



#### Memo

TO Hearings Panel (Gina Sweetman, Rawiri Faulkner, Jim Cooke)

FROM Shaun Andrewartha, Manager - Environmental Regulation, GWRC and Harry

Wilson, Chief Executive Officer, SWDC

DATE 20 March 2020

SUBJECT Joint response from GWRC and SWDC in regard to Minute #15 (17 February

2020)

FILE NUMBER WAR/170229

**Applicant:** South Wairarapa District Council

**Proposal:** To discharge contaminants to water, land and air associated with the proposed long term upgrade and

operation of the Featherston Wastewater Treatment Plant

**Location:** Featherston Wastewater Treatment Plant, Donald Street, Featherston

Site A – 65 Longwood West Road, Featherston

Site B – 270 Murphys Line, Featherston

## 1. Introduction

The Hearings Panel Minute #15 directed that the applicant, South Wairarapa District Council (SWDC), and Greater Wellington Regional Council (GWRC) respond to the Panel by no later than 5pm 20 March 2020 to advise on:

- a. The applicant's intended direction to either progress the current proposal (with or without the recommended add-on treatment), re-notify, or withdraw and lodge a new application; and
- b. An updated timetable which reflects the intended direction set out in a.

# 2. The applicant's intended direction

Earlier this month, SWDC provided an informal workshop to its councillors, SWDC staff and representatives from Wellington Water. Eight of nine councillors attended and the ninth councillor was given all the information on the topics discussed. The workshop focused on the Featherston WWTP treated wastewater to land wastewater treatment application, progress to date, and identification of options to progress the current proposal or otherwise.

A Council paper was prepared for SWDC's Councillors for consideration at the 18 March 2020 Council meeting (refer to Appendix 1). SWDC officer recommendations were to:

- 1. Receive the Featherston Treated Wastewater to Land and Water Resource Consent Application Report (refer to Appendix 1 for a copy)
- 2. Endorse Officers' recommendation to select Option 2 (withdrawal of the current consent application and lodging a new consent application) as the way forward for the Featherston Treated Wastewater to land and water consent application.

At the 18 March 2020 meeting, the SWDC Councillor's resolution was to withdraw the current consent application and lodge a new consent application. SWDC Councillors also identified a preference for the preparation of options for Assessment of Environmental Effects and Community Engagement Plans within three months.

# 3. An updated timetable

Given SWDC's decision to withdraw the current WAR170229 application from the consent process and work towards lodging a new consent application (to be led by Wellington Water), an updated timetable is not appropriate to be provided in this memo.

The key next steps to be undertaken by SWDC and Wellington Water will likely involve:

- A formal letter to GWRC confirming the withdrawal of the WAR170229 application
- An administrative process with GWRC to confirm the continued discharge from the Featherston WWTP whilst optioneering, consultation, and the preparation of a new application is undertaken. GWRC have indicated to SWDC that this will require details on key milestones and timeframes to be met for any further extension to the Section 37 currently allowing the continued operation of the discharge.
- Undertaking optioneering, consultation with the community, and the preparation of a new application for lodgement with GWRC (at a yet to be determined timeframe)

SWDC and GWRC would like to thank the Hearing Panel and submitters for their input during this consent process to date.

Shaun Andrewartha

**Harry Wilson** 

Manager - Environmental Regulation, GWRC

Chief Executive Officer, SWDC

Attached: Appendix 1: Featherston Treated Wastewater to Land and Water Resource Consent Application Report (as per SWDC 18 March 2020 Council meeting)

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Appendix 1: Featherston Treated Wastewater to Land and Water Resource Consent Application Report (as per SWDC 18 March 2020 Council meeting)

#### SOUTH WAIRARAPA DISTRICT COUNCIL

18 MARCH 2020

**AGENDA ITEM C1** 

# FEATHERSTON TREATED WASTEWATER TO LAND AND WATER RESOURCE CONSENT APPLICATION

### **Purpose of Report**

To inform councillors of the progress of the Featherston Treated Wastewater to land and water resource consent application and seek Council direction on the current resource consent application.

