



WAIROA DISTRICT COUNCIL

P +64 6 838 7309

W www.wairoadc.govt.nz

F +64 6 838 8874

p PO Box 54, Wairoa 4160, Hawke's Bay

E administrator@wairoadc.govt.nz

A Coronation Square, Queen Street, Wairoa

[Sent by Email : Post]

25 June 2019

Hawke's Bay Regional Council
Private Bag 6006
NAPIER 4142

Attention: Tania Diack

Dear Tania

FURTHER INFORMATION REQUEST RESPONSE AND INTENT OF CONSENT APPLICATION APP-123774

Subsequent to Wairoa District Council (WDC) lodging resource consents for wastewater discharges in November 2018, Hawke's Bay Regional Council (HBRC) have requested clarification on a number of issues and also sought clarification on the scope and intent of the consent applications lodged.

This letter provides a response to the further information sought and also provides clarification of the intent of the consent applications.

Also provided is additional wording relating to a further suggested condition regarding the outfall structure in response to current consent non-compliance.

FURTHER INFORMATION

Attached to this letter is a response to specific information sought by HBRC. With questions and responses there have been iterations that have enabled both WDC and HBRC to have a common understanding of the purpose of the question and clarification needed as it relates to the information available and how it relates to the wider wastewater programme WDC are working on. Please see the attached Response Table.

INTENT OF CONSENT APPLICATIONS

The applications for resource consent are limited in scope as defined and set out in the Form 9 applications that accompanied the bundle of consent documents. Further, the main consent application document, in the Executive Summary and at other places, clearly sets out that the applications were specifically for discharges of wastewater to surface water, and directly associated activities. They do not include applications for land application or commit to having land application achieved by a particular date, nor could they as further consents would be required.

The surface water discharge consents sought are part of a wider wastewater programme (Package), that has been informed and guided by community input. The ability of the wider programme to be implemented to the degree intended will be a function of a number of programmed design,

investigation and financing outcomes. Success of the wider programme will ultimately see less wastewater discharged to the Wairoa River over time.

Key Intentions of Consent Applications

The intentions of the resource consent application APP-123774 are to:

1. Replace resource consent CD940404W that currently authorises the WWTP discharges of treated wastewater to the Wairoa River,
2. Authorise pump station overflow structures and discharge events, that may remain to occur, which appear to have never been authorised under the RMA despite their existence and operation since the 1940's,
3. Authorise the modifications and operation of the riverbank overflow structure for the main outfall pipeline,
4. Respond to the existing overflow issue at the main outlet by allowing for rapid construction and operation of the specific main outfall design provided to HBRC on 14 June 2019 and reduce overflow discharges at this point,
5. Enable greater flexibility to manage the effectiveness of the outlet by allowing for future relocations and design modifications to be readily made to the main outfall pipeline and its overflow structure and main outlet as necessary to respond to riverbed migration or effects of siltation on its discharge capacity (without further consent applications but instead with HBRC certification of designs),
6. Modify the river discharge regime to better ensure system performance and reduce adverse effects on the river environment by restricting discharges during low river flows and enabling increased discharge volumes over longer daily durations as river flows increase, and
7. Improve the quality and reduce the volume and frequency of wastewater discharge during low river flows.

The primary goals of these resource consents are to:

1. Obtain a long-term discharge consent for certainty of Wairoa's WWTP discharges to the river while enforcing a programme to investigate and, where possible, implement a transition to land discharges, reducing river discharges, and regular reviews of progress towards ceasing river discharges,
2. Resolve RMA compliance concerns regarding unauthorised pump station overflow discharge structures,
3. Resolve RMA compliance concerns regarding unauthorised modifications and discharges from the main outfall pipeline's overflow structure and outlet,
4. Provide a framework to reduce the volume of wastewater discharged to the river over time as opportunities are developed, and
5. Resource and work towards recognising and providing for social and cultural values.

Wider Context

The wider context of these consent applications is that WDC and their community seek to improve the health of the Wairoa River. Proposed consent conditions have therefore been developed around a programme of action to transition over time if and where possible from a river based wastewater discharge system to a land discharge system. The ultimate aspirational goal is to cease wastewater discharges to the river and instead rely entirely on storage and land discharges (such as irrigation). However, implementation of a land discharge system may need to occur over several decades due to cost, land availability, land suitability, storage capacity, design, consenting, and procurement constraints. As progress is made towards ceasing the river discharges, the discharge regime will be progressively restricted to only allow river discharges when storage capacity is nearly full and river flows are above thresholds that, over time, are progressively increased.

WDC and the community (as assessed through community participation) recognise, from a cultural, environmental, and social perspective, that wastewater discharges to the Wairoa River must be reduced and if possible avoided. They also recognise that the river's health and water quality are degraded by rural hill country inputs to a much greater extent than the discharge of Wairoa's treated

wastewater near the river mouth to Hawke's Bay. As a result, WDC and the community are determined to work together, with support from a wide range of local through to national organisations, to improve the health and water quality of the entire Wairoa River catchment. This process has started with funding already being committed through WDC's Long Term Planning Process and collaboration with HBRC's catchment management planning team based in Wairoa.

WDC and the community also recognise that old, leaky reticulation is a common underlying cause of pump station overflows, treatment performance variability, storage capacity challenges, discharge volumes, and potential adverse effects on the receiving environment. Improvements in the reticulation are therefore crucial and fundamental to achieving desired environmental outcomes. The physical and financial constraints on the practicable rate of reticulation upgrades require WDC and the community to expect that significant changes will require some years to achieve. In the meantime, WDC wish to avoid investment into expanding the capacity of downstream wastewater system components