aside for eating and drinking by employees; and
 - (j) where the process is on a construction site, running water is available to enable employees engaged in a lead process to wash.
- (3) Where it is not practicable to comply with subregulation (2) (a) or it is not practicable to comply with subregulation (2) (d), the employer shall ensure that every person who is—
- (a) engaged in the process carried on;
 - (b) engaged in cleaning up dust from lead materials; or
 - (c) for any other reason likely to be exposed to fumes or dust from lead material,
- wears suitable respiratory equipment.
- (4) A person who contravenes subregulation (2) or (3) commits an offence.

Washing time

- 829.** (1) An employer shall allow a person working on a lead process 5 minutes for washing—
- (a) prior to commencement of a work break given for that person to eat or drink; and
 - (b) prior to the time when he would otherwise be required to cease duty.
- (2) A person who contravenes subregulation (1) commits an offence.

Employment of young persons prohibited

830. An employer who permits a person under 16 years of age to work in a lead process commits an offence.

Duties of employee

- 831.** (1) A person employed in a lead process shall—
- (a) refrain from smoking while his hands are contaminated with lead material;
 - (b) wash his face, neck, hands and arms in the wash room or facilities provided before eating or drinking and on ceasing work on a lead process; and
 - (c) remove any contaminated clothing or personal protective equipment before entering an area set aside for the consumption of food.
- (2) A person who contravenes subregulation (1) commits an offence.

PART 9—SAFETY IN CARRYING OUT PARTICULAR TYPES OF CONSTRUCTION WORK

Application

- 901.** This Part applies only in relation to a construction site.

*Division 1—Scaffolding other than gantries***Application**

902. This Division does not apply in relation to a gantry.

Interpretation

903. In this Division—

“light duty suspended stage” means a working platform suspended from overhead supports and—

- (a) the means of lowering or raising the stage, whether those means are operated by hand or are power driven;
- (b) the overhead supports, attachments and tracks; and
- (c) the means of suspension;

“suspended scaffolding” includes the cantilevers, the means of securing them to the structure and the platform suspended from the cantilevers, together with the winches by which the platform is raised or lowered.

Scaffolding to be erected and used in accordance with Schedule 6

904. (1) A person shall not erect any scaffolding other than in accordance with Schedule 6 and regulation 351 or as is approved.

(2) A person shall not use, work on, operate or manage any scaffolding that is erected contrary to subregulation (1).

(3) A person shall not use, work on, operate or manage any scaffolding other than in accordance with Schedule 6 and regulation 351 or as is approved.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Welding of lugs and saddle pieces

905. (1) A person who welds lugs or saddle pieces to a steel structure or tank on which scaffolding is, or is to be, supported—

- (a) shall not depart for any purpose whatever, leaving a lug or saddle piece partially and incompletely welded; and
- (b) shall endorse his initials, with a durable crayon, on the structure or tank, immediately adjacent to every lug or saddle piece that has been finally and completely welded.

(2) A person who contravenes subregulation (1) commits an offence.

Boatswain’s chairs

906. (1) A person who constructs or erects a boatswain’s chair commits an offence unless it is of an approved design or meets the requirements of Part 5 of Schedule 6.

(2) A person who uses a boatswain’s chair for the first time after—

- (a) it is constructed or re-constructed; or
- (b) any substantial period of disuse,

commits an offence unless he ensures that—

- (c) it is in accordance with subregulation (1);
- (d) any safety warning sign required by subregulation (4) to be displayed is so displayed; and
- (e) the boatswain's chair has been examined and found suitable for use by an inspector or other approved person.

(3) A person under the age of 18 years who works on, uses, erects or operates a boatswain's chair commits an offence.

(4) Where a boatswain's chair is over an area that is a thoroughfare, the person who erects or uses it commits an offence if he does not ensure that a safety warning sign is displayed below the overhead support of the boatswain's chair so as to be visible to any person approaching the area, bearing the words "DANGER—WORKERS ABOVE".

Light duty suspended stage

907. (1) A person who constructs or erects a light duty suspended stage commits an offence unless it is of an approved design or meets the requirements of Part 6 of Schedule 6.

(2) A person who uses a light duty suspended stage for the first time after—

- (a) it is constructed or re-constructed; or
- (b) any substantial period of disuse,

commits an offence unless he ensures that—

- (c) it is in accordance with subregulation (1);
- (d) any safety warning sign required by subregulation (4) to be displayed is so displayed; and
- (e) the stage has been examined and found suitable for use by an inspector or other approved person.

(3) A person under the age of 18 years who works on, uses, erects or manages a light duty suspended stage commits an offence.

(4) Where a light duty suspended stage is over an area that is a public place, the person who erects or uses it commits an offence if he does not ensure that a safety warning sign bearing the words "DANGER—WORKERS ABOVE" is displayed at each end of the area under the stage so as to be visible to any person approaching the area.

(5) A person who fits or uses an outrigger or projecting platform on a light duty suspended stage unless approved, commits an offence.

(6) Where there are, on a light duty suspended stage, at any time—

- (a) more than 2 persons; or
- (b) 2 persons and a further load exceeding 25 kg,

each of those persons commits an offence.

Suspended scaffolding

908. (1) A person who constructs or erects suspended scaffolding commits an offence unless it is of an approved design.

(2) A person who uses suspended scaffolding for the first time after—

- (a) it is constructed or re-constructed; or
- (b) any substantial period of disuse,

commits an offence unless, in addition to it being in accordance with subregulation (1), the suspended scaffolding has been examined and found suitable for use by an inspector or other approved person.

(3) The main contractor or a subcontractor commits an offence if he does not ensure that a notice is displayed on suspended scaffolding specifying the weight approved as being the maximum load to be carried by the scaffolding.

Division 2—Gantries, hoardings and barricades

Interpretation

909. In this Division—

“barricade” means a temporary fence consisting of rigid vertical and horizontal members;

“gantry” means a structure that is used—

- (a) for the overhead protection of persons; and
- (b) for the support of materials and persons;

“hoarding” means a substantial and fully sheeted fence or screen.

Public safety

910. (1) Subject to subregulations (2) and (3), the main contractor in relation to a construction site that is near or adjacent to any public place shall ensure that no construction work is carried out at the site until there has been erected—

- (a) if it is necessary to exclude persons other than those working at the site from the site, a barricade or, if it is necessary to provide a greater measure of safety than would be provided by a barricade, a hoarding; and
- (b) if the height of any part of the building or structure exceeds or is intended to exceed a height that is twice the horizontal distance between the building or structure or the proposed building or structure and the boundary of any public place adjacent to the site, a gantry.

(2) Notwithstanding subregulation (1), construction work may be carried out on a construction site adjoining a footway that is used by the public if an inspector considers that the safety of the public will be adequately provided for by the erection of scaffolding and gives his approval under this subsection and, in accordance with that approval, there has been erected at the site scaffolding that—

- (a) has the first stage decked over the full width of the footway or if the scaffolding does not extend to the full width of the footway—
 - (i) the scaffolding has, at the first stage, approved overhead protection extending along the outside and returned at both ends of the scaffolding; and
 - (ii) both the decking and the overhead protection of the scaffolding are placed in position before any work is commenced;
- (b) provides, where necessary, access for materials through openings that are railed off to prevent the public from passing under the scaffolding at the point of access;
- (c) has night lights at both ends, at access ways through the scaffolding and elsewhere as directed by an inspector;

- (d) has standards that are painted white to a height of 2.05 m and all sharp and protruding members protected by hessian or a similar material;
- (e) where the type of work so requires, has a fender board and protective screen to the outside and ends of the scaffolding; and
- (f) conforms to any safety requirements that are necessary for the protection of the public and the persons on the site.

(3) Subregulation (1) does not apply by reason only of construction work that is demolition if the safety of the public will not be endangered if no barricade, hoarding or gantry is erected, unless the Commissioner directs otherwise but nothing in this subregulation limits the application of Division 5.

(4) A person who contravenes subregulation (1) commits an offence.

Approval of gantry design

911. (1) Where a person commences to build a gantry before the plans and specifications for the gantry have been approved, or other than in accordance with approved plans and specifications, the main contractor commits an offence.

(2) A gantry shall not be approved under subsection (1) unless it is designed to withstand a loading of—

- (a) 730 kg/m², where the gantry is to be used for storing material or where loads are to be lifted over it;
- (b) 360 kg/m², where the gantry is to be used for carrying site offices or for demolition work; or
- (c) 100 kg/m², where the gantry is to be used only to provide public protection during alterations, painting or similar work.

(3) Except where it would not be reasonably practicable to build the gantry to those specifications, approval shall not be given under subsection (1) unless the gantry—

- (a) where it is erected over a footway that is used by the public, provides a minimum vertical distance of 2.1 m from the footway to any horizontal or diagonal transverse member;
- (b) has no members closer than 300 mm to the edge of a road kerb;
- (c) has standards that—
 - (i) are founded on approved base plates and sole plates with minimum dimensions of—
 - (A) 216 mm in width by 60 mm in thickness in the case of a gantry designed to withstand a loading of 730 kg/m²; or
 - (B) 216 mm in width by 30 mm in thickness in the case of a gantry designed to withstand a loading of 360 kg/m² or less,
 that extend over the full length of the gantry; and
 - (ii) are painted white to a height of 2.1 m;
- (d) has a main decking that consists of closely laid planks that conform to clause 18 (1) of Schedule 6;
- (e) has a waterproof cover of metal or other approved material that has a slope of at least 1 in 40 and is capable of effectively shedding water and excluding dust and rubble from the footway area;
- (f) has a continuous handrail located on the outer standards 900 mm above the footway level;

- (g) has night lights that provide adequate illumination of the area at each end and under the gantry;
 - (h) has a hoarding attached to the inner standards and extending to the underside of—
 - (i) where demolition work is being carried out, the decking; or
 - (ii) in any other case, the decking or waterproof cover, whichever is lower;
 - (i) has any area between the hoarding and the under side of the decking enclosed by a wire mesh of at least 2.5 mm with a maximum aperture of 50 mm;
 - (j) has any fittings or sharp protruding members protected by wrappings of hessian or similar material;
 - (k) has the outer edge and ends of the main decking provided with a rigid guard rail with the area between the surface of the decking and the guard rail enclosed by a fender board;
 - (l) extends at least 2 m beyond each end of the limits of the site or any working platform erected adjacent to the site; and
 - (m) is braced or tied to substantial ground anchors or otherwise secured from overturning.
- (4) A gantry of steel tube shall not be approved under subregulation (1) unless the gantry—
- (a) is of a design that conforms to Schedule 7;
 - (b) has steel tubes and fittings that are in accordance with clauses 2, 3, 5, 6 and 7 of Schedule 6;
 - (c) has standards that are spaced at distances not exceeding 2 m; and
 - (d) is braced to form a rigid stable structure.
- (5) A fabricated steel gantry shall not be approved under subregulation (1) unless certified design calculations in respect of it have been submitted and approved.

Gates of hoarding not to open outwards

912. (1) The main contractor shall ensure that no hoarding has gates or doors that open over the area outside the construction site.
- (2) A person who contravenes subregulation (1) commits an offence.
- (3) A person who leaves open any gate or door of a hoarding at a construction site except when providing access to or egress from the site commits an offence.

Specifications for gantries

913. Where a person uses a gantry, the main contractor commits an offence unless the gantry is in accordance with the plans and specifications approved under regulation 911.

Protection to remain in position until work completed

914. A person who removes or interferes with a barricade, hoarding or gantry on a construction site before the work for which it was erected has been completed commits an offence.

*Division 3—Formwork and falsework***Formwork and falsework**

- 915.** (1) A person shall not use or construct formwork or falsework unless—
- (a) the formwork or falsework is so designed, erected, supported, braced and maintained that it supports safely all vertical or lateral loads and withstands any force that may be applied to the loads until the loads can be supported by the concrete structure;
 - (b) vertical or lateral loads are carried to the ground by the falsework and by the in-place construction that has attained adequate strength for the purpose;
 - (c) the formwork or falsework is braced by lateral or diagonal bracing in vertical or horizontal planes where required and to the extent necessary to ensure the stability of the whole framework and to prevent buckling of individual members;
 - (d) the formwork or falsework is supported by sole plates, spread footings or pile footings with sufficient capacity to carry the maximum loads intended to be imposed on the formwork or falsework;
 - (e) the sole plates used in the formwork or falsework are—
 - (i) continuous;
 - (ii) bedded evenly over their whole bearing; and
 - (iii) borne on undisturbed or compacted soil; and
 - (f) the falsework is so designed as to allow vertical adjustments to be made to facilitate erection and stripping of the formwork.
- (2) A person shall not use a wedge—
- (a) at both ends of a shore; or
 - (b) in a manner that allows the wedge to move.
- (3) Where a person constructing formwork or falsework—
- (a) uses a “U” head and a steel shore to support a timber bearer; and
 - (b) the width of the bearer is less than the width of the “U” head,
- that person shall centre the bearer over the shore.
- (4) A person shall—
- (a) carry out stripping of formwork or falsework in a systematic manner and so as to minimize damage to the components; and
 - (b) upon completion of the work, stack the components of the formwork or falsework so that there is no obstruction either to accessways or to work areas.
- (5) A person who contravenes subregulation (1), (2), (3) or (4) commits an offence.

*Division 4—Excavation work***Equipment near excavation work**

- 916.** (1) A person shall not place a hoisting appliance, power driven equipment or any other load in or near an excavation unless the sides of the excavation have been adequately supported to prevent the collapse of the sides of the excavation.
- (2) A person shall not place, overburden or surcharge in a place that is less distant from an excavation than one-third of the depth of the excavation.
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

Where person at risk due to excavation

917. (1) Where any person is at risk because of excavation work, the main contractor commits an offence unless he—

- (a) erects, as close as possible to any likely cause of the danger, suitable barriers to a height of not less than 900 mm between the person and the likely cause of the danger; and
- (b) maintains sufficient and safe means of access—
 - (i) into the excavation;
 - (ii) out of the excavation; and
 - (iii) across the excavation.