#### Recommendations

Officers recommend that the Council:

- Receive the Featherston Treated Wastewater to Land and Water Resource Consent Application Report.
- Endorse Officers' recommendation to select Option 2 (withdrawal of the current consent application and lodging a new consent application) as the way forward for the Featherston Treated Wastewater to land and water consent application.

#### 1. Executive Summary

SWDC lodged a resource consent application on 28 February 2017 for the discharge of treated wastewater to land, water (Donald Creek) and air at the Featherston Wastewater Treatment Plant (FWWTP). As part of the consent process, the Hearings Panel directed SWDC to undertake further technical assessments and investigations to address some outstanding matters.

SWDC has now undertaken most of these required technical investigations, including commissioning NIWA to undertake a public health risk assessment (QMRA - Quantitative Microbial Risk Assessment) to clarify the issues around the concerns regarding potential pathogen effects on nearby shallow bores.

This paper presents the two principal options available to Council (and includes 'sub-options' should Council decide to proceed with the current application) and outlines the financial, legal, and time implications, as well as identified pros and cons for each.

Officers recommend Option 2 to Council, which is to withdraw the current application and lodge a new consent application.

## 2. Background

- 2.1 As part of the district-wide approach to treating wastewater, SWDC had identified the following objectives:
  - The progressive removal of wastewater from streams and the ultimate receiving environment Lake Wairarapa.
  - Meeting the requirements of the National Policy Statement for Freshwater Management, Ruamahanga whaitua process, and direction of Greater Wellington Regional Council's Proposed Natural Resources Plan.
  - Progression towards our goal of 100% wastewater discharge to land, as set in 2008.
  - Implementing a best practicable option for a staged land application scheme that is cost effective to ratepayers and minimises environmental effects.
- 2.2 In addition, the following principles underlie the current proposed activity, as described in the resource consent application report:
  - Due to the significant capital costs involved and financial constraints of the SWDC community, to take a long-term view of solutions (50+ year horizon) in an integrated way across all three urban WWTP's.
  - The need to develop the best practicable option ("BPO") for each site
    and on a combined basis, offering a high degree of performance
    certainty fundamentally based on parameters of; risk, public health,
    cultural considerations; environmental effects, and community
    affordability.
  - To ensure continued consultation with key stakeholders, including iwi, and community groups (which has been ongoing since 2008), and Greater Wellington Regional Council ("GWRC", as the regulator) in developing and implementing the preferred long-term options.
  - To obtain the required degree of certainty through a commitment in the short-term to optimise performance of the existing plant where practicable and implement the preliminary stages of the BPO at each site.
- 2.3 In February 2017, SWDC applied to GWRC for consent for the discharge of treated wastewater to land, water (Donald Creek) and air at the Featherston Wastewater Treatment Plant (FWWTP). This application included:
  - Progressive irrigation of treated wastewater (from oxidation ponds and UV process) to land and water for a term of 35 years.
  - Progressively move treated wastewater to land irrigation (up to 116ha) over several years to remove flows from waterways. The frequency and volume of treated wastewater discharged to water decreases over time as the land treatment scheme develops in stages as follows:

- Stage 1 56% of Annual Flow to land (occurs immediately over the first 2 years).
- Stage 2A 68% of Annual Flow to land (to begin 5 years from commencement).
- Stage 2B 94% of Annual Flow to land (to begin 13 years from commencement).
- Sewer network rehabilitation programme to reduce inflow and infiltration (I&I).
- Tree screening around buffer areas and property boundaries.
- Riparian planting at Donald Creek or another suitable location.
- Tangata Whenua Values Monitoring.
- 2.4 Since lodgement of this application, the following activities have been undertaken:
  - Public notification of the application.
  - Submissions on the application were called for. A total of 159 submissions were received: 152 in opposition, three in support, and four neutral/conditional support. 82 submitters identified they wished to be heard a hearing.
  - Evidence exchange occurred between SWDC, Greater Wellington Regional Council (GWRC) and submitters.
  - A hearing was scheduled. However, the timeframe for completing this has been extended by GWRC to allow for further work to be undertaken and the hearing is now scheduled to be completed by 29 May 2020.
  - Further community engagement "drop in" sessions, broader communications and meetings with local iwi.
  - SWDC has also undertaken further technical assessments and investigations as directed by the Hearings Panel:
    - Pathogen sampling
    - Public health risk assessment (quantitative microbiological risk assessment (QMRA)). Note: the QMRA relates to only pathogen effects, not other nutrients.
    - Soil surveys
    - Groundwater level sampling
    - Groundwater quality and bore head security checks on neighbouring shallow bores where SWDC were granted permission to do so from landowners
    - WWTP Add on feasibility studies
    - Inflow and infiltration (I&I) assessments.

