

**DRAFT FOR SUBMISSION
TO THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON ENVIRONMENT AND
HERITAGE**

Regarding the appropriate level of government administration of plumbing product quality

Need for national control

Given that WaterMark certification and Australian Standards, upon which plumbing product quality is based, are intended to be national in scope and content, it is arguable that the implementation of legislative regulations dependent upon this system should be managed at national level - that is, by a department or body responsible to the the federal government and acting upon expert advice from industry and Standards authorities, rather than by a state government body acting autonomously and without such advice. An example of problems presently being encountered by developers, manufacturers and contractors in Queensland is given below.

Introduction

EVERHARD Industries Pty Ltd is a leading Australian manufacturer of plumbing products for domestic, commercial and industrial waste water and stormwater control and treatment, and has a number of manufacturing branches from Cairns to South Queensland, with our main production facilities in the South-East of Queensland. EVERHARD is the holder of StandardsMark Licences for both Concrete and Polymer Septic Tanks and Collection Wells, which are manufactured in strict accordance with the current Australian Standard AS/NZS 1546.1, and are also the manufacturer of the well-known **Aqua-nova** aerated wastewater treatment system. EVERHARD takes pride in being able to supply components for recognised wastewater systems to locations across Australia, with approvals and accreditation from many state and local authorities.

EVERHARD Industries Pty Ltd is well aware of the significance of the impact on the environment of inadequately treated effluent from wastewater systems, and is continually investigating avenues of research which may offer improvements to final treated water quality. It is our aim to be able to continue to provide an economical, effective, reliable and safe treatment system to suit most industrial, commercial and residential situations, and which will comply with all relevant and applicable regulatory requirements. In particular, the company remains committed to the principle of complying with relevant national standards in designing and manufacturing new additions to our extensive product range.

EVERHARD has also had an enviable long-term reputation for the manufacture and supply of a highly respected range of trade waste pre-treatment appliances under the "SERIES 90" product range name. These are conventional "passive natural buoyancy" grease / silt Arrestors, commonly known as "Grease Traps". This very successful product design has been in constant production since 1990, following its' development, which was undertaken in conjunction with the trade waste department of a major local authority for the best possible performance, and to ensure compliance with the existing state legal requirements for plumbing appliances. The design was then approved by the then Queensland state authority responsible for such products, the "Joint Committee". However, recent events appear to have brought a halt to the manufacture and distribution of these effective and reliable trade waste pre-treatment systems.

Recent changes to state legislation

While regulations requiring WaterMark certification have generally resulted in positive benefits to the consumer and to those suppliers, manufacturers, distributors, and contractors who have embraced the scheme to ensure that plumbing products used in Australia are made in accordance with, and are capable of meeting, Australian Standards, there is a significant degree of confusion (across Queensland at least) regarding the use of "Grease Traps" or "Arrestors" which seriously affects building development and construction and plumbing contractors as well as manufacturers and distributors of all such pre-formed appliances.

Some months ago local authorities across Queensland began to receive instructions from State government offices to enforce requirements embodied in recently introduced legislation. This has

recently been re-enforced by documents stating that only pre-formed "Grease Traps" and "Arrestors" with WaterMark certification may be used for both domestic and commercial/industrial applications. It appears that the government office responsible for these instructions is not interested in, or capable of, considering submissions from manufacturers regarding the fact that these requirements were implemented despite there being no applicable national standard extant to provide compliance criteria which can be used by any certifying body.

New certification requirements

Some specifications for Arrestors have been prepared and/or accepted from time to time by various local authorities, and usually for specific purposes. In many cases manufacturers have designed products to meet parameters perceived as appropriate and relevant by local authorities. In general however, to date there has been no coherent attempt to establish a general or national standard for Arrestors for either domestic or commercial or industrial use. In fact, the difference in the perceived requirements of many local authorities, enhanced by the experience of key personnel over past years, has made it difficult to introduce the principle of commonality of design. Some authorities in states other than Queensland have adopted means of providing some form of compliance with specifications established by bodies and agencies based on their own preferences, such as the Sydney Water design concept, but this must also be seen as providing only strictly limited means of determining product acceptability. If some form of certification is required, then WaterMark certification must be seen as the obvious means for indicating product acceptability.

However, WaterMark certification cannot be provided until either a national standard is in place, or until new Australian Technical Specifications are prepared and adopted, allowing compliance testing of products to begin. Steps have been taken by EVERHARD Industries to begin this process and a draft specification for consideration has been submitted to a qualified certifying body. However, information received indicates that it could be several months before the first complete specification is ready to go before a committee of the Australian Standards Association. We have also been advised that previous attempts at developing a standard for such devices have been unsuccessful because of the difficulty in obtaining consensus on the various aspects of trade waste pre-treatment, so it is still quite possible that an acceptable standard may not be developed, making any form of certification impossible, and denying local authorities, developers, and water treatment operators an effective means of improving waste water quality.