(2) A person who works in an excavation without at least one other person in the immediate vicinity of the excavation commits an offence.

Shoring in excavations

918. (1) A person who is the main contractor or a subcontractor shall ensure that on the construction site—

- (a) every face of any excavation that exceeds a depth of 1.5 m is supported or contained by shoring unless—
 - (i) the face is cut back to a safe slope;
 - (ii) the material in the face has good standing quality under all anticipated conditions of work and weather; or
 - (iii) by reason of the nature of the work and the position of the persons in the vicinity of the work there is no danger to those persons;
- (b) the shoring of the excavation is braced as the excavation progresses and, where a mechanical digger is used the shoring, is kept as close as practicable to the digger; and
- (c) the shoring extends at least 200 mm above the surrounding ground level or a similar protection is provided at the edges of the excavation by a fender board.

(2) A person who contravenes subregulation (1) commits an offence.

Shoring of trenches

919. (1) A person shall not excavate in a trench that exceeds a depth of 1.5 m unless—

- (a) the timber shoring of the trenches is comprised of sheeting boards secured in position by a system of walings and struts;
- (b) the sheeting boards—
 - (i) are vertical;
 - (ii) are either closely boarded in the case of an excavation in sandy soil or boarded at maximum intervals not exceeding 1.25 m in the case of cohesive soils; and
 - (iii) have cross-sectional dimensions of at least 235 mm by 38 mm;

- (c) the walings are—
- (i) parallel to the bottom of the trench;
 - (ii) supported by cleats attached to the sheeting boards;
 - (iii) positioned in the trench so that one waling is not more than 500 mm below the surrounding ground level and except where equal support is given by sheeting driven into the excavation another waling is not more than 500 mm above the bottom of the excavation; and
 - (iv) placed with the smaller dimensions against the sheeting boards; and
- (d) the struts—
- (i) are horizontal and at right angles to the walings; and
 - (ii) have cleats that extend over the walings.
- (2) A person who contravenes subregulation (1) commits an offence.

Specifications of shoring

920. A person who enters a trench for the purpose of carrying out any construction work commits an offence unless—

- (a) the shoring in the trench conforms to the specifications and arrangements approved by a qualified civil engineer; or
- (b) where the trench does not have a depth that exceeds 6 m, the shoring in the trench conforms to the requirements specified in the table to this regulation and the notes thereto.

TABLE TO REGULATION 920

MAXIMUM DEPTH OF TRENCH (Metres)	WALINGS		STRUTS	
	Min. Member Size (Millimetres)	Max. Vertical Spacing (Metres)	Min. Member Size (Millimetres)	Max. Horizontal Spacing (Metres)
3.0	125 × 125	1.5	125 × 125	1.8
	125 × 125	0.9	125 × 125	2.4
	100 × 100	0.8	100 × 100	1.8
	100 × 100	0.5	100 × 100	2.4
4.5	125 × 125	1.0	125 × 125	1.8
	125 × 125	0.6	125 × 125	2.4
	100 × 100	0.5	100 × 100	1.8
6.0	125 × 125	0.80	125 × 125	1.8
	125 × 125	0.45	125 × 125	2.4

Note:

1. For dry and moist sandy soil conditions only.
2. Use karri with F14 minimum stress grade or timber of equal strength.
3. Minimum sheeting board size—235 mm × 38 mm.
4. Strut sizes detailed assume a maximum trench width of 3 m.
5. Strut sizes detailed assume only comprehensive forces applied, no direct bending forces.
6. Only waling and strut details on the same line relate.
7. The waling spacing nominated for a particular depth trench is to apply for the entire depth.

Trench jacks

921. A person who uses a trench jack in a trench commits an offence unless the trench jack is of an approved design.

Steel trench sheeting or piling

922. A person who carries out any steel trench sheeting or piling commits an offence unless—

- (a) the device lifting or positioning the steel trench sheet or pile is fitted with an approved mechanical device that positively locks the lifting device to the pile or steel trench sheeting;
- (b) the steel trench sheet or pile is controlled either by a tail rope or in some other approved manner; and
- (c) the hammer used for driving the steel trench sheet or pile is hooked from the supporting crane except where—
 - (i) the hammer is fitted with guide runners that have a maximum clearance between the runners and the steel trench sheet or pile and sufficient projection below the top of the steel trench sheet or pile so that the hammer does not incline more than 5 degrees from the vertical; and
 - (ii) the steel trench sheet or pile has been driven into the ground not less than 25 per cent of its length.

*Division 5—Demolition***Interpretation**

923. In this Division “demolition contractor” means—

- (a) a person who has a contract to carry out demolition on a construction site; or
- (b) if there is no such person as referred to in paragraph (a), the main contractor in relation to any construction site where demolition is carried out.

Demolition to be in accordance with these regulations or as approved

924. (1) A demolition contractor shall ensure that no demolition is carried out by him or any employee of his other than in accordance with this Division or as approved.

(2) A demolition contractor who contravenes subregulation (1) commits an offence.

Safety precautions

925. A person who carries out demolition commits an offence unless—

- (a) where the building or structure to be demolished has a height that exceeds twice the distance between the closest part of the building or structure to be demolished and the boundary of a public place—
 - (i) the demolition is carried on wholly inside a building or structure and the debris from the demolition is prevented from falling or rebounding outside the building or structure; or
 - (ii) approved overhead protection has been erected;

- (b) where there is a risk that any person (other than persons working on the site) might be injured as a result of demolished or other material falling or rebounding there are provided—
 - (i) a fence or barricade to prevent persons from entering the site; and
 - (ii) safety warning signs warning persons of that risk, fixed in positions where they will be readily visible to persons approaching the area;
- (c) all practicable steps have been taken to protect persons from injury and property from damage arising from—
 - (i) leakage or accumulation of gas or vapour;
 - (ii) flooding of water mains, drains or sewers;
 - (iii) fire or explosion;
 - (iv) electric shock;
 - (v) demolished or other material falling or rebounding,
 or any combination of those events; and
- (d) where the glass in any window, door or other opening in the building or structure to be demolished may otherwise break during the demolition and cause injury to any person either—
 - (i) all the glass from the window, door or other opening has been removed; or
 - (ii) the window, door or other opening has been boarded up in such a manner as to prevent such injury.

Demolition contractor to undertake survey

926. (1) A demolition contractor shall, before allowing any demolition to commence, undertake a survey and examination of the building or structure to be demolished in accordance with the requirements of sections 2.4.1 to 2.4.11 of AS 2601.

(2) The survey referred to in subregulation (1) shall include a planned method of demolition which shall be recorded and made available upon request to an inspector.

(3) A demolition contractor who contravenes subregulation (1) commits an offence.

Asbestos in demolition

927. (1) Where in any building or structure that is to be demolished there is any thermal or acoustic insulating material containing asbestos, a demolition contractor or any person carrying out the demolition—

- (a) shall not commence; or
- (b) shall immediately cease,

that demolition when the presence of that material is apparent, and shall not proceed with the demolition until the material has been removed in accordance with subregulation (2).

(2) A person shall not remove any insulating material referred to in subregulation (1) other than in accordance with Division 8.

(3) A person who contravenes subregulation (1) or (2) commits an offence.

Limited entry on site of demolition

928. (1) After demolition has commenced a demolition contractor shall not allow any person to enter or remain on the construction site other than—

- (a) a person carrying out the work;
 - (b) a person authorized by the demolition contractor to enter the site for a purpose connected with the carrying out of the work; or
 - (c) a person authorized under any written law to enter that site.
- (2) A person who contravenes subregulation (1) commits an offence.

Scaffolding in demolition

929. A demolition contractor carrying out any demolition involving the use of scaffolding commits an offence if he does not ensure that the scaffolding, unless otherwise approved—

- (a) conforms to the requirements for heavy duty scaffolding in clauses 7 and 8 of Schedule 6;
- (b) is erected to the full height of the building or structure;
- (c) has a closely boarded platform with a minimum width of 900 mm that abuts on the face of the building or structure at the working level;
- (d) has a fender board not less than 900 mm high fitted on the outer edge and on the ends of the working platform;
- (e) has the external face and ends sheathed with an approved fire retardant material and wire mesh that has wires that are at least 3 mm in diameter and with apertures not greater than 50 mm x 50 mm;
- (f) is maintained in position and in an effective state up to the working level of the scaffolding during the whole of the period that demolition work is being carried out; and
- (g) is progressively dismantled so that the unsupported part of the scaffolding does not exceed by more than 4 m the height of the last row of ties that secure the scaffolding to the building or structure.

Responsibilities of demolition contractor

930. A demolition contractor commits an offence if he does not—

- (a) ensure the demolition is carried out in a methodical manner and by reasonably even stages commencing from the roof or top of the building or structure to be demolished;
- (b) ensure that debris is not dropped or permitted to accumulate on a floor beyond the safe capacity of that floor;
- (c) before leaving the work for an interval of time, secure by shoring or other means any unsafe part of the building or structure;
- (d) take effective measures to prevent excessive dust from becoming airborne by dampening down debris or other such means; and
- (e) maintain, in a safe condition, all stairways, landings or other facilities that are used for access or egress until the part of the building or structure serviced by the stairway, landing or other facility is demolished.

Demolition by hand

931. (1) Where demolition is carried out by hand, every person carrying out that work shall ensure that—

- (a) structural members are lowered to the ground or cut into lengths appropriate to the mass and size of the member before being allowed to fall;
- (b) masonry and brickwork are taken down in reasonably even courses; and
- (c) every gable and protruding portion of every chimney is demolished at the time when the roof is removed, and before the ceiling or floor joists are removed.

(2) A person who contravenes subregulation (1) commits an offence.

Mechanical demolition by swinging ball

932. (1) Where demolition is carried out by a swinging ball suspended from a lifting appliance, every person carrying out the work shall ensure that—

- (a) a clear space having a minimum dimension of 6 m or 50% of the height of the building or structure to be demolished, whichever is the greater, is maintained;
- (b) the ball is only used by—
 - (i) a vertical drop;
 - (ii) swinging in line with the jib; or
 - (iii) slewing the jib;
- (c) the ball is attached to the hoist rope by a chain of adequate size and length;
- (d) an anti-spin device is used on the hoist rope in conjunction with the ball attachment equipment;
- (e) the supporting ropes are of such a length or are so restrained that it is not possible for the ball to swing against any structure other than that being demolished; and
- (f) the crane was selected and is used in accordance with AS 2550 and the boom head is not less than 3 m above the height of the building or structure to be demolished.

(2) A person who contravenes subregulation (1) commits an offence.

Mechanical demolition by chain or wire rope pulling

933. (1) Where mechanical demolition is carried out by chain or wire rope pulling, every person carrying out the work shall ensure that—

- (a) the pulling medium is—
 - (i) a securely anchored winch; or
 - (ii) an approved vehicle having an adequate mass relative to the mass of the structure to be pulled;
- (b) no person is within a distance on either side of the chain or wire of 75% of the distance between the pulling medium and the building or structure to be demolished;

- (c) walls are cut into appropriate sections having due regard to their height, width and construction and where it is not possible to isolate such sections, the chains or wire ropes are attached to their respective sections prior to the first pull being made, and the free ends of the chains or wire ropes are left a safe distance from the structure;
 - (d) horizontal chases are not made in masonry or brick walls to facilitate felling;
 - (e) reinforced concrete walls are chased to facilitate felling only if the horizontal chase is made first followed by any vertical chases;
 - (f) vertical reinforcing bars are cut after the wall is pulled over; and
 - (g) the chain or wire ropes are—
 - (i) of such a length that the horizontal distance from the demolition work to the pulling medium is not less than 1.5 times the height of the highest part of the structure to be pulled; and
 - (ii) firmly fixed at both ends and the tension in the pulling rope or chain is gradually applied.
- (2) A person who contravenes subregulation (1) commits an offence.

Machines used in demolition

934. (1) Where a bulldozer, backhoe, machine mounted pusher arm or similar machine is used in carrying out demolition, the demolition contractor carrying out the work shall ensure that—

- (a) the machine—
 - (i) has a blade, bucket or pusher arm that is designed to withstand all intended forces;
 - (ii) is used in accordance with the manufacturer's recommendations;
 - (iii) where overhead protection for the operator is necessary, has a cab that conforms to the requirements of Section 4 of AS 2294; and
 - (iv) has cab windows, if any, manufactured from shatter proof material;
 - (b) the height of the building if necessary is reduced by hand demolition to a height to suit the machine being used; and
 - (c) a competent operator is in charge of the machine.
- (2) A demolition contractor who contravenes subregulation (1) commits an offence.

Demolition near public place

935. (1) Where demolition is to take place adjacent to a public place and a method referred to in regulation 933 or 934 is to be employed, the demolition contractor carrying out the work, shall ensure that during the pushing and pulling operation, unless otherwise approved—

- (a) positive barricades are secured and positioned on the footpath in a manner that will prevent the entry of persons into an area that is adjacent to where the operation is to be carried on;
- (b) safety warning signs bearing the warning "DANGER DEMOLITION WORK" are fixed in positions where they will be readily visible to persons approaching the barricades;

- (c) a person is present who will act as a sentry to warn persons of the danger; and
 - (d) a positive and clear method of communication between the sentry and the person directly supervising the pulling or pushing operations is in operation.
- (2) A person who contravenes subregulation (1) commits an offence.