- 2.5 The outcome of the above technical assessments and the QMRA was that:
  - Norovirus was selected as the model pathogen to estimate risks to groundwater consumers (potable water use).
  - Up to 19 non-SWDC bores are depicted as at-risk of being affected from the proposed Featherston WWTP land treatment scheme.
  - Given the regular and larger volumes of water consumed from groundwater relative to volumes likely to be consumed accidentally during contact recreation in surface water, higher levels of treatment efficacy are required to protect potable water consumers, being a 9-log virus treatment efficacy (potable water treatment standard).
  - Faecal Indicator Bacteria indicates that current UV irradiation of the treated wastewater is effective in reducing concentrations of viable pathogens (viruses).
- 2.6 As a result of the above findings and to address the pathogen risk identified in the QMRA, SWDC undertook further work through WWTP Add-On Treatment Feasibility Studies. These studies used the following criteria to develop the Best Practicable Option (BPO):

Table 21: Best Practical Option - Selection Criteria and Weighting

Criteria		Description	Weighting
Environment (total	Aquatic – streams/rivers	Consideration of the discharge (or emission), sensitivity of the receiving environment and potential effects of the discharge (or emission)	5
weighting 25)	Aquatic – lakes		5
_	Terrestrial		5
	Groundwater		5
_	Air		5
Community / Cultural Values		Consideration of recreational use and cultural values (fishing/gathering), and aesthetics	10
Human health and safety		Risk to human health and safety, contact recreational values, physical hazards associated with poor water clarity (etc)	15
Economic Utility		Consideration for any commercial activities that may be adversely effected by any discharge(s) or emissions	5
Financial Implication to SWDC ratepayers		Relative financial cost, both capital and operational implications	25
Likelihood of success		Evaluation of the risk that the option will not achieve the criteria outlined above	10
Risk		Other risks such as consentability risks.	10
		Total	100

- 2.7 The studies identified the following add-on solution (the BPO) to meet the treatment outcomes required in the QMRA:
  - a tertiary treatment plant consisting of
    - a new pump station to lift the flows to duty/stand by 0.5mm aperture screens,
    - o a Dissolved Air Flotation (DAF) plant,

- membrane tanks complete with submerged membrane modules, and
- o a UV disinfection system would need to be implemented.
- The flow would be pumped to discharge to land or water, sludge removed in the DAF plant, and membrane tanks dewatered and removed off-site by truck or through another solution.
- 2.8 A further alternative of providing potable water to the users of the affected downstream bores has also been suggested.

#### 3. Timeframes

- 3.1 More than three years has elapsed since the current resource consent application was lodged in February 2017. SWDC has been granted an extension by GWRC for completing a hearing for the current application to 29th May 2020.
- 3.2 The next update to the Hearing Panel is due on the 20<sup>th</sup> March 2020. The Panel are seeking clear direction from SWDC on the future of the current application, as outlined in Appendix 1 (Joint SWDC and GWRC memo to the Hearings Panel, dated 14 February 2020).
- 3.3 To date, SWDC has spent approximately \$2,637,200 (excluding costs associated with land purchase). Much of this investment has focused on planning, detailed technical assessments and solution development.

