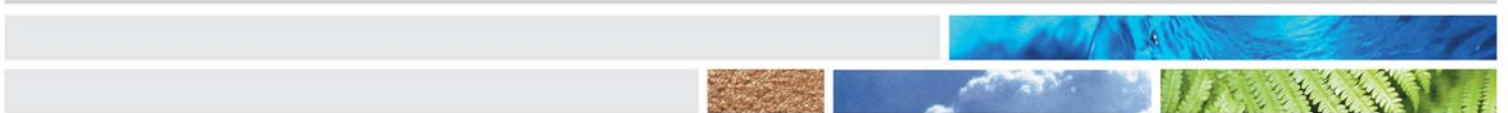




Environmental
Protection Authority
Te Mana Rauhi Taiao

Certification of Stationary Tanks and Process Containers

APRIL 2012



TECHNICAL GUIDE

Table of Contents

1.	Scope.....	3
2.	Introduction.....	4
3.	Certifying the Design for a Workshop Constructed Stationary Tank and Process Container.....	5
3.1.	Relevant Legislation.....	5
3.2.	Clause outline	5
3.3.	Criteria.....	5
4.	Certifying the Fabricator for the Workshop Construction of a Certified Design.....	7
4.1.	Relevant Legislation.....	7
4.2.	Clause outline	7
4.3.	Criteria.....	7
5.	Certifying the Stationary Container - Design and Construction	8
5.1.	Relevant Legislation.....	8
5.2.	Clause outline	8
5.3.	Stationary container system approval process	8
5.3.1.	Workshop Constructed Tank (Certified Fabricator and Certified Design)	8
5.3.2.	Field Constructed Tanks	8
5.4.	Criteria.....	9
6.	HSNO Stationary Container Data Sheet Design – Workshop Constructed.....	10
6.1.	Explanation of terms	12
7.	HSNO Stationary Container Data Sheet Fabricator	14
7.1.	Explanation of terms	15
8.	HSNO Stationary Container Data Sheet Design & Construction - Field Constructed or One-off Design	16
8.1.	Explanation of terms	19
9.	Appendix A – Relevant Clauses.....	21
10.	Appendix B – Decision Flow Chart.....	24

1. Scope

To ensure compliance, persons must meet all of the obligations set out in the relevant regulations and controls. This document provides guidance for certification of the design and fabrication of stationary tanks and process containers required in Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended), in particular clauses 91, 92 and 94.

This document, whilst providing guidance, is not endorsed as a means of compliance although it may satisfy some requirements of Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended). This document does not include certification that may be required by other sections of the HSNO legislation (or related regulations) or other legislation such as certification of pressure vessels covered by the Health and Safety in Employment (Pressure Equipment, Cranes and Passenger Ropeways) Regulations

This guide should be read in conjunction with Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended) (the Transfer Notice).

Antecedent

February 2011 – Approval date

April 2012 – Converted to EPA format

2. Introduction

The term stationary container includes both stationary tanks and process containers. These are broadly grouped into two categories: workshop constructed or field constructed.

Generally the former will be smaller tanks that are able to be transported (which may be up to 100,000 litre capacity) while the latter can be of any size up to millions of litres. There will be some overlap, for example where field constructed tanks are fabricated in parts and assembled on site. Each must be considered on a case by case basis.

For workshop manufactured tanks the fabricator must be certified for a particular design or designs. Hence in this case the design has to be certified by a test certifier prior to tank construction. If the fabricator is not certified, they are still able to manufacture a tank, but it is considered as a field constructed tank and that process will need to be followed.

Workshop constructed tanks and process containers are included in Clause 94, Schedule 8 of the Transfer Notice.

Field constructed tanks and process containers which are designed and constructed on a one-off basis, fall under Clause 92, Schedule 8 of the Transfer Notice. The requirements for stationary tanks are more prescriptive than process containers in this clause.

Explanations for these processes are outlined in each section below. For workshop constructed tanks and process containers, refer to Sections 3, and 4, with the relevant criteria in sections 6 and 7. For field constructed tanks and process containers, refer to section 5 with the criteria in Section 8.

Appendix B is a flow chart to show the separate processes to be followed for workshop and field constructed stationary tanks and process containers.