Consequences of denial of use of viable products

This action by the State government offices has effectively banned the supply and installation of such devices, despite the fact that many existing designs have been proven reliable and satisfactory for many years in an extremely wide range of applications, and some patterns have been accepted by the great majority of local authorities as a virtual "industry standard". Furthermore, the legislation has effectively driven construction and plumbing contractors to the only alternative remaining to them, which is to construct "Grease Traps" or "Arrestors" in-situ. This situation is fraught with hazards as such installations are not governed by the terms of any standard for performance or efficiency. Each installing contractor is therefore free to construct any arrangement they desire, whether or not it may be effective. With no guidelines by which the design may be judged, concerns must be held that authority inspectors, or their contracted independent counterparts, have no means of determining compliance or non-compliance. It could be said that the implementation of the legislative requirements has actually reduced the efficacy of waste water treatment.

All "Grease Traps" or "Arrestors", in whatever type or pattern they are manufactured, may be defined as trade-waste pre-treatment appliances intended to separate contaminating oils, grease, fats and other materials from waste water prior to it entering an authority sewer or drain system. Effective products are therefore instrumental in reducing contamination loads which could otherwise have serious and drastic effects upon infrastructure and the quality of treated water outfall. Denying the use of existing designs for devices proven by years of service not only applies potentially excessive loads on the existing local authority waste water treatment system, it may also be a contributing factor in increasing risk to public health.

Product definition

The glossary of AS/NZS 3500.0:2003 defines a **Trap** as a fitting designed to retain a water seal to prevent the passage of gas.

An **Arrestor** is defined as any apparatus designed to intercept and retain silt, sand, oil, grease, sludge or other substance that is a prohibited discharge to the sewer or drain.

A product commonly named a "Grease Trap" should therefore be referred to as an **Arrestor** for Silt/Oil/Grease etc, to avoid confusion with Traps as defined by the standard. While an Arrestor should provide a water seal against the passage of gas from the downstream drain while in normal service, this may not be so during the maintenance operation. Most Arrestors must be regularly cleaned out to remove all trapped waste matter for safe disposal, and a gas seal may not be present between being emptied and re-filled with clean water.

Standards and requirements

AS 5200.000-2005 sets out requirements for WaterMark certification of plumbing and drainage materials and products. Products, appliances, and fittings used in plumbing and drainage installations must comply with the applicable Australian standards or Australian Technical Specification, and be tested in accordance with those standards by an approved laboratory. Certificates are then issued for the items and goods must be marked with the identifying mark. Failure to display a certifying mark will be an offence, as will the sale or installation of an unmarked or uncertified product.

Schedule 5 of the standard contains a table listing all certifiable equipment, and gives the applicable Australian standards or Australian Technical Specifications. There is no mention of Grease Arrestors or Traps, either by those names or by any description which could be taken to imply any aspect of their application in a trade-waste pre-treatment system incorporated into a sewer or drain between the waste source and the main sewer.

AS/NZS 3500.2:2003 (National Plumbing Code - Sanitary Plumbing and Drainage) does not mention Grease Traps or Arrestors but does provide a legal basis for the local authority to establish minimum effluent quality. However the minimum effluent quality, and the method, are not prescribed.

AS/NZS 3500.3:2003 (National Plumbing Code - Stormwater) Section 8.6 does include requirements for Inlet and Access Pits and Oil and/or Silt Arrestors for use in stormwater drain systems, but does not provide any criteria for Arrestors in sewers or associated drainage systems.

AS/NZS 4494:1998 (Discharge of commercial & industrial liquid waste to sewers) encourages local authorities to establish controls for liquid waste, but does not specify any type of equipment to do so.

AS/NZS 1547:2000 (On-site domestic waste-water management) mentions a "grease trap" in sections 3A5.2(a) and 3A5.3(d) but the references are only to the need for regular cleaning. Therefore a "grease trap" is implied to be normal in domestic waste-water systems - despite the fact that many local authorities have effectively banned its' use.

Queensland Standard Sewerage Law (Division 1 - Arrestors), within Queensland, was used to provide the basic design parameters for Arrestors. EVERHARD's own Series 90 Arrestors were designed to comply with these specifications, and were approved for use throughout Queensland by the authorising body then in place, the Joint Committee. However, this very effective guide to the acceptable design of Arrestors is no longer in effect, the Act having been repealed to make way for the legislation which provides the subject for the matter in hand.