#### 4. Discussion

- 4.1 Since the original application was lodged, several changes have occurred that are relevant to consenting of wastewater discharges and this application:
  - Regulatory changes, including:
    - GWRC Proposed Natural Resources Plan decisions version released
    - National Policy Statement on Freshwater Management (as part of a greater push from Central Government to clean up waterways) updated in September 2017
    - Three Waters Review (extent of impact currently unknown)
  - Improved climate change awareness
  - Ongoing technological changes
  - QMRA/norovirus being used as a measure for public health risk assessment
  - Wellington Water is now managing SWDC's assets and three waters services.

As a result of these changes and the outcomes from the technical assessments and investigations (particularly the QMRA), SWDC should now consider the best option to proceed with wastewater treatment at the Featherston WWTP.

4.2 Officers have identified the two principal options available to Council (and possible 'sub-options' should Council decide to proceed with the current application) and outlines the financial, legal, and time implications, as well as identified pros and cons for each in the following table.

Option Description	Pros	Cons
Progress the resource consent application for the current proposal to irrigate to land in a staged approach with no additional mitigation, as outlined at para 2.2, above.	<ol> <li>Still allows for possible grant of consent through the hearing process.</li> <li>Lower sunk costs in consent processing than withdrawing and re-lodging.</li> <li>Likely to be implemented faster than other options (Hearing date scheduled for 29<sup>th</sup> May).</li> </ol>	<ol> <li>Significant risk of decline. The Hearings Panel has indicated that the effects that have been identified through the evidence regarding public health may be considered out of scope from the lodged application and AEE. The Hearing Panel may not consider aspects of our evidence leading to a decline decision, requiring a new application.</li> <li>Public health risks not being addressed.</li> <li>Potential that the application is referred to the Environment Court given the number of submitters in opposition. This would result in delay and cost.</li> <li>Community consider changes to proposal to be 'out of scope' and natural justice has not been applied to the process.</li> <li>A high number of submitters oppose this option.</li> <li>Some risk of not being able to complete "pre-hearing" processes in time for 29<sup>th</sup> May hearing.</li> </ol>
<b>1b.</b> As per Option 1a, above, plus the provision of potable water supply to impacted bore owners downstream from discharge point.	<ol> <li>Still allows for possible grant of consent through hearing process.</li> <li>Reduces sunk costs in consent processing than withdrawing and relodging.</li> <li>May be able to be implemented faster than other options.</li> <li>Provision of potable water is likely to be a lower cost option than supplementary WWTP treatment.</li> </ol>	<ol> <li>Less risk of decline compared to option 1a but still a risk. The Hearings Panel has indicated that the effects that have been identified through the evidence regarding public health may be considered out of scope from the lodged application and AEE. The Hearing Panel may not consider aspects of our evidence leading to a decline decision, requiring a new application.</li> <li>Potential that the application is referred to the Environment Court given the number of submitters in opposition. This would result in delay and cost.</li> <li>Community consider changes to proposal to be 'out of scope' and natural justice has not been applied to the process.</li> <li>Requires a moratorium on groundwater takes for potable water from bores within the zone from the FWWTP scheme.</li> <li>Additional costs of providing potable water supply (only applies relative to Option 1, above).</li> <li>Increased risk of not being able to complete pre-hearing processes in time for 29<sup>th</sup> May hearing (additional work required over Option 1).</li> <li>Does not address environmental or cultural impact of discharging to stream.</li> </ol>
As per Option 1a, above, with mitigation through the Phase 2 add-on solution (Membrane + DAF + UV).	<ol> <li>Lower risk of consent being declined due to treatment level applied</li> <li>Likely to meet public health technical requirements.</li> <li>Likely to be a lower GWRC consent processing costs than withdrawing and re-lodging.</li> <li>Known treatment solution, used across NZ.</li> </ol>	<ol> <li>Lower risk of risk of decline than Options 1a and 1b but still a risk. The Hearings Panel has indicated that the effects that have been identified through the evidence regarding public health may be considered out of scope from the lodged application and AEE. The Hearing Panel may not consider aspects of our evidence leading to a decline decision, requiring a new application.</li> <li>Potential that the application is referred to the Environment Court given the number of submitters in opposition. This would result in delay and cost.</li> <li>Addition of DAF and chemicals to treatment process may also be out of scope, resulting in decline.</li> <li>Community consider changes to proposal to be 'out of scope' and natural justice has not been applied to the process.</li> <li>High (but currently quantified) CAPEX costs.</li> <li>Increased risk of not being able to complete pre-hearing processes in time for 29<sup>th</sup> May hearing (additional work required over Option 1).</li> </ol>
1d.  As per Option 1a, above, with an alternative measure to mitigate public health risks	<ol> <li>Still allows treatment plant polishing to occur if this is a feasible and affordable mitigation measure. This may assist in granting of consent.</li> <li>Likely to be a lower overall GWRC consent processing costs than withdrawing and re-lodging.</li> <li>Allows potentially affected bore owners (who did not submit on the original application) to be part of the process which is fairer i.e. natural justice.</li> <li>Opportunity to engage with the community and GWRC on other treatment options.</li> </ol>	<ol> <li>Option has risk of decline. The Hearings Panel has indicated that the effects that have been identified through the evidence regarding public health may be considered out of scope from the lodged application and AEE. Should we continue, the Hearing Panel may not consider aspects of our evidence which could lead to a decline decision, requiring a new application.</li> <li>Potential that the application is referred to the Environment Court given the number of submitters in opposition. This would result in delay and cost.</li> <li>Community consider changes to proposal to be 'out of scope' and natural justice has not been applied to the process.</li> <li>Potential high CAPEX costs, depending on the option chosen to mitigate public health risks.</li> <li>If the add-on treatment is not proffered, then submitters are likely to be frustrated and re-iterate their current stance.</li> <li>GWRC may not accept re-notification if adequate add-on treatment is not proffered.</li> <li>Unknown investment required until solution is developed.</li> <li>Unlikely to be able to complete pre-hearing processes before 29<sup>th</sup> May hearing and would depend on GWRC granting a further extension.</li> </ol> Continued

