

Practice Note

Approval process for use of
proprietary stormwater treatment
devices on private and public sites

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1.0 Purpose of practice note

This practice note explains a two-stage approval process for manufacturers or suppliers of stormwater treatment devices requiring:

- 1) Approval from Auckland Council for a device to be used on private sites as a suitable stormwater treatment device that meets regulatory requirements, on the basis of recognition of performance claims
- 2) Recognition from Auckland Council for a device to be a potentially suitable option for use as a public vested asset, subject to conditions and case-by-case evaluation.

The approval process is aimed at stormwater filtration devices, such as, but not limited to, media filtration and membrane filtration. A similar process will be followed for separation/diversion devices (i.e. oil/water separators, gravity settlement, vortex), once MfE Environmental Guidelines for Water Discharges from Petroleum Industry Sites in New Zealand has been updated.

1.1 Introduction

Auckland Council promotes the use of water sensitive design as a best practice approach for stormwater management. Design guidance for stormwater treatment devices in accordance with the water sensitive design principles is provided in Auckland Council Technical Publication 10 (TP10), which is soon to be superseded by Guidance Document 01 (GD01).

Stormwater devices that are designed, constructed and operated in accordance with these guidelines have a contaminant removal performance that meets the obligations of the Resource Management Act (RMA 1991); Auckland Regional Plan: Air, Land and Water; and Auckland Unitary Plan.

There are certain situations where individual development sites may present unique issues where TP10/GD01-designed stormwater devices are not the best practicable option. Stormwater proprietary treatment systems are a common alternative solution for stormwater treatment on private sites as well as in certain circumstances, as part of a public stormwater network.

Proprietary devices require a separate approval from Auckland Council to ensure that performance and design standards are met. The approval process for proprietary devices consists of a two-stage approach:

- Stage 1: Performance standard approval → acceptance for use on private sites
- Stage 2: New products and material approval → acceptance for use as a public vested asset.

1.2 Background

1.2.1 Evaluation of performance claims

There is a need for a standard approach to evaluating stormwater proprietary device performance claims. In the absence of a national standard approach, Auckland Council and its predecessors, assess stormwater proprietary treatment devices in terms of compliance with regional requirements.

This document describes the standard process that Auckland Council will use to assess performance claims in relation to meeting Auckland's Unitary Plan prescribed levels of contaminant management. The process is described as an interim protocol, because there is an initiative underway to develop a national approach which may be suitable for Auckland.

This assessment protocol, or its subsequent replacement, will supersede any existing approvals under predecessor arrangements.

The following should also be considered:

- Assessments of performance claims against future regulatory requirements will have to be completed, once the implications of the stormwater treatment requirements under the Auckland Unitary Plan are fully known and understood
- To extend the approval for use as a public vested asset, the product requires assessment under the "New Products and Material" acceptance process.

1.2.2 Acceptance of new products and materials (NPM)

As an asset owner, Auckland Council undertakes maintenance and renewal of millions of dollars' worth of infrastructure. Therefore, it sets requirements for any new assets to meet as they are to be owned and managed on behalf of ratepayers.

The size and complexity of this type of investment requires that the design life and cost-effective performance of the infrastructure assets is maximised.

Auckland Council currently specifies a design life of up to, and beyond, 100 years for most infrastructure assets and requires cycle-of-life cost information for that duration. In line with this, Auckland Council requires manufacturers/suppliers to provide supporting evidence that their product or material meets the Council's technical specifications, performance and durability requirements, and ensures the ease, safety and cost effectiveness of the asset's long-term maintenance.

Manufacturers or suppliers of new products and materials can apply for their product or material to be assessed as an acceptable infrastructure asset for vesting to Auckland Council. The acceptance will be valid for a period of 5 years, after which it will be reviewed.

