



Works approval number	W6921/2024/1	
Works approval holder	Aquila Holdings (WA) Pty Ltd	
ACN	659 814 276	
Registered business address	18 Sangiorgio Court Osborne Park 6017	
DWER file number	DER2024/000111	
Duration	28/06/2024 to	27/06/2027
Date of issue	28/06/2024	
Premises details	Vac West Industrial 41 Foskew Way Narngulu WA 6532 Legal description - Lot 130 on Deposited Plan 67361 Certificate of Title Volume 1681 Folio 264	

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated, or irrigated.	2000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 28 June 2024, by:

**A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
28/06/2024	W6921/2024/1	Works approval granted.

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) Construct and/or install the infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location, as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure and/or equipment	Design and construction / installation requirements	Infrastructure and/or equipment location
1.	2 x 32,000L Coerco IT32000 industrial process wastewater storage tanks	<ol style="list-style-type: none"> (a) Tanks must be manufactured in accordance with Australian Standard <i>AS4766:2006 Polyethylene storage tanks for water and chemicals</i>; (b) Tank walls must be strengthened to a rating of 1.2 as per the manufacturer's construction requirements; (c) Tanks must be installed upon an Enviro Liner 6030; (d) Tanks must be free of leaks and defects and have an individual capacity of 32,000 L; (e) Outlets must be fitted with butterfly taps and a camlock cap; (f) Tanks must be coupled with a manifold with taps and a check valve; (g) Tanks must be fitted with high level indicators connected to a visual or audible alarm, or an automatic pump cut-off switch; and (h) Concrete bunding must be installed around the two tanks with a pump and pipework to divert water from leaks/overflow to the wash down pad and slipway. Bunding must be free of leaks and defects. The bunded area must be 31m x 6.2m. 	As depicted in Schedule 1, Figure 1 and Figure 2
2.	Enviro Liner 6030	<ol style="list-style-type: none"> (a) The liner must meet design and installation specifications as listed in Schedule 2: Minimum specification for excavation and Enviro Liner 6030 geomembrane installation, Table 7, 	N/A

	Infrastructure and/or equipment	Design and construction / installation requirements	Infrastructure and/or equipment location
		<p>Table 8; and</p> <p>(b) The liner must:</p> <ul style="list-style-type: none"> (i) be installed as one consecutive piece, welded if necessary to manufacturer's specification; (ii) be installed underneath tank 1 and tank 2; (iii) extend to the concrete bunding around all sides; and (iv) be free from leaks and defects where it adjoins the concrete bunding. 	

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) Certification by a suitably qualified geotechnical engineer (or equivalent) that the items of infrastructure or components thereof, as specified in condition 1, Table 1, row 2 have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) Certification that the items of infrastructure or components thereof, as specified in condition 1, Table 1, row 1 have been constructed in accordance with the relevant requirements specified in condition 1;
 - (c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4 for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the Environmental Protection Act 1986, if one is granted before the end of the period specified in condition 5(a).

Time limited operations requirements

6. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	2 x 32,000L Coerco IT32000 industrial process wash water storage tanks	<ul style="list-style-type: none"> (a) Must be maintained free of leaks and defects and be fit for purpose; (b) High level indicators must be maintained and be fit for purpose; (c) Bunding must be maintained to be free of leaks and defects; (d) The pump and pipework in the bunded area must be maintained to divert water from leaks/overflow to the wash down pad and slipway; (e) There must be a spill tray at each connection; (f) All hoses and fittings used for transfers must be inspected prior to the transfer of wash water; (g) Wash water deliveries into the tank must be manned; and (h) Spill kits must be available, capable of and used to immediately contain and clean any spill of liquid waste on the premises. 	As depicted in Schedule 1, Figure 1 and Figure 2
2.	Wash down pad and slipway	<ul style="list-style-type: none"> (a) Connection to the truck must be carried out on the wash down pad; (b) The concrete floor and bunding of the wash down pad and concrete floor of the slipway are to be free of leaks and defects; (c) The concrete floor of the wash down pad and slipway are to be maintained to ensure a permeability of $\leq 1 \times 10^{-9}$ m/sec; and (d) Maintain the slipway and wash down pad to ensure they are capable of containing a cumulative volume of 32,500 L of wash water. 	As depicted in Schedule 1, Figure 1
3.	Enviro Liner 6030	<ul style="list-style-type: none"> (a) Must be maintained to the manufacturer's specifications, free from leaks and defects and meet a permeability of $\leq 2 \times 10^{-10}$ m/sec. 	N/A

Waste acceptance requirements during time limited operations

7. The works approval holder must only accept onto the premises waste of a type that:

- (a) does not exceed the rate at which that waste is received; and
 - (b) meets the relevant acceptance specification,
- as set out in Table 3.

