

(24 March 2017 – to date)

## OCCUPATIONAL HEALTH AND SAFETY ACT 85 OF 1993

*(Gazette No. 14918, Notice No. 1158, dated 2 July 1993. Commencement date: 1 January 1994, except section 1(3)(b): to be proclaimed)*

### INCORPORATION OF HEALTH AND SAFETY STANDARDS INTO THE PRESSURE EQUIPMENT REGULATIONS, 2009

*Government Notice R262 in Government Gazette 40713 dated 24 March 2017. Commencement date: 24 March 2017.*

*(Editorial note: Also see Government Notice R79 dated 3 February 2012)*

I, Mr Tibor Szana, appointed as the chief inspector in terms of section 27(1) of the said Act, and by virtue of the powers delegated to me by the Minister of Labour in terms of section 42(1) of the Act, after consultation with the Advisory Council for Occupational Health and Safety, hereby, under section 44 of the Occupational Health and Safety (Act No. 85 of 1993), as amended, amend the schedule in the Pressure Equipment Regulations, 2009, by replacing the current schedule with the new schedule as gazetted

(Signed)

Tibor Szana

Chief Inspector

#### Schedule

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<b>American standards</b>	
ASME Section I	Rules for construction of power boilers
ASME Section III	Rules for construction of nuclear facility components (divisions 1, 2 and 3)
ASME Section IV	Rules for construction of heating boilers
ASME Section VI	Recommended rules for the care and operation of heating boilers
ASME Section VII	Recommended guidelines for the care of power boilers
ASME Section VIII	Rules for construction of pressure vessels (divisions 1, 2 and 3)
ASME Section X	Fibre-reinforced plastic pressure vessels
ASME Section XI	Rules for in-service inspection of nuclear power plant components
ASME B31	ASME Code for pressure piping: B31.1 - Power piping B31.2 - Fuel gas piping B31.3 - Process piping B31.4 - Pipeline transportation systems for liquid hydrocarbons and other liquids

Prepared by:

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	B31.5 - Refrigeration piping and heat transfer components B31.8 - Gas transmission and distribution piping systems B31.8S - Managing system integrity of gas pipelines B31.9 - Building services piping B31.11 - Slurry transportation piping systems
ASME RTP-1	Reinforced thermoset plastic corrosion resistant equipment
ASME PCC-2	Repair of pressure equipment and piping
ASME PCC-3	Inspection planning using risk-based methods
ASME PVHO-1	Safety standard for pressure vessels for human occupancy
ASTM D 2774	Standard practice for underground installation of thermoplastic pressure piping
ASTM D 2996	Standard specification for filament-wound "fiberglass" pipe (glass-fibre-reinforced thermosetting resin)
ASTM D 3299	Standard specification for filament-wound glass-fiber-reinforced thermoset resin corrosion-resistant tanks
ASTM D 4097	Standard specification for contact-moulded glass-fiber-reinforced thermoset resin corrosion-resistant tanks
API	American Petroleum Institute. Standard specifications for pressure equipment (as applicable)
The Association of American Railroads Section C, Part III	Specifications for tank cars, M 1002
ANSI/ISA 84.00.01	Functional safety - Safety instrumented systems for the process industry sector
ANSI NB-23	National board inspection code
ANSI Z223.1	National fuel gas code
AWWA	American water works association.[sic] as applicable
DOT 3T	Seamless steel cylinder with a minimum water capacity of 1000 pounds and a minimum service pressure of 1800 psig.
DOT 4L	Welded insulated cylinders.
TEMA rules	Tubular exchanger manufacturers association, Inc.
UL 1316	Standard for safety for glass-fiber-reinforced plastic underground storage tanks for petroleum products, alcohols and alcohol-gasoline mixtures
<b>Australian standards</b>	
AS 2634	Chemical plant equipment made from glass-fibre reinforced plastics (GRP) based on thermosetting resins
<b>British standards</b>	
BS 1113	Design and manufacture of water-tube steam generating plant (including super heaters, reheaters and steel tube economizers)
BS 4994	Specification of the design and construction of vessels and tanks in reinforced plastics
BS 5169	Fusion welded steel air receivers

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BS 6464	Specification for reinforced plastics pipes, fittings and joints for process plants
BS 7159	Code of practice for design and construction of glass-reinforced plastics (GRP) piping systems for individual plants or sites
PD 5500	Specification for unfired fusion welded pressure vessels
<b>European standards</b>	
2010/35/EU	Council Directive 2010/35/EU 16 June 2010 on transportable pressure equipment
EN 286-1	Simple unfired pressure vessels designed to contain air or nitrogen - Part 1: Pressure vessels for general purposes
EN 303-1	Heating Boilers - Part 1: Heating boilers with forced draught burners -- Terminology, general requirements, testing and marking
EN 303-2	Heating Boilers - Part 2: Heating boilers with forced draught burners – Special requirements for boilers with atomizing oil burners
EN 12493	LPG equipment and accessories - Welded steel tanks for liquefied petroleum gas (LPG) - Road tankers design and manufacture
EN 12952 (All parts)	Water-tube boilers and auxiliary installations
EN 12953 (All parts)	Shell boilers
EN 13121 (All parts)	GRP tanks and vessels for use above ground
EN 13923	Filament-wound FRP pressure vessels - Materials, design, manufacturing and testing
EN 13445	Unfired pressure vessels
EN 13458-1	Cryogenic vessels - Static vacuum insulated vessels - Part 1: Fundamental requirements
EN 13458-2	Cryogenic vessels - Static vacuum-insulated vessels - Part 2: Design, fabrication, inspection and testing
EN 13480 (All parts)	Piping
EN 13530-1	Cryogenic vessels - Large transportable vacuum insulated vessels - Part 1: Fundamental requirements
EN 13530-2	Cryogenic vessels - Large transportable vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing
EN 14398-2	Cryogenic vessels - Large transportable non-vacuum insulated vessels - Part 2: Design, fabrication, inspection and testing
EN 14025	Tanks for the transport of dangerous goods - Metallic pressure tanks - Design and construction
EN 14931	Pressure vessels for human occupancy (PVHO) - Multi-place pressure chambers for hyperbaric therapy - Performance, safety requirements and testing
EN 14359	Gas Loaded accumulators for fluid power applications
EN 50052	Cast aluminium alloy enclosures for gas-filled high-voltage switchgear and control gear