Machine to be on adequate surface and have competent operator

936. (1) Where a machine mounted impact hammer, skid steer loader or other machine is used on demolition, the demolition contractor carrying out the work shall ensure that—

- (a) the surface on which the machine is operating is of adequate strength to withstand all loads that are or may be imposed; and
 - (b) a competent operator is in charge of the machine.
- (2) A person who contravenes subregulation (1) commits an offence.

Demolition of chimney stacks

937. (1) Where a chimney stack is to be felled by deliberate collapse, the demolition contractor carrying out the work shall ensure that—

- (a) a clear space defined as that segment of a circle forming an angle of 40 degrees, being 20 degrees each side of the proposed line of fall and with a radius of at least 1.5 times the total height of the chimney, measured from its centre, is available for fall; and
- (b) felling is not carried out in a wind which is likely to cause the chimney stack to fall otherwise than in the intended and safe direction.

(2) Where a masonry chimney stack is demolished progressively by hand every person carrying out the work shall ensure that—

- (a) the work is executed from external scaffolding;
- (b) debris is dropped only through the chimney;
- (c) debris is regularly removed; and
- (d) demolition work is stopped while the debris is being removed.

(3) Where a steel chimney stack is demolished progressively by hand every person carrying out the work shall ensure that—

- (a) the work is executed from external scaffolding;
- (b) the plate is cut into manageable sized pieces and then lowered to the ground; and
- (c) any lining within the steel work is progressively demolished in accordance with subregulation (2).

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Explosives or dangerous methods

938. (1) Where demolition is to be carried out on—

- (a) tanks which have been used for the storage of flammable or combustible liquid or gases; or
- (b) chemical works, gas works or similar establishments,

the demolition contractor shall ensure that the requirements of section 4.13 and 4.14 of AS 2601 are complied with and that where required, personal protective equipment is provided for any person carrying out the work.

(2) A person who contravenes subregulation (1) commits an offence.

Division 6—Electrical work

Connection of power driven equipment

939. (1) An employer using electricity shall ensure that electric power driven equipment used on the construction site is connected directly through a main switchboard or distribution board and not otherwise and that all connections are as approved by the supply authority.

(2) A person who contravenes subregulation (1) commits an offence.

Switchboards

940. (1) A person who is the main contractor or a subcontractor supplying or installing a switchboard or submains shall ensure that—

- (a) any main distribution switchboard used is of a type, size, loading and capacity approved by the supply authority and is situated in an approved area on the site;
- (b) any submains and rising submains used are approved by the supply authority; and
- (c) any distribution switchboard used—
 - (i) is enclosed in a robust surround approved by the supply authority;
 - (ii) provides outlets of 240 volts through three pin outlets approved by the supply authority and is protected by overload circuit breakers; and
 - (iii) is located as near as practicable to the work being performed.

(2) A person who contravenes subregulation (1) commits an offence.

Electrical outlet boxes

941. (1) A person who is the main contractor or a subcontractor supplying or installing the electrical outlet box shall ensure that—

- (a) every electrical outlet box is fitted with a plug and a 15 ampere flexible supply cord that—
 - (i) is of a heavy duty sheathed type;
 - (ii) is not less than 3 metres and not more than 12 metres in length; and
 - (iii) is anchored effectively at the box;
 and
- (b) where the voltage of electricity supplied from an electrical outlet box is 240 volts—
 - (i) there are not more than 6 outlets in the box; and
 - (ii) each outlet has a current rating of at least 10 amperes and is individually controlled by a double pole switch that is not operated automatically by withdrawing or inserting the plug.

(2) A person who contravenes subregulation (1) commits an offence.

Lighting systems

942. (1) Every employer on a construction site illuminated by electric power shall ensure that the electric lighting system—

- (a) if it is a permanent installation, complies with the requirements of Part 1 of AS 3000;
- (b) if it is not a permanent installation, consists of portable flood lights, hand lamps, or moulded festoon lights, as is approved by the supply authority;
- (c) if it operates at a potential exceeding 32 volts, is protected by a current operated core balance earth leakage system circuit protection as approved by the supply authority which conforms to regulation 946.

(2) A person who contravenes subregulation (1) commits an offence.

Guarding of lamps

943. (1) An employer using electricity shall ensure that every lamp in an electrical circuit, the potential of which exceeds 32 volts is protected by a guard.

(2) A person who contravenes subregulation (1) commits an offence.

Portable equipment

944. (1) Where any portable electric power driven equipment is provided the employer shall ensure that all such equipment—

- (a) conforms to the requirements of Part 1 of AS 3000 unless the supply authority otherwise approves; and
- (b) is connected to its electric supply point by flexible heavy duty extension cord in accordance with subregulation (2).

(2) An extension cord is in accordance with this subregulation if—

- (a) where joined, it is joined in a manner approved by the supply authority; and
- (b) in the case of a construction site that is subject to vehicular traffic and, so far as it is practicable, in the case of any other site, the cord is protected or kept clear of the floor or the ground so as to prevent damage or injury to persons;
- (c) the length of the cord is not more than 50 metres;
- (d) connection plugs and sockets of the cord are either—
 - (i) of a type that cannot be rewired; or
 - (ii) made of transparent material;
 and
- (e) the cord does not extend from one level to a level more than one above or below it except where the cord is used for work in lift shafts or stair wells.

(3) An employer who contravenes subregulation (1) commits an offence.

Plug boards and double adaptors

945. (1) An employer shall ensure that a plug board or double adaptor of a type designed for domestic use is not used on a construction site.

(2) An employer who contravenes subregulation (1) commits an offence.

Earth leakage protection

946. (1) Subject to subregulation (2), every employer using electricity shall ensure that every circuit supplying electric power to electric power driven equipment as alternating current with a potential exceeding 32 volts has a current activated core balance earth leakage circuit protection as approved by the supply authority that is—

- (a) set to act—
 - (i) in the case of electric power driven equipment operating at a potential not exceeding 240 volts, at a current leakage not exceeding 30 milliamperes;
 - (ii) in the case of electric power driven equipment operating at a potential exceeding 240 volts but not exceeding 650 volts, at a current leakage not exceeding 100 milliamperes;
- (b) provided with a testing facility; and
- (c) fully operative at all times.

(2) Subregulation (1) does not apply where the power is supplied from a single phase generator that complies with AS 2790 and is labelled to indicate that it complies with that standard.

(3) An employer shall ensure that—

- (a) all earth leakage circuit protection is trip tested at least quarterly by an electrical worker duly licensed under the *Electricity Act 1945* using a method of test that does not use the built in test facility, if any, of the device; and
- (b) a record of each test referred to in paragraph (a) is made in a record book kept at the construction site, and the record shows—
 - (i) the identification number of the device tested;
 - (ii) the date of the test;
 - (iii) the name and licence number of the electrical worker who carried out the test; and
 - (iv) the result of the test.

(4) An employer who contravenes subregulation (1) or (3) commits an offence.

Inspection

947. (1) An employer shall ensure that—

- (a) all electrical equipment and flexible extension cords are inspected and tested, at least quarterly, by an electrical worker licensed under the *Electricity Act 1945*; and
- (b) there is affixed to each item inspected and tested as referred to in paragraph (a) a durable weatherproof tag indelibly marked with—
 - (i) the type of item concerned;
 - (ii) the name of the owner of the item;
 - (iii) the licence number of the electrical worker who carried out the inspection and test; and
 - (iv) the date on which the inspection and test was carried out.

(2) A person who contravenes subregulation (1) commits an offence.

Overhead wires

948. (1) Where an electric wire crosses above a roadway or accessway on a construction site the main contractor shall, unless otherwise approved, erect across that roadway or accessway on each side of and at a distance of 6 m from the electric wire, a flagged catenary wire at a height of 600 mm less than the electric wire, as a warning to persons driving mobile equipment.

(2) A main contractor who contravenes subregulation (1) commits an offence.

Underground wiring systems

949. (1) The main contractor shall ensure that, where electrical cable is installed underground—

- (a) it is installed in a manner approved by the supply authority;
- (b) it is buried to a depth of at least 600 mm;
- (c) the location of all underground cable is recorded on a site plan that is, at all times, kept up to date and readily available on the construction site; and
- (d) the route of the cable is identified by using suitable marker tape buried within 150 mm beneath the surface.

(2) A person who contravenes subregulation (1) commits an offence.

*Division 7—Working on lifts***Independent power supply**

950. (1) Where a person carries out construction work on a lift in a building or structure the main contractor shall provide him with an independent power supply.

(2) A main contractor who contravenes subregulation (1) commits an offence.

Limited entry to lift motor room while lift circuit breaker connected

951. (1) A person who enters a lift motor room while electric power is connected to the lift circuit breaker and a safety warning sign as described in subregulation (2) is in place as mentioned in that subregulation commits an offence unless authorized by the lift subcontractor to so enter.

(2) A main contractor or subcontractor who carries out work on a lift commits an offence unless, before the work is commenced, he places in a conspicuous position adjacent to the entrance to the motor room, a safety warning sign bearing the word "DANGER" and the words "ENTRY OF UNAUTHORIZED PERSONS PROHIBITED".

Signalling

952. A main contractor or subcontractor who carries out any construction work in a lift shaft commits an offence unless he provides an efficient auditory signalling system between the winch driver and the false car or permanent platform.

Main contractor to ensure certain parts of lift shaft screened

953. (1) The main contractor shall ensure that no construction work commences in a lift shaft of a building that is in use until—

- (a) all openings between the lift shaft and the landing; and

(b) the area in which the work is being carried out and any adjacent lift shaft that has a lift in operation,
are enclosed by approved screens.

(2) A main contractor who contravenes subregulation (1) commits an offence.

Work in lift shafts

- 954.** (1) A person shall not carry out any construction work in a lift shaft unless—
- (a) a solid enclosure or a 50 mm x 2.5 mm diameter wire mesh is fixed between the lift shaft and any adjacent lift shaft that has a lift in operation;
 - (b) where work is being carried out at more than one level in that lift shaft, adequate overhead protection is provided;
 - (c) all working places and the machine room have a safe and sufficient means of access and egress;
 - (d) where the lift shaft is an express lift shaft and false cars or permanent cars are in use in the same shaft, an adjacent false car or permanent car platform is provided to give access to or egress from the express lift shaft in an emergency;
 - (e) all openings of the lift shaft have fabricated steel guards that—
 - (i) are not less than 900 mm high;
 - (ii) have fenders at least 215 mm high;
 - (iii) have the area between the fender and guard rail covered by a 75 mm x 50 mm x 4 mm diameter wire mesh; and
 - (f) where relevant, the screens referred to in regulation 953 are in place.
- (2) A person who contravenes subregulation (1) commits an offence.

Use of false cars and permanent cars as installation aid

955. A person who uses a false car or a permanent car in a lift shaft as an installation aid commits an offence unless he ensures that, prior to it being used, any power driven platform in the lift shaft—

- (a) has functioning mechanisms which will safely control all movements and locations of such platforms in a lift shaft when operated by authorized persons;
- (b) has kick boards, guard rails, overhead protection, connecting attachments and load notices as appropriate to the design and safe use of the equipment; and
- (c) has in force a current certificate of inspection issued under regulation 610.

Winches

956. (1) A person who uses a winch for doing any construction work in or on a lift commits an offence unless the winch—

- (a) is properly secured in position; and
- (b) is—
 - (i) an approved drive-up drive-down type that does not incorporate any form of declutching allowing free fall; or
 - (ii) an approved manually operated type.

(2) A person who drives or operates a winch for the purpose of carrying out any work in connection with a lift or a lift shaft commits an offence unless he holds a certificate of competency as a rigger (R) under Part 10.

Division 8—Working with brittle roof materials

Interpretation

957. In this Division, “brittle roof material” means sheeting material of asbestos, cellulose cement, glass, plastic, acrylic or other similar synthetic moulded or fabricated material used either—

- (a) to sheath a roof; or
- (b) in a roof,

and likely to endanger a person standing on the roof.

Roofs of brittle roof materials

958. (1) Subject to subregulation (2) no person shall place, fix or cause to be placed or fixed on any roof structure a roof sheathing of brittle roof material except in accordance with AS 1639.

(2) Where brittle roof material is domed or otherwise raised above support purlins, so that subregulation (1) cannot be complied with, the main contractor shall display a safety warning sign bearing the words “WARNING KEEP OFF—BRITTLE ROOF” in such a manner as to be clearly visible to all persons who approach the area where the material is.

(3) The Commissioner may approve of any other methods or procedures to be adopted when fixing brittle roof material in which case subregulations (1) and (2) do not apply but the main contractor shall ensure that the methods or procedures so approved are complied with.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Box-gutters

959. (1) A person shall not fix or cause to be fixed to any building or structure any box-gutter of brittle roof material unless—

- (a) the gutter supports are not more than 760 mm apart, measured from centre to centre; or
- (b) the gutter is supported by a suitable gutter board fixed immediately under it.

(2) A person who contravenes subregulation (1) commits an offence.

Division 9—Work involving diving

Diving to comply with AS 2299

960. (1) A person who carries out work in water and uses compressed air to breathe shall do so in accordance with the requirements of AS 2299.

(2) A person who employs or instructs a person to carry out work in water and use compressed air to breathe shall ensure that—

- (a) the person to carry out the work is qualified in accordance with the Australian Standard referred to in subregulation (1) to use compressed air to breathe; and

- (b) the work is carried out in accordance with the relevant requirements, if any, of the Australian Standard referred to in subregulation (1).
- (3) A person who contravenes subregulation (1) or (2) commits an offence.