3. Certifying the Design for a Workshop Constructed Stationary Tank and Process Container

3.1. Relevant Legislation

The Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended) Schedule 8 clause 94(1)(a):

“(1) A test certifier may certify-

(a) a design for a stationary tank or process container if that design complies with the requirements of this Schedule that relate to the stationary tank or process container (as the case may be);...”

Schedule 8 Clause 96 requires the Authority to allocate a register number to an approved design, and to enter details of the design onto the register. These details will be sufficient for the design to be identified but will not contain any confidential design information. This clause also allows the Authority to “add such conditions as it thinks fit on a certified design or fabricator prior to allocating a register number”. The type of conditions likely to be imposed by the Authority would most likely be related to the use of the tank.

3.2. Clause outline

For workshop constructed stationary containers, a design may be certified by a test certifier, so long as the test certifier is provided with sufficient information. The design is then registered with the Authority. Once registered, these designs may be used on a regular basis. The characteristics of the design do not change with the location of the installation, or the application. Typical examples of tanks that fall into this category are farm tanks, diesel burner tanks and service station tanks which may be built to UL2085, AS1692 etc.

It is generally accepted that this clause applies to stationary containers up to approximately 100,000 litres capacity as larger stationary containers cannot be made and transported in one piece.

Stationary containers assembled on site will generally be to one off designs and are therefore considered field constructed. Whilst these are required to be certified by a test certifier, it is not anticipated that the design for such stationary containers will require prior approval and registration by the Authority.

3.3. Criteria

The test certifier must be satisfied that a tank design meets the requirements of Schedule 8 of the Transfer Notice. The following is a non-exclusive list of information, which may be required to be provided:

- Tank type
- Contents and hazardous substance classification
- Tank identification
- Tank design code
- Materials of construction

- Tank dimensions, and absolute maximum tank volume
- Design safe fill height
- Design pressures
- Design temperatures
- Other assumptions or limitations

The requirement for each of these criteria is covered in the checklist in Section 6 below. The test certifier (if approved for tank designs) may either check these items themselves or accept a statement from a competent professional engineer familiar with tank construction of the type under review (e.g. polyethylene, stainless steel, etc).

4. Certifying the Fabricator for the Workshop Construction of a Certified Design

4.1. Relevant Legislation

The Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended) Schedule 8 clause 94(1)(b):

“(1) A test certifier may certify-

(b) in relation to a certified design or designs, a fabricator for the purposes of constructing a stationary container system in accordance with the design.”

4.2. Clause outline

A fabricator for a workshop constructed stationary container must be certified by a test certifier. The design must be approved first (see previous section), and the fabricator then certified to fabricate that specific design. The design can include a range of capacities to the same basic design provided that sufficient detail for each size is included in the design.

A fabricator can only be certified to fabricate a specific design – they cannot be approved to generally construct tanks to a design standard such as AS 1692 Steel tanks for flammable and combustible liquids.

4.3. Criteria

The non exclusive criteria for the certification of a fabricator include:

- a. Premises and Equipment
- b. Experience
- c. Quality systems
- d. Purchasing systems
- e. Qualified welders and welding procedures
- f. Quality assurance program (including audit process)
- g. Inspection and testing regime
- h. Coating systems
- i. Record keeping

The requirement for each of these criteria is covered in the checklist in Section 7 below.

This step of certifying the fabricator is not necessary for field constructed tanks

5. Certifying the Stationary Container - Design and Construction

5.1. Relevant Legislation

The Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended) Schedule 8 clauses 92 (2)(b)(i) and (ii):

92(2)(b) if the stationary container system includes a stationary tank, the stationary tank complies with the requirements specified in this Schedule relating to—

- (i) tank design; and*
- (ii) tank construction; and*
- (iii) tank installation; and*
-”*

5.2. Clause outline

Clause 92(2)(b) specifies the elements of a stationary tank that are to be certified in order for a stationary container system certificate to be issued. This guide only relates to the tank design and tank construction as required by sub clauses (i) and (ii) of this clause.

5.3. Stationary container system approval process

A tank comprising part of a stationary container system must comply with clause 92(2)(b). Sub clauses (i) and (ii) require the tank design and construction to be verified. Two situations are likely to be presented to the test certifier; each of which will require a different approach.

