

Hunter Water Corporation ABN 46 228 513 446 Standard Technical Specification for:

# STS 650 PRESSURE EQUIPMENT

This Standard Technical Specification (STS) was developed by Hunter Water Corporation to be used in the design, construction or installation and maintenance of facilities that are, or are to become, the property of Hunter Water Corporation. It is intended that this STS be used in conjunction with various other standard and project specific drawings and design requirements as defined by Hunter Water Corporation for a particular project.

Hunter Water Corporation does not consider this STS suitable for use for any other purpose or in any other manner. Use of this STS for any other purpose or in any other manner is wholly at the user's risk.

Hunter Water Corporation does not assume a duty of care to any person using this STS for any purpose other than as stated.

In the case of this document having been downloaded from Hunter Water Corporation's website:

- Hunter Water Corporation has no responsibility to inform you of any matter relating to the accuracy of this STS which is known to Hunter Water Corporation at the time of downloading or that subsequently comes to the attention of Hunter Water Corporation.
- This document is current as at the date of downloading. Hunter Water Corporation may update the document at any time.

Copyright in this document belongs to Hunter Water Corporation.

1 Purpose4
1.1 Scope
1.2 Excluded Equipment 4
2 Interpretation
2.1 Order of precedence
3 Roles and Responsibilities
3.1 Document Owner
3.2 Responsibilities
4 Definitions
5 Pressure Equipment Requirements8
5.1 Pressure Vessel Design and Manufacture
5.2 Pressure Vessel Installation
5.3 Boiler Requirements
5.4 Air Receivers
5.5 Accumulators
5.6 Hydro-pneumatic Accumulators
5.7 Relief and Safety Valve Requirements9
6 Modification of Pressure Equipment11
7 Commissioning of Pressure Equipment12
7.1 Construction
7.2 Registration of Pressure Equipment 12
7.3 Commissioning 12
8 Decommissioning or Disposal13
9 Boilers and Pressure Vessels – Documentation Requirements
9.1 Site Hard Copy Documentation Requirements14
9.2 O&M Documentation Requirements 14
10 Related Documents15
11 Document Control16
Appendix A: Standards17

#### Appendix B: Boiler and Pressure Vessel – Construction Checklist......19

Appendix D: Boiler and Pressure Vessel – Statutory Compliance RACI ......21



# Standard – STS 650 PRESSURE EQUIPMENT

### **1** Purpose

This standard technical specification (STS) details the requirements of Hunter Water Corporation (Hunter Water) for the design, manufacture, installation, modification, and commissioning of pressure equipment that is, or is to become, the property of Hunter Water.

These specifications are available from the Hunter Water website: www.hunterwater.com.au.

#### 1.1 Scope

STS 650 Pressure Equipment applies to fixed asset pressure equipment that is supplied, installed, or modified, and that is to be owned or controlled by Hunter Water.

Pressure equipment is defined in STS650 as in AS/NZS 1200 as:

 Pressure equipment is a pressure vessel or pressure piping to which AS/NZS 1200 applies and having a hazard level of A, B, C or D according to AS4343. Examples include but are not limited to air receivers, air compressors, autoclaves, boilers, pressurised storage tanks, fired heaters and heritage boilers.

#### **1.2 Excluded Equipment**

The scope does not include:

- Pipework. Pipework is addressed in Hunter Waters STS600,
- Gas cylinders covered under the AS 2030 Gas Cylinders series, up to a volume of 3000L,
- Other equipment as set out or excluded in Appendix A3 of AS 1200 Pressure Equipment,
- Domestic-type hot water heaters,
- Hydraulically actuated equipment, including hydraulic cylinders and rams,
- Hydraulic pressure vessels, including inert gas-type 'dampers', shock absorbers, or accumulators, in which the product of pressure (MPa) and gas volume (L) does not exceed 30 MPaL,
- Portable fire extinguishers,
- Pressurised machines such as compressors and pumps,
- Storage tanks designed for storage of liquids at atmospheric pressure.

#### **2** Interpretation

For the purposes of interpreting *STS 650 Pressure Equipment*, except where the context requires otherwise:

- 'drawings' means the drawings detailing the work involved in a particular project in hand,
- 'include' means including, but not limited to, and is used to provide clarification or examples of the type and nature of items intended,
- 'specification' means a specification detailing the work involved in a particular project,
- 'Standard drawings' means Hunter Water drawings,
- 'standards' means applicable industry standards and includes:
  - o Australian Standards (AS)
  - o Australian/New Zealand Standards (AS/NZS)
  - o American National Standards Institute (ANSI) Standards and
  - o International Organization for Standardization (ISO).
- 'Standard technical specification' (STS) references any of Hunter Water's standard technical specifications, as implied by the text.

