

Submission

Submission to the Proposed National Environmental Standards for On-site Wastewater Systems

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Beacon Pathway supports, in principle, the introduction of an Environmental Standard such as the one proposed:

“[From 1 July 2010] Owners of properties with on-site wastewater systems in locations identified by the regional council will be required to hold a current warrant of fitness (WOF) that confirms their on-site system is functioning properly and is being maintained to an appropriate standard.”

Beacon will not comment on the detail but wishes consideration be given to extending the standard to include grey-water systems.

Background

Beacon Pathway Ltd (Beacon) is a research consortium that seeks to radically change the design, construction and renovation of New Zealand’s homes and neighbourhoods. Beacon aims to bring about a significant improvement in the sustainability of the residential built environment in New Zealand through science-based New Zealand research.

The Foundation for Research, Science and Technology matches funding from Beacon’s shareholding partners, a unique mix of industry, local government and research organisations: BRANZ, Scion, New Zealand Steel, Waitakere City Council and Fletcher Building.

Beacon’s vision is:

**Creating homes and neighbourhoods
that work well into the future
and don’t cost the Earth**

To meet this goal, Beacon undertakes practical and robust research to support, also demonstrates, showcases, advocates for and encourages good practice.

One of the fundamental drivers behind Beacon's aims and objectives is to create building stock and on-site systems, particularly focused on energy, water and wastewater, which have a lighter impact on the natural environment and are essential elements of more sustainable development. Although its work is primarily centred in the urban environment, there are similar issues in the rural sector.

Water/waste water

One of Beacon's major work streams is on the management of on-site water and waste water. Substantial research undertaken thus far indicates that a demand management approach is needed in New Zealand to reduce water consumption and has demonstrated that water demand management has beneficial environmental, social and economic impacts nationally¹, and that grey water systems contribute significantly to that approach².

One of the methods used to reduce consumption and strengthen resilience of communities, is the use of grey water systems, either on their own, or in combination with rainwater tanks, to reduce peak demand, slow stormwater and make the best use of waste water.

In the course of Beacon's discussions with councils across New Zealand, the issue of maintenance and the lack of standards for on-site solutions were frequently raised as barriers to the introduction of grey-water systems.

Kapiti Coast District Council is the first council in the country to propose regulation specifically for a water demand management intervention via its district plan. As there were no New Zealand standards for grey-water systems it has based its District Plan rules on Australian standards:

"Under the Kapiti Residential Zone Rules and Standards section of the plan it states:

ADD a new rule to.... Non-Complying Activities

All new or relocated residential dwelling units unless they are provided with a rainwater storage tank complying with the Water Demand Management Permitted Activity Standard.

ADD a new standard to.... Permitted Activity

Standards

¹ *National Value Case for Sustainable Housing Innovations. Report for Beacon Pathway PR 240. www.beaconpathway.co.nz*

² *Lawton, M. et al. 2008 Best Practice Water Efficiency Policy and Regulation A report for Beacon Pathway Limited. On www.beaconpathway.co.nz*

WATER DEMAND MANAGEMENT

(i) All new or relocated dwelling units shall install one of the following:

a) Rainwater storage tanks with a minimum capacity of 10,000 litres for the supply of non-potable water for outdoor and indoor toilets.

b) Rainwater storage tanks with a minimum capacity of 4,500 litres for the supply of non-potable

water for outdoor and indoor toilets, and a greywater re-use system for outdoor irrigation. The grey-water re-use system shall comply with SAI Global standard ATS 5200.460:2005 or equivalent and shall reuse all water from bathrooms (excluding toilets) and laundries. It shall be installed in accordance with New South Wales Government standards specified in part B of Guidelines for Government, 2007.)”

Kapiti is also in the process of developing a code of practice for on-site water management systems to support its proposed plan change, however is using a recognized standard developed in New South Wales. The Department of Building And Housing has seen and approved the use of this temporary standard.

Thus Beacon sees the proposed On-Site Wastewater Environmental Standard and requirement for the maintenance of sewage-based waste water as very helpful, but is not clear whether this would include greywater systems as well. If grey water systems could be included, this would remove at least two of the potential barriers to the uptake of these systems on a broader scale in New Zealand. Although this would potentially add to the cost of these systems it would deal with any residual concerns about health or environmental effects.

Beacon therefore requests that consideration be given to the Warrant of Fitness model being expanded to include grey-water as well as sewage based systems.

Summary

Beacon agrees in principle with the policy objectives-to improve health and environmental outcomes.

We would like to see either that the standard includes grey water, or that similar requirements be considered for grey-water systems.