The Institution of Professional Engineers New Zealand Inc

PENZ ENGINEERS NEW ZEALAND

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Northland Draft Regional Plan Northland Regional Council Private Bag 9021 Whangārei Mail Centre Whangārei 0148

Via email: mailroom@nrc.govt.nz

To whom it may concern,

Northland Draft Regional Plan

I am writing in relation to the Northland Draft Regional 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 C.4.3.1 6d) 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 storage facilities 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 the design of farm dairy effluent infrastructure and systems be considered along with effluent storage facilities.

I also note the reference in C.4.3.1 6e) to the need for a written statement or certification from a "suitably qualified and experienced person" to shows compliance with the design and performance requirements for farm wastewater storage facilities. Similar wording is also used in D.6.2 4) which requires that hard protection structures to protect against coastal hazards must be "designed and constructed by a suitably qualified and experienced person".

IPENZ recommends that where the design of any structure or facility is complex or potentially has significant safety or environmental risks, the work should be undertaken by a Chartered Professional Engineer. Chartered Professional Engineers are professionals who have successfully completed a competence assessment. They, along with IPENZ Members, 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 structures that are to be used at a workplace (including a dairy farm) have a number of obligations. These include ensuring, so 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.

I trust these comments assist you as you look to finalise the Draft Regional Plan. I am available to discuss and assist further, if needed.

Yours faithfully

Graham Dilks

General Manager - Engineering Leadership