Headings are for the convenience of the reader and shall not be used in the interpretation of this standard technical specification.

Unless otherwise stated, expressions such as 'give notice', 'submit', 'approval', or 'directed' mean 'give notice to', 'submit to', 'approval by', or 'directed by' the person nominated by Hunter Water.

Approval does not imply acceptance of responsibility by Hunter Water for compliance with this STS. Unless issued in writing, approval has not been granted.

Failure to comply with the requirements of this STS or any referred documentation may result in rejection. Where equipment or manufacture are rejected, notice will be given by Hunter Water in writing. All associated rectification work shall be completed by the contractor at their cost.

#### 2.1 Order of precedence

All work shall meet all stated requirements in this STS in addition to project specifications or standards specified.

Any deviation from this STS shall be approved in writing on a case-by-case basis by Hunter Water's Document Owner.

The order of precedence for this STS are, from high to lowest:

- Legislative requirements
- Content in this STS
- Australian Standards

#### **3 Roles and Responsibilities**

#### 3.1 Document Owner

The Document Owner of this Hunter Water STS for pressure equipment is Hunter Water's Manager Mechanical Engineering.

#### 3.2 Responsibilities

The Document Owner shall approve the issue of any updated version of this STS in writing.

Any concession to any requirement in *STS 650 Pressure Equipment* is valid only when authorised in writing by the Document Owner.

#### **4 Definitions**

Where the following term, abbreviation, or expression occurs in this STS, it is defined as follows, unless the context implies otherwise.

Term, Abbreviation, Expression	Definition							
AICIP	Australian Institute for the Certification of Inspection Personnel							
AS	Australian Standard							
ASME	American Society of Mechanical Engineers							
AS/NZS	Australian and New Zealand Standard							
Designer	<ul> <li>The person performing design in relation to plant, a substance, or a structure, including:</li> <li>a. Design of part of the plant, substance, or structure, and</li> <li>b. Redesign or modify a design.</li> <li>(Definition as per WHS Act 2011 (NSW)</li> </ul>							
EN	European Standard							
Hazard	A source, situation, or act with the potential for harm resulting in human injury or ill health, damage to property or the environment, or a combination of any of these.							
Hazard level	Hazard level as per AS 4343							
Hunter Water	Hunter Water Corporation							
Hydropneumatic accumulator	Accumulators with a flexible bladder as a separation element between compressible gas cushion and operating fluid							
ISO	International Organization for Standardization							
OEM	Original equipment manufacturer							
Pressure equipment	Definitions of pressure equipment and all pressure equipment types are as per AS/NZS 1200 or AS 4942, whichever is applicable.							
Relief valve	Relief valves also includes safety valves							
Risk assessment	The overall process of risk identification, risk analysis and risk evaluation							
WHS	Work, health and safety							

#### **5 Pressure Equipment Requirements**

Pressure equipment must be:

- designed, manufactured, and installed to ensure a minimum design life of 20 years,
- designed for the lowest hazard level possible, whilst meeting the operational requirements.

Boilers and pressure vessels:

 vessels with hazard levels of B, C, D, or E only must be installed at Hunter Water facilities. Pressure vessels of hazard level A must not be installed at Hunter Water facilities, due to the associated risks. Where the storage requirement exceeds that of a hazard level B vessel, install additional vessels as required to achieve hazard level B.

Any revision of hazard level from the manufacturer's advice shall be risk assessed and verified by an AICIP-certified inspector. Guidance material for a pressure vessel risk assessment is available in Appendix C of AS 1210 Pressure Vessels.

#### 5.1 Pressure Vessel Design and Manufacture

Pressure vessels must be designed, manufactured, and tested in accordance with the requirements of either *AS 1210 Pressure Vessels* or *AS 2971 Serially Produced Pressure Vessels*. Where *AS 1210* allows the use of the international standards *ASME Section VIII, Division 1,* and *BSI PD5500*, these alternative standards must only be used if evidence is provided by the manufacturer that the design has been assessed and conforms to the requirements of *AS 1210 Pressure Vessels*.