Table 3: Types of waste authorised to be accepted onto the premises during time limited operations

Waste type	Controlled waste codes ¹	Rate at which waste is received	Acceptance specification ²
Industrial wash water	L150	Up to 2000 tonnes per annual period	Limited to wash water accepted from Mid West Ports Authority

Note 1: Waste codes are used by industry and the Department of Water and Environmental Regulation for waste tracking and reporting purposes.

Note 2: Additional requirements for the acceptance of Controlled Waste are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

8. The works approval holder must ensure that where waste does not meet the waste acceptance criteria set out in Condition 7, it is removed from the premises by the delivery vehicle and disposed of at an appropriately authorised facility as soon as practicable.

Waste processing requirements during time limited operations

9. The works approval holder must ensure that the waste types specified in Table 4 are only subjected to the corresponding processes, subject to the corresponding process limits and/or specifications.

Table 4: Waste processing

Waste type	Processes	Process limits and/or specifications
Industrial wash water	Storage prior to removal off-site for disposal	Storage within the wash water storage tanks. No more than 64,000 litres of wash water is to be stored at any one time.

Monitoring during time limited operations

10. During time limited operations, the works approval holder must record the total amount of waste accepted onto and removed from the premises, for the waste type listed in Table 5, in the corresponding unit, and for the corresponding time period, as set out in Table 5.

Table 5: Waste input and output monitoring

Waste type	Unit	Time period
Industrial wash water	Tonnes	Each load arriving at and leaving the premises

Compliance reporting

11. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.
12. The works approval holder must ensure the report required by condition 11 includes the following:
 - (a) a summary of the time limited operations, including timeframes and amount of material processed;
 - (b) a summary of monitoring results obtained during time limited operations under condition 10;
 - (c) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable);
 - (d) a review of performance and compliance against the conditions of the works approval; and
 - (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

13. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
14. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
 - (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 6;
 - (c) monitoring programmes undertaken in accordance with condition 10; and
 - (d) complaints received under condition 13.
15. The books specified under condition 14 must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 6 have the meanings defined.

Table 6: Definitions

Term	Definition
AS4766:2006	Means Australian Standard <i>AS4766:2006 Polyethylene storage tanks for water and chemicals</i> .
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Controlled Waste Regulations	means the <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986 (WA)</i> .
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i> .
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.

Term	Definition
suitably qualified geotechnical engineer	<p>means a person who:</p> <p>(a) holds a Bachelor of Engineering degree recognised by Engineers Australia; and</p> <p>(b) has a minimum of five years of experience working in a supervisory role of geotechnical engineering; and</p> <p>(c) is employed by an independent third party external to the Works Approval Holder's business;</p> <p>or is otherwise approved in writing by the CEO to act in this capacity.</p>
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
waste	has the same meaning given to that term under the EP Act.
waste code	means the waste code assigned to the type of controlled waste for purposes of tracking and reporting as specified in the Department of Water and Environmental Regulation's 'Controlled Waste Category List' (May 2018), as amended from time to time.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).