5.3.1. Workshop Constructed Tank (Certified Fabricator and Certified Design)

For a tank that has been constructed by a certified fabricator to a certified design, the test certifier certifying the stationary container system upon installation, would not need to check the tank design and construction. The tank quality control package will however need to be checked. The certifier would need to check the tank installation and all other requirements of Clause 92(2)(b) from (iii) onwards.

It is possible for a tank to be made to a certified design but constructed by a fabricator who is not certified for that design. In that case the tank construction should be checked as for a field constructed tank.

5.3.2. Field Constructed Tanks

For a tank that has not been constructed by a certified fabricator to a certified design, the test certifier certifying the stationary container system will need to check the tank design and construction.

Field constructed tanks will need to be assessed on a case by case basis, without having to go through the process of separately certifying the design and the fabricator for these custom built tanks. This could include tanks that are individually designed and fabricated in a workshop as well as tanks that are designed for a

specific location and purpose, and are generally constructed on site in the final intended location. They could be of sizes up to millions of litres. Examples of these types of tank designs are those designed in accordance with API 650 Welded tanks for Oil Storage, EN 14015 Specification for the design and manufacture of site built, vertical, cylindrical, flat-bottomed, above ground, welded, steel tanks for the storage of liquids at ambient temperature and above, etc.

The process to be followed is outlined below:

- The tank design is to be verified by a person who is competent in tank design . This person will supply a statement for the tank design. This statement should cover the items in Section 10. If the test certifier is approved for tank design certification, and is competent for the type and size of tank concerned, the test certifier may approve the tank design directly.
- Tank construction is to be checked against the requirements of the QA package for construction. A quality certificate from the fabricator will normally suffice to ensure these requirements have been met, providing it covers all the requirements in Section 10.

The test certifier issuing the stationary container system certificate must ensure that all the requirements of clause 92(2)(b) are met. It is expected that the tank design and construction will also include the pressure management and emergency pressure management requirements in clauses 92(2)(b)(iv) and (v). All other parts of clause 92(2)(b) will be covered by the tank installation and form part of the stationary container system certificate.

5.4. Criteria

The test certifier must be satisfied that the tank design and construction meet the requirements of Schedule 8 of the Transfer Notice. The checklists in Section 8 below have been produced to assist with the assessment.

As far as the design element is concerned, this includes a checklist that is similar to the checklist for the workshop constructed tanks.

The main difference under this clause is the proof required for construction which refers to the quality assurance package, and includes:-

- Extent of the testing and inspection performed
- Suitability of materials of construction
- Welding qualifications
- Suitability of the appurtenances fixed to the tank
- Proof the tank has been constructed strictly in accordance with the design

6. HSNO Stationary Container Data Sheet Design – Workshop Constructed

Owner	
Tank Identification	
Designer	
Name	
Company	
Address	
Qualifications	
Either: CPEng No	
Relevant Experience	☐ Yes ☐ No
Statement – Design complete?	☐ Yes ☐ No
Or: State Qualification and Experience	
Design Drawings	
Tank Type	☐ Vertical ☐ Horizontal ☐ Above ground ☐ Below ground
Contents	
Hazardous Substances class(es)	
Tank dimensions and volume	
Diameter	
Shell height/length	
Maximum volume	
Materials of construction and thicknesses	
Floor	
Shell	
Roof	
Ends	
Design Code	
☐ NZS/API 650 ☐ NZS/BS EN 14015 ☐ API 620 ☐ SWRI 95-03 ☐ SWRI 93-01 ☐ UL 2085 ☐ AS 1692 ☐ AS 2634 ☐ BS 4994 ☐ Other:	
Other design details	

Design Fill Levels

Design Safe fill height

Design specific gravity

Design volume

Design variables

Vacuum

Pressure

Emergency

Maximum flow
rates

Fill

Empty

Design
temperatures

Minimum

Maximum

Other design variables

Venting

Inbreathing rate

Outbreathing rate

Free vent

or Pressure and Vacuum
P/V Certificates available☐ Yes

Setting:

☐ Yes ☐ No

Frangible roof

or Emergency vent

☐ Yes

Setting:

6.1. Explanation of terms

Owner	Name of the final stationary container owner.
Tank Identification	A unique tank identifier, such as a serial number or tank name or number.
Designer	Name, Company, and Address of the person responsible for the design on the tank.
Qualifications	Provide proof that the designer has the relevant experience and knowledge to design the tank to the required codes, standards and loadings. The designer should either be a Chartered Professional Engineer or have relevant qualifications, and should also have experience in tank design. He/she should be able to complete a Statement.
Statement	The design documents should contain a statement (for example PS1) to show the loadings and codes used in the design, and are to be signed by a competent person ¹ . Templates of statements are available from the IPENZ website. Visit http://www.ipenz.org.nz
Design Drawings	Reference the drawing, revision numbers, and date of the detailed tank drawings.
Tank Type	Physical tank type.
Contents	The intended product name in the common form.
Haz subs class	The hazardous substance rating of the stored product.
Tank dimensions and volume	Tank characteristics. Note that the tank design may be for various sizes, with similar characteristics, but may have simple changes such as length and/or diameter
Max Volume	The volume of the tank contained by the shell, which does not necessarily include the volume of the vapour space contained in the roof, but may allow for the volume of the floor, sumps and the likes.
Materials of construction and thickness	The construction material specification and thickness of each major component of the tank. For vertical tanks enter N/A in the 'Ends' field. For horizontal tanks enter N/A for 'Floor' and 'Roof'.
Design Codes	Check the box of the design code used, or comment if using another approved code of practice. The codes listed are those specified in Clause 8(2) of the Gazette notice. The codes used must be the current versions (Note that new versions have a transition period of approximately 6 months to come in to effect).
Design safe fill height	The design level to which the tank may be filled safely on a regular basis. Sometimes referred to as Safe Fill Level, or Normal Fill Level.
Design Specific Gravity	The safe fill height is based on a specific gravity of the stored liquid. Usually this will be that of water (s.g. = 1.0) but occasionally a more dense product may be used such as for caustic (s.g. > 1.2).

¹ This could be a chartered engineer experienced in tank design or person with similar competencies

Design volume	This is the volume in the tank, at the Design safe fill height.
Design variables	State the physical design variables, such as 1. Vacuum / Pressure / Emergency Pressure: Horizontal tanks usually 35kPa pressure (AS 1692). Vertical tanks – considered 'atmospheric' in the vicinity of 2.5mbar vacuum and up to the weight of the roof plates pressure (API 650). Emergency pressures generally 10-20% above the design pressure of the tank (API 2000). 2. Flow rates: Filling and emptying rates for the tank which can be limited by the size of the vents. 3. Temperatures: Minimum and maximum design temperatures

7. HSNO Stationary Container Data Sheet Fabricator

Fabricator			
HSNO Fabricator No (if any)			
Address			
Design(s) for which approved			
Premises and equipment			
Relevant experience			
Quality systems			
Purchasing systems			
Qualified welding and welders			
Welding Procedure Qualifications (WPS)	Relevant	☐ Yes	☐ No
Procedure Qualification Records (PQR)	Relevant	☐ Yes	☐ No
Welder Performance Qualifications (WPQ)	Relevant	☐ Yes	☐ No
Inspection and testing regime			
Are inspection test plans prepared	Relevant	☐ Yes	☐ No
Coating systems			
Record keeping			

7.1. Explanation of terms

Fabricator	Company name of the fabricator applying for approval. <i>Note that should a Fabricator change their name, and provided there are no material changes in the company, then the Fabricator will continue to be certified for the duration of the original certification. Should there be a name change for the Fabricator, then they must advise the Authority (through a test certifier) of the need to update the register.</i> <i>However, should there be a material change, then the Fabricator is required to be recertified.</i>
HSNO Fabricator No	Once the Fabricator has been approved, the number may be added
Premises and Equipment	A comment on the overall impression of the premises, including the equipment. Is the workshop a suitable size for the manufacture? Does the place look in disarray or neat and tidy? Is the right equipment for the manufacture in place? Is there a separate location for the office files etc?
Experience	Does the Fabricator have suitable experience to be able to construct the tank? Is the Fabricator they building other structures with similar techniques? Has the Fabricator brought in someone experienced in tank construction?
Quality Systems	Does the Fabricator have a quality assurance system in place? Is the Fabricator ISO9000 accredited? How is it managed?
Purchasing system	Is there a purchasing system to ensure quality of the materials and parts ordered? Does it allow tracking of goods ordered and dispatched?
Qualified Welding and Welders	Are there written welding procedures (WPS)? Do the welding procedures have procedure qualification records (PQR)? Are the welding procedures suitable for the construction? Are qualified welders on site? Are the welders qualified to perform the company welding procedures i.e. is welder performance qualification (WPQ) in place?
Inspection and testing regime	How does the Fabricator manage the inspection and testing regime? What sorts of tests are implemented in house, and which are out sourced? The fabricator must have an Inspection Test Plan (ITP) developed prior to commencing the fabrication of the tank. The minimum inspection requirements in the ITP must meet the inspection requirements as stated in the tank design standard.
Coating systems	Are these applied in house, or is it out-sourced? Are reputable and reliable coating manufacturers used? How is the surface preparation performed? What about coatings inspections?
Record keeping	Are records kept up to date? Are the records kept secure but easily accessible?