#### 5.2 Pressure Vessel Installation

Pressure vessels must be installed with markings, protective devices, and other fittings in accordance with the requirements of *AS 1210 Pressure Vessels*, regardless of the standard of design/manufacture.

Pressure vessels with hazard level A, B or C must be installed with a label showing "Plant item registration" followed by the plant item registration number as per WHS Regulations.

#### **5.3 Boiler Requirements**

Boilers must be designed, manufactured, installed, and tested to the Australian boiler standard *AS 1228 Pressure Equipment – Boilers*, or the international boiler standard *ASME BPVC Section I*.

#### 5.4 Air Receivers

Air receivers must have a pressure relief valve(s) to relieve pressure from external energy sources. Relief valves may be fitted to connecting pipework, any isolation valves between the accumulator and the relief valve that do not simultaneously isolate the vessel from the energy source shall be lockable in the open position by padlock.

A pressure gauge that meets the requirements of *AS 1210 Pressure Vessels* shall be provided to display air pressure for each air receiver.

Air receivers must be manufactured from:

• Carbon steel manufactured to a grade as specified in *AS 1210 Pressure Vessels* and protected with an epoxy coating in accordance with the requirements of *WSA-201 Manual for Selection and Application of Protective Coatings*, or

• Galvanised carbon steel manufactured to an appropriate grade as specified in *AS 1210 Pressure Vessels.* 

Air receivers larger than 150 L capacity:

- must be fitted with an automatic condensate drain together with a separate manual ball valve drain off a tee connection;
  - Automatic drains must be connected to an oil and water separator unit, where the compressor contains oil;
    - Water from the separator can drain to site stormwater systems, however draining to wastewater systems is preferred.
  - The condensate water, without an oil/water separator must drain to the site wastewater system.

#### **5.5 Accumulators**

Accumulators must have:

- An epoxy coating in accordance with the requirements of WSA-201 Manual for Selection and Application of Protective Coatings,
- protection from over pressure by means of a pressure relief valve, unless:
  - a documented risk assessment in accordance with AS1210 identifies a that a pressure relief valve is not required.

#### **5.6 Hydro-pneumatic Accumulators**

Hydro-pneumatic accumulators must:

- Have a capacity of less than 150L,
- Have a WorkSafe NSW Design Registration if they are rated at a Hazard Level of C, D or E, in lieu of compliance to AS-1210,
- Be rated for a pressure that is a minimum of 50 per cent higher than the shut-off head of the associated upstream system, such that a failure in the control system cannot over-pressurise the accumulator,
- Be permanently marked with the design pre-charge pressure specific to the application,
- Be protected from over pressure by means of a pressure relief valve, unless:
  - a documented risk assessment in accordance with AS1210 identifies a that a pressure relief valve is not required,
- Be externally protected with a painted coating.

#### 5.7 Relief and Safety Valve Requirements

This section applies to relief and safety valves used to protect pressure vessels or boilers from over pressurisation. Any reference hereafter to relief valves also includes safety valves.

Relief valves must be:

Warning – This document is current at time of printing or downloading. It may be reviewed and amended prior to the noted review date at the discretion of Hunter Water Corporation.

- Designed, manufactured, and installed in accordance with the requirements of *AS* 1271 Safety Valves, Other Valves, Liquid Level Gauges and Other Fittings for Boilers and Unfired Pressure Vessels, *AS* 1210 Pressure Vessels and other applicable Australian Standards,
- Installed vertically,
- Installed with a silencer where it will be greater than 85dBA when operated,
- Either brass or grade 316 stainless steel. The operating environment must be considered when selecting appropriate pressure relief valve materials. If neither brass nor grade 316 stainless steel is appropriate for the operating environment then an alternative shall be recommended to Hunter Water for approval prior to installation,
- Permanently marked or provided with a tag displaying the following information:
  - o device name, type, and tag number
  - manufacturer and serial number
  - nominal size (DN)
  - o set pressure (in kPa)
  - o test date or date of manufacture.
- Right-angled outlet valves. Circumferentially venting pressure relief valves must only be used for valves less than 26 mm in diameter that are located in dry, clean, indoor environments.

#### **6 Modification of Pressure Equipment**

Modification of pressure equipment must ensure compliance with the Australian Standard relevant to the equipment.