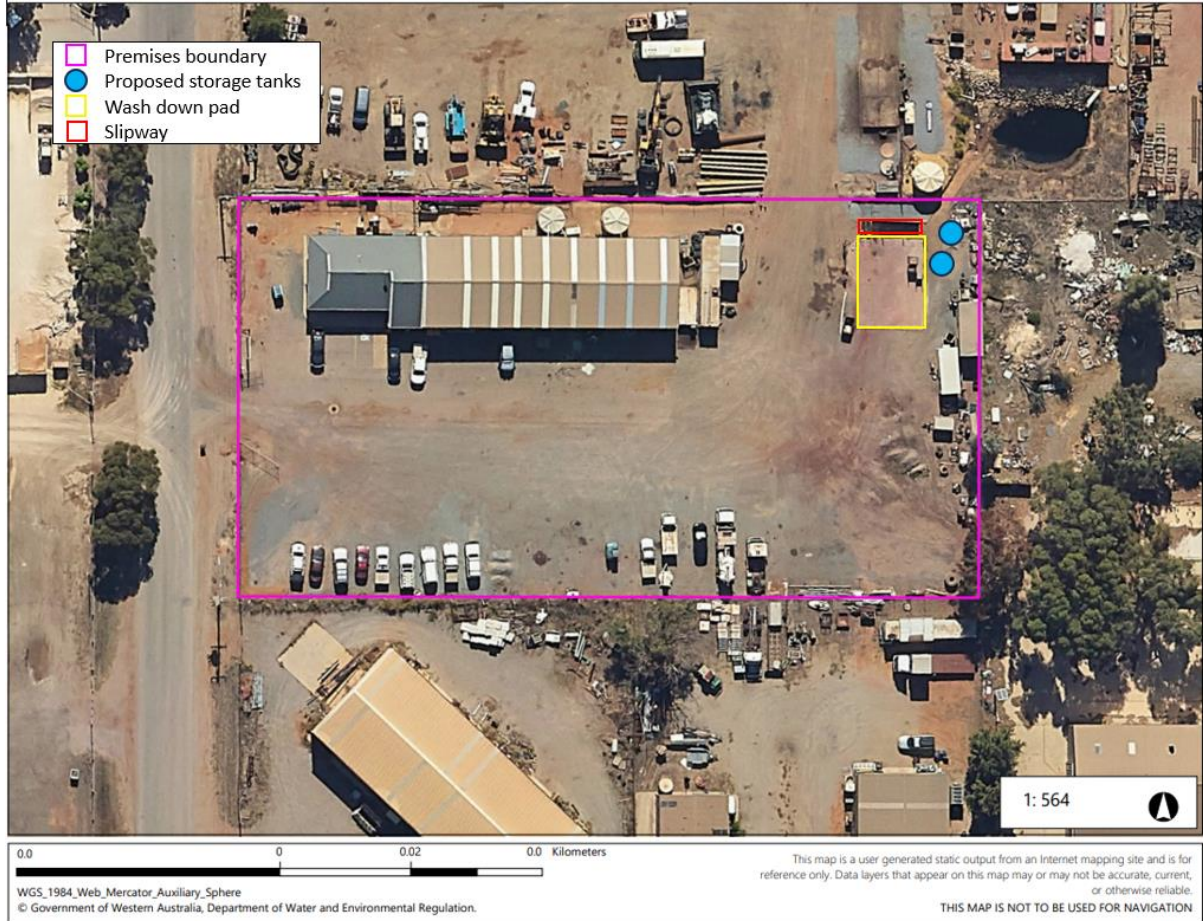


Figure 1: Map of the boundary of the prescribed premises

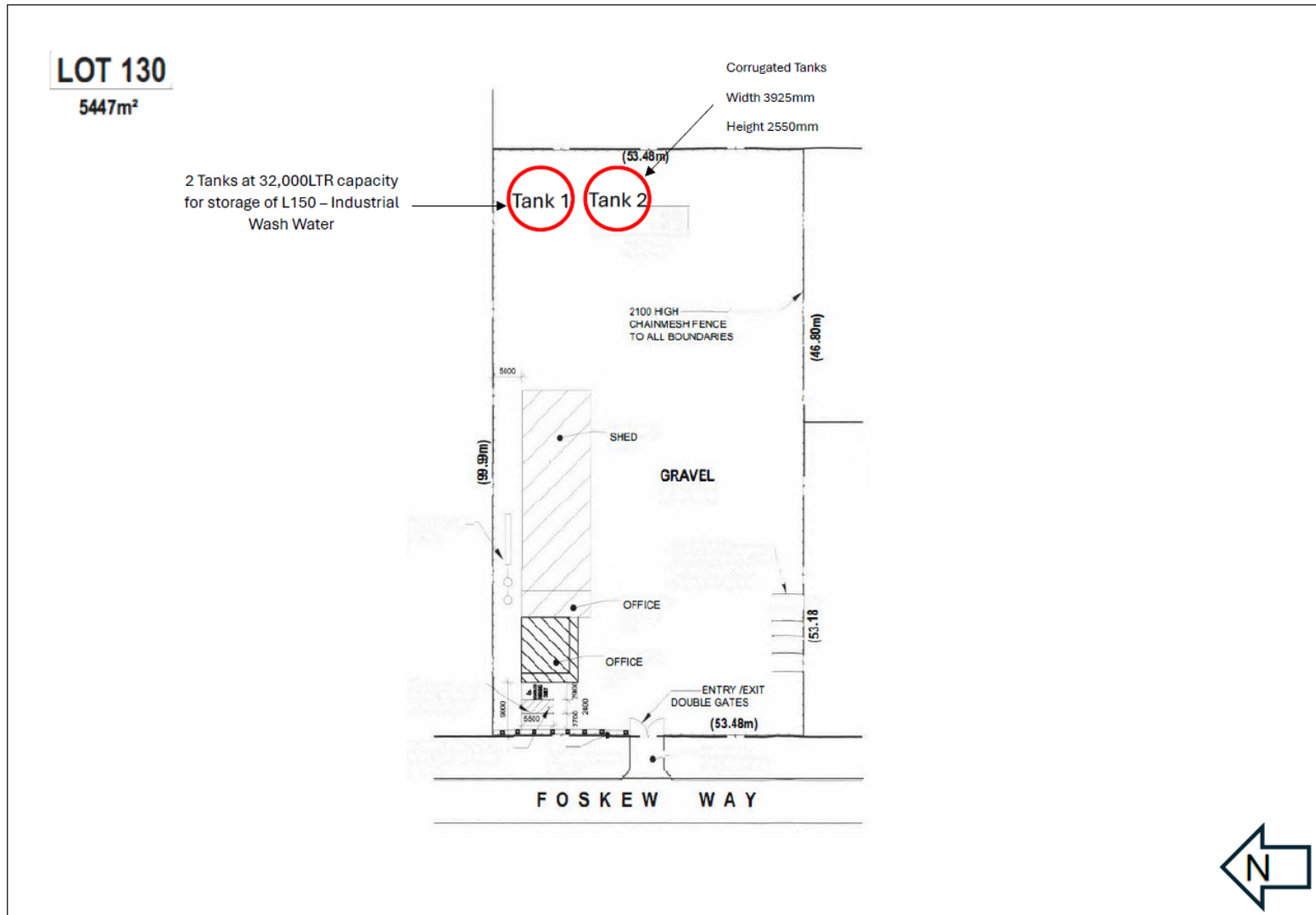


Figure 2: Site map with location of storage tanks

Schedule 2: Minimum specification for excavation and Enviro Liner 6030 geomembrane installation

The construction works and requirements described in the following tables are required to be completed in accordance with Condition 1, Table 1, row 2.

Table 7: Liner Subgrade Construction Specifications

Infrastructure or Equipment	Requirements (design and construction)
Site Preparation and Subgrade construction	<p>The following site preparation works must be undertaken:</p> <ul style="list-style-type: none"> • Clearing and grubbing of entire footprint including embankments, bunds and base. • Excavation of all unsuitable materials to a minimum depth of -300mm from final surface level (FSL) to form a suitable subgrade, and replace with engineered fill material, moisture condition and compact to Standard Maximum Dry Density (SMDD) of 95% and Optimum Moisture Content (OMC) of -2% to +2% in layers to FSL not exceeding 300mm and not less than 100mm. • If suitable material (meeting requirements for engineered fill material) exists in the tank footprint, the material shall be excavated to -250mm of FSL, ripped and treated as per engineered fill material for moisture conditions and compaction requirements. • Internal batters cut to 1:3 (V:H). • Proof roll entire footprint including pond floor and embankments. • Following rolling, the surface is to have no irregularities in excess of 10 mm deep over a straightedge length of 20 mm.

Table 8: Liner Design, Construction and Quality Assurance Specifications

	Parameter	Requirements (design and construction)