1.3 Stage 1: Performance standard approval → acceptance for use on private sites

Manufacturers or suppliers of stormwater treatment devices can apply to get their performance claims recognised by Auckland Council, based on existing international certifications, where these have been determined to be appropriate for the Auckland environment.

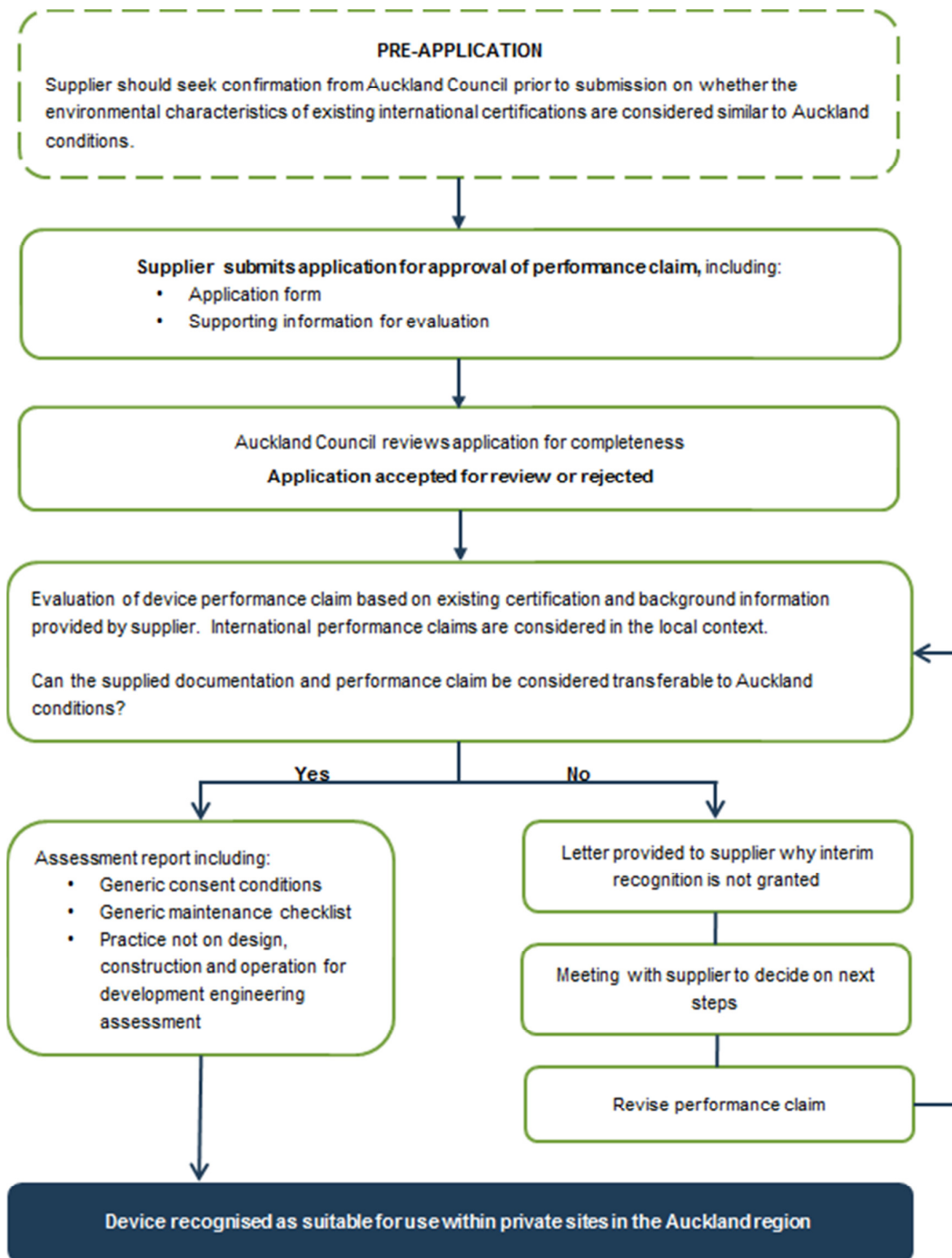
Manufacturers or suppliers should apply by submitting the application form with appropriate supporting documentation and payment of an application fee (based on cost recovery). This supporting documentation will include detail of the international certification and associated testing undertaken. Approval under this process means that the product will be deemed to meet relevant consenting requirements for stormwater quality treatment, subject to compliance with the conditions of consent.