8. HSNO Stationary Container Data Sheet

Design & Construction - Field Constructed or One-off Design

Owner		
Tank location		
Tank identification		
Design already certified		
Designer		
Name		
Company		
Address		
Qualifications		
Either: CPEng No		
Relevant experience	☐ Yes	☐ No
Statement – Design complete	☐ Yes	☐ No
Or: State Qualification and Experience		
Design Drawings		
Tank Type	☐ Vertical ☐ Above ground	☐ Horizontal ☐ Below ground
Other details		
Contents		
Hazardous substances class(es):		
Tank dimensions and volume		
Diameter		
Shell height/length		
Maximum volume		
Materials of construction and thicknesses		
Floor		
Shell		
Roof		
Ends		

Design codes (indicate where applicable).

Structural design codes

- | | | | |
|-------------------------------------|---|----------------------------------|-------------------------------------|
| ☐ NZS/API650 | ☐ NZS/BS EN14015 | ☐ API 620 | ☐ SWRI 95-03 |
| ☐ SWRI 93-01 | ☐ UL 2085 | ☐ AS 1692 | ☐ AS 2634 |
| ☐ BS 4994 | ☐ Other: | | |

Seismic design codes

Seismic Use Group

Wind loading codes

Design wind speed

Other design details

Design fill levels

Hydrostatic fill height

Seismic fill height

Design Specific Gravity

Design fill level

Design fill volume

Design variables

Vacuum

Pressure

Emergency

Maximum Flow rates	Filling	
	Emptying	
Design temperatures	Minimum	
	Maximum	

Certification of Stationary Tanks and Process Containers

Fabricator			
HSNO Fabricator No (if any)			
Address			
Quality Assurance Package			
Inspection Test Plan (ITP)	☐ Complete	☐ Not complete	
Hydrotest fill height	☐ Yes	☐ No	
Certificate available	☐ Yes	☐ No	
Witnessed by test certifier	☐ Yes	☐ No	
Producer Statement (PS4)	☐ Complete	☐ Not complete	
Non-destructive testing (NDT)	☐ Visual ☐ Radiography	☐ Magnetic Particle Inspection (MPI) ☐ Other	
Non-compliances repaired and retested?	☐ Yes	☐ No	
Materials of construction			
Material certificates available for	Shell	☐ Yes	☐ No
	Nozzles	☐ Yes	☐ No
	Either Floor and Roof	☐ Yes	☐ No
	Or: Ends	☐ Yes	☐ No
Welding qualifications			
Welding documents present	WPS	☐ Yes	☐ No
	PQR	☐ Yes	☐ No
	WPQ	☐ Yes	☐ No
Weld maps	Shell	☐ Yes	☐ No
	Either Floor and Roof	☐ Yes	☐ No
	Or: Ends	☐ Yes	☐ No
Venting			
Inbreathing rate			
Outbreathing rate			
Free vent or Pressure and Vacuum P/V Certificates available	☐ Yes Setting: ☐ Yes ☐ No		
Frangible roof or Emergency vent	☐ Yes Setting:		
Nameplate			
Comments			