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CWA 15740	Risk-based inspection and maintenance procedures for industry (RIMAP)
IEC 61508	Functional Safety of electrical/electronic/programmable electronic safety-related systems - General requirements
IEC 61511 (All parts)	Functional safety - Safety instrumented systems for the process industry sector
<b>NOTE In addition to the above mentioned health and safety standards any standard which results in pressure equipment being CE or Pi marked is deemed approved.</b>	
<b>French standards</b>	
RCC-M	Design and construction rules for mechanical components of PWR nuclear standards
CODAP	Code for the construction of unfired pressure vessels
<b>German standards</b>	
DIN 6647	Cylindrical beverage containers
Technical Rules	Technical rules for steam boilers (TRD), Dampfkrv and all sections
AD-2000	Technical rules for pressure vessels (TRB), Druckbehvo and all sections
DVS 2205	Design calculations for containers and apparatus made from thermoplastics
DVS 2210-1	Plastic piping for industrial applications
<b>ISO Standards</b>	
ISO 4126 (All parts)	Safety devices for protection against excessive pressure
ISO 14692 (All Parts)	Petroleum and natural gas industries - Glass-reinforced plastics (GRP) piping
ISO 23251	Petroleum, petrochemical and natural gas industries - Pressure-relieving and depressuring systems
<b>South African standards</b>	
SANS 347	SANS 347: Categorization and conformity assessment criteria for all pressure equipment
SANS 151	Fixed electric storage water heaters
SANS 10228	Identification and classification of dangerous goods for transport
SANS 10254	Installation, maintenance, replacement and repair of fixed electric storage water heating systems
SANS 10227	SANS 10227: Criteria for the operation of inspection authorities performing inspections in terms of the Pressure Equipment Regulations
SANS 10019	SANS 10019: Transportable metal containers for compressed gas - Basic design, manufacture, use and maintenance
SANS 1475 - 1:	SANS 1475 - 1: The production of reconditioned fire-fighting equipment - Part 1: Portable and wheeled (mobile) rechargeable fire extinguishers
SANS 10087	The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial and industrial installations:
	Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 ℓ and a combined water capacity not exceeding 3 000 ℓ per installation

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	Part 2: Installation in mobile units and small non-permanent buildings
	Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 ℓ
	Part 4: Transportation of LPG in bulk by road
	Part 6: The application of liquefied petroleum and compressed natural gases as engine fuels for internal combustion engines
	Part 7: Storage and filling sites for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg
	Part 8: The fuelling of fork-lift trucks and other LP gas operated vehicles
	Part 10: Mobile filling stations for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg.
SANS 10147	Refrigeration systems including plants associated with air-conditioning systems
SANS 1539	Appliances operating on liquefied petroleum gas - Portable and mobile appliances - Safety aspects
SANS 1237	Single-stage low-pressure regulators for liquefied petroleum gas (LPG)
SANS 329	Industrial thermal processing equipment - Safety requirements for combustion and fuel-handling systems
SANS 10105 - 1	The use and control of fire-fighting equipment - Part 1: Portable and wheeled (mobile) fire extinguishers
SANS 1910	Portable refillable fire extinguishers
SANS 1567	Portable rechargeable fire extinguishers - CO <sub>2</sub> type extinguishers
SANS 10147	Refrigeration systems including plants associated with air-conditioning systems
SANS 1539	Appliances operating on liquefied petroleum gas - Portable and mobile appliances - Safety aspects
SANS 1237	Single-stage low-pressure regulators for liquefied petroleum gas (LPG)
SANS 1518	Transport of dangerous goods - Design, construction, testing, approval and maintenance of road vehicles and portable tanks
SANS 1668	Fibre-reinforced plastics (FRP) tanks for buried (underground) storage for petroleum products
SANS 1748 (All Parts)	Glass-fibre-reinforced thermosetting plastics (GRP) pipes
SANS 7396-1	Medical gas pipeline systems - Part 1: Pipeline systems for compressed medical gases and vacuum
SANS 10019	Transportable containers for compressed, dissolved and liquefied gases - Basic design, manufacture, use and maintenance
SANS 10252-1	Water supply and drainage to buildings - Part 1: Water supply installations for buildings
SANS 10260 (All parts)	Industrial gas pipelines
SANS 10147	Refrigerating systems including plants associated with air-conditioning systems

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SANS 10377-1	Pressure vessels for human occupancy - Part 1: Hyperbaric chambers (therapeutic)