PART 10—CERTIFICATES OF COMPETENCY

Interpretation

1001. (1) In this Part—

“certificate of competency” means a certificate of competency issued by the Commissioner under this Part;

“dogman” means a person on a construction site who slings or directs the movement of loads raised or lowered by a crane;

“explosive powered tool” means a direct acting explosive powered tool as defined in AS 1873;

“rigging work” means construction work involving the use of gear for the lifting, lowering, moving or positioning of structural steel, plant or equipment in connection with the erection, demolition or dismantling of a building or structure, tower hoist or crane;

“scaffolding work” means construction work involving erecting, altering or dismantling scaffolding which is, or is intended to exceed 6 metres in height.

(2) A reference in this Part to operating plant refers, where the plant is a boiler, to attending and checking the boiler.

Plant to which this Part applies

1002. This Part applies to—

- (a) steam boilers;
- (b) hot water boilers;
- (c) traction engines;
- (d) internal combustion engines, other than—
 - (i) an internal combustion engine with a power output of one megawatt or less; and
 - (ii) an internal combustion engine kept for historical interest that has a cylinder area, or a combined cylinder area, of not more than 1 290 square centimetres;
- (e) steam engines;
- (f) locomotive engines, other than a miniature locomotive engine;
- (g) cranes, other than—
 - (i) a crane driven solely by human or animal power; and
 - (ii) an overhead travelling crane operated from floor level;
- (h) cantilever platform hoists;
- (i) elevating work platform hoists, other than those operated from the platform;

- (j) materials hoists where the vertical travel involved exceeds 11 metres; and
- (k) men and materials hoists, other than those with a lift car type cab that has automatic controls in accordance with AS 1735.

Certificate necessary to carry out certain work and use certain plant

1003. (1) A person shall not—

- (a) drive any plant to which this Part applies unless the person—
 - (i) holds a certificate of competency of a type listed in Part 1 of Schedule 9 authorizing him as a driver of the plant; or
 - (ii) is entitled in accordance with regulation 1004 to drive the plant;
- or
- (b) operate any plant to which this Part applies unless—
 - (i) the person holds a certificate of competency of a type listed in Part 1 of Schedule 9 authorizing him as an operator or attendant of the plant;
 - (ii) the person is entitled in accordance with regulation 1004 to operate the plant; or
 - (iii) where the plant is a boiler, the person is trained as defined in regulation 505 and attends and checks the boiler in accordance with regulation 505.

(2) A person on a construction site shall not—

- (a) work as a dogman;
- (b) work using an explosive powered tool;
- (c) carry out any rigging work; or
- (d) carry out any scaffolding work,

unless that person holds a certificate of competency of a type listed in Part 2 of Schedule 9 appropriate to that work.

(3) Notwithstanding subregulations (1) and (2), a person—

- (a) may operate or drive any plant if working directly under the supervision of a person who holds a certificate of competency authorizing or entitling the certificate holder to operate or drive that plant; and
- (b) may carry out rigging work or scaffolding work if working directly under the supervision of a person who holds a certificate of competency authorizing the certificate holder to carry out the type of work being supervised.

(4) A person shall not operate a steam crane unless that person holds a certificate of competency authorizing the holder to operate the boiler of the crane as well as a certificate of competency authorizing or entitling the holder to drive the crane.

(5) If subregulation (1), (2) or (4) is contravened—

- (a) the person who contravened the subregulation commits an offence; and
- (b) each employer, main contractor and subcontractor commits an offence.

Extra entitlements under certificates—Schedule 10

1004. A person who holds a certificate of competency referred to in column 1 of Schedule 10 is entitled, as the case may be, to—

- (a) drive or operate the plant referred to in column 2 of that Schedule opposite the reference to the certificate of competency held; or
- (b) carry out the work authorized to be carried out by the holder of a certificate of competency referred to in column 2 of that Schedule opposite the reference to the certificate of competency held.

Number of people to be supervised by certificate holder

1005. (1) A person holding a certificate of competency to drive or operate any plant shall not supervise more than one person operating or driving that plant at any one time.

(2) A person holding a certificate of competency as a rigger shall not supervise more than 4 persons carrying out rigging work on a construction site at any one time.

(3) A person holding a certificate of competency as a scaffolder shall not supervise more than 4 persons carrying out scaffolding work on a construction site at any one time.

(4) A person who contravenes subregulation (1), (2) or (3) commits an offence.

Certificate holder not to leave plant

1006. (1) A person driving or operating any plant to which this Part applies other than a boiler commits an offence if that person leaves that plant when it is in use unless another person who holds an appropriate certificate of competency takes over control of the plant.

(2) Nothing in subregulation (1) affects the requirements of regulation 505 as to attendance of boilers and a person who leaves a boiler unattended when attendance is required by that regulation commits an offence.

Application for certificate of competency

1007. An application for a certificate of competency shall be made to the Commissioner in a form determined by the Commissioner and shall be accompanied by—

- (a) an application fee of \$15;
- (b) written evidence that the applicant has attained the age of 18 years, or in the case of an application for a certificate of competency as a rigger (R) has attained the age of 21 years;
- (c) a written statement signed by the applicant and witnessed by another person that the applicant has had the experience, if any, required by these regulations or by the Commissioner in respect of the certificate of competency for which the applicant is applying;
- (d) in the case of an applicant for a certificate of competency as an explosive powered tool operator who has sat an approved proficiency examination administered other than by the Commissioner, the results of that examination;
- (e) where the applicant holds a similar or equivalent qualification from another State or Territory, that qualification for sighting; and
- (f) in the case of an applicant for a certificate of competency of a type listed in Part 1 of Schedule 9, a medical certificate from a medical practitioner registered under the *Medical Act 1894*, in a form determined by the Commissioner.

Issue of certificate of competency

1008. (1) The Commissioner shall not issue a certificate of competency unless satisfied that the applicant—

- (a) has attained the age of 18 years, or where the applicant is applying for a certificate of competency as a rigger (R), has attained the age of 21 years;
- (b) speaks the English language intelligibly;
- (c) has paid the fee referred to in regulation 1007;
- (d) is medically fit to drive or operate the plant or carry out the work that the certificate would authorize;
- (e) has passed an examination demonstrating that the applicant has a sound knowledge of—
 - (i) except in the case of an applicant for a certificate of competency as an explosive powered tool operator, elementary mathematics;
 - (ii) the provisions of the Act and these regulations that relate to the work or plant the certificate would authorize the applicant to carry out, drive or operate; and
 - (iii) the matters set out in column 2 of Schedule 11 opposite the certificate of competency that the applicant has applied for or where no provision is made in that Schedule in respect of a certificate, such matters as the Commissioner considers relevant; and
- (f) has had suitable experience of the duration and type set out in column 3 of Schedule 3 opposite the certificate of competency that the applicant has applied for, or where no provision is made in that Schedule in respect of a certificate, such experience as the Commissioner considers adequate.

(2) Certificates of competency shall be in a form determined by the Commissioner.

Certificates valid for 5 years unless suspended or cancelled

1009. A certificate of competency issued by the Commissioner is valid for a period of 5 years after it is issued unless it is cancelled, or suspended for a period of time, by the Commissioner because the certificate holder—

- (a) is no longer competent to carry out the work that the certificate authorizes;
- (b) has failed to comply with the Act or these regulations; or
- (c) in the Commissioner's opinion, is not a suitable person to hold the certificate.

Renewal of certificate of competency

1010. If the holder of a certificate of competency presents it for renewal and pays a renewal fee of \$15 the Commissioner may renew the certificate or may request the holder of the certificate to satisfy the Commissioner as to any of the matters referred to in regulation 1008 (1) before renewing the certificate.

Replacement of certificate

1011. Where the Commissioner is satisfied that a certificate of competency has been lost or destroyed the Commissioner shall, on application for a replacement for the certificate being made in a form determined by the Commissioner and on payment of a replacement fee of \$15, issue a replacement for the certificate.

PART 11—TRANSITIONAL PROVISIONS

Safety warning signs

1101. Where less than one year has elapsed since the commencement of these regulations, the words on a safety warning sign required by these regulations are deemed to comply with the requirements of these regulations, notwithstanding that they are not identical with the words required by these regulations, if they have substantially the same meaning.

Noise officers and noise reports

1102. (1) Unless and until otherwise approved under regulation 312 a person who was approved as a noise officer under the repealed regulations immediately before the commencement of these regulations is deemed to be a noise officer for the purpose of Subdivision 1 of Division 1 of Part 3 until that approval would have expired under the repealed regulations.

(2) A report prepared on a noise survey on a workplace made under the repealed regulations and not superseded by the findings of another report as referred to in regulation 6 (2) of those regulations is deemed to be a noise report relating to that workplace for the purpose of Subdivision 1 of Division 1 of Part 3.

(3) In this regulation "repealed regulations" means the *Noise Abatement (Hearing Conservation in Workplaces) Regulations 1983*.

Transfer of audiograms recorded under the repealed regulations

1103. (1) A person who, on the day on which these regulations come into operation, is in possession of an audiogram recorded under the repealed regulations shall transfer the audiogram as soon as practicable and by not later than one year after that day—

- (a) to a person who is to carry out a voluntary audiometric testing programme—
 - (i) if the employee to whom the audiogram relates has consented in writing to the audiogram being used for the purposes of that programme; or
 - (ii) if the Commissioner, after advising the Commission, so directs;
- (b) if it is impossible or impracticable to comply with paragraph (a), to the employee to whom the audiogram relates; or
- (c) if it is impossible or impracticable to comply with paragraph (a) or (b), to the Commissioner or to an approved organization.

(2) Subregulation (1) does not apply where the person in possession of the audiogram is—

- (a) the Commissioner;
- (b) the person to whom the audiogram relates; or
- (c) a person in possession of the audiogram with the written consent or, at the written request, of the person to whom the audiogram relates.

(3) Regulation 302 applies to the interpretation of this regulation as if it were in Subdivision 1 of Division 1 of Part 3.

Plant complying under *Machinery Safety Act 1974*

1104. Where, immediately before the commencement of these regulations, machinery complied with all of the requirements of the *Machinery Safety Act 1974* and the regulations under that Act ("the former requirements"), it is deemed to comply with the requirements of these regulations if it continues to comply with the former requirements and it complies with any other requirements, if any, that the Commissioner, in the interests of safety, sees fit to impose in respect of it.

Certificate of inspection issued under *Machinery Safety Act 1974*

1105. A certificate of inspection lawfully issued under the *Machinery Safety Act 1974* and in force before the coming into operation of these regulations in respect of machinery that is classified plant within the meaning of these regulations shall be deemed to be a certificate of inspection and to have been given under regulation 610 of these regulations and continues in force in respect of that classified plant for the balance of the period for which it would have continued in force if that Act had not been repealed.

Attendance of boilers

1106. (1) Whether or not he is required to do so by regulation 505 and the requirements in Schedule 8, the owner of a boiler that, before the commencement of these regulations, was required, when in use, to be attended by a person who held a certificate of competency under the former *Machinery Safety Act 1974* shall ensure that the boiler, when in use, is attended by a person who holds an appropriate certificate of competency under these regulations.

(2) A person who contravenes subregulation (1) commits an offence.

(3) This regulation ceases to have effect on the expiry of 1 year after the commencement of these regulations.

Validity and replacement of certificates issued under former legislation

1107. (1) Notwithstanding regulation 1003, a person who, immediately before the commencement of these regulations, held—

- (a) a certificate of competency, provisional certificate of competency or a restricted certificate of competency in force under the *Construction Safety Act 1972*; or
- (b) a certificate of competency, restricted certificate of competency or permit in force under the *Machinery Safety Act 1974*,

may carry out any work or drive or operate any plant that the certificate authorized prior to the commencement of these regulations for as long as the certificate would have remained in force but for that commencement or until 1 January 1994, whichever occurs sooner.

(2) The Commissioner may issue an appropriate certificate of competency to a person who held a certificate or permit referred to in subregulation (1) under the *Construction Safety Act 1972*, or the *Machinery Safety Act 1974* if that person applies to the Commissioner in a form determined by the Commissioner and surrenders the certificate or permit referred to in subregulation (1).

Approvals under *Construction Safety Act 1972*

1108. Where under these regulations a matter or thing may be approved and under the *Construction Safety Act 1972* approval of that matter or thing had been given by a person having authority under that Act to give that approval, the matter or thing shall be taken to have been approved under these regulations.