8.1. Explanation of terms

Owner	Name of the final stationary container owner.
Tank Location	Location where the tank is to be installed.
Tank Identification	A unique tank identifier, such as a serial number or tank name or number.
Designer	Name, Company, and Address of the person responsible for the design on the tank.
Qualifications	Provide proof that the designer has the relevant experience and knowledge to design the tank to the required codes, standards and loadings. The designer must be a competent person ² , and be able to complete a Statement.
Statement	The design documents should contain a statement (for example PS1 or PS4) to show the loadings and codes used in the design, and are to be signed by a competent person ² . Templates of statements are available from the IPENZ website. Visit http://www.ipenz.org.nz
Design Drawings	Reference the drawing, revision numbers, and date of the detailed tank drawings.
Tank Type	Physical tank type.
Contents	The intended product name in the common form.
Haz subs class	The hazardous substance rating of the stored product.
Tank dimensions and volume	Tank characteristics.
Max Volume	The volume of the tank contained by the shell, which does not necessarily include the volume of the vapour space contained in the roof, but may allow for the volume of the floor, sumps and the likes.
Materials of construction and thickness	The construction material specification and thickness of each major component of the tank. For vertical tanks enter N/A in the 'Ends' field. For horizontal tanks enter N/A for 'Floor' and 'Roof'.
Design Codes	Check the box of the design code used, or comment if using another approved code of practice. The codes listed are those specified in Clause 8(2) of the Gazette notice. The codes used must be the current versions (Note that new versions have a transition period of approximately 6 months to come in to effect).
Design safe fill height	The design level to which the tank may be filled safely on a regular basis. Sometimes referred to as Safe Fill Level, or Normal Fill Level.
Design Specific Gravity	The safe fill height is based on a specific gravity of the stored liquid. Usually this will be that of water (s.g. = 1.0) but occasionally a more dense product may be used such as for caustic (s.g. > 1.2).
Design volume	This is the volume in the tank, at the Design safe fill height.
Design variables	State the physical design variables, such as

² This could be a chartered engineer experienced in tank design or person with similar competencies

	1. Vacuum / Pressure / Emergency Pressure: Horizontal tanks usually 35kPa pressure (AS1692). Vertical tanks – considered 'atmospheric' in the vicinity of 2.5mbar vacuum and up to the weight of the roof plates pressure (API650). Emergency pressures generally 10-20% above the design pressure of the tank (API2000). 2. Flow rates: Filling and emptying rates for the tank which can be limited by the size of the vents. 3. Temperatures: Minimum and maximum design temperatures
Fabricator	Company name of the Fabricator constructing the tank. If the constructor is separate from the fabricator (for example if one company produces the parts and another puts them together), then list both and provide comment at the bottom of the page.
Quality Assurance Package	A QA Package should be furnished at the completion of the construction. It should include the items listed below. A workshop constructed tank may not include the Inspection Test Plan, Materials of Construction or Welding Qualifications in the QA documentation.
Inspection Test Plan	An inspection and test plan ensures the tank has undergone the relevant inspection and testing as the tank is being constructed.
Hydrotest fill height	To ensure the integrity of the tank prior to seeing product service. Horizontal tanks may undergo a pressure test instead.
Witnessed by test certifier	It is strongly suggested that the test certifier view the tank shortly after construction but before finally signing the tank as complete. This is the ideal opportunity to see the tank and ensure that it looks like what it is expected.
Producer Statement	The QA documents should contain a statement to certify that the construction has been completed in accordance with the tank design. This may be signed by a company representative, the tank designer, or other third party. A Producer Statement – PS4 Construction Review is available from the IPENZ website for this purpose. Visit http://www.ipenz.org.nz
Materials of Construction	Are material certificates available and do they conform to the design.
Welding qualifications	Does the QA package contain welding qualifications (WPS, PQR and WPQ) and records for the construction? Are there weld maps for all components of the tank? Do they show a welder identification either stamped on the tank, or on a drawing?
Venting	Are the venting requirements below the design capacities? Are the P/V vent settings below the design pressures? Does the roof have a frangible roof or Emergency vent (flammable or oxidising substances only)? Is the setting below the design emergency setting?
Nameplate	Is there a name plate on this tank? Is it permanently secured to the tank? Does it contain all the requirements of the HSNO Act?

9. Appendix A – Relevant Clauses

This section includes the relevant clauses from Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 (as amended).