## 2.

Withdraw the application and lodge a new application to account for changes since initial application and undertake a full programme of community engagement.

- 1. Allows potentially affected bore owners (who did not originally submit on the original application) to be part of the process.
- 2. Opportunity to engage interactively with the community and GWRC to build support in the community, resulting in fewer objections and through-life community frustrations.
- 3. Allows time for further technical investigations and optioneering, including the feasibility and costs for treatment to cover the disinfection and clarity issue. Investigations may result in the land scheme being able to be run differently, requiring less storage.
- 4. May save costs, if continuing with current consent process results in decline and the need to re-lodge anyway.
- 5. Allows time to make financial and rates impact assessment and decisions and factor in LGA obligations better.
- 6. The PNRP decision version of rules provides better clarity around activity status prior to re-lodging the application in this case the discharge to land will be a Discretionary Activity.
- 7. Allows more time for investigations with Central Government funding.
- 8. Allows for additional consideration of how nutrients (i.e. nitrogen) are removed from the effluent, as well as pathogens and viruses etc.
- Submitting a new application may allow for any changed objectives, relative priorities or emerging strategies (i.e. climate change) for Council to be considered as part of the optioneering process.

- 1. Further delay to the project (potentially 3-9 months) and additional costs to undertake further engagement, optioneering and prepare the new application.
- 2. Relies on GWRC agreeing to an extension of timeframe (under section 37 of the RMA) with goals, agreed processes and timeframes to allow any 'new' application to proceed while the current WWTP discharges continue.
- 3. GWRC processing costs to date on the current application will be sunk costs in the process.
- 4. The new application may propose the same or very similar treatment as the other options outlined above. This may result in a negative community perception.
- 5. New technology solutions may not be affordable or available/supported in NZ.
- 6. Will require continuation of current Featherston WWTP treatment process and its adverse environmental impacts. SWDC has a duty to mitigate such impacts and not cause unreasonable delay.