SCHEDULE 1

(Reg. 103)

AUSTRALIAN STANDARDS

ITEM	AS NUMBER	TITLE
1	AS 1076-1977	Code of practice for selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres (other than mining applications)
2	AS 1210-1982	Unfired pressure vessels
3	AS 1228-1984	Boilers—Water-tube
4	AS 1250-1981	The use of steel in structures
5	AS 1269-1983	Hearing Conservation
6	AS 1319-1983	Safety signs for the occupational environment
7	AS 1336-1982	Recommended practices for eye protection in the industrial environment
8	AS 1337-1984	Eye protectors for industrial applications
9	AS 1338-1981	Filters for eye protectors
10	AS 1418-1986	Cranes (including hoists and winches)
11	AS 1450-1983	Steel tubes for mechanical purposes
12	AS 1575-1974	Tubes, couplers and accessories used in metal scaffolding
13	AS 1576-1974	Code of practice for metal scaffolding
14	AS 1639-1974	Code of practice for design and installation of corrugated asbestos cement roofing
15	AS 1657-1985	Fixed platforms, walkways, stairways and ladders—Design, construction and installation
16	AS 1664-1979	Rules for the use of aluminium in structures
17	AS 1666-1976	Wire-rope slings
18	AS 1668-1979	Rules for the use of mechanical ventilation and airconditioning in buildings
19	AS 1674-1980	Fire precautions in cutting, heating and welding operations
20	AS 1680-1976	Code of practice for interior lighting and the visual environment
21	AS 1688-1974	Portable timber ladders (including step-ladders and trestle-ladders)
22	AS 1689-1974	Code of practice for the use and maintenance of portable timber ladders
23	AS 1715-1982	Selection, use and maintenance of respiratory protective devices
24	AS 1716-1984	Respiratory protective devices
25	AS 1735-1986	Lifts, escalators, and moving walks
26	AS 1797-1986	Boilers—Fire-tube, shell, and miscellaneous
27	AS 1801-1981	Industrial safety helmets
28	AS 1866-1986	Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes
29	AS 1873-1978	Explosive-powered hand-held fastening tools, fasteners and explosive charges
30	AS 1891-1983	Industrial safety belts and harnesses

SCHEDULE 1—*continued*

ITEM	AS NUMBER	TITLE
31	AS 1892-1986	Portable ladders
32	AS 2030-1985	The approval, filling, inspection, testing and maintenance of cylinders for the storage and transport of compressed gases
33	AS 2106-1980	Methods for the determination of the flashpoint of flammable liquids (closed cup)
34	AS 2208-1978	Safety glazing materials for use in buildings (human impact considerations)
35	AS 2268-1979	Electrostatic paint and powder sprayguns for explosive atmospheres
36	AS 2294-1979	Protective structures for operators of earthmoving machines
37	AS 2299-1979	Underwater air breathing operations
38	AS 2337-1987	Gas cylinder test stations
39	AS 2550-1982	Cranes—Mobile, tower and derrick—Selection and operation
40	AS 2593-1983	Boilers—unattended
41	AS 2601-1983	The demolition of structures
42	AS 2745-1984	Electrical welding safety
43	AS 2790-1985	Electricity generating sets—Transportable (up to 25 kW)
44	AS 2865-1986	Safe working in a confined space
45	AS 2971-1987	Serially produced pressure vessels
46	AS 3000-1986	Electrical installations—Buildings, structures and premises

SCHEDULE 2

(Reg. 103)

EXCLUSIONS FROM THE DEFINITIONS OF
"BOILER" AND "PRESSURE VESSEL"

1. A vessel in which the pressure is due only to the static head of liquid in the vessel.
 2. Cans used for containing aerated beverages, soft drinks, beer or other products that are not intended to be refilled.
 3. Glass bottles that are used for containing aerated beverages, soft drinks, beer or other products.
 4. Soda syphon sparklet bulbs below the limit of size to which Part 1 of AS 2030 applies.
 5. Soda syphons.
 6. Pressure lamps, blow lamps and similar pressure containers.
 7. Tyres and tubes, balloons and other inflatable articles.
 8. Air brake bleeders.
 9. Internal combustion engine radiators used for cooling.
 10. Air bags used for manufacturing and retreading tyres.
 11. Wind tunnels used in universities or research establishments.
 12. Low pressure town and natural gas holders commonly known as "gasometers".
 13. Hydraulic actuator systems.
 14. Portable fire extinguishers.
 15. Steam cleaners in which steam is not generated in the system and valves are not incorporated between the inlet and outlet.
 16. Aerosol containers.
 17. Pipelines other than those expressly included in the definition of "boiler" or "pressure vessel" in regulation 103.
 18. Pneumatic loaders of explosives.
 19. Vessels used for domestic purposes only.
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SCHEDULE 3

(Reg. 103, 322, 749)

TIME WEIGHTED AVERAGE

EXPOSURE STANDARDS FOR ATMOSPHERIC CONTAMINANTS

Column 1		Column 2		
Atmospheric Contaminant	CAS Number*	Exposure Standard		
		ppm	mg/m ³	f/ml
Amosite	[12172-73-5]			0.1
Asbestos (not otherwise listed)	[1332-21-4]			0.1
Benzene	[71-43-2]	5		
Carbon Dioxide	[124-38-9]	5,000		
Chrysotile	[12001-29-5]			1
Crocidolite	[12001-28-4]			0.1
Ethylene Dibromide	[106-93-4]	—	—	
Ethylene Oxide	[75-21-8]	1		
Formaldehyde	[50-00-0]	1		
1,6-Hexamethylene diisocyanate (HMDI)	[822-06-0]	0.005		
Hydrogen Cyanide	[74-90-8]	10		
Inspirable Dust (not otherwise listed)	[—]		10	
Isocyanates (not otherwise listed)		0.005		
Lead, inorganic dust and fume (as Pb)	[7439-92-1]		0.15	
Methyl Bromide	[74-83-9]	5		
4,4' -Methylene bis (2-chloroaniline)	[101-14-4]	0.02		
Methylene bis (4-cyclo- hexyl-isocyanate)	[5124-30-1]	0.005		
Methylene bisphenyl isocyanate (MDI)	[101-68-8]	0.005		
4,4' -Methylene dianiline	[107-77-9]	0.1		
Phosphine	[7803-51-2]	0.3		
Quartz (respirable)	[14808-60-7]		0.1	
Respirable Dust (not otherwise listed)	[—]		5	
Styrene, monomer	[100-42-5]	50		
Toluene-2,4- diisocyanate	[584-84-9]	0.005		
Vinyl Chloride	[75-01-4]	1		

* Chemical Abstracts Service Registry Number

ppm —parts of atmospheric contaminant per million parts of air by volume.

mg/m³—milligrams of atmospheric contaminant per cubic metre of air at standard conditions of 25°C and 101.3 kilopascals atmosphere pressure.

f/ml —respirable fibres per millilitre of air at standard conditions of 25°C and 101.3 kilopascals atmosphere pressure.

SCHEDULE 4

(Reg. 607)

MAXIMUM PERIODS FOR CERTIFICATES OF INSPECTION

Column 1 Item	Column 2 Class	Column 3 Period
Boilers and pressure vessels		
1.	Fire tube boiler	1 year
2.	Water tube boiler (less than 6MW)	1 year
3.	Water tube boiler (more than 6MW)	2 years
4.	Electrode boiler	2 years
5.	Electric boiler	2 years
6.	Autoclave	1 year
7.	Sterilizer	1 year
8.	Digester	1 year
9.	Jacketed cooker	1 year
10.	Unfired pressure vessel— de-aerator	2 years
11.	Unfired pressure vessel— static for refrigeration or air-conditioning system	5 years
12.	Unfired pressure vessel— vacuum insulated (static)	2 years
13.	Unfired pressure vessel— vacuum insulated (transportable)	1 year
14.	Unfired pressure vessel used to transport anhy- drous ammonia in portable tanks or nurse tanks	2 years
15.	Unfired pressure vessel used to transport anhy- drous ammonia in conventional road tanks	1 year
16.	Unfired pressure vessel made of carbon steel used to carry a gas other than anhydrous ammonia	3 years
17.	Unfired pressure vessel made of quenched and tempered steel used to carry a gas other than anhydrous ammonia	1 year
18.	Unfired pressure vessel other than of a class specified in item 10, 11, 12, 13, 14, 15, 16 or 17	3 years
19.	Static vessel used to store, under pressure, any liquid or gas	5 years
Cranes		
20.	Monorail crane	5 years
21.	Overhead electric travelling crane	4 years
22.	Gantry crane	4 years
23.	Truck self-loading crane	3 years
24.	Mobile crane, other than of a class specified in item 20, 21, 22 or 23, used in construction work, structural concrete fabrication, steel fabrication or ship building	1 year

Schedule 4—*continued*

Column 1 Item	Column 2 Class	Column 3 Period
<i>Cranes—continued</i>		
25.	Mobile crane other than of a class specified in item 20, 21, 22 or 23 used other than as mentioned in item 24	2 years
26.	Tower crane	End of each jump or 1 year if no jump in a year
Lifts and escalators		
27.	All classes	2 years
Hoists		
28.	All classes	2 years
Amusement devices		
29.	All classes	1 year

SCHEDULE 5

(reg. 745)

TOXIC PAINT SUBSTANCES
PART 1—SOLID COMPONENTS

1. All chromates and dichromates contained in such quantity that chromium in these forms, calculated as a percentage of the dried material, exceeds 0.1% by weight.
2. Antimony and compounds of antimony contained in such quantity that antimony, calculated as a percentage of the dried material, exceeds 5% by weight.
3. Arsenic and compounds of arsenic contained in such quantity that arsenic, calculated as a percentage of the dried material, exceeds 0.1% by weight.
4. Barium and compounds of barium (except barium sulphate and barium metaborate) contained in such quantity that barium, calculated as a percentage of the dried material, exceeds 5% by weight.
5. Cadmium and compounds of cadmium contained in such quantity that cadmium, calculated as a percentage of the dried material, exceeds 0.1% by weight.
6. Lead and compounds of lead contained in such quantity that lead, calculated as a percentage of the dried material, exceeds 1% by weight.
7. Mercury and compounds of mercury contained in such quantity that mercury, calculated as a percentage of the dried material, exceeds 0.1% by weight.

Schedule 5—*continued*

8. Selenium and compounds of selenium contained in such quantity that selenium, calculated as a percentage of the dried material, exceeds 0.1% by weight.
9. Crystalline silica contained in such quantity that silicon dioxide, calculated as a percentage of the dried material, exceeds 2% by weight.

PART 2—SOLVENT COMPONENTS

1. Benzene in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 1.5% by volume.
2. Chlorinated hydrocarbons in a quantity that, calculated as a percentage of the material in which they are contained, exceeds 5% by weight.
3. Methanol in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 1% by weight.
4. Nitrobenzene in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 1% by weight.
5. Pyridine in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 2% by weight.

PART 3—CURING AGENTS

1. Accelerators, promoters and catalysts (excluding driers).
 2. Formaldehyde in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 0.2% by weight.
 3. Oxalic acid in a quantity that, calculated as a percentage of the material in which it is contained, exceeds 5% by weight.
 4. Raw epoxide resins.
 5. Uncombined organic isocyanates (as NCO) in a quantity that, calculated as a percentage of the material in which they are contained, exceeds, or may exceed upon normal storage, 0.5% by weight.
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SCHEDULE 6

(Regs. 351, 904, 906, 907, 911, 929)

SCAFFOLDING

PART 1—INTERPRETATION

Interpretation of Schedule

1. In this Schedule—

“base plate” means a mild steel plate with an area of at least 0.0225 m² x 6 mm thick;

“bay” means the rectangular space enclosed by 4 adjacent standards for the full height of the scaffold or the equivalent space when applied to a putlog scaffold;

“brace” means a tube incorporated diagonally across 2 members in a scaffold and fixed to them to afford stability;

“heavy duty scaffold” means a scaffold that is normally erected for use by bricklayers, stonemasons or similar trades;

“independent scaffold” means a scaffold consisting of 2 rows of standards connected together longitudinally with ledgers and braces and transversely with transoms and putlogs;

“ledger” means a tube fixed horizontally to the standards to tie the scaffold longitudinally which may support the putlogs;

“lift” means a height from the ground or floor to the lowest ledger, or the vertical distance between ledgers;

“light duty scaffold” means a scaffold that is normally erected for use by electricians, painters, sign writers or general light duty maintenance workers;

“light duty suspended stage” means a working platform suspended from overhead supports and—

(a) the means of lowering or raising the stage, whether those means are operated by hand or are power driven;

(b) the overhead supports, attachments and tracks; and

(c) the means of suspension;

“medium duty scaffold” means a scaffold that is normally erected for use by carpenters, plasterers, glaziers or similar trades;

“panel” means an area bounded by 2 longitudinally adjacent standards that is one lift in height;

“putlog” means a member fixed horizontally across ledgers or across a ledger to an adjacent wall to support a working platform;

“putlog scaffold” means a scaffold consisting of a single row of standards connected together longitudinally by ledgers and braces, with putlogs having one end fixed to the ledgers and the other end built into or resting on the wall of the building or structure;

“sole plate” means a timber member of at least the cross-sectional dimensions required under clause 18 (1) of this Schedule for karri platform planks and of a length that is adequate to distribute the load to be supported;

“span” means the distance measured along a member, between the centre lines of adjacent supports of that member;

“standard” means a vertical support;

Schedule 6—*continued*

“tie” means a member used to secure the scaffold to a structure;

“transom” means a transverse horizontal member, clamped to the standards or ledgers by right angle couplers.

PART 2—METAL TUBE SCAFFOLDING

Metal tubes

2. All metal tubes used in scaffolding shall—
 - (a) be straight and free from indentations, corrosion or other defects;
 - (b) have ends that are clean cut and square with their axes; and
 - (c) be free from burrs and bevels.

Steel tubes

3. All steel tubes used in scaffolding shall—
 - (a) be manufactured by the process known as the Continuous Weld Process;
 - (b) comply with the requirements of AS 1450;
 - (c) be round pipes with an outside diameter of at least 48.3 mm and a wall thickness of at least 4 mm; and
 - (d) have permissible dimension tolerances of—
 - (i) outside diameter plus 0.4 mm and minus 0.8 mm; and
 - (ii) wall thickness plus 15% and minus 10%.

Aluminium tubes

4. All aluminium tubes used in scaffolding shall—
 - (a) be of extruded aluminium, complying with the requirements of AS 1866 and have a tensile strength of not less than 262.5 M Pa, with a 0.2% proof stress of not less than 241.5 M Pa; the elongation measured on a gauge length of 50 mm shall be not less than 8%;
 - (b) be round pipes of at least 48.3 mm outside diameter, having a wall thickness of 4.5 mm; and
 - (c) have permissible dimension tolerances of—
 - (i) outside diameter, plus and minus 0.31 mm; and
 - (ii) wall thickness, plus and minus 0.23 mm.

Fittings or devices

5. A fitting or device used in tubular metal scaffolding shall—
 - (a) be of a type approved; and
 - (b) satisfy the test methods specified in AS 1575.