#### 7 Commissioning of Pressure Equipment

#### 7.1 Construction

The pressure equipment installation or modification must include:

- Completion of inspections required by AS/NZS 3788 Pressure Equipment In-service Inspection.
  - Inspections completed by AICIP certified inspectors for pressure vessels, boilers and pressure relief valves as required by and in accordance with AS/NZS 3788 Pressure Equipment – In-service Inspection.
- Rectification of deficiencies identified in the AS/NZS 3788 Pressure Equipment In-service Inspection or from the construction checklist (Appendix B: Boiler and Pressure Vessel – Construction Checklist)
- Submission of a signed and completed construction checklist as per Appendix B: Boiler and Pressure Vessel Construction Checklist to Hunter Water.

#### 7.2 Registration of Pressure Equipment

Boilers and pressure vessels with a hazard level of:

- A, B or C must be 'item registered' with SafeWork NSW under the Work Health and Safety (WHS) Regulation 2017.
- A, B, C, or D must be 'design registered' with SafeWork NSW under the WHS Regulation 2017 prior to installation at any Hunter Water site.

All registration processes must be completed during construction or prior to on-site pressurisation of the equipment.

For more detail on responsibilities and process, see Appendix D: Boiler and Pressure Vessel – Statutory Compliance RACI which may be referenced for efficiently arranging to meet the requirements of this STS but is informative only.

#### 7.3 Commissioning

Pressure equipment must be commissioned in accordance with AS1200 and the manufacturers commissioning procedure.

#### 8 Decommissioning or Disposal

Decommissioning and disposal of boilers and pressure vessels must have a risk assessment and safe work method statement. The risk assessment and safe work method statement must address, as a minimum:

- depressurisation of the boiler or pressure vessel
- purging of contents
- no harm to the environment
- removal of the serial number and any other unique identification markings
- rendering the boiler or pressure vessel unusable or inoperable
- the safety of personnel doing the work.

For each boiler or pressure vessel to be disposed of, submit to Hunter Water a signed and completed pressure vessel decommissioning checklist for each vessel. Refer Appendix C: Boiler and Pressure Vessel – Decommissioning.

Hunter Water shall submit Appendix C to SafeWork NSW with a brief covering letter or email to deregister the boiler or pressure vessel. This is to be recorded in Hunter Water's document management system.

#### 9 Boilers and Pressure Vessels – Documentation Requirements

Pressure equipment must have documentation provided compliant with STS903 and STS906. This section details the additional documentation requirements for boilers and pressure vessels.

For more detail on responsibilities and process, see Appendix D: Boiler and Pressure Vessel – Statutory Compliance RACI.

#### 9.1 Site Hard Copy Documentation Requirements

At construction completion for each boiler or pressure vessel supplied, installed, or modified provide the following documentation in electronic format & hardcopy:

- In-service inspection report by an AICIP approved inspector (where required by AS/NZS 3788 Pressure Equipment – In-service Inspection):
  - Install the report securely on site near the vessel in a weatherproof display box or frame.
  - o Attach or update the in-service sticker on the pressure vessel.
- registration certificate from SafeWork NSW (for boilers or pressure vessels with a hazard level B or C)
  - Install the certificate securely on site near the vessel in a weatherproof display box or frame, or on-site noticeboards in administration office if unavailable.

#### 9.2 O&M Documentation Requirements

Operation and Maintenance documentation for boilers and pressure vessels supplied, installed, or modified at Hunter Water must comply with Hunter Water's *STS 906 Operation and Maintenance Manual Requirements*. In addition, the following documentation must be provided to Asset Information:

- Manufacturer's data report (or equivalent statement of compliance with equipment standard),
- Designer's or manufacturer's risk and safety information and instructions,
- In-service inspection report by an AICIP-approved inspector (if required by *AS/NZS 3788 Pressure Equipment In-service Inspection*),
- Design registration certification and design verification documentation for boilers and pressure vessels with hazard levels B, C, or D,
- Item registration certification for boilers and pressure vessels with hazard levels B or C,
- detail to support determination of the hazard level for each pressure vessel installed or modified, including consideration of the location near other equipment in which it is installed and the frequency with which workers are expected to be in the vicinity, for boilers and pressure vessels of hazard level B or C.
- for modified boilers or pressure vessels:
  - engineering verification report demonstrating that modifications to any pressure vessels have been designed and implemented in accordance with the relevant Australian Standards

Warning – This document is current at time of printing or downloading. It may be reviewed and amended prior to the noted review date at the discretion of Hunter Water Corporation.