Successful applications will receive a report evaluating the product and assessing the performance claims against current regulatory requirements and guidance documents.

The report will conclude whether or not the device is likely to achieve the performance claims as stated by the manufacturer, in the Auckland context.

1.3.1 The performance standard approval process

The application process used for the assessment of existing data from international certifications is summarised in the following flow chart:



1.3.2 Supporting information required

The following information is required to support any application for the recognition of performance standards and approval for use on private sites:

- Application form
- Supporting information, including but not limited to:
 - Letter/s from international bodies confirming certification of performance standard
 - Background information (i.e. verification program, testing methods, procedures, test results)
 - Performance claim and basis of claim
 - Evidence proving international performance claim can be transferred to local circumstances
 - Device design and sizing specifications
 - Operation and maintenance criteria.

Examples of international bodies and certifications that have been approved previously by Auckland Council for specific applications are NJCAT from the New Jersey Department of Environmental Protection and GULD from the Washington State Technology Assessment Program.

1.4 Stage 2: New products and materials → acceptance for use as a public vested asset

After Stage 1, following the recognition of the claimed performance standards and approval for use on private sites, a stormwater treatment device is eligible to be assessed for acceptance as an infrastructure asset, to be vested to Auckland Council under the “New Products and Materials” approval process.

Applications for new products and material approvals should be submitted to npm@aucklandcouncil.govt.nz.

Successful applications will receive a letter of acceptance, which sets out Auckland Council’s conditional acceptance for vesting of the device as a public asset.

Actual acceptance of a device for a specific project is always subject to an evaluation on a case by case basis by the future asset owner (i.e. Auckland Council Healthy Waters Unit, Auckland Transport).

1.4.1 The new products and materials application process

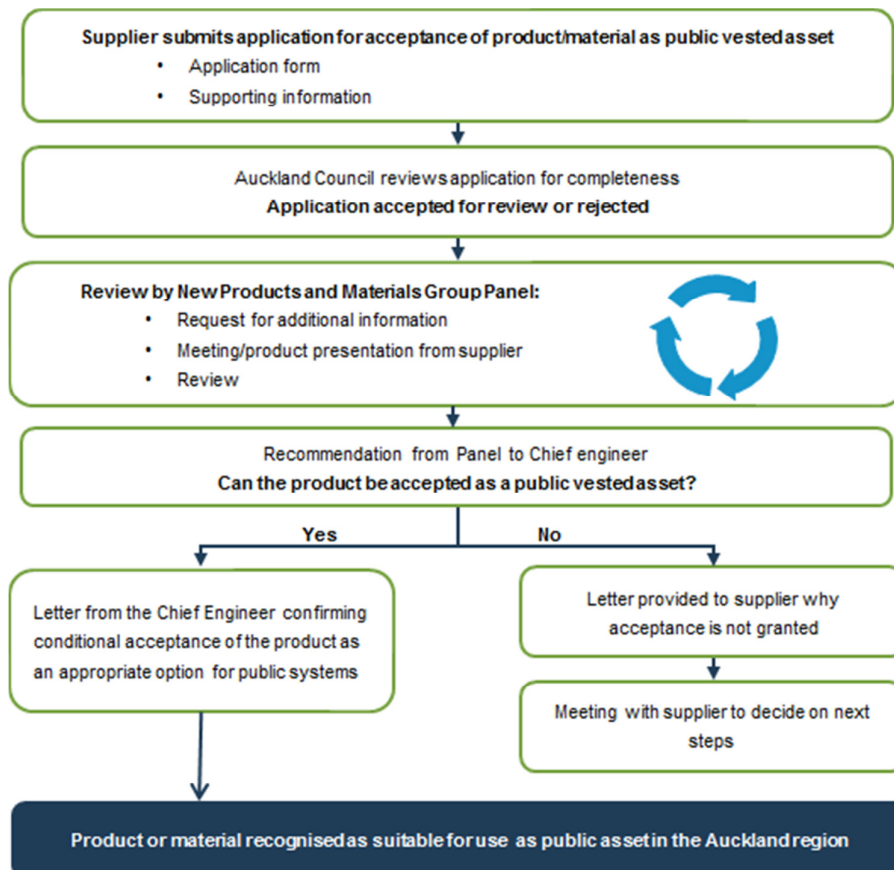
After an application is submitted, the new product or material will be assessed by the New Products and Materials Task Group Panel consisting of Auckland Council specialists and if necessary, appropriate external parties. The Panel may request a meeting with the manufacturer or supplier to discuss the application and request further information or testing.

