

1 August 2016

Southland Water and Land Plan  
Environment Southland  
Private Bag 90116  
Invercargill 9840

Via email [policy@es.govt.nz](mailto:policy@es.govt.nz)

To whom it may concern,

### **Proposed Southland Water and Land Plan**

I am writing in relation to Environment Southland's call for feedback on the proposed Southland Water and Land Plan.

The Institution of Professional Engineers New Zealand (IPENZ) is the lead national professional body representing the engineering profession in New Zealand. We have approximately 17,000 Members, including a cross-section from engineering students, to practising engineers, to senior Members in positions of responsibility in business. We are also the Registration Authority for Chartered Professional Engineers and accredit qualifications for professional engineers, engineering technologists and engineering technicians that meet the requirements of the Washington, Sydney and Dublin Accords respectively.

IPENZ notes and supports the reference in Rule 32 (Effluent Storage) to *IPENZ Practice Note 21 Farm Dairy Effluent Pond Design and Construction*. We believe it is essential that dairy effluent ponds are well designed and carefully constructed. Practice Note 21 was produced to help achieve this; it provides a good-practice industry standard to help reduce the potential for poor quality ponds adversely affecting the environment.

It is also critical the infrastructure and systems feeding the effluent ponds are well designed and fit for purpose. The infrastructure and systems can be complex and their failure can be detrimental to the environment and pose risks to farm workers' well-being. *IPENZ Practice Note 27: Dairy Farm Infrastructure* provides guidance in the design and construction of dairy farm infrastructure components relevant to dairy effluent management.

We recommend Environment Southland expands the scope of the Water and Land Plan to include the design of farm dairy effluent infrastructure, systems as well as effluent storage ponds. Where the design is complex, or potentially has significant safety or environmental risks, we recommend that the work be undertaken by a Chartered Professional Engineer.

Chartered Professional Engineers are professionals who have successfully completed a competence assessment. They are bound by a Code of Ethical Conduct which requires them to, amongst other things, take reasonable steps to safeguard health and safety, have regard to effects on environment, report adverse consequences and act competently.

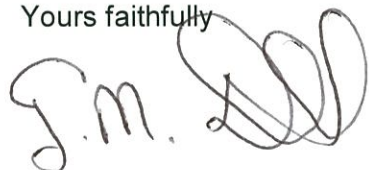
In addition, under section 39 of the Health and Safety at Work Act 2015, designers of plant, substances or structure that are to be used at a workplace (including a dairy

farm) have a number of obligations. These include ensuring, as far as is reasonably practicable, the plant or structure is designed to be without risks to the health and safety of persons. The persons whose health and safety must be considered includes those who work at the workplace, those who construct the structure, those who carry out any reasonably foreseeable activity (such as inspection, cleaning, maintenance, or repair) at the workplace and those who are at or in the vicinity of the workplace and who are exposed to the plant or structure at the workplace.

Protecting the safety of those who work on and around dairy farms is important. As noted in the Government's recently released *Reducing Harm in New Zealand Workplaces Action Plan*, the agriculture sector has some of the highest number of severe injuries, fatalities and harm at work.

I trust these comments assist you as you look to finalise the proposed Southland Water and Land Plan. I am available to discuss and assist further, if needed.

Yours faithfully

A handwritten signature in black ink, appearing to read 'G.M.' followed by a stylized, cursive flourish.

Graham Dilks  
General Manager - Engineering Leadership