Schedule 6—*continued***Couplers**

6. A coupler used in scaffolding shall—
- (a) have no threaded blind holes;
 - (b) be such that when assembled, but before tightening, no part can be detached by inadvertent action;
 - (c) have a tightening bolt of not less than 12 mm in diameter with a hexagonal nut;
 - (d) have a washer not less than 1.5 mm thick fitted beneath;
 - (e) be provided with a rib or recess not less than 1.5 mm in height to prevent the bolt and washer from being displaced from the coupler, unless the geometry of the fitting positively holds the bolt in position;
 - (f) where a hinge is provided, have a hinge pin not less than 8 mm in diameter;
 - (g) be not less than 4 mm in any section of the body or flap; and
 - (h) accurately embrace over the whole area of its bearing surfaces the member or members on which it is used.

Tubular metal scaffolding

7. (1) Tubular metal scaffolding shall—
- (a) consist of—
 - (i) a number of standards fixed by transoms and ledgers;
 - (ii) ledgers supporting putlogs or transoms; and
 - (iii) platform planks laid on putlogs or on transoms; and
 - (b) be braced and tied to form a rigid and stable structure.
- (2) Tubular metal scaffolding shall not exceed 45 m in height unless the weight of the scaffold is relieved by spurring or by other approved means.
- (3) Tubular metal scaffolding shall have standards—
- (a) spaced not more than—
 - (i) 1.8 m apart for heavy duty scaffolds;
 - (ii) 2.4 m apart for medium duty scaffolds; or
 - (iii) 3 m apart for light duty scaffolds;
 - (b) with joints that do not occur—
 - (i) in adjacent standards in the same lift;
 - (ii) in the same standard in adjacent vertical lifts; and
 - (iii) more than once between any 2 adjacent ledgers;
 - (c) founded on base plates and where necessary on sole plates or on an equivalent base construction;
 - (d) straight throughout and set up in a vertical plane; and
 - (e) where necessary, provided with suitable guards or fenders to prevent damage from any source.

Schedule 6—*continued*

- (4) Tubular metal scaffolding shall have ledgers—
- (a) clamped to the standards with right angle couplers;
 - (b) spaced not more than 2 m apart on a standard;
 - (c) with joints that do not occur—
 - (i) in vertically adjacent ledgers in the same bay;
 - (ii) in the same ledger in adjacent bays;
 - (d) continuous throughout the whole length of the scaffolding, except where access is provided; and
 - (e) fixed in a horizontal plane.
- (5) Tubular metal scaffolding shall have putlogs that are—
- (a) set horizontally above each ledger;
 - (b) fixed to each ledger either by right angle couplers or by putlog clips;
 - (c) placed so that—
 - (i) they are not more than 230 mm from a standard; and
 - (ii) there is one on each side of every standard;
 - (d) in the single lengths;
 - (e) except in the case of bird cage scaffolding as defined in clause 12, placed so that spans do not exceed 1.5 m;
 - (f) in position until that portion of the scaffolding is dismantled, but a transom may be substituted for 2 putlogs on each side of a standard.
- (6) Where a detachable blade fitting is used in tubular metal scaffolding to support the putlog on a wall the detachable blade fitting—
- (a) shall be placed with the blade in a horizontal plane;
 - (b) shall be fixed beneath the putlog; and
 - (c) shall bear not less than 75 mm on the wall.
- (7) Tubular metal scaffolding shall have ties that are—
- (a) attached by right angle couplers—
 - (i) in the case of putlog scaffolding, to the standard or ledger; or
 - (ii) in the case of independent scaffolding, to the outside and inside standards or ledgers,
 and in each case as close as possible to the junction of the standards and ledgers;
 - (b) located no further than one bay from the ends of the scaffolding and in every third bay but this spacing may be increased to every sixth bay if—
 - (i) a system of horizontal diagonal plan bracing is added between the ties on the underside of the ledgers at the level that the ties occur; and
 - (ii) any joints in the span of the ledgers forming part of the horizontal diagonal plan bracing are positively secured by means of a splice tube and 2 swivel couplers; and
 - (c) located in the first lift of the scaffolding and at vertical intervals not exceeding 4 m.

Schedule 6—*continued*

- (8) Tubular metal scaffolding shall be braced by means of—
- (a) face braces that are attached to the external row of standards of the scaffolding and extend to the full length and height of the scaffolding; and
 - (b) transverse braces that are attached diagonally in every lift joining the internal and external standards—
 - (i) at both ends of the scaffolding; and
 - (ii) at intervals not exceeding 25 m.

Loading of tubular scaffolding

8. Tubular metal scaffolding shall not carry more than 2 working platforms across the full length of the scaffolding though shorter working platforms may be carried in different positions on the frame if the total load of the shorter working platforms does not exceed the total load of 2 fully loaded platforms, but in any event the total load on a platform in a bay shall not exceed—

- (a) 625 kg in the case of a heavy duty scaffold;
- (b) 430 kg in the case of a medium duty scaffold; or
- (c) 180 kg in the case of a light duty scaffold.

PART 3—OTHER TYPES OF METAL SCAFFOLDING

Tubular mobile metal scaffolding

9. (1) Tubular mobile metal scaffolding shall—
- (a) consist of—
 - (i) a number of standards fixed by transoms and ledgers;
 - (ii) platform planks laid on putlogs or transoms;
 - (iii) horizontal diagonal braces and ledgers fixed as near as practicable to the base of the standards; and
 - (iv) castors fixed into the base of each standard; and
 - (b) be braced and tied to form a rigid and stable structure.
- (2) A castor used in tubular mobile metal scaffolding shall—
- (a) have an effective locking device to prevent movement when the scaffold is in use;
 - (b) have a minimum diameter of 125 mm;
 - (c) have a shank or socket not less than 150 mm long and an eccentricity between the centre of the castor and the centre of the shank or socket not exceeding 60 mm;
 - (d) be properly secured in the standard by an approved method;
 - (e) not be fitted with a pneumatic tyre; and
 - (f) have the safe working load clearly stamped on it.
- (3) Tubular mobile metal scaffolding shall have a working platform—
- (a) at a height not exceeding 3 times the least width between the castors;
 - (b) that is closely planked, except where access is provided;
 - (c) that extends not more than 250 mm nor less than 150 mm beyond the plan area unless a method is provided for plank location.

Schedule 6—*continued*

(4) A working platform shall not be placed between separate mobile tubular scaffolds unless the mobile scaffolds are securely joined together by ledgers.

(5) Tubular mobile metal scaffolding shall meet the requirements of the table to this subclause and shall not be loaded in excess of the weight specified in that table.

TABLE

Class of Scaffold	Maximum Spacing of Standards	Span of Transom or Putlog	Maximum Load
Heavy Duty	1.8 m	1.5 m	625 kg
Medium Duty	2.4 m	1.8 m	430 kg
Light Duty	3 m	2.1 m	180 kg

Metal frame scaffolding

10. (1) In this clause “frame” means a fabricated metal unit consisting of standards, transoms and braces welded or otherwise fixed together to form a rigid and complete unit.

(2) A frame used in scaffolding shall be of an approved type.

(3) In addition to being in accordance with this Schedule, scaffolding using frames shall be of an approved type and shall consist of frames that are—

(a) tied together by a continuous ledger that—

(i) is fixed to the external standard of each frame; and

(ii) is spaced at vertical intervals not exceeding 15 m;

(b) spaced either not more than 2 m apart in the case of heavy duty scaffolding or not more than 2.4 m apart in the case of light duty scaffolding;

(c) provided with adjustable base plates where the ground or surface is not level; and

(d) braced in each panel on both the internal and external faces of the scaffolding.

(4) A scaffolding consisting of frames shall be erected and used in accordance with clauses 7(7) and 8 as if it was a tubular metal scaffolding.

Modular scaffolding

11. (1) In this clause—

“modular members” means standards, ledgers, transoms, putlogs and braces made of metal that are capable of being assembled into scaffolding of pre-determined shapes.

(2) A modular member used in scaffolding shall be of an approved type.

(3) In addition to being in accordance with this Schedule, scaffolding using modular members shall be of an approved type and shall—

(a) be erected, braced and used as is approved;

(b) be erected and used in accordance with clauses 7(7) and 8 as if it was a tubular metal scaffolding;

(c) have adjustable base plates where the ground or surface is not level; and

(d) be planked with planks designed for that modular system.

Schedule 6—*continued***Bird cage scaffolding**

12. (1) In this clause—

“bird cage scaffolding” means a scaffolding used for gaining access to ceilings, soffits and walls.

(2) A bird cage scaffolding shall—

(a) consist of—

- (i) standards;
- (ii) ledgers and transoms fixed on standards;
- (iii) putlogs fixed to ledgers on each side and within 230 mm of the standards, unless substituted by a single transom fixed to the ledger; and
- (iv) a working platform at the height required for the type of work in progress; and

(b) be braced and tied to form a rigid and stable structure.

(3) A bird cage scaffolding shall meet the requirements of the table to this subclause and shall not be loaded in excess of the weight specified in that table.

TABLE

Class of Scaffold	Maximum Longitudinal Spacing	Maximum Transverse Spacing	Maximum Load
Heavy Duty	1.8 m	1.5 m	625 kg
Medium Duty	2.4 m	1.8 m	430 kg
Light Duty	3 m	2.1 m	180 kg

PART 4—SCAFFOLDING ON CIRCULAR STEEL STRUCTURES AND TANKS

Circular steel structures and tanks

13. Scaffolding shall not be supported by a steel tank or circular steel structure unless—

- (a) lugs or saddle pieces of mild steel are welded to the surface of the tank to receive the hooks of the scaffolding platform;
- (b) the scaffolding platform is supported from the lugs or saddle pieces or mild steel by brackets—
 - (i) that are made of mild steel angle not less than 44 mm x 44 mm x 5 mm or mild steel tube of equivalent strength and rigidity and that are spaced with centres not exceeding 2.5 m apart on the tank face;
 - (ii) that incorporate hooks formed by 50 mm x 6 mm mild steel that attach to the lugs; and
 - (iii) that have an upstand with welded attachments to accommodate 2 guard rails or lifelines; and

Schedule 6—*continued*

- (c) the working platform—
 - (i) has platform planks that conform to clause 18; and
 - (ii) is fitted with a rigid guard rail 1 m above the working platform and a mid rail, or, where lifelines are used instead of rigid guard rails, the lifelines are not less than 16 mm in diameter cordage rope or 12 mm diameter flexible steel wire rope and are secured at each upstand with a maximum allowable sag of 50 mm.

PART 5—BOATSWAIN'S CHAIRS

Specifications for boatswain's chairs

14. Unless otherwise approved, a boatswain's chair on a construction site shall have—

- (a) the overhead needle support properly secured in position and counterbalanced to sustain a load of not less than 3 times the maximum weight to be suspended from the boatswain's chair when in use;
- (b) the rope blocks for suspending, raising or lowering the boatswain's chair consisting of at least one double sheave upper block and at least one single sheave lower block that—
 - (i) have metal carcasses;
 - (ii) have sheaves not less than 100 mm in diameter that are grooved to accommodate the rope; and
 - (iii) are fitted with a head fitting of a swivel closed eye type and the rope anchor or becket of the lower block shall not, unless otherwise approved, be welded to the block;
- (c) the suspending rope of the tackle made either of manilla or of sisal fibre not less than 16 mm in diameter and reeved to form a 4-part rope tackle;
- (d) the sling supporting the seat—
 - (i) of 6 x 24 construction flexible steel wire rope with a diameter of not less than 8 mm;
 - (ii) passing through holes in each corner of the seat to form a cross;
 - (iii) crossed under the seat;
 - (iv) arranged to form a loop fitted with a suitable thimble that is—
 - (A) not more than 800 mm above the seat; and
 - (B) fitted by a mild steel shackle not less than 9.5 mm in diameter to the swivel eye of the rope block;
 - (v) spliced or joined by 2 bulldog grips underneath the seat; and
 - (vi) fixed to the seat on the underside to prevent the seat from tilting in the sling;
- (e) the seat—
 - (i) constructed of timber of not less than 30 mm in thickness and 230 mm in width;
 - (ii) with a distance exceeding 450 mm but not exceeding 550 mm between the slings; and
 - (iii) with cleats made of timber not less than 75 mm x 25 mm sectional dimensions firmly fixed to the underside so that they bear the weight of the sling and prevent the seat from splitting.

Schedule 6—*continued*

PART 6—LIGHT DUTY SUSPENDED STAGE

Parapet hook not to be used, unless approved

15. A parapet hook shall not be used to suspend a light duty suspended stage without the prior approval of an inspector.

Specifications for light duty suspended stage

16. A light duty suspended stage on a construction site shall have—

(a) overhead needle supports—

(i) that—

(A) are properly secured to the building or structure by bolts, by approved steel fittings or by lashing to the satisfaction of an inspector; or

(B) are counterbalanced by weights that—

(I) have a weight not less than 3 times the weight necessary to balance the weight of the load on the projecting part of the needle when the platform is fully loaded;

(II) are properly secured to the needle;

(III) are of purpose made metal or similar approved material; and

(IV) have their weight clearly stamped thereon;

(ii) that—

(A) if constructed of Oregon timber—

(I) do not project a distance exceeding 1.2 m to the outer suspension point; and

(II) have minimum dimensions of 150 mm by 100 mm; or

(B) if constructed of steel (whether or not steel tube), are constructed, erected and used as is approved by an inspector; and

(iii) that are prevented from moving laterally or from rolling over;

(b) blocks made of metal with sheaves not less than 125 mm in diameter and comprising a double and single block, each with a swivel eye;

(c) falls—

(i) made of manilla or sisal cordage rope with a diameter not less than 20 mm or of such other rope as may be approved; or

(ii) where the presence of fumes is likely to affect them, are of at least 8 mm wire rope;

(d) 2 mild steel hangers supporting the working platform, each made from a material having a cross-sectional area of 484 mm² of an approved design, and attached to a winch or winches for which they are designed and approved; and

(e) a working platform that—

(i) is of rigid construction and neither more than 600 mm nor less than 500 mm wide;

(ii) has guard rails securely fixed around the outer edges of the stage; and

(iii) has fender boards of not less than 100 mm fitted to each side of the stage.

