



SUBMISSION

On

Drinking Water Standards for New Zealand

(Draft) 20 December 2021

to

Taumata Arowai

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About the Fertiliser Association of New Zealand

1. The Fertiliser Association of New Zealand (the Association), is an industry association funded by member companies, to address issues of common public good. Member companies include Ballance Agri-Nutrients Ltd and Ravensdown Ltd. Both are farmer co-operatives with some 40,000 farmer shareholders. Between them, our members supply the majority of all fertiliser used in New Zealand. As co-operatives, they are not driven by maximising the value of product sales to farmer shareholders, but by delivering best value to farmer shareholders.
2. Our members currently have the largest team of on-farm advisers – around 200 – of any of the primary sector groups. Their staff are all well trained, assisting farmers and growers to make informed, evidence-based decisions for their farm systems.
3. The Association member companies have invested significantly in products, systems and procedures which support responsible nutrient management to enable a viable primary industry within environmental limits.
4. The Association submits on national policy and proposed regulation to support environmental management, with the view that policy and regulation should be enabling, and that controls are both appropriate and necessary while providing for sustainable primary production within environmental limits.
5. The Association supports robust science-based evidence to underpin regulation.

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6. This submission exclusively addresses the Drinking Water Standard for nitrate.
7. The Water Services Act positions us well so that all New Zealanders can have access to safe drinking water. While the intent of the Act is clear it is obvious there will be a significant transition process to ensure that the Act continues to deliver safe water for all New Zealanders every day.
8. Government has put Te Mana o te Wai at the centre of its approach to regulations focussed on protecting our water. Te Mana o te Wai sets an aspiration for us all – it is about ensuring the health and well-being of water and people are safeguarded.
9. The NZ fertiliser co-operatives take this challenge seriously and their focus is on helping shareholders meet these aspirations, including the new nitrogen limit of 190 kg N/ha/yr on pastoral farms (the amount of nitrogen fertiliser that can be used per ha per year)
10. Currently less than two percent of the population received water from supplies which are regularly monitored for nitrate. The new monitoring and reporting requirements will give New Zealanders greater confidence that their drinking water supply is appropriately managed.
11. Nitrate is a contaminant that can enter wells and water supplies directly, or indirectly via groundwater recharge and run off. Parts of New Zealand may have elevated levels of nitrate in ground water and this is an important issue that needs consideration for management, particularly for small schemes or self-supply.
12. A key consideration in management is what maximum level of nitrate in drinking water is appropriate.
13. We support Taumata Arowai's proposal of retaining the current Maximum Acceptable Value (MAV) of 50 mg NO₃/l but recognise that continuing ongoing review and advances in scientific knowledge may lead to changes in the MAV.
14. The New Zealand MAV for safe drinking water in terms of nitrate is in line with current international standards. The World Health Organization published the results of a survey of

drinking water standards across the world in 2018¹. Over 100 countries participated in the review. Sixty-nine of these countries use the same guideline figure as New Zealand. The most conservative guideline figure set internationally is 40 mg NO₃/l.

15. There has been recent international research that is suggesting an association between nitrates in drinking water and poor health outcomes. While we follow the research closely, we rely on the public health authorities in this space.
16. We note the Ministry of Health statement² which says:
“The Ministry of Health continues to review new evidence and research about nitrates in drinking-water to understand links to adverse health. Current evidence suggests that nitrate levels lower than 50mg/L are safe”
17. We note that Bowel Cancer New Zealand issued a statement³ on the issue in December 2021, in which they concluded:
“Nitrates in drinking water are highly unlikely to increase the risk of bowel cancer in New Zealand, according to the current weight of evidence.”
18. The Liggins Institute was commissioned by Ministry of Health to review links between nitrate and birth defects. They found⁴ :
“There's no conclusive evidence that nitrate in drinking water causes adverse birth outcomes such as preterm birth or birth defects”
19. ESR were commissioned by the New Zealand Food Safety and Science Research Centre to assess the levels of nitrates New Zealanders are consuming from water and food (funded by MBIE and Fonterra). The report stated⁵:
“The combination of the biology, chemistry and exposure assessment suggest that it is highly unlikely that nitrates in drinking-water or the diet present an increased risk of cancer. This conclusion is consistent with the finding of several international food safety assessments of nitrates. The exposure analysis shows that a low overall percentage of nitrates come from drinking-water consumption and a very small proportion is from consumption of drinking-water as a beverage. Therefore, the complete assessment suggests that there is little reason to differentiate between drinking-water and food nitrate exposure.”
They also have a useful series of FAQs⁶:
20. The new Cancer Control Agency, Te Aho, released a report⁷ in February 2022, on prevention of cancer in New Zealand: In terms of bowel cancer, it focuses on established risks, such as obesity, alcohol consumption, diet, physical activity and smoking.

Concluding comment

21. Thank you for the opportunity to provide feedback on the proposed Drinking Water Standards.

¹ https://www.who.int/water_sanitation_health/publications/national-regulations-and-standards-for-drinking-water-quality/en/

² <https://www.health.govt.nz/your-health/healthy-living/drinking-water/nitrate-drinking-water>

³ <https://bowelcancernz.org.nz/new/position-statement-nitrates-drinking-water/>

⁴ <https://www.auckland.ac.nz/en/news/2021/11/18/nitrate-risks.html>

⁵ <https://nzfssrc.org.nz/news/esr-study-assessing-nz-ers-intake-of-nitrates-from-food-and-water/#/>

⁶ https://nzfssrc.org.nz/assets/Project-Reports/Q_A_Nitrate.pdf

⁷ <https://teaho.govt.nz/reports/prevention-report>