#### **10 Related Documents**

In addition to *STS 650*, all work must comply with relevant current standards and regulations inclusive of all amendments. In particular:

- Workplace Health and Safety Regulations
- WorkCover NSW Codes of Practice
- Safe Work Australia Model Codes of Practice
- Hunter Water's Design Manuals
- Hunter Water's Standard Technical Specifications
- Hunter Water's Standard Drawings

Appendix A: Standards is a list of Standards referenced in this specification and other Standards relevant to the scope.

## **11 Document Control**

Document Owner: Manager Mechanical Engineering

Document Approver: Executive Manager Customer Delivery

Document review is as per the Integrated Management System Document Management Standard <u>HW2013-421/22.002</u>.

Version	Author	Details of change	Approval date	Approved by
1.0	R Lonergan	Initial release	01/11/2017	D Cleary
2.0	R Lonergan	Section 5.5 and 8.4	24/09/2018	S Horvath
3.0	G Moore	Re-drafted	14/10/2020	L Backhausen
4.0	E Hill	Construction clarifications, Appendix A update, Appendix D added	18 Sept 2024	Glen Robinson

# Appendix A: Standards

The documents listed below and in Appendix C of AS/NZS 1200 are deemed relevant to pressure equipment within STS 650. This is not an exhaustive list.

Reference number	Title						
AS/NZS 1200	Pressure equipment						
AS 1210	Pressure vessels						
AS 1228	Pressure equipment – Boilers						
AS 1271	Safety valves, other valves, liquid level gauges and other fittings for boilers and unfired pressure vessels						
AS 1358	Bursting discs and bursting disc devices – Application, selection and installation						
AS 2030	Gas cylinders						
AS 2337	Gas cylinder test stations						
AS 2593	Boilers – Safety management and supervision systems						
AS 2971	Serially produced pressure vessels						
AS/NZS 3788	Pressure equipment – In-service inspection						
AS 3873	Pressure equipment – Operation and maintenance						
AS 3892	Pressure equipment – Installation						
AS 3920	Pressure equipment – Conformity assessment						
AS 4037	Pressure equipment – Examination and testing						
AS 4041	Pressure piping						
AS 4343	Pressure equipment – Hazard levels						
AS 4458	Pressure equipment – Manufacture						
AS 4942	Pressure equipment – Glossary of terms						
AS/NZS 1170.0	Structural design actions, Part 0: General principles						
AS/NZS 1170.2	Structural design actions, Part 2: Wind actions						
AS 1170.4	Structural design actions, Part 4: Earthquake actions in Australia						
AS 3600	Concrete structures						
AS 4100	Steel structures						
AS 3990	Mechanical equipment - Steelwork						
AS/NZS 2312	Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings						

Reference number	Title						
AS/NZS 3992	Pressure equipment – Welding and brazing qualification						
AS/NZS 5601	Gas installations						
AS/NZS 60079	Explosive atmospheres						
ASME BPVC-I	Boiler and pressure vessel code, Section I, Rules for construction of power boilers						
ASME BPVC-V	Boiler and pressure vessel code, Section V, Non-destructive examination						
ASME BPVC-VIII-1	Boiler and pressure vessel code, Section VIII, Rules for construction of pressure vessels, Division 1						
ASME BPVC-VIII-2	Boiler and pressure vessel code, Section VIII, Rules for construction of pressure vessels, Division 2: Alternative rules						
ASME BPVC-IX	Boiler and pressure vessel code, Section IX, Welding, brazing, and fusing qualifications						
ASME BPVC-X	Boiler and pressure vessel code, Section X, Fibre-reinforced plastic pressure vessels						
ASME B31.1	Power piping						
ASME B31.3	Process piping						
BSI PD5500	Specification for unfired fusion welded pressure vessels						