1	High Density Polyethylene liner	<ul style="list-style-type: none"> • To extend over the entire base and up the side embankments; • Must be uniform and free of pin holes, blisters, blemishes, striations, bubbles, roughness, contaminants and permanently attached raw materials; • Completely sealed and waterproof along all joins and seams with heat welded joints; <ul style="list-style-type: none"> • All seams and joins made on site should be continuous; • Panels of the liner should be overlapped by a minimum of 100mm, prior to heat welding; and • Leak detection survey to be carried out following installation.
2	Quality Assurance and Quality Control	<p>Construction and installation performance must be measured by the following specifications:</p> <ul style="list-style-type: none"> • Construction requirements (as specified by 1 and this table); • Conformance testing – to show materials meet the following minimum requirements;

Parameter		Requirements (design and construction)					
		Property	Units	Value	Test	Testing Frequency	
		Thickness (average)	mm	0.75	ASTM D5199	One for every two rolls	
		Thickness (minimum)	mm	0.75	ASTM D5199		
		Water permeability (liquid tightness) (minimum)	m/s	2 x 10 ⁻¹⁰	ASTM D4716	Every five years	
		Tensile properties	Break strength	N/mm	25	ASTM D638	One per batch
			Yield elongation (minimum)	%	10	ASTM D638	
			Break elongation (minimum)	%	300	ASTM D638	
		Tear resistance	N	280	ASTM D751		
		Puncture resistance	N	236	ASTM D4833		
		Carbon black content	%	2-3	ASTM D1603		
		Destructive fusion weld testing on-site tests undertaken by Contractor, witnessed by CQA Consultant	Fusion/Wedge Weld - Shear strength	% yield	95	ASTM D6392	At least once in every weld
			Fusion/Wedge Weld - Peel strength		62		
			Extrusion Weld - Shear Strength		95		At least once in every weld
			Extrusion Weld - Peel Strength		62		

	Parameter	Requirements (design and construction)						
		Non - destructive weld testing – tests undertaken by Contractor, witnessed by CQA Consultant	Air pressure test	-	pass/fail	ASTM D4437	All seams over full length	