

12 July 2018

The Environmental Regulation Department
Greater Wellington Regional Council
PO Box 41
Masterton 5840

Dear Sir/Madam

Re: Resource Management Act 1991
Submission on South Wairarapa District Council Discharge Consent to discharge
contaminants to land, air and water associated with the proposed long term upgrade and
operation of the Featherston Wastewater Treatment Plant.
WGN/WAR 34616 , 34617, 34618, & 34619

Submitter: Dr Jill McKenzie, Medical Officer of Health on behalf of Regional Public Health
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Regional Public Health serves the greater Wellington region, through its three District Health Boards (DHBs): Wairarapa, Hutt Valley and Capital & Coast and is based at the Hutt Valley District Health Board.

We work with our community to make it a healthier safer place to live. We promote good health, prevent disease, and improve the quality of life for our population, with a particular focus on children, Māori and working with primary care organisations. Our staff include a range of occupations such as: medical officers of health, public health advisors, health protection officers, public health nurses, and public health analysts.

Reasons for submitting

The reason for this submission is to ensure that the public health risks associated with the proposed activity are considered. The Ministry of Health requires us to reduce potential health risks by various means, which includes making submissions on resource consent matters. The submitter is **neutral** and neither supports or opposes the application.

Regional Public Health could not gain an advantage in trade competition through this submission.

General comments

1. Regional Public Health **supports** the South Wairarapa District Council's policy of progressively reducing discharges into water ways in a sustainable and affordable way. Regional Public Health recognises that poor recreational water quality is one of the key environmental factors contributing to reduced well-being, and disparities in health outcomes in the Wairarapa.
2. In terms of fully assessing the environmental effects of the discharges, it is important to consider 'health' as being broader than merely the physical effects on people. In particular, effects on Maori health include physical, mental, whanau, and spiritual wellbeing (as described by Professor Mason Durie in *Whaiora: Maori Health Development, 1998*). Regional Public Health recognises non-physical impacts on health as valid and requiring consideration in terms of the Resource Management Act 1991. Although it is possible to reduce the potential physical health risks from microbes in direct wastewater discharges to waterways, for example via use of warning signage, this does not necessarily apply to effects on the other aspects of health. The discharge of human effluent to waterways is of significance to iwi and can reasonably be expected to have more than just physical implications for iwi health. Regional Public Health notes that iwi are being consulted on this proposal.
3. Regional Public Health supports the concept of Integrated Catchment Management and recognises that the Featherston Wastewater Treatment Plant should be considered an integral part of the wider Wairarapa Valley catchment and that the wastewater treatment plant discharge represents a point source discharge.

Specific comments

4. Regional Public Health supports the proposed consent condition 26 regarding warning signage and proposed condition 27 regarding consultation with Regional Public Health on the appropriate wording for the signage.
5. Regional Public Health does not oppose the proposed timeframe of the land stage commissioning programme provided that they are set as timeframe conditions of any consent granted. If it is necessary over time to deviate from the set timeframe then this should require further discussion with regulatory agencies (that is, a structured review process as suggested below) and the associated Community Liaison Group. We believe however that health risk associated with the discharge of treated effluent to Donalds Creek and down stream to Wairarapa Moana should be reduced as soon as practicable and thus the timeframes proposed should be seen as a maximum.
6. It is proposed that discharge to land at stage 2B will commence in 2035 and that this timeframe represents the maximum anticipated time period to implementation. Regional Public Health recommends that in formulating a consent condition requiring discharge to land under stage 2B, that consideration is given in the consent wording to reflect that disposal technologies and treated wastewater demand may alter over the ensuing seventeen years. It would be anticipated that discharge to land would be as per best practice operational procedures at time

of commencement of activity. It is further recommended that provision for a structured review process be incorporated into consent conditions to regularly track and monitor progress towards the implementation of the staged upgrades.

7. Regional Public Health has in the past been a member of South Wairarapa District Council Wastewater Consent Community Liasion Groups and is happy to participate in the proposed Community Liasion Group for the Featherston Wastewater Plant Consent if consent conditions around membership so allow.
8. Regional Public Health notes that land application to site A will be by Deficit irrigation and to Site B by application rate control where a sufficient soil moisture deficit exists. Deficit irrigation is a mitigation method to ensure there is no impact on groundwater quality. It will also be important to consider conditions around mitigating against preferential pathways that could introduce contamination to groundwater, for example, review of ground conditions during very dry periods and management of any existing bores or new monitoring bores. Regional Public Health requests that appropriate monitoring conditions are imposed to ensure that the discharge is not adversely impacting on groundwater.
9. It is noted that discharge to land will take place subject to the provisions of the Wairarapa Combined District Plan Rule 4.5.2(m)(ii)(a) Disposal of wastewater from a municipal wastewater treatment plant, which provides a setback distance of 25m from the property boundary for spray irrigation of treated wastewater meeting median E. coli concentrations less than 100cfu/100ml, provided application methods and parameters comply with the provisions of the Combined District Plan. Regional Public Health is satisfied that this setback distance is appropriate and is likely to ensure that aerosols (including associated odour) do not cross boundaries to adjoining properties.
10. Regional Public Health is unable to determine from the Assessment of Environmental Effects whether or not final decisions on the use of the land in regard to cut and carry, grazing or cropping have yet been made. We would suggest that there is greater clarity around the cropping regime proposed to support an improved understanding of any potential public health risks.
11. The irrigation of Wastewater Treatment Plant (WWTP) effluent to land can introduce a range of contaminants into soil including prescription and organic chemicals. These types of contaminants are named emerging contaminants because the level of evidence around their fate in the environment and potential for toxicity to ecological and human health, is still being developed. Part of the structured review process could incorporate current scientific knowledge on emerging contaminants and their potential impact on human health. This review can be used to determine any need for the soil, herbage and/or groundwater to be monitored for specific emerging contaminants. Regional Public Health requests that there be a review condition included for the purposes of assessing whether any emerging contaminants should be monitored.

Resolution

12. The decision sought in the event that the application is granted is the imposition of adequate conditions to protect the health of people and communities including that:

- Public warning signage shall continue to be placed in the vicinity of the plants discharge to Donalds Creek.
- Public warning signage shall be erected around areas of disposal of treated effluent to land.
- Consideration be given to incorporating monitoring of implementation of the staged upgrades and alignment with reassessment of current best practice and wastewater treatment demand.
- That the immediate and cumulative effects of the activity on groundwater are monitored.
- Controls which ensure that groundwater quality is not impacted by the existence of preferential pathways of treated wastewater.
- That disposal to land methods ensures that aerosols (including associated odour) do not cross boundaries to adjoining properties thus meeting the Wairarapa Combined District Plan provisions.
- A review condition be included for the purposes of assessing whether any specific emerging contaminants shall be monitored.

We **do** wish to be heard in support of our submission.

We have served a copy of this submission on the applicant. We are happy to provide further advice or clarification on any of the points raised in our written submission. The contact point for this submission is:

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Kind regards

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Peter Gush
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