In brief, the acceptance process involves the following steps:

- 1) Applicant completes the application form and submits together with appropriate supporting information by email to npm@aucklandcouncil.govt.nz
- 2) The submitted information will be reviewed and assessed by the New Products and Materials Task Group. Any review will be confidential to protect all rights and interests of the submitting commercial entities
- 3) The New Products and Materials Task Group Panel, may require to meet with the manufacturer or supplier to discuss the application, or to request further information or testing
- 4) After finalising the review and assessment, the Panel will make its recommendation including any specific conditions to the Chief Engineer who will then make a decision on the acceptance of the new product and material as potential vested public asset
- 5) A letter from the Chief Engineer will be send to the applicant which sets out the conditional acceptance or non-acceptance of the product as a public asset.

Auckland Council reserves the right to review and withdraw all approvals at any time.

The following diagram summarises the process for acceptance of a proprietary device under the new products and materials approval process:



1.4.2 Supporting information required

The following information is required to support any application for a new product or material to be accepted in principal as a public vested asset:

- Application form
- Supporting information, including but not limited to:
 - Manufacturer and product history
 - Specification
 - Performance (including relevant performance approvals)
 - Designs/drawings of product
 - Safety in design
 - Compliance with relevant standards
 - Product price
 - Installation requirements and costs
 - Maintenance requirements and costs
 - Life expectancy of product
 - Proposed supplier support through product/material life
 - Samples
 - Quality assurance for manufacturing and installation
 - References from current users
 - Any other relevant information.

1.5 Conditional acceptance of a product or material

Conditional acceptance confirms that Auckland Council has assessed the product or material as being suitable for use as a vested public infrastructure asset, subject to compliance with the conditions of acceptance.

The future asset owner (e.g. Auckland Council Healthy Waters Unit, Auckland Transport) will evaluate the suitability of this option for a specific project on a case-by-case basis to ensure it is appropriate for the development or project and the best option for council and ratepayers. This evaluation may include an analysis of:

- Alternative options that have been considered
- Life cycle costs
- Maintenance frequency and costs
- Asset life and renewal costs
- Designer statement on safe installation and use/safety in design

- Any other analyses deemed necessary by the future asset owner to make an informed decision on acceptance of the device.

Products or materials which have not gone through the New Products and Materials Task Group may still be proposed as an infrastructure asset for vesting to Auckland Council. In this case, the fundamental properties and performance of the product or material need to be assessed at the application stage before specific assessment for the project or development can proceed.

It must be noted that Auckland Council’s confirmation of acceptance of a new product/material does not constitute endorsement or recommendation of this specific product or material. Any documentation or letters from Auckland Council confirming the conditional acceptance of a product or material cannot be used for advertising purposes.

1.6 For further information please contact:

Stage 1 Approval: Performance standards		
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