Schedule 6—*continued*

PART 7—PLATFORMS AND EDGE PROTECTION

Specifications for working platform

17. There shall not be a working platform on scaffolding unless—
- (a) the width of the platform exceeds 450 mm but—
 - (i) where the platform is used either for the erection of scaffolding or rigging or on trestles not exceeding a height of 4.5 m, the width of the platform may be 225 mm; and
 - (ii) where the platform is used in the mortar trades, the width of the platform shall exceed 900 mm;
 - (b) the slope of the platform is set at a slope not exceeding 1 m vertical to 6 m horizontal;
 - (c) the scaffold plank overhangs its support by neither less than 150 mm nor more than 250 mm except where the plank is a lapped plank;
 - (d) where the working platform is erected to enable a person to work on a ceiling, the scaffold planks—
 - (i) are spaced at distances not exceeding 250 mm apart for a platform that does not exceed a height of 6 m; or
 - (ii) are close laid for a platform that exceeds a height of 6 m; and
 - (e) where applicable, guard rails and fender boards are in place as required by regulation 351.

Specifications for platform planks

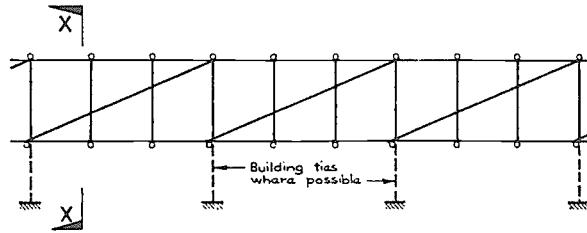
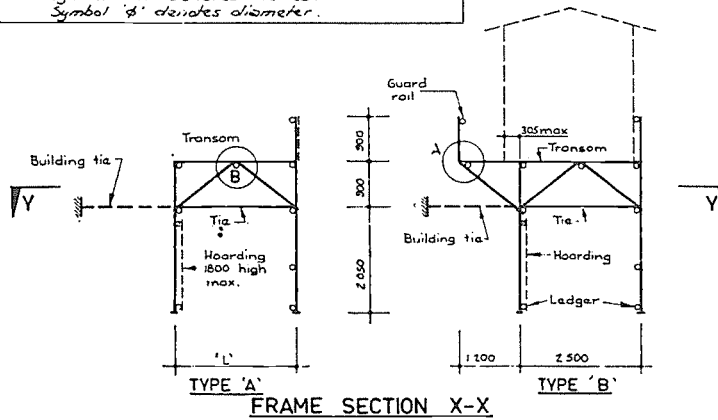
18. (1) Platform planks used in scaffolding shall—
- (a) have minimum cross-sectional dimensions—
 - (i) where the planks are Oregon planks, of 225 mm by 38 mm;
 - (ii) where the planks are karri planks—
 - (A) of 225 mm by 32 mm, in the case of planks that are green off saw; and
 - (B) of 216 mm by 30 mm, in the case of planks at 15 per cent moisture content; or
 - (iii) in any other case, as approved; and
 - (b) span a distance not exceeding—
 - (i) 2 m in the case of heavy duty scaffolding; and
 - (ii) 2.5 m in the case of light duty scaffolding.
- (2) Unless prior written approval has been given, scaffolding platform planks shall not be fabricated, laminated or moulded or made by any process of manufacture.
-

SCHEDULE 7

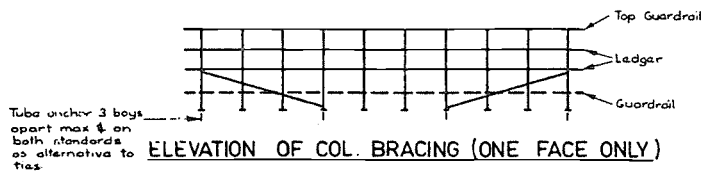
(Reg. 911 (4))

CONSTRUCTION OF STEEL TUBE GANTRIES
DIAGRAM 1

NOTE
All dimensions without symbols are in millimetres.
Symbol 'm' denotes metres.
Symbol ϕ denotes diameter.



PLAN AT LEVEL Y-Y



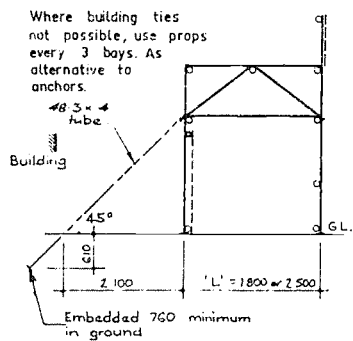
ELEVATION OF COL. BRACING (ONE FACE ONLY)

LOCATIONS		SHELTERED FROM WIND		EXPOSED TO WIND	
'L'	COMPONENT	100 kg/m ² LIVE LOAD	360 kg/m ² LIVE LOAD	100 kg/m ² LIVE LOAD	360 kg/m ² LIVE LOAD
1 800	STANDARDS	1	1	2	2
	TRANSOMS	1	1	1	1
	LEDGERS & BRACES	1	1	1	1
	TUBE ANCHORS *	460	460	760	760
2 500	STANDARDS	1	2	2	2
	TRANSOMS	1	2	1	2
	LEDGERS & BRACES	1	1	1	1
	TUBE ANCHORS *	460	460	610	610
2 500 with 1 200 overhang	STANDARDS	NOT APPLICABLE	2	NOT APPLICABLE	2
	TRANSOMS		2		2
	LEDGERS & BRACES		1		1
	TUBE ANCHORS *		760		483x4 x 3mtie back

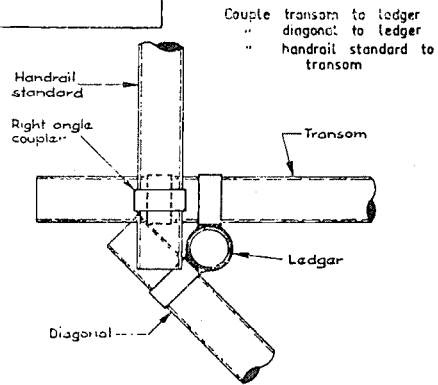
48.3 x 4 Scaffolding Tube Gantry *USE WHEN GANTRY IS UNSUPPORTED Laterally. SHELTERED AREAS EG CITY LOCATIONS EXPOSED AREAS EG SUBURBAN LOCATIONS

Schedule 7—continued
DIAGRAM 2

NOTE
All dimensions without symbols are in millimetres.
Symbol "m" denotes metres.
Symbol "φ" denotes diameter.

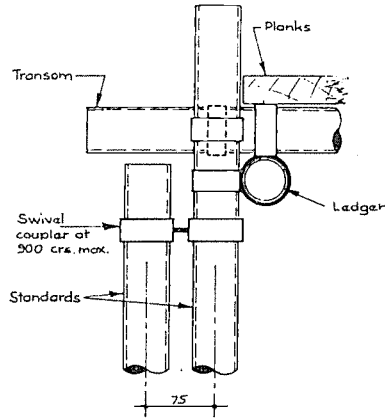


TYPE 'A'

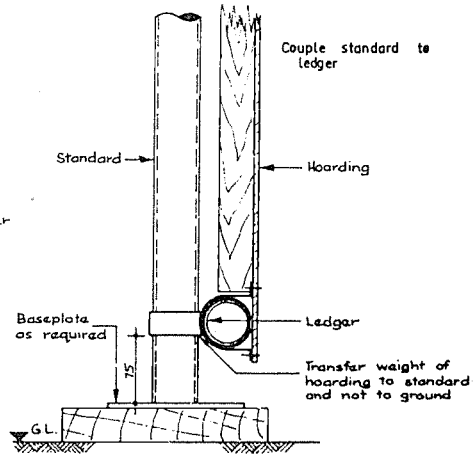


DETAIL A

Couple ledger to transom
" inside standard to transom
" inside standard to ledger



DETAIL OF DOUBLE STANDARD

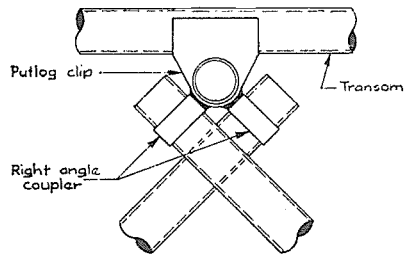


DETAIL OF HOARDING

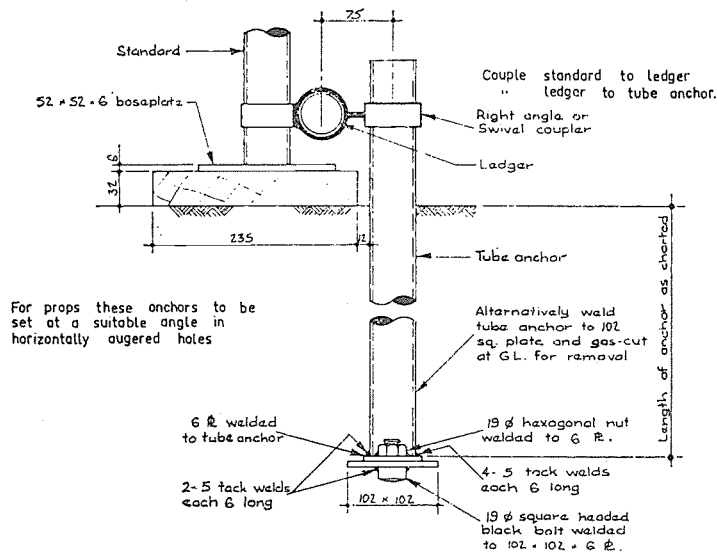
Schedule 7—continued
 DIAGRAM 3

NOTES

1. Tube anchors are one per standard, every third frame and are to be design sketched below.
2. Augered holes for H.D. bolts are to be filled with coarse sand rammed back hard throughout depth. For diagonally propped frame, auger on the rake to suit prop.
3. All tubes shown are 48.3 O.D. x 4
4. Where space restrictions permit use of diagonal props at angles greater than 45°, consult Structures Engineer.
5. All dimensions without symbols are in millimetres.
 Symbol 'm' denotes metres.
6. Symbol 'φ' denotes diameter.



DETAIL B



DETAIL OF TUBE ANCHOR

ATTENDANCE, CHECKING, TESTING AND MAINTENANCE OF BOILERS

Attendance Category	Description of Boiler			Attendance and Checking			Testing and Maintenance		
	Types	Capacity	Applicable Standard	By	Attendance	Checking	By	Action Req'd	
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	
Attended Operation	All types	No limit	AS 1228 or AS 1797 (Not AS 2593)	Certificated boiler attendant (Note 2)	Continually (Note 2)	Normal boiler checks (Note 2)	A responsible and experienced person	Manufacturer's recommendation but at least annually	
Limited attended operation	(a) Water tube steam boilers and all types of hot water boilers	> 2 MW ≤ 10 MW	AS 1228 or AS 1797 Plus AS 2593	Certificated boiler attendant	4 hourly intervals (max.)	(per Clause 9.4.1 of AS 2593)	Approved boiler maintenance contractor (Note 2)	per Reg. 505 (6) (a)	
	(b) All types (Note 1)	≤ 2 MW	AS 1228 or AS 1797 Plus AS 2593	Certificated boiler attendant	Start and end of each shift that unit is operating	(per Clause 9.4.1 of AS 2593)	Approved boiler maintenance contractor	per Reg. 505 (6) (a)	
Unattended operation	(a) Water tube steam boilers and all types of hot water boilers (excluding electric element)	≤ 6 MW	AS 1228 or AS 1797 plus AS 2593	Trained (Note 2) but not necessarily certificated person	24 hourly (max.)	(per Clause 9.4.1 of AS 2593)	Approved boiler maintenance contractor	per Reg. 505 (6) (b)	
	(b) (i) Electrode or electric element (element fails on low water)	No limit	AS 1797 Plus AS 2593	Trained but not necessarily certificated person	7 days (max.)	(per Clause 9.4.1 of AS 2593)	Approved boiler maintenance contractor	per Reg. 505 (6) (b)	
	(ii) Electric element (element may not fall on low water)	≤ 250 kW	AS 1797 Plus AS 2593	Trained but not necessarily certificated person	7 days (max.)	(per Clause 9.4.1 of AS 2593)	Approved boiler maintenance contractor	per Reg. 505 (6) (b)	
	(c) Small low hazard boilers	≤ 125 kW (fire tube welded tubes) & 250 kW (all other types)	AS 1228 or AS 1797 (Not AS 2593)	Trained but not necessarily certificated person	Continually within sight or sound of boiler annunciating system, or as otherwise approved by the relevant authority	Normal boiler checks	A responsible and experienced person	Manufacturer's recommendation but at least annually	
	(d) Small low hazard boilers	≤ 10 m ² and ≤ 1200 kPa	AS 1797 (Not AS 2593)	Trained but not necessarily certificated person	24 hours (max.)	Normal boiler checks	Approved boiler maintenance contractor	per Reg. 505 (6) (b)	

Note 1 - See regulation 505(3)
 Note 2 - See regulation 505(4)

SCHEDULE 9—CERTIFICATES OF COMPETENCY

(Regs. 1003, 1007)