Part 8 Clause 92 – Requirements for Test Certificate

- (1) A test certifier may not issue a certificate in relation to a stationary container system of any of the types specified in clause 91(2) unless the test certifier is satisfied that—
 - (a) it complies with the requirements set out in subclause (2); or
 - (b) in the case of a stationary container system for which a compliance plan under Part 20 is in effect,—
 - (i) it does not comply with 1 or more requirements set out in subclause (2); but
 - (ii) it does comply with—
 - (A) the corresponding requirements in the compliance plan; and
 - (B) all of the other requirements set out in subclause (2); or]
 - [(c) a code of practice approved by the Authority in accordance with clause 100(2)(c).]
- (2) The requirements referred to in subclause (1) are—
 - (a) the stationary container system is—
 - (i) suitable for service with a specified hazardous substance, or specified substances, without leakage of the substance, for all reasonably foreseeable operating pressures, temperatures, stresses and loadings; and
 - (ii) constructed of materials that are compatible with any hazardous substance that the system is likely to contain; and
 - (b) if the stationary container system includes a stationary tank, the stationary tank complies with the requirements specified in this Schedule relating to—
 - (i) tank design; and
 - (ii) tank construction; and
 - (iii) tank installation; and
 - (iv) pressure management; and
 - (v) emergency pressure management; and
 - (vi) the level indicator requirements specified in clauses 13 and 36; and
 - (vii) lightning and stray current protection; and
 - (viii) the separation requirements specified in Part 5; and
 - (ix) fire fighting systems; and
 - (x) the marking requirements under clause 77; and
 - (xi) the requirements relating to plans under clause 81; and
 - (c) if the stationary container system includes a stationary tank with integral secondary containment, the stationary container system complies with regulation 39 or 40 as applicable of the Hazardous Substance (Emergency Management Regulations) 2001; and

- (d) if the stationary container system includes a stationary tank that contains a [class 3.1D, or] class 6, or class 8, or class 9 hazardous substance that is not also a class 2, or class 3 [other than class 3.1D], or class 4, or class 5 hazardous substance, the stationary container system complies with the requirements of Part 4 of the Hazardous Substances (Emergency Management) Regulations 2001; and
 - (e) if the stationary container system includes a vaporiser, the vaporiser complies with clause 55; and
 - (f) if the stationary container system complies with Part 13; and
 - (g) if the stationary container system includes a burner, the burner is—
 - (i) approved in accordance with clause 68; and
 - (ii) installed in accordance with clause 71; and
 - (h) pipe work complies with requirements for—
 - (i) design, construction, and installation; and
 - (ii) operation, inspection, testing, and maintenance; and
 - (iii) installation of transfer point pipe work in accordance with clause 75; and
 - (i) the requirements for valves in clause 75 are complied with; and
 - (j) the records specified in clause 81 are available; and
 - (k) any repairs or alterations carried out comply with the requirements of Part 18.
- (3) A stationary container system that includes a stationary tank complies with subclause (2)(b)(i) if the stationary tank is—
- (a) constructed in accordance with a design that is certified under clause 94(1)(a); and
 - (b) marked in accordance with clause 77.
- (4) A stationary container system that includes a stationary tank complies with subclause (2)(b)(i) and subclause (2)(b)(ii) if the stationary tank—
- (a) constructed in accordance with a design that is certified under clause 94(1)(a); and
 - (b) is constructed by a fabricator that is certified under clause 94(1)(b) in respect of that design; and
 - (c) marked in accordance with clause 77.
- (5) A stationary container system that includes a stationary tank used to store a hazardous substance in respect of which a current certificate of inspection has been issued in accordance with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 complies with—
- (a) subclause (2)(a); and
 - (b) subclause (2)(b)(i) to (v); and
 - (c) subclause (2)(k).
- (6) Pipe work forming part of a stationary container system used to store a hazardous substance in respect of which a current certificate of inspection has been issued in accordance with the Health and

Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 or the Health and Safety in Employment (Pipelines) Regulations 1999 complies with—

