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Building Policy
Ministry of Business, Innovation and Employment
PO Box 1473
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New Zealand

Submission to Building System Legislative Reform Programme Discussion Document

Introduction

Water New Zealand welcomes the proposed reforms to the regulation of the building system.

Water New Zealand is a not-for profit organisation that promotes and represents water management professionals and organisations. It is the country's largest water industry body, providing leadership in the water sector through advocacy, collaboration and professional development. Members are drawn from all areas of the water management industry including regional councils and territorial authorities, consultants, suppliers, government agencies and scientists.

Occupational regulation

Water New Zealand supports the repeal of specific sanitary plumbing exemptions for householders in specified areas and for rural districts. We also support the repeal of exemptions for restricted sanitary plumbing, gasfitting and drainlaying work under supervision. There is a risk to public safety from water contamination and leakage if a plumber or drainlayer is not suitably qualified. We agree that consistent standards should be applied to all New Zealand.

Water New Zealand has an interest in the proposals for the certification and licensing of engineers for safety-critical engineering work. We note that *“this framework would enable licence classes to be created for other engineering disciplines at a later stage”*. Water-related engineering work is clearly safety-critical. As the 2016 campylobacter outbreak in Havelock North demonstrated, water contamination has the potential to make large number of people seriously ill and is life-threatening.

The Havelock North Inquiry Stage 2 Report recommended that *“a licensing system for all existing and future networked drinking water suppliers should be established as soon as practicable and consideration should be given to a mandatory qualification system for suppliers and their staff... All aspects of licensing and qualifications would best come under the purview of a new dedicated drinking water regulator”*.¹

Currently the water industry in New Zealand does not have a licensing or certification scheme for many safety-critical activities, including:

- designing and operating drinking water treatment plants and their associated reticulation systems;
- designing and operating wastewater treatment plants and their associated reticulation systems;
- installing and maintaining on-site wastewater treatment facilities;
- stormwater treatment, including ‘green infrastructure’;
- backflow protection design and maintenance.

¹ [https://www.dia.govt.nz/diawebsite.nsf/Files/Report-Havelock-North-Water-Inquiry-Stage-2/\\$file/Report-Havelock-North-Water-Inquiry-Stage-2.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Report-Havelock-North-Water-Inquiry-Stage-2/$file/Report-Havelock-North-Water-Inquiry-Stage-2.pdf) p. 226-7

Water New Zealand has been exploring the options for the certification of drinking and wastewater managers, supervisors and operators. The options for a New Zealand Operator Certification Scheme were discussed in a 2017 Water New Zealand [Draft Paper for Industry Consultation](#). Whilst there was support for continuing professional development, there was not clear agreement on how to introduce certification. It was identified that there is a skill shortage and a risk that experienced people will leave the industry and new staff will not be attracted into the industry to replace them. The administrative burden of the operation of a governance or certification body is an issue. Issues arise as to how to set thresholds by type of work or role, and about how to assess qualification or experience requirements. There are unanswered questions as to whether the issue is a lack of qualification, experience or certification of water designers or operators.

As the Havelock North Inquiry pointed out, the ‘Swiss cheese’ model assumes that accidents happen when multiple barriers and safeguards that separate injurious hazards from vulnerable people or assets are breached. The Inquiry *“revealed a cumulative set of acts, omissions or circumstances in which all of the holes aligned to enable the contamination of the drinking water system. While such acts or omissions may not have been proximate or direct causes, they were undoubtedly part of the circumstances that allowed the accident to happen.”*² For example, the lack of partnership between statutory regulators is evidently a factor in water contamination incidents as identified in the Havelock North Inquiry Stage 1 Report.³

CONCLUSION

In summary, Water New Zealand supports the removal of exemptions for plumbers and drainlayers. However, certification or licensing of safety-critical engineering work is likely to be complex to introduce and may not resolve the issues or prevent the failure that can lead to a potentially fatal accident.

The Havelock North Inquiry demonstrated that ongoing life-safety risk remains high in the ongoing operation and maintenance of systems, not just at the design, construction and installation stage. Water New Zealand’s view is that all water-related work should be licensed or certified as any failure in the system can result in a significant public health incident.

Water New Zealand welcomes this opportunity to share with MBIE the insights we have gained from our work in the water industry. Please contact me if you wish to discuss any of our comments in greater detail.

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² Ibid p. 61

³ [https://www.dia.govt.nz/vwluResources/Report-Havelock-North-Water-Inquiry-Stage-1/\\$file/Report-Havelock-North-Water-Inquiry-Stage-1.pdf](https://www.dia.govt.nz/vwluResources/Report-Havelock-North-Water-Inquiry-Stage-1/$file/Report-Havelock-North-Water-Inquiry-Stage-1.pdf)