Table 1: Analysis of Consent options for Featherston WWTP consent application.

#### 5. Other considerations

- 5.1 Regardless of which option is chosen, SWDC's expired consent WAR970080 [30723], [23139] and [20869] has the replacement application WAR120294 sitting on hold under section 37 of the Resource Management Act 1991 (RMA). GWRC has allowed a time extension enabling existing wastewater discharges from the Featherston WWTP until such time that a decision is made on the current application (WAR170229). However, ongoing s37 (RMA) time extensions are not guaranteed from GWRC and are only provided after review of the s37 (RMA) extension request.
- 5.2 Moreover, as the current discharge is having adverse effects on the environment, SWDC has a duty to mitigate these effects (S17 RMA) and GWRC has the power to take enforcement action to mandate SWDC to abate the effects within a given timeframe.
- 5.3 The Hearings Panel and submitters are aware of the options SWDC are considering in the most recent joint SWDC and GWRC memo dated 14 February 2020 (refer to Appendix 1) and a subsequent teleconference discussion on 21 February 2020 between GWRC officers, SWDC officers (and their consultants), and Wellington Water.

# 6. Assumptions

- 6.1 It is considered that if Option 1 (including any 'sub-options') is chosen then renotification will be required regardless. This results in costs and up to a three-month delay for completion of technical assessments and a key stakeholder/community engagement programme. Option 5 would see a delay between 3-9 months due to the extra work required.
- 6.2 The purchase of the required land for irrigation purposes has already been completed.

  Any changes to the scheme should consider the potential uses of the land and land value.
- 6.3 Any financial implications for the decision will be incorporated into the Annual Plan and Long-Term Plan considerations.

#### 7. Conclusion and recommendation

- 7.1 Officers recommend Option 2 (withdrawal of the current application and the lodging of a new resource consent application) to Council.
- 7.2 While it is considered that there is likely to be some adverse reaction to further delay to this application process, this option allows Council to consider a range of factors that have changed since the original application was made, including updated technical assessments (i.e. QMRA), our emerging climate change considerations and Central Government direction on freshwater management.
- 7.3 This option also gives Council greater scope to undertake focused community engagement to deliver a sustainable and fully quantified wastewater treatment solution for Featherston and the district.

# 8. Appendices

Appendix 1 - Latest joint SWDC and GWRC memo to the Hearings Panel, dated 14 February 2020

Contact officer: Euan Stitt, Group Manager, Partnerships and Operations

Reviewed by: Harry Wilson, CEO

# Appendix 1 - Latest joint SWDC and GWRC memo to the Hearings Panel, dated 14 February 2020

TO Hearings Panel (Gina Sweetman, Rawiri Faulkner, Jim Cooke)

FROM Shaun Andrewartha, Manager - Environmental Regulation, GWRC and Harry

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**Location:** Featherston Wastewater Treatment Plant, Donald Street, Featherston

Site A – 65 Longwood West Road, Featherston

Site B – 270 Murphys Line, Featherston

## 1. Introduction

The Hearings Panel Minute #14 directed that the applicant, South Wairarapa District Council (SWDC), and Greater Wellington Regional Council (GWRC) respond to the Panel by no later than 5pm 14 February 2020 to provide an update on its current approach; which shall include:

- i. Progress to date;
- ii. An update on consultation undertaken to date;
- iii. An updated timetable;
- iv. The implications of the length of time since public notification and the matter of scope;
- v. The revised timeframe for a hearing, considering iv. above; and
- vi. A summary of relevant changes to the Proposed Natural Resources Plan, as updated by any appeals.

# 2. Progress to date

A progress update against the four steps identified as a Council agreed approach is identified in Table 1 below.