- (a) subclauses (2)(h)(i) and (ii); and*
- (b) subclause (2)(k).*

Part 8 Clause 94 - Certification of designs or fabricators

(1) A test certifier may certify-

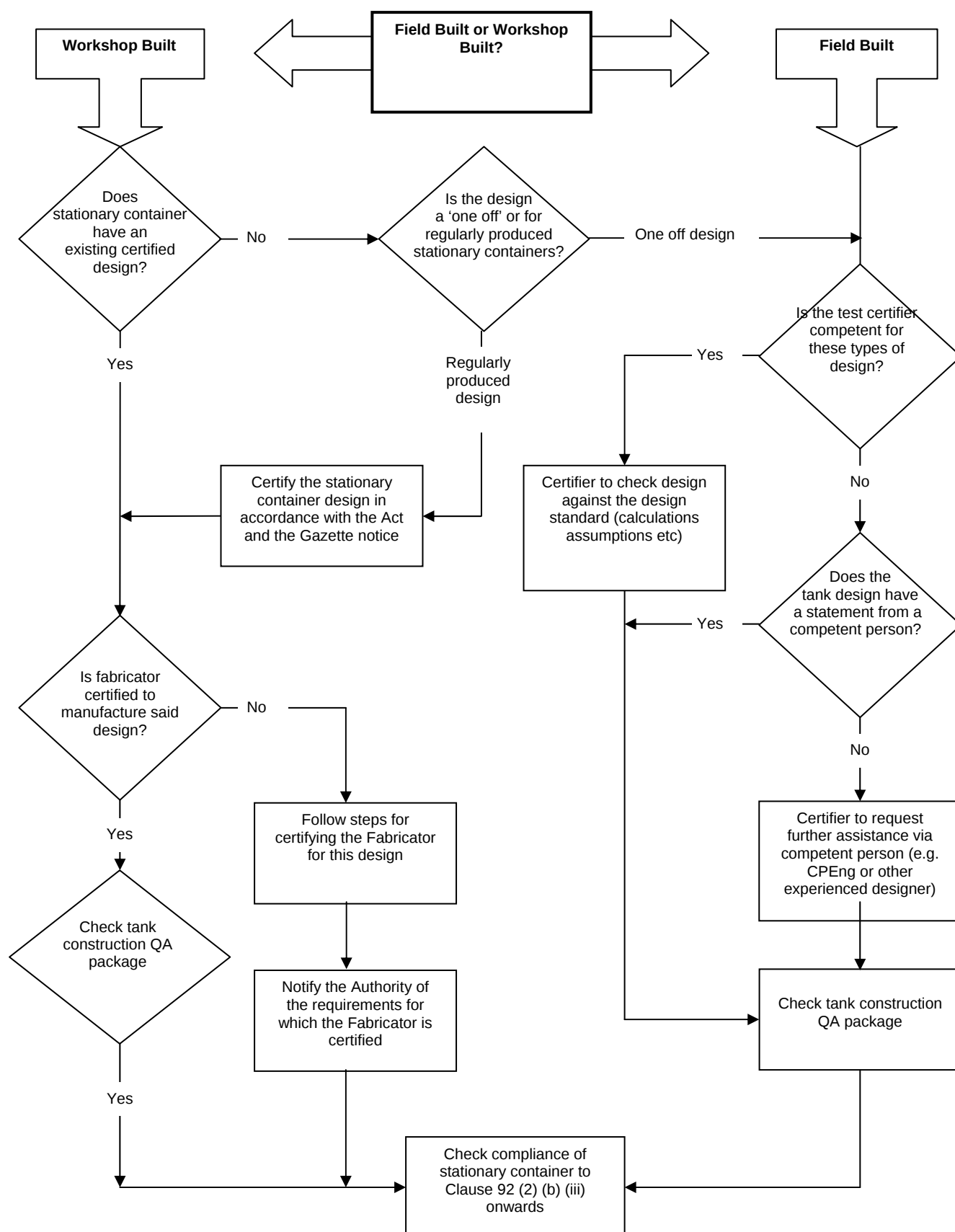
- (a) a design for a stationary tank or process container if that design complies with the requirements of this Schedule that relate to the stationary tank or process container (as the case may be); or*
- (b) in relation to a certified design or designs, a fabricator for the purposes of constructing a stationary container system in accordance with the design.*

(2) The test certifier must advise the Authority of—

- (a) for a certified design, the requirements for which the design is certified; or*
- (b) for a certified fabricator, the name and contact details of the fabricator and the design in respect of which the fabricator is certified.*

[(3) Every design and fabricator that was approved by the Authority or the Chief Inspector of Dangerous Goods under regulation 60 of the Dangerous Goods (Class 3 – Flammable Liquids) Regulations 1985 before the commencement of this notice is deemed to be approved in accordance with this Schedule subject to such conditions as applied to the approval given under that regulation.]

10. Appendix B – Decision Flow Chart





Environmental
Protection Authority
Te Mana Rauhi Taiao

BP House, (Level 1), 20 Customhouse Quay, Wellington 6011, New Zealand