PART 1—TYPES OF CERTIFICATES TO DRIVE OR OPERATE PLANT

Code shown on certificate	Type of plant for which certificate issued
BOILERS	
1	All water-tube boilers
2	Water-tube boilers not exceeding 30 MW
3	Fire-tube boilers
4	Electric boilers
ENGINES	
5	All steam turbines
6	Steam turbines not exceeding 20 MW
7	Reciprocating steam engines
8	All internal combustion engines
LOCOMOTIVES	
9	Steam locomotives
10	Internal combustion locomotives
CRANES	
TOWER AND DERRICK CRANES	
1-A-2	All tower cranes
1-B-2	All derrick cranes
RAIL MOUNTED CRANES	
2-A	Portal boom cranes
2-B-2	Bridge or gantry cabin operated cranes
2-B-3	Bridge or gantry cranes (containers)
MOBILE CRANES	
3-A-1	Vehicle loading crane less than 10 metre tonnes
3-A-2	All vehicle loading cranes
3-B	Non slewing cranes
3-C-1	Slewing hydraulic boom cranes with a capacity of less than 20 tonnes
3-C-2	Slewing hydraulic boom cranes with a capacity of less than 80 tonnes
3-C-3	All slewing hydraulic boom cranes
3-D-1	Slewing lattice boom cranes with a capacity of less than 20 tonnes
3-D-2	Slewing lattice boom cranes with a capacity of less than 80 tonnes
3-D-3	All slewing lattice boom cranes
20-A-1	Slewing cranes fitted with a tower boom with a capacity of less than 20 tonnes
20-A-2	All slewing cranes fitted with a tower boom

SCHEDULE 9—*continued*PART 1—TYPES OF CERTIFICATES TO DRIVE OR OPERATE PLANT—*continued*

Code shown on certificate	Type of plant for which certificate issued
HOISTS	
4-A-1	Cantilever platform hoists
4-A-2	Materials hoists
4-A-3	Men and materials hoists
MISCELLANEOUS	
20-B	Elevating work platform
7-A-2	Excavator/shovel
7-C	Dragline
9-B	Tow Truck
21	Any other type of plant specified by the Commissioner on the certificate of competency

PART 2—TYPES OF CERTIFICATES FOR WORK ON CONSTRUCTION SITES

Code shown on certificate	Type of work for which certificate issued
R	Rigger (all rigging work)
S	Scaffolder (all scaffolding work)
D	Dogman
E	Explosive powered tool operator
1	Erection of boatswain chairs and fixed light duty suspended stages
2	Erection and dismantling of tower cranes
3	Erection and dismantling of tower hoists
4	Installation, alteration and repair of lifts
5	Erection, alteration and dismantling of scaffolding and gear for ship building
6	Steeple jacking
7	Erection, repair and dismantling of windmills
8	Erection of steel framed buildings to a height of 8 metres
9	Any other type of scaffolding work or rigging work specified by the Commissioner on the certificate of competency

SCHEDULE 10—EXTRA ENTITLEMENTS UNDER CERTIFICATES

(Reg. 1004)

Column 1	Column 2
CRANES	
Certificate of Competency	Other plant entitled to be driven or operated
All tower cranes (1-A-2)	All derrick cranes (1-B-2)
All vehicle loading cranes (3-A-2)	A vehicle loading crane less than 10 metre tonne (3-A-1)
Bridge or gantry cabin operated crane (2-B-2)	Bridge or gantry crane (containers) (2-B-3)
All slewing cranes fitted with a tower boom (20-A-2)	Tow trucks (9-B)
Slewing cranes fitted with a tower boom with a capacity of less than 20 tonnes (20-A-1)	Tow trucks (9-B)
Non slewing cranes (3-B)	All vehicle loading cranes (3-A-1 and 3-A-2)
Slewing hydraulic boom cranes with a capacity of less than 20 tonnes (3-C-1)	All vehicle loading cranes (3-A-1 and 3-A-2), non slewing cranes (3-B) and tow trucks (9-B)
Slewing hydraulic boom cranes with a capacity of less than 80 tonnes (3-C-2)	All vehicle loading cranes (3-A-1 and 3-A-2), slewing hydraulic boom cranes with a capacity of less than 20 tonnes (3-C-1), non slewing cranes (3-B) and tow trucks (9-B)
All slewing hydraulic boom cranes (3-C-3)	All vehicle loading cranes (3-A-1 and 3-A-2), slewing hydraulic boom cranes with a capacity of less than 80 tonnes (3-C-1 and 3-C-2), non slewing cranes (3-B) and tow trucks (9-B)
Slewing lattice boom cranes with a capacity of less than 20 tonnes (3-D-1)	All vehicle loading cranes (3-A-1 and 3-A-2), non slewing cranes (3-B), slewing hydraulic boom cranes with a capacity of less than 20 tonnes (3-C-1) and tow trucks (9-B)
Slewing lattice boom cranes with a capacity of less than 80 tonnes (3-D-2)	All vehicle loading cranes (3-A-1 and 3-A-2), non slewing cranes (3-B), slewing hydraulic boom cranes with a capacity of less than 80 tonnes (3-C-1 and 3-C-2), slewing lattice boom cranes with a capacity of less than 20 tonnes (3-D-1) and tow trucks (9-B)
All slewing lattice boom cranes (3-D-3)	All mobile cranes (3-A-1, 3-A-2, 3-B, 3-C-1, 3-C-2, 3-C-3, 3-D-1, 3-D-2) and tow trucks (9-B)
HOISTS	
Certificate of Competency	Other plant entitled to be operated
Men and materials hoists (4-A-3)	Cantilever platform hoists (4-A-1) and material hoists (4-A-2)

SCHEDULE 10—EXTRA ENTITLEMENTS UNDER CERTIFICATES—*continued*

Column 1	Column 2
CONSTRUCTION WORK	
Certificate of Competency	Other work entitled to be carried out
Rigger (R)	Dogman (D)

SCHEDULE 11—EXAMINATIONS AND EXPERIENCE

(Reg. 1008)

Column 1	Column 2	
DRIVING OR OPERATING PLANT		
Code	Certificate of Competency	Examinable matters
BOILERS		
1,2, 3,4	Boiler Attendant (water tube boiler, fire tube boiler or electric boiler)	In respect of each type of boiler the certificate will entitle the holder to operate— <ol style="list-style-type: none"> 1. Construction, staying and related features of the boiler. 2. Methods of washing out, making manhole, mudhole and other joints on the boiler. 3. Procedure for testing, constructing and maintaining waterlevel gauges. 4. Valves and fittings. 5. Construction and capabilities of feed pumps, feed water regulating equipment and injectors in common use. 6. Firing and blowing down boilers. 7. Safe working of a boiler.
ENGINES		
5,6, 7	Steam engine operator (steam turbines and reciprocating steam engines)	In respect of each steam engine the certificate will entitle the holder to operate— <ol style="list-style-type: none"> 1. Parts of various stationary steam engines, condensers and appropriate uses for them. 2. Maintenance and running of engines. 3. Detection of defects and actions necessary to control and maintain engine in common emergencies.

Schedule 11—Examinations and Experience—*continued*

Column 1	Column 2	
DRIVING OR OPERATING PLANT		
Code	Certificate of Competency	Examinable matters
8	Internal combustion engine operator	<ol style="list-style-type: none"> 1. Principals of the operation of internal combustion engines. 2. Principal working parts of internal combustion engines. 3. Accessories required for internal combustion engines, and their functions. 4. Detection of defects and actions necessary to control and maintain engine in common emergencies. 5. Safety, maintenance and operation of engines.
LOCOMOTIVES		
9	Steam locomotive driver	<ol style="list-style-type: none"> 1. Parts and operations of steam locomotives, particularly braking systems. 2. Day and night signals used on railway systems in Australia. 3. Principals of safe working. 4. Uses of various cocks, gauges, valves and connections on boilers and methods of effecting temporary repairs in cases of a breakdown of an engine or boiler. 5. Impurities in water used in the boiler and methods adopted to keep the boiler clean.
10	Internal combustion locomotive driver	<ol style="list-style-type: none"> 1. Parts and operations of diesel locomotives, particularly braking systems. 2. Day and night signals used on railway systems in Australia.
CRANES AND HOISTS		
1-A-2, 1-B-2, 2-A, 2-B-2, 2-B-3, 3-A-1, 3-A-2, 3-B, 3-C-1, 3-C-2, 3-C-3, 3-D-1, 3-D-2, 3-D-3, 20-A-1, 20-A-2	Crane driver	<p>In respect of each type of crane the certificate will entitle the holder to drive—</p> <ol style="list-style-type: none"> 1. Parts of the crane. 2. Workings and features of the crane and its uses in moving, placing, raising, lowering and transporting loads. 3. Slings and slinging practice. 4. Operation of any boiler and fitting of a steam crane or steam excavator. 5. Deployment of personnel. 6. Ability to drive the crane. 7. Detection of defects and actions necessary to control and maintain the crane in common emergencies.

Schedule 11—Examinations and Experience—*continued*

Column 1		Column 2	
DRIVING OR OPERATING PLANT			
Code	Certificate of Competency	Examinable matters	
4-A-1, 4-A-2, 4-A-3	Hoist operator	<p>In respect of the type of hoist the certificate will entitle the holder to operate—</p> <ol style="list-style-type: none"> 1. Parts and operation of the hoist. 2. Detection of defects and actions necessary to control and maintain the hoist in common emergencies. 	
WORK ON CONSTRUCTION SITES			
Column 1		Column 2	Column 3
Code	Certificate of Competency	Examinable matters	Experience
R	Rigger	<ol style="list-style-type: none"> 1. Rigging and safety of rigging involved in the erection, positioning and dismantling of any building or structure, structural steel, equipment or any material (other than scaffolding) that requires the use of gear. 2. Safe working loads for ropes, chains and slings. 3. Splicing and knotting of ropes and the making up of slings. 4. Safe working loads of, and uses for, gear and equipment. 5. Slings and lifting of heavy loads. 6. Freehand sketching. 	1 years experience in rigging work
S	Scaffolder	<ol style="list-style-type: none"> 1. Methods of constructing, dismantling and altering scaffolding. 2. Timbers used in scaffolding, sizes required and possible defects. 3. Gear and component parts used in scaffolding. 4. Freehand sketching. 5. Safety precautions and measures relating to the construction, dismantling and alteration of scaffolding. 	1 years experience in scaffolding work

Schedule 11—Examinations and Experience—*continued*

Column 1	Column 2	Column 3	
WORK ON CONSTRUCTION SITES			
Code	Certificate of Competency	Examinable matters	Experience
D	Dogman	<ol style="list-style-type: none"> 1. Precautions and measures to be taken to prevent accidents in connection with the movement of loads by a crane. 2. Safe and efficient methods of slinging and handling loads. 3. Safe working loads of, and uses for, ropes, chains and terminal fittings. 4. Estimating the weights of loads composed of different materials. 5. Standard crane signals. 	6 months experience in construction work using cranes
E	Explosive powered tool operator	Proficiency in the safe use, adjustment, assembly and dismantling of explosive powered tools.	

SCHEDULE 12

FORM 1

(s. 19(3), reg. 201)

Occupational Health, Safety and Welfare Act 1984

Commissioner for
Occupational Health, Safety and Welfare
600 Murray Street
WEST PERTH 6005
(09) 327 8777
FAX 321 8973
TELEX "DOSHWA" AA 93346

NOTIFICATION OF ACCIDENT

ACCIDENT REPORTING TELEPHONES
(09)
(008)

Employer name and business address	Date of Accident				
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> <td style="width: 15px; height: 15px;"></td> </tr> </table>				
Address where accident occurred	Time of Accident				
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 15px;"></td> </tr> </table> a.m. p.m.				
Type of workplace where accident occurred (eg construction site, panel beating shop etc)					
Name of injured person	Estimated Time Off				
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; height: 15px;"></td> </tr> </table> days				
Occupation	Age Sex M or F				
Nature of injury					
Brief description of accident (include type of machine / equipment, kW & identification no.)					
Identification No.					
kW					
Place injured person removed to					
Name of person reporting accident					
Position	Telephone no.				
Person for liaison					
Telephone no.					

OFFICE USE ONLY

Person receiving report
Date Time

<input type="checkbox"/> Nat	<input type="checkbox"/> F&S
<input type="checkbox"/> Loc	<input type="checkbox"/> CSB
<input type="checkbox"/> Ag	<input type="checkbox"/> M/S
<input type="checkbox"/> Type	<input type="checkbox"/>

Schedule 12—continued

FORM 2

(s. 51(2), reg. 204)

Occupational Health, Safety and Welfare Act 1984

REFERENCE OF IMPROVEMENT NOTICE FOR REVIEW

(Section 51)

To: The Commissioner for Occupational Health, Safety and Welfare
600 Murray Street
West Perth WA 6005

Take notice that.....
(name of person referring notice for review)

hereby refers an improvement notice issued by.....
(inspector)

.....to
on to you for review.

The notice related to:-

Workplace at of
(address) (employer)

Provision allegedly contravened

To be complied with by
(specify time)

I request the review on the following grounds:

.....

Capacity of person referring notice for review.....
person to

.....
whom notice issued/employer of person to whom notice issued)

Signature Date

Schedule 12—continued

FORM 3

(s. 51(2), reg. 204)

Occupational Health, Safety and Welfare Act 1984

REFERENCE OF PROHIBITION NOTICE FOR REVIEW

(Section 51)

To: Industrial Relations Commission
815 Hay Street
Perth WA 6000

Take notice that
(name of person referring notice for review)

hereby refers a prohibition notice issued by
(inspector)

to on
to you for review.

The prohibition notice related to:-

Workplace at of
(address) (employer)

Activity prohibited.....

I request the review on the following grounds:

.....

Capacity of person referring notice for review
person to

.....
whom notice issued/employer of person to whom notice issued)

Signature Date

By His Excellency's Command,

G. PEARCE,

Clerk of the Council.