Table 1: Progress to date

Step	Task	Progress to date
1	Preparation of a table	Complete.
	outlining the outstanding	-
	issues/information gaps,	
	responsibility, key issues to	
	resolve at future workshops	

GWRC and SWDC experts review and approve the scopes of work for the scopes of work for the		and matters set out in the GWRC s37 extension and Panel Minute #7.  SWDC experts draft scopes for the QMRA, Groundwater Effects Assessment and Monitoring and Pathogen sampling plan.	Complete.
information gaps, with work to be undertaken over the next few months.  Complete in part - addressing information gaps  Technical feasibility assessment for "add-on" mode wastewater treatment technology  The findings in NIWA's Quantitative Microbial Risk Assessment (QMRA) report in relation to the proposal's public health risks and associated effects of wastewater discharges, have been analysed by SWDC's wastewater technical experts from Mott MacDonald. A draft technical note was presented to SWDC on 19 December 2019.  Mott MacDonald's analysis included a feasibility study into a treatment plant "add-on" that can achieve 10-4 norovirus per litre in the effluent leaving the Featherston WWTP. Th is equivalent to a 9-log reduction in norovirus, as per the QMRA undertaken by NIWA.  The purpose of the draft technical note delivered to SWDC was to:  Confirm a tertiary polishing option that will achieve 10-4 norovirus per litre in the effluent leaving the Featherston WWTP.  Consider the potential clarity improvements that this polishing system will provide with respect to section 107 (RMA) requirements for the discharges to Donald Creek.  Inform discussions with suppliers about performanc requirements.  The recommended tertiary treatment plant would comprise:  A new pump station to lift the flows to duty/standl 0.5mm aperture screens.  Dissolved Air Flotation (DAF) plant (to confirmed).	2	review and approve the scopes of work for the information gaps, with work to be undertaken over the	Complete in part - addressing information gaps  Technical feasibility assessment for "add-on" modern wastewater treatment technology  The findings in NIWA's Quantitative Microbial Risk Assessment (QMRA) report in relation to the proposal's public health risks and associated effects of wastewater discharges, have been analysed by SWDC's wastewater technical experts from Mott MacDonald. A draft technical note was presented to SWDC on 19 December 2019.  Mott MacDonald's analysis included a feasibility study into a treatment plant "add-on" that can achieve 10-4 norovirus per litre in the effluent leaving the Featherston WWTP. This is equivalent to a 9-log reduction in norovirus, as per the QMRA undertaken by NIWA.  The purpose of the draft technical note delivered to SWDC was to:  • Confirm a tertiary polishing option that will achieve 10-4 norovirus per litre in the effluent leaving the Featherston WWTP.  • Consider the potential clarity improvements that this polishing system will provide with respect to section 107 (RMA) requirements for the discharges to Donald Creek.  • Inform discussions with suppliers about performance requirements.  The recommended tertiary treatment plant would comprise:  • A new pump station to lift the flows to duty/standby 0.5mm aperture screens.  • Dissolved Air Flotation (DAF) plant (to be confirmed).

		membrane modules.
		UV disinfection system. The flow would be pumped to discharge to land or water, sludge removed in the DAF plant, and membrane tanks dewatered and removed off-site by truck.
		In combination with proposed land treatment, the recommended tertiary treatment plant could achieve a significant reduction in suspended solids and algae, and therefore would improve the colour and visual clarity of the discharge to Donalds Creek.
		The outcomes of this draft technical note has been subject to further discussions between Wellington Water, SWDC and GWRC officers to help inform the options available to SWDC to mitigate public health and environmental effects. Discussions have covered whether it is feasible and within scope to continue to progress this application with the recommended 'add on' treatment to meet NIWA's recommendation in their QMRA report.
3	SWDC conduct community engagement which is likely to include community meetings/workshops – to help inform the 'experts' workshop identified in Step 4 below.	No further community engagement has been undertaken since the last update provided to the Hearings Panel on 13 December 2019.
4	Expert workshops. The overall goal is to get clarity on the issues, how/if these can be resolved and the different options available to the applicant (together with any perceived risks) going forward.	No progress.