# Appendix B: Boiler and Pressure Vessel – Construction Checklist

Boiler and pressure vessel construction checklist								
Site: HWC vessel ID:								
Vessel description:								
Check the following items	Initial as complete and comments							
Protective device (for example, relief valve) is provided and is rated appropriately for design pressure of vessel and flow rate								
Any relief valve(s) are marked/tagged with: [Device name, type, and tag number]; [Test date or date of manufacture]; [Set pressure (in kPa)]; [Manufacturer and its serial number]; [Nominal size (DN)] as required under AS 1271	Relief valve set pressure:							
Pressure gauge is fitted to vessel as per requirements of AS 1210 (required if vessel is fitted with a pressure relief device)								
Automatic condensate drains are provided for air receivers upstream of air dryers and >150L, or at unmanned sites								
Boiler or pressure vessel is marked as compliant to an approved Australian Standard (for example, AS 1228 or AS 1210)								
For pressure vessels: Permanently marked as per requirements of AS 1210 including: [manufacturer]; [design pressure]; [test pressure]; [test date]; [hazard level]; [serial number]; [design approval number for vessels with hazard level A, B, C or D]								
Boiler or pressure vessel is permanently labelled with Hunter Water's vessel identification number, as per STS 600								
Where required by AS 3788, in service inspection report by qualified AICIP inspector is securely stored near equipment and has been electronically submitted to Hunter Water								
SafeWork NSW equipment item registration certificate is securely stored near equipment with hazard level A, B or C								
Contractor's representative	Hunter Water Mechanical Engineer							
Name:	Name:							
Position:	Position:							
Company:	Signature:							
Signature:	Date:							
Date:								

# Appendix C: Boiler and Pressure Vessel – Decommissioning Checklist

Boiler and pressure vessel decommissioning checklist							
Site: HWC vessel ID:							
Vessel description: Serial number:							
Complete the	following items	Initial as complete and comments					
disposal of any p A, B or C have b	ifying SafeWork NSW of removal or pressure equipment with hazard level peen prepared and submitted to Hunter Hunter Water to submit to SafeWork						
Identification ma vessels being di	rkings removed from any pressure sposed of						
Pressure vessel	s being disposed of rendered unusable						
	nas been done with the disposed nent listed (for example, scrapped for						
	ecting piping and equipment are safe ne site has been tidied up and made						
	ng documentation of changes to current en prepared and submitted to Hunter s						
Contractor's rep	resentative	Hunter Water Mechanical Engineer					
Name:		Name:					
Position:		Position:					
Company:		Signature:					
Signature:		Date:					
Date:							

#### Appendix D: Boiler and Pressure Vessel – Statutory Compliance RACI

#### HW2012-1042/4/2.401 – Protocol – Pressure Vessel Registration RACI

RACI MODEL			R	Resp	oonsible	A	Acc	countable		
Statutory Compliance - Pressure Vessel Registration	Asset As									
	Maintenance			Asset Informatio n		Project Delivery		Operations	Pressure Vessel Contractor	Documents required / Deliverables (detailed in STS 650)
NEW PRESSURE VESSEL					С	1	A		R	0007
Assign Ellipse Asset Number				R			A			
Obtain Manufacturers data report & Design registration certificate	T					A	R		с	Manufacturers data report, Design registration certificate
Organise an inspection time with Adept for when it has been installed but not live							A		R	
Pay invoice for inspection						A	R		I	
Register the new vessel using the Ellipse Asset number with SafeWork				NI.	A	С	С		R	
Confirm appropriate documentation on site	T				1	A	R			In-service inspection report, Registration certificate from SafeWork NSW
Confirm registration prior to commissioning or energisiation						A	R			
File inspection report & registration certificate in HW2012-1042/4/2 \\trim\TRIMREFERENCE\1313299.tr5 File other static documents in HW2007-1712/26 file:\\trim\TRIMREFERENCE\2038902.tr5	I			R		A	I			In-service inspection report, Design registration certification, Manufacturer's data report, Designer's or manufacturer's risk and safety information and instructions, Item registration certification, Documented risk assessment for each pressure vessel installed or modified
Update registered information in Ellipse	I			R		A				
Distribute & display registration on site	I		(R - if network )				A	R		In-service inspection report, Registration certificate from SafeWork NSW
DISPOSAL OF ASSET		A			1				R	
Alert SafeWork of disposal of pressure vessel	A			1					R	
Remove from internal schedule									A/R	02
Remove or retire Asset in Ellipse	A			R						

Note: If there is a **change to the pressure vessel** (location moved or incorrect information; eg serial #) that is <u>not</u> picked up during HWC's Pressure Vessel inspection contractor's maintenance inspections, **contact the Responsible HWC Engineer**, who can notify contractor and work through options to change information with Safework NSW, or provide an alternate solution if a change is not possible.

For any inquiries on whether a Hunter Water Pressure vessel is registered, check the pressure vessel register HW2012-1042/4/2, and address queries to Responsible HWC Engineer if the vessel is unable to be found on the register.