

Exemption Decision Paper

Exemption number	EXE-00001043
Exemption type	General Exemption
Supply name	Riverlands Industrial (RIV002)
Date	21 August 2026
Submitted by	Jim Graham
Exemptions Team	Reviewed by Alice Liddell and Peter Wood

Recommendation

For the reasons set out in this paper, the Exemption Team recommends that you **grant with conditions** a general exemption application for the Riverlands Industrial drinking water supply.

Marlborough District Council (MDC) have sought an exemption for the Riverlands Industrial supply because the supply primarily provides water for industrial wine making and associated industries and normal drinking water disinfection with chlorine presents an unacceptable risk to the operation of that industry. A very small amount of chlorine has an adverse effect on the quality of wine produced by wineries that are supplied with water. Alternative methods of ensuring that consumers are provided with safe drinking water are available and while the approach proposed is unusual, it is necessary that the Authority does not place requirements on MDC that in this situation are *impractical, inefficient, unduly costly, or unduly burdensome*.

The exemption conditions recommended are outlined at the end of this paper and include installation of end-point treatment at domestic premises, and places where drinking water is consumed by people at industrial sites, along with monitoring and backflow protection conditions.

Executive summary

1. On 17 December 2025, MDC applied for a general exemption in relation to the Riverlands Industrial drinking water supply (RIV002). The application was made under s 57 of the Water Services Act 2021 (the Act).
2. The Exemption Team considers that it would be *impractical, inefficient, unduly costly and unduly burdensome* given the primary purpose of the supply, the risks relevant to the supply and the methods available to mitigate those risks, to operate the supply in a way that meets all the requirements of the Act due to:
 - The majority of the water supplied being provided for wine making and associated industries.

- The adverse impact that chlorine when used as a disinfectant in water has on the quality of wine.
 - The current water source which historically has not received any form of treatment, will ultimately be abandoned and replaced with a new source and treatment plant, which is currently under construction.
 - The installation of treatment for the existing sources being an unreasonable expense as it would be in use for only a short period of time.
3. The key factors that underpin the Exemption Team's view are:
- The considerable bulk of water use is for industrial purposes.
 - Chlorination of the supply represents a real risk to the production of wine by industrial users of the supply.
 - The source water is of high quality and has a low level of risk of being contaminated with pathogenic micro-organisms.
 - The supply has been operated without treatment and there have been no identified microbiological incidents.
 - An absence of residual chlorine means that risks of contamination in the distribution zone is not managed in the usual way, however end-point treatment provides a suitable method of ensuring the safety of water provided to consumers.
 - MDC has undertaken a trial of end-point treatment which has demonstrated that this form of treatment will operate successfully given the levels of manganese in the supply.
 - Most connections on the supply have backflow prevention devices and MDC intends to install devices at all connections.
4. In summary, the conditions that are recommended to ensure consumers receive safe drinking water include (see detailed conditions on page 21):
- Installation of end-point treatment devices at domestic dwellings and other places where drinking water is consumed, referencing relevant requirements of an acceptable solution.
 - Installation of backflow protection for all connections by reference to the backflow protection requirements of an acceptable solution
 - Preparation of a supply operations plan to replace the supply water safety plan, monitoring plan and incident response plan.
 - Continuation of the supply microbiological monitoring currently being undertaken by MDC and source water monitoring for chemical and other determinands as required by an acceptable solution.

5. Granting the exemption would be consistent with the purpose of exemptions in s 58A as treating all the water for drinking is considered impractical, inefficient, unduly costly and unduly burdensome.

Supply information

6. The Riverlands Industrial drinking water supply is unusual as it supplies water for an industrial area which includes wineries, irrigation and domestic premises. The wineries and irrigation have seasonal harvest demand which uses high volumes of water during March and April when 50% of the water use for the supply occurs. Water is supplied to industrial water consumers including Mount Riley Winery and Pernod Ricard Winery in approximately 122 hectares of industrial zoned land and to the Riverlands Irrigation Scheme. The supply also provides water to three small rural housing enclaves. The total population supplied is 740 people, mostly workers at the industrial area.
7. The Riverlands Industrial Area is located between approximately one and two kilometres southeast of Blenheim on State Highway 1. The industrial area is surrounded by grape growing country and consists of 113 industrial lots and 7 rural residential sections. There are 147 connections to the supply, 27 of which are domestic households. It is estimated by MDC that less than 1% of the water provided to the supply is used for domestic purposes (including drinking water in staff canteens), the other 99% being used as process water by the wineries. The area does not have the usual social infrastructure of a community other than some food outlets.

Riverlands Industrial Water Supply Details

Supply Name	Riverlands Industrial
WINZ Community Code	RIV002
Supply Owner	Marlborough District Council
Distribution Zone Name	Riverlands
WINZ Distribution Zone Code	RIV002RI
Distribution Zone Population	740
Treatment Plant Name	Riverlands Industrial Estate
Treatment Plant Code	TP00505
Treatment Process	None
Peak Daily Volume	Malthouse Bore 3056 m ³ /day, Hardings Bores 1098m ³ /day

Source Details	Riverlands Malthouse Rd Well, Hardings Road North Well, Hardings Road South Well.
Source Codes	G00336, G01675 and G01676

Source, abstraction infrastructure

8. Currently, water for the industrial area is supplied primarily from one bore, referred to as the Riverlands Malthouse Well which is located adjacent to the Opaoa River. But water can also be supplied from two irrigation bores installed in the 1980s and referred to as the Hardings Road Wells. The Hardings Road bores were purchased with associated water infrastructure and a wastewater plant from the Primary Producers Co-operative Society which owned and operated a freezing works in the area that became the Cloudy Bay Business Park, part of the wider industrial area. This purchase expanded MDCs network and capacity in an area where water demand was increasing due to the number of wineries locating in the Industrial Area. Increasing demand for a reliable and sustainable irrigation water supply from viticulture developers in the immediate area was also a concern for MDC. MDC subsequently applied for a new consent for the bores which changed the industrial and food processing water use consent to a mix of industrial use, irrigation, stock and domestic uses.
9. The Malthouse Bore has been drilled to a depth of 32 metres and is screened from 29 to 32 metres. The Hardings Road South Bore has a depth of 41 metres and is screened between 35 and 41 metres. The Hardings Road North Bore also has a depth of 41 metres and is screened between 35 and 40 metres.
10. Abstraction from the Malthouse is limited to 35 L/s and during the grape harvest when demand is high (March – May), the Hardings Road bores are used to supplement the industrial area supply by pumping directly to the Riverlands Industrial Reservoir.
11. All of the bores have elevated manganese concentrations though these are below the current maximum acceptable value (MAV) of the drinking water standards. The World Health Organisation has reduced their guideline value to less than a quarter of the current MAV and the New Zealand MAV may be adjusted when it is reviewed in 2027. The manganese levels can cause operational difficulties for MDC and customers on the supply. The Hardings Road bores have the highest manganese levels and when they are used, the overall level is reduced by blending the water from the Malthouse bore in the Riverlands Industrial Reservoir. The Hardings Road bores are also used if maintenance is required on the Malthouse bore. Irrigation demand is highest between January and April. Datran SCADA monitors pump operation, reservoir water levels and pressure within the supply.
12. Due to the age, condition and manganese issues with the bore water, new bores have been drilled at a site a kilometre closer to Blenheim. The new bores are 31m deep (screened 25-31m)

- and 28m deep (screened 22-28m). The water quality at the new bores is very good and manganese is not at elevated levels. They are to have sanitary bore heads installed and it appears that they will fit the Class C source water category of the Drinking Water Quality Assurance Rules 2027, effective from 1 July 2027 and the supply will require bacterial and protozoa barriers.
13. Information has been provided in the source water risk management plan suggesting the groundwater from the Malthouse and Hardings Rd bores is abstracted from a confined aquifer recharged principally from the Wairau River with some inputs from a local river, local springs and rainfall. Residence time data indicates that the water in the aquifer in the region of the supply bores is between 10 and 60 years. Vineyards dominate the land-use in the area around the Malthouse Rd bore but the Hardings Rd bores are surrounded by pasture.
 14. All three bores are tested for *E. coli* every three days and the reticulation system every nine days. Between 1 January 2022 and 27 April 2026 MDC reported that 828 samples from the Malthouse bore and 829 samples from the Hardings Road bores have been analysed for *E. coli* and total coliforms. All results were negative.
 15. The SWRMP has assessed the protozoa risk for the bores as low and recommends protozoa treatment of 3-log as required by the Drinking Water Quality Assurance Rules 2022 (DWQAR). It is likely this overestimates the risk as the Malthouse bore is screened to 29 metres and hence protozoa treatment is required. If the screen was set at 30 metres, it is likely that the bores would meet the Class 1 source water requirements of the DWQAR and protozoa treatment would not be required. The Hardings Road bores are deeper though treated effluent is applied to the land at the Blenheim Sewage Treatment Plant approximately 95 metres from the Hardings Road South bore, representing a risk of contamination to the groundwater. All of the bores typically have static head above ground level indicating that they are artesian and are separated from surface influences by an aquiclude. Groundwater Protection Areas have been established by MDC and formalised in the Proposed Marlborough Environment Plan.
 16. Conductivity, chloride and nitrate nitrogen are monitored at the Malthouse and Hardings Road bores monthly. Results indicate levels below the requirements of the drinking water standards (DWS).
 17. An MDC monitoring bore near to the bores is used to monitor for seawater intrusion but after 22 years of continuous recording, seawater intrusion has not been identified in the area of abstraction.
 18. The supply SWRMP identifies the main risks associated with the groundwater source are drought, flooding of the bores, microbial contamination from damage to the bore heads or abandoned or improperly decommissioned bores, agricultural chemical application, septic tanks, disruption to the integrity of the aquifer and land-use change, all medium level risks that are satisfactorily managed by monitoring and awareness outlined in the supply DWSP.

Treatment infrastructure

19. Treatment of the source water from the Malthouse or the Hardings Road bores is not provided prior to delivery to consumers and chlorine is not added to the water to provide a network residual.
20. The Riverlands Industrial supply has been operated without primary or secondary disinfection since it was installed. Until 2022 it was considered by MDC to meet the secure bore water criteria of successive versions of the Drinking Water Standards for New Zealand but compliance with them was not demonstrated. The Ministry of Health Annual Report on Drinking Water 2020-2021 identifies that the supply did not comply with the Health Act as it did not have a Drinking Water Safety Plan and did not comply with the *Drinking Water Standards for New Zealand (R2018)* (DWSNZ) because it did not meet the requirements for either a bacterial or protozoa barrier. At the time, compliance for untreated groundwater could be met by monitoring for *E. coli* only but protozoa compliance needed demonstration of a secure bore head, one which was sealed at the surface to prevent the ingress of surface water. This could not be achieved.
21. It is proposed that when the new bores are brought into service a treatment plant which includes cartridge filtration and UV disinfection treatment processes which meet the requirements of the DWQAR will be installed at the treatment plant site.

Distribution infrastructure

22. Water from the Malthouse bore is pumped through the Industrial Area reticulation to the Riverlands Industrial Area Reservoir. The reservoir is constructed of concrete and has a capacity of 3,850m³. An additional 360m³ reservoir, currently not in use, can be utilised if maintenance is required on the main reservoir.
23. The Hardings Road bores pump to six 30m³ plastic tanks located next to the Riverlands Industrial Reservoir which supply into the irrigation network. When the Hardings Road bores supplement the Malthouse bore, the water from Hardings Road bores goes into the Riverlands Industrial Reservoir before being distributed to Riverlands Industrial consumers. Malthouse bore water on the other hand is distributed directly to customers in the reticulation with any surplus or shortfall going to or coming from the Riverlands Industrial Reservoir.
24. For most of the year the Hardings Road bores supply only the 55 hectares of the Riverlands Irrigation Scheme.
25. The Riverlands Industrial reticulation system has a total length of 11.4km and is made up of a variety of pipe materials

26. All of the newer urban domestic connections have a meter with a double check valve fitted. Medium or high-risk sites have a testable double check valve or a reduced pressure zone (RPZ) valve.
27. Riverlands Industrial has 58 properties assessed as High Risk and fitted with RPZs at the boundary and 5 Medium Risk properties fitted with testable double check valves. Some of the older connections do not have any backflow protection devices fitted.
28. An assessment of water loss for the supply has not been provided specifically, though a document submitted with the application called Attribute Table of Reticulation Contamination Mitigation indicates that two assessments for water loss were made on 11/11/2024 and 28/1/2025 by conducting a drop test on the isolated reservoir while manually reading the customer meters. This suggested the unaccounted water was around 26%.MDC has indicated an intention to install smart meters throughout the network so that an accurate assessment of water loss can be undertaken.
29. The network is currently monitored three times a month for *E. coli*. No positive results have been reported. The supply has not been the subject of any drinking water quality emergencies or incidents, notifications, investigations, consumer advisories or enforcement action.
30. When the new bores and treatment plant are operational, proposed for 2028/29, water from the new treatment plant will be pumped to the Industrial Area reticulation via a new pipeline and to the Riverlands Industrial Area Reservoir. This water will go directly to customers and also onto the existing reservoir.
31. It is proposed when the new bores and treatment plant are commissioned, the current Hardings Road bores will supply only the Riverlands Irrigation Scheme and the Malthouse bore will be retained as a supplementary supply for irrigation water to the Riverlands Irrigation Scheme.

Drinking Water Safety Plan

32. The most recent version of the DWSP (V5.1.1 December 2025) was reviewed. The plan provides a description of the drinking water supply but notes the construction of new bores to provide water for the supply and the intention to build a new water treatment plant. As the new bores and plant are not expected to be commissioned until 2028, an older version of the DWSP was more instructive. Both versions of the DWSP have been considered together. They note the absence of any form of treatment at the supply and the intention to seek an exemption from the requirement to provide residual disinfection until the new bores and plant are operational.
33. The plan provides a description of the supply, a diagram of the infrastructure, some photos, a risk assessment matrix, improvement schedule and risk tables, not dissimilar to may DWSPs.

34. It provides summaries of operational procedures, operational monitoring and inspection, routine maintenance, equipment validation, corrective actions and outlines the documents that provide further information on these matters.
35. Overall, the DWSP is satisfactory, identifies the main risks associated with the supply and proposes suitable improvements to manage those risks.

Incident Response Plans

36. The supply draft Drinking Water Incident Response Plan, prepared in 2024 was reviewed. The plan provides a risk and consequence escalation matrix with five risk levels ranging from a simple localised problem to an extensive and prolonged failure of services leading to a civil defence emergency. The plan sets out the roles and responsibilities and supporting agencies relevant to and incident, communication tools and prescribed responses to each of the incident levels. The plan specifically notes the response required to three events, microbiological contamination of the network, chemical contamination of the network and a supply outage.
37. The response to a microbiological transgression sets out a flow chart response chain and activities to be undertaken (ideally) within an hour. It also notes acceptable parameters for pH, FAC and turbidity in supply networks. A boil water notice response is outlined and a boil water advisory example is provided. The plan also sets out a response to chemical contamination, including a response flow chart, activities to be undertaken within an hour of notification, actions for issuing a *do not drink* notice and notice example. Activities to be undertaken in the event of a supply outage are provided and water conservation levels and actions are included.
38. The plan sets out a specific response for a total coliform detection in the Riverlands Industrial supply but does not set out a similarly specific response for an *E. coli* detection in that supply.

Monitoring Plans

39. The supply monitoring plan is included in the SWRMP for source water and the DWSP for the rest of the supply. The SWRMP outlines monitoring for conductivity, chloride and nitrate nitrogen at the Malthouse and Hardings Road bores and saltwater intrusion to the aquifer from a monitoring bore. The supply monitoring programme in the DWSP is comprehensive and outlines all of the monitoring undertaken against the DWQAR monitoring rules and actions undertaken in relation to DWQAR assurance rules.

Human Resources - Capacity and Competency

40. MDC employs a team of dedicated staff to operate drinking water supplies across the region. The staff include engineers with considerable experience in drinking water supply.

Consumers and industry

41. The wine sector is the largest industry in Marlborough and produces around 80% of NZ's exported wines. It is also a large employing sector which accounts (both directly and indirectly) for one in five jobs in the region and contributes to about 20% of Marlborough's GDP. Wine's contribution to the Marlborough economy has grown by 300% since 2000 and continues to grow. More than 50% of New Zealand wine is made at Riverlands Industrial Estate and Cloudy Bay Business Park. In addition to wineries there are a number of wine-related businesses also in the area, including bottling and transport industries.

Information provided by applicant

42. MDC submitted the following documents in support of its application. Each document contains relevant information and has been considered by the Exemptions Team with a focus on material specifically referenced in the application.
43. MDC also provided the following additional information after it was requested:
- Source water quality data
 - Report on end-point treatment trial

Completed Application for Exemption form
Attribute Table of Reticulation Contamination Risk Mitigation Measures
Chlorine And Wine Production
Wine Marlborough Presentation to Taumata Arowai 23 Oct 2024 – Pt1
Wine Marlborough Presentation to Taumata Arowai 23 Oct 2024 – Pt2
Background to Marlborough Water Supply
MDC Long Term Plan 2024-34. Activity – Water Supply
Water Supply AMP 2024-34 (Draft)
Water Supply AMP 2024-34 Appendices (Draft)
Riverlands Industrial Water Supply Area
Riverlands Water Safety Plan V.5 (updated 2025)
Riverlands Source Water Risk Management Plan V.1 (Current)
Riverlands Source Water Risk Management Plan V.2 (Proposed New Site)
Riverlands Water Safety Plan V5.1(Future Outline)
Backflow
Backflow Prevention Programme – Assets & Services Committee Approval 2008

Hygiene
Hygiene Code of Practice
Chlorine Alternatives for Disinfection of Drinking Water Reticulation.
Water Storage
Reservoir Maintenance & Hygiene Code of Practice
Reticulation
Reticulation Repair and Maintenance Standard Operating Procedure
System Condition
Work Orders for Reticulation Maintenance 2022-25
Water Loss
Smart Meters - Request for Information and Prices

Practical Considerations

44. One of the reasons for seeking a general exemption is because of the effect that chlorine has on wine. Even very small amounts of chlorine can produce compounds which affect the quality of the wine. The main compound of concern is 2, 4, 6 Trichloroanisole (TCA, aka Cork Taint). Fungi present in the wine and wine production infrastructure convert chlorophenol compounds to TCA. As long as the fungi and chlorine are present in a moist environment, TCA will be produced. TCA in wine produces a mouldy musty smell like wet cement or damp newspapers. The effect of TCA on wine is that it reduces the fruit aromas of the wine. While this may not make the wine undrinkable, the reduction in quality reduces the reputation of the wine and hence its value.
45. TCA has a very low perception threshold for humans with 1 nanogram/litre enough to significantly affect the quality of wine. Other chlorophenols that can occur in wine as a result of contact with chlorine are 2, 6-Dichlorophenol and 6-Chloro-o-cresol. Both have very low perception thresholds and can produce a smell of chlorine, plastic and chemicals.
46. For this reason, wineries do not use chlorine-based cleaning products and don't allow these products on the winery sites. For cleaning purposes, they generally use hydrogen peroxide which doesn't have the same effect.
47. Historical provision of water without chlorine has facilitated the development of wineries at the Riverlands Industrial Area and the lack of chlorine in the water supply has been an enabling factor for the wineries. It is their view and the view of MDC that addition of chlorine to the drinking water supply will put at risk the production of high-quality wine produced for both the domestic and export markets.
48. There doesn't appear to be suitable alternative substances for use as residual disinfectant in the supply. Consideration would normally be given to chlorine dioxide and chloramination, neither

of which are included in the DWQAR but the use of which could be considered as an exemption condition. However, both of these substances are chlorine based and would present the same risks of formation of TCA in the wine.

49. Alternatively, consideration has been given to removal of chlorine at the point of entry to each winery. This could theoretically be achieved with the use of carbon filtration. There are two difficulties with this, the first being the seasonal nature of water use with 50% of the water use occurring during the harvest period in March and April. A filtration system would need to be sized and constructed at each winery with the capacity for the harvest peak of water use. The costs of this would be high. Secondly, use of carbon filtration would not remove the risk of contamination of the wine with chlorine but would reduce or mitigate it. The implications of failure of the carbon filtration system, given the very small concentrations of chlorine needed to damage large quantities of wine would be significant, both financially and reputationally.
50. Disinfection of water pipes after repairs and installation of new mains would still be required. MDC has investigated use of hydrogen peroxide as a disinfectant for this purpose and has included hydrogen peroxide as the disinfectant proposed to be used at the Riverlands Industrial supply in the operating procedure for repair and maintenance of water reticulation.
51. An exemption from the requirement to use residual disinfection under s 58 is not suitable for this supply because s 58 requires that the supply complies with all other legislative requirements and does not allow for the use of end-point treatment as an alternative.
52. MDC has considered that if the supply is to be operated without primary or residual disinfection, it will be necessary to provide both bacteria and protozoa barriers to consumers through end-point treatment. Iron and manganese are present in water supplied from the existing bores which has the potential to clog cartridge filters. MDC have undertaken a trial of end-point treatment filtration and UV units to determine if they are a viable option for householders and drinking water supplied in commercial and industrial premises. The trial has demonstrated that the presence of manganese in the supply does not compromise end-point treatment systems and that end-point treatment is a viable option to ensure consumers are provided with safe drinking water.
53. MDC are seeking a general exemption for a limited time (3 yrs) to allow them to operate the Riverlands Industrial supply without centralised treatment barriers until the new bores and treatment plant are operational. At that time, they will decide the best option to demonstrate compliance with the DWQAR or may seek a further exemption. The exemption team considers that an exemption of 5 years would be appropriate due to the risk of delays in getting the new sources and treatment plant operational.
54. MDC anticipates that an exemption would include conditions which would require the installation of end-point treatment at all residential premises connected to the supply.

Community engagement

55. MDC have undertaken considerable engagement with the wineries, other industries in the industrial area and residents of households using the supply. Representatives of the Water Services Authority met with representatives of the wine industry and other industrial area water users in October 2024 where a presentation was made explaining the impact of small amounts of chlorine on wine, the mechanism responsible and the risks to the industry. A further meeting was held in September 2025 where details of the supply and approach to an exemption application were discussed.
56. MDC has discussed the option of end-point treatment with representatives of households connected to the supply and has indicated that they were agreeable. MDC intends to fund the installation and maintenance of the domestic end-point treatment systems but will require businesses to fund the installation and maintenance of devices at commercial premises.

Available compliance pathways

57. Drinking water suppliers have three main options for demonstrating compliance with the Act. They can comply with the Drinking Water Quality Assurance Rules 2022 (DWQAR) and have a drinking water safety plan, follow an Acceptable Solution or seek a general exemption.
58. The supply is currently not compliant with the DWQAR and the requirements of a drinking water safety plan. If it was to comply, it would need to include a treatment plant which would provide a bacterial barrier and a 3-log protozoa barrier with associated monitoring, SCADA and telemetry and residual disinfection.
59. Acceptable solutions have also been considered. The Water Services (Small to Medium Networks) Drinking Water Acceptable Solution 2025 has a population limit of 500 people and cannot be applied to the Riverlands Industrial supply as the population exceeds this figure. The Water Services (Mixed-use Rural) Drinking Water Acceptable Solution 2025 doesn't have a population limit but the supply doesn't meet the requirements of a mixed-use rural supply as the main use is industrial. While the supply does have some association with an irrigation supply, the main source of water for the Riverlands Industrial supply is the Malthouse bore. The Hardings Road bores are used to supplement the Riverlands Industrial supply when water demand is high during the harvest period. This arrangement is not within scope of the Mixed-use Rural Acceptable Solution and it is unlikely that 50% of the water is used for agricultural or horticultural purposes. MDC proposes that the supply is a dedicated urban industrial supply.
60. A general exemption under s 57 with conditions allowing for the use of end-point treatment is the most viable option.

Assessment factors

61. MDCs application has been assessed against the relevant factors arising under the Act, Authority policy and guidance material in relation to exemption applications, and other considerations relevant to decision-making by the Authority and its staff.
62. Those factors, which shape the structure of this paper, are set out here.
 - The Treaty of Waitangi / te Tiriti o Waitangi and its principles, which are relevant considerations under s 19(1)(b) of the Water Services Authority-Taumata Arowai Act 2020.
 - The scale, complexity and risk profile of the drinking water supply, which go both to the assessment of drinking water safety risks and also to the proportionality of regulation under the Act.
 - Consistency with the main purpose of the Act, i.e. to ensure that drinking water suppliers provide safe drinking water to consumers. In accordance with s 57(4)(a) of the Act, a general exemption can only be granted if the decision-maker is satisfied that the exemption is consistent with the main purpose of the Act.
 - The purpose of exemptions in s 58A of the Act, which has general relevance to exemptions although the decision-maker is not required to be satisfied that an applicant-initiated general exemption is consistent. Section 58A provides that the purpose of exemptions is to *provide flexibility where compliance with the relevant requirement is impractical, inefficient, unduly costly, or unduly burdensome, taking into account the nature of the supply and characteristics of the supplier*.
 - The Authority's Compliance, Monitoring and Enforcement Strategy 2025-2028 (**CME Strategy**). This is a matter that the Authority's Chief Executive, and any delegate of the Chief Executive, must have regard to when determining exemption applications.¹

The Treaty of Waitangi / te Tiriti o Waitangi and its principles

63. The Authority and its staff are required to uphold the Treaty of Waitangi (Te Tiriti o Waitangi) and its principles when carrying out their functions.²
64. What this means in practice varies from situation to situation, depending on the relevance of Treaty/Te Tiriti provisions and associated principles, including: partnership, self-determination, mutual benefit, honour, active protection, options, right of development, informed decisions,

¹ Water Services Act 2021, s 136(7); Water Services Authority-Taumata Arowai Act 2020, s 11(2)(b).

² Water Services Authority-Taumata Arowai Act 2020, s19(1)(b)(i).

equity and equal treatment, and other principles that may be developed or identified as relevant from time to time.

65. MDCs application does not include specific information about the interests of mana whenua. Correspondence with MDC indicates that engagement with the local iwi is on-going on a number of matters and the exemption has been raised in these discussions. This has a bearing on the Treaty/Te Tiriti principle of informed decisions. The information about on-going engagement indicates that this principle has been met.

Scale, complexity, and risk

66. The Riverlands Industrial supply is categorised under the DWQAR as a large-networked supply (>500 people). At a minimum, the Riverlands Industrial supply is expected to comply with the level 3 rules modules within the DWQAR and all of subparts 1-5 of the Act.
67. The Riverlands Industrial supply is registered as providing water to 740 people. The scale of water supply is due to the industrial use, which is significant. The volume of water provided is high though domestic consumption is relatively low. This becomes important when considering conditions designed to protect consumers.
68. The supply as it is currently operated is not complex. Water is abstracted from the ground via the Malthouse bore and provided into a network and on to a storage reservoir. When the reservoir is full it supplies water to the industrial area under gravity. When the reservoir level falls to about 80% the Malthouse bore is activated and pumps more water through the network to the reservoir. During times of high demand, the Hardings Road bores also provide water to the reservoir. The distribution system is also relatively simple with water pumped directly into the network and on to a reservoir at the extremity of the network. The reservoir buffers demand.
69. The risks of the supply can be considered in relation to the source, treatment and distribution system. Sampling results indicate the source water from both the Malthouse bore and Hardings Road bores to be microbiologically and chemically very good with the exception of the presence of manganese and iron at elevated but below MAV levels. However, the groundwater is abstracted via non-sanitary bore heads which makes them potentially vulnerable to surface water ingress, particularly at times of heavy rainfall.
70. The supply does not have a treatment barrier so source water quality risks are not managed through treatment.
71. It is proposed that within the duration of the proposed exemption new bores that have been drilled, will be brought into service and a treatment plant that includes cartridge filtration and

- UV disinfection treatment processes which meet the requirements of the DWQAR will be installed at the treatment plant site.
72. The main distribution risks relate to the absence of residual disinfection, water loss, backflow prevention and operational procedures. Backflow prevention devices are installed at newer domestic premises (double check valves) all medium and high-risk connections.
 73. The relative scale, complexity and risk of the supply have been factored into the Exemption Team's assessment of MDCs application and the commentary and recommendations in this paper.

Consistency with the main purpose of the Water Services Act 2021

74. The main purpose of the Act is to ensure that drinking water suppliers provide safe drinking water to consumers.
75. One of the things a general exemption may exclude is the duty to supply safe drinking water, which may appear to cut across the main purpose of the Act. However, a general exemption can still be consistent with the main purpose of the Act. To achieve this, measures are required to ensure consumers only consume safe drinking water.
76. For a general exemption to be granted and consistent with the main purpose of the Act, conditions need to be imposed to ensure risks are mitigated so far as practicable. In this case, conditions can require the supplier to provide for consumers to have end-point treatment and backflow protection, to carry out monitoring, and to have plans for supply maintenance and incident response.
77. **Factor 1 – Source water quality:** The microbiological quality of source water is critical to a supply that is operated without a centralised treatment system. Evidence provided in the current SWRMP indicates that the source water is of very high quality and extracted via bore heads that are in good condition though it doesn't appear that they have met compliance criteria for sanitary bore heads. The water is abstracted from a confined aquifer and in excess of 1600 sample results over the past 4 years have been negative for *E. coli* and total coliforms. While a protozoa barrier is required for the supply under the DWQAR, it is highly unlikely that the source water would be contaminated with protozoa. The activities within the catchment while contributors to microbial contaminants to surface water, represent a low level of risk to the groundwater.
78. Without treatment, an effective barrier to source water contamination is not provided. It is proposed that a condition is included which *requires continuation of the current MDC analysis of 3 source water samples each week for E. coli and total coliforms*

79. **Factor 2 – Absence of centralised treatment:** The supply has never been operated with any form of centralised treatment and barriers to bacteria and protozoa are not present. Under the DWQAR the supply is required to include a bacterial barrier, protozoa barrier and residual disinfection. Safe water cannot be guaranteed without some treatment barriers. To operate the supply without the required treatment barriers in the DWQAR, an exemption from compliance with s 21 is needed. It is proposed that *a condition is included that end-point treatment is installed at each consumer's property to mitigate this risk*. The use of end-point treatment outside of an acceptable solution requires exemption from compliance with s 28. This would provide an alternative means of ensuring that consumers have safe drinking water.
80. **Factor 3 – Residual disinfection:** The supply does not include residual disinfection. This is one of the reasons that the supply does not comply with the DWQAR. The supply cannot meet the main purpose of the Act without residual disinfection unless an alternative approach is used. To provide an indication of water quality within the distribution zone it is proposed that a condition is included which requires *continuation of the current MDC analysis of one distribution zone sample every 9 days for E. coli and total coliforms*.
81. **Factor 4 – Backflow prevention:** All high-risk and medium-risk high connections have RPZs fitted and tested annually. All newer urban domestic connections have a meter with a double check valve fitted but older connections currently do not. Best practice would be to have backflow prevention devices installed at every connection which would require installation at the older connections. In mid-2025 MDC released a request for information and pricing for the installation of smart meters and output transmitters for 133 properties and smart meters for 10 properties integrated with SCADA and billing platforms. It is proposed that a condition is included that requires backflow protection to be installed at all connections to mitigate this risk.
82. **Factor 5 – Mains repair disinfection:** MDC provided a standard operating procedure for repair and maintenance of water reticulation. It includes procedures for low, medium and high-risk situations which includes chlorine disinfection of pipe work for all situations except for the Riverlands Industrial supply. A separate set of procedures is provided for the Riverlands Industrial supply which requires the use of hydrogen peroxide rather than chlorine as the disinfectant. Under the circumstances, hydrogen peroxide is a satisfactory alternative. The procedures provide confidence that repairs are undertaken in a satisfactory manner. It is proposed that a condition is included that *requires the inclusion of the standard operating procedure for the repair and maintenance of the reticulation network be included into the operations plan for the supply* which takes account of the circumstances of the supply, conditions of this exemption and the installation and maintenance of end-point treatment devices.

83. **Factor 6 – Contamination response planning:** The supply incident response plan sets out a specific response for a chemical incident and a total coliform detection in the Riverlands Industrial supply but does not set out a similarly specific response for an *E. coli* detection in that supply. The supply incident response plan is part of the DWSP and because granting of a general exemption from compliance with s 30 would remove the requirement for the supply to have a DWSP it is necessary that a specific incident response plan is prepared for the Riverlands Industrial supply. It is proposed that a *condition is included that requires the Drinking Water Response Plan to be updated to include a response to detection of E. coli in the supply and is included as part of the supply operations plan.*
84. **Factor 7 – DWSP and SWRMP:** Granting of a general exemption from compliance with s 30 would remove the requirement for the supply to have a DWSP and a SWRMP, two key risk management tools. The exemptions team consider that it remains necessary for the MDC to provide an operational plan for the supply that outlines how the supply will be operated in a manner that manages the risks inherent in the supply, including the use of end-point treatment. It is proposed that a condition is included that requires MDC to prepare *an operations plan for the supply* which takes account of the circumstances of the supply, conditions of this exemption and the installation and maintenance of end-point treatment devices.

Purpose of exemptions

85. Subject to the purpose of the Act (ensure that drinking water suppliers provide safe drinking water to consumers), s 58A provides that the purpose of exemptions is to *provide flexibility where compliance with the relevant requirement is impractical, inefficient, unduly costly, or unduly burdensome, taking into account the nature of the supply and characteristics of the supplier.*
86. The Authority's technical assessment is that given the circumstances and primary purpose of the supply it would be impracticable and disproportionate to the risks associated with the supply to operate the supply in a way that meets all the requirements of the Act due to:
- The majority water being provided for viticultural use that is inconsistent with normal treatment processes required for drinking water.
 - Less than 1% of the water provided to the supply is used for domestic purposes (including domestic premises and drinking water in staff canteens).
 - The water supply is currently untreated. It is disproportionate and expensive to construct a water treatment plant for drinking water purposes based on the limited time that the current source waters will be used.

- The risk of consumption of microbiologically contaminated water to consumers can be sufficiently protected through the installation of end-point treatment.
87. The supply has historically been operated without any form of treatment which is unusual but not unprecedented and is a key reason the wineries have located in the industrial area. It is important that The Authority considers the consequences of its regulatory actions and in this case takes account of the primary purpose of the supply and the adverse impact of chlorine on that primary purpose. That impact is significant as it would either disable the winery operations or impose considerable cost on them without completely removing the risk to their operations.
 88. The option of adding chlorine to the supply for either primary disinfection or as a residual disinfectant and then removing it at each winery with large scale carbon filtration is impractical. It would require considerable investment from each of those industries and would place an undue burden on each of them. It would also be inefficient and unduly costly as the outcome of safe drinking water can be achieved in other ways.
 89. Other forms of disinfection like chlorine dioxide and chloramination would not prevent contamination of the wine that is produced and are not considered practical options.
 90. The option of building a treatment plant using, for example, a filtration process and UV disinfection to treat water provided from the Malthouse and Hardings Road bores is also impractical. The timeframe necessary to design and build a treatment plant of this nature would be such that it would likely be commissioned close to the time that the new bores and treatment plant would also be commissioned. The cost of this infrastructure would be unduly burdensome.
 91. It is considered that an exemption would be consistent with the purpose of exemptions because installing a treatment plant and providing residual disinfection for the supply would be inefficient, unduly costly and unduly burdensome given the primary purpose of the supply, the temporary nature of the treatment plant, the characteristics of the consumers of the supply and the options for MDC to ensure safe drinking water with alternative methods.

Compliance, Monitoring and Enforcement Strategy

92. The CME Strategy outlines the approach the Authority will take to exemption applications. It provides part of the backdrop for the more detailed provisions in other Authority policy and guidance material.
93. Amongst other things, the CME Strategy provides that “exemptions are issued with careful consideration of the public health risks involved” and that “By managing exemptions carefully and with transparency, we ensure that public health remains protected while providing flexibility for suppliers facing exceptional circumstances”.

94. The CME Strategy was last updated prior to the changes to the Act in 2025. At that time, the Authority signalled an intent to maintain a risk-based approach following the then anticipated changes.
95. The Exemption Team has had regard to the relevant parts of the CME Strategy when conducting its assessment and preparing this paper. The approach recorded in the CME Strategy is reflected in the discussion above. The Exemption Team are confident that a risk-based approach that applies the purpose of the Act and the purpose of exemptions and provides both transparency and flexibility has been taken when assessing the application and that the granting of the exemption will not compromise the ability of MDC to ensure that consumers are provided with safe drinking water.

Scope of exemption

96. The Act allows the decision-maker to grant a general exemption for one or more of the requirements set out in s 57(1). In this case, it is not necessary for a general exemption to cover all the requirements in s 57 as it is reasonably practicable for MDC to comply with some requirements, for example, the duty to provide a sufficient quantity of drinking water.
97. The following sections have been identified as appropriate to be included in the general exemption:
- Duty to supply safe drinking water (s 21)
Exemption from the duty to supply safe drinking water enables the supply to operate without complying with the relevant rules in the DWQAR to ensure that drinking water supplied by the supplier is safe. These rules include treatment barriers which are considered disproportionate requirements for a supply of this nature. Conditions are intended to require the supplier to arrange for the installation of end-point treatment to ensure that consumers have safe drinking water at their properties. Alternative monitoring requirements will be imposed in conditions.
 - Duty to protect against the risk of backflow (s 27)
Exemption from this duty removes requirements to comply with distribution rules in the DWQAR relating to backflow. This risk of backflow will be addressed through a condition.
 - Requirements relating to end-point treatment (s 28).
Exemption from requirements relating to end-point treatment enables end-point treatment devices to be used outside of an acceptable solution. Conditions will address the responsibility for the devices that are otherwise covered by s 28.
 - Requirement to have a drinking water safety plan (s 30).
The exemption to the requirement to have a drinking water safety plan enables the supply to be operated without the use of residual disinfection. The risks of poor operation of the

supply will be addressed through a condition requiring the preparation of a supply operations plan, that includes the elements of the incident response plan for microbiological or chemical contamination (above the MAV) and insufficiency of supply that are already in place.

98. It is not necessary to exempt MDC from the requirement to comply with drinking water standards as drinking water should meet the standards after being treated with end-point treatment. Conditions which require monitoring of *E. coli*, total coliforms, manganese, iron and some other determinands in source water are included to identify contamination risks. There was no information provided to suggest it would be impracticable or unduly burdensome to take reasonable steps to provide aesthetically acceptable drinking water, to provide a sufficient quantity of drinking water to consumers, to protect against the risk of backflow or to keep records so those matters have not been considered for exemption.

Additional comments

99. The circumstances of the application from MDC are unusual. It is considered that it is not reasonably practicable for MDC to comply with the relevant requirement of the Act due to the fact that the supply primarily provides water for industrial wine making and associated industries and normal drinking water disinfection with UV, filtration and chlorine is inefficient and unduly burdensome.
100. The recommended conditions will ensure that the proposed exemption is consistent with the main purpose of the Act. Alternative methods of ensuring that consumers are provided with safe drinking water are available and considered appropriate in proportion with the scale, complexity and risk of the supply.

Approval

The Authority's exemption assessment team recommends that you:

- (a) **note** the assessment that, having regard to the scale, complexity and risk profile of the Riverlands Industrial supply, the supply can with conditions be operated in a way that would meet the requirements of the Act;
- (b) **agree** to grant a general exemption for Marlborough District Council for a period of five years for the Riverlands Industrial drinking water supply from the following duties in the Act: **Yes / No**
- To supply safe drinking water (s 21)
 - To protect against the risk of backflow (s 27)
 - Requirements relating to end-point treatment (s 28)
 - To have a drinking water safety plan (s 30)
- (c) **agree** to grant the exemption subject to the following conditions:
- (i) End-point treatment devices must be installed at all premises where drinking water is available to consumers within six months of the commencement of the exemption. **Yes / No**
- (ii) MDC must meet the following requirements of the Water Services (Small to Medium Networks) Drinking Water Acceptable Solution 2025 once (a) is met:
- SMN.1 End-point treatment must be used at consumers properties
 - SMN.2 Exceptions to end-point treatment requirements may apply in respect of connected drinking water supplies
 - SMN.3 End-point treatment must meet population and building limits
 - SMN.4 End-point must be effective
 - SMN.5 UV disinfection systems must be validated for designated buildings
 - SMN.8 Bore, spring and surface water must be monitored
 - SMN.10 Springs and bores must be protected
 - SMN.13 Monitoring results must be made available
 - SMN.14 Information about testing must be provided
 - SMN.17 All connections must have backflow protection
 - SMN.20 People working on the drinking water supply must be competent

- (iii) MDC must maintain a monitoring programme that includes three samples of source water each week at the Malthouse bore and one sample every nine days from the distribution network for microbiological indicators *E. coli* and total coliforms.
- (iv) MDC must prepare and provide to the Authority within six weeks of the commencement of the exemption, an operations, monitoring and incident response plan for the supply which takes account of the circumstances of the supply, this exemption and the installation and maintenance of end-point treatment devices.

Date: 1/10/26

Steve Taylor

Head of Operations