# 3. An update on consultation undertaken to date

SWDC has not undertaken any additional public consultation activities since the last joint memo provided to the Hearings Panel on 13 December 2019. However, a number of collaborative discussions between SWDC and GWRC staff has occurred since the last joint memo. These discussions have covered the outcomes of the QMRA, the recommended add-on treatment option identified by Mott MacDonald to meet the recommended level of treatment identified in the QMRA, and the options available to SWDC to progress the current proposal, or otherwise.

Further, as SWDC became a joint owner of Wellington Water from 1 October 2019, discussions about progressing the application under the current proposal, or otherwise, has been undertaken with senior management from Wellington Water.

# 4. An updated timetable showing matters in progress to deal with outstanding issues

There has been no updates to the timetable provided in the 13 December 2019 joint memo to the Hearings Panel. Progress of the technical assessments have been detailed in Table 1 above.

# 5. The implications of the length of time since public notification and the matter of scope

SWDC and GWRC are aware of the time that has elapsed since the application was lodged in 2018, and the multiple extensions to timeframes granted by GWRC under section 37 of the Resource Management Act 1991. This has enabled the application timeframes to be extended until the end of May 2020 for the completion of a hearing.

SWDC has over the past six months dealt with many water, wastewater and stormwater matters in both Featherston and neighbouring townships. SWDC is now more cognisant of climate change mitigation, and believe that there is a real opportunity to rethink how Featherston's wastewater can be treated by more modern technology to future proof it for the long-term, as well as address the effects of the wastewater discharge on the receiving environments. SWDC recognises that the most significant contributor to the district's CO2 emissions is methane created by traditional pond systems. In addition, an increasing pressure to improve freshwater quality requirements, and work with the community together to implement feasible treatment options is more apparent.

SWDC will continue to strive for the delivery of a cost-effective treatment system for Featherston's wastewater, and has had initial discussions with GWRC about the options available to SWDC to either:

- a) Progress the resource consent application for the current proposal to irrigate to land in a staged approach, with the recommended 'add-on' treatment to address section 107 RMA matters and public health risks and effects. Scope will still need to be addressed regarding the 'add-on treatment', and any other changes to the application/proposal since notification.
- b) Progress the resource consent application for the current proposal to irrigate to land in a staged approach, with an alternative measure to mitigate public health risks. Scope will still need to be addressed regarding any alternative measures, associated effects, and any other changes to the application/proposal since notification.
- c) Re-notify the application based on the current application (with a yet to be confirmed add-on treatment) to enable those who did not have the opportunity to submit, to now become part of the consent process. *The implications of scope may still need to be addressed*.
- d) Withdraw the application and lodge a new application. This would involve SWDC taking into account modern technology and climate change mitigation, as well as undertaking a programme of engagement with the community about the options being considered. The implications of scope will no longer need to be addressed, as a new application will be put forward.

SWDC needs to complete robust discussions of these options with its senior management team and GWRC Environmental Regulation senior management. In particular, SWDC's Councillors will be involved with the decision-making process of which option will be chosen. The decision on which option SWDC will proceed with will be taken at a meeting of Council (either the next scheduled meeting or by calling an extraordinary meeting). The decision will be provided to the Hearings Panel as soon as possible thereafter, or, at the latest, in the next update to the Hearings Panel.

# 6. The revised timeframe for a hearing

As a decision is yet to be made on which option SWDC will proceed with, a revised timeframe for a hearing, including whether a hearing will take place at all, will be confirmed in the next update to the Hearing Panel.

# 7. A summary of relevant changes to the Proposed Natural Resources Plan, as updated by any appeals

There are no further updates to the Proposed Natural Resources Plan, as updated by any appeals that have been looked at by SWDC or GWRC for this consent application.

# 8. Next update to the Hearings Panel

If acceptable to the Hearings Panel, GWRC and SWDC will provide a joint memo to the Panel by 5pm 20 March 2020, which will cover the intended direction SWDC will take to either progress the current proposal (with or without the recommended add-on treatment), re-notify, or withdraw and lodge a new application.

**Shaun Andrewartha** 

J.S. Kndmvalle

Manager - Environmental Regulation, GWRC

Harry Wilson

Chief Executive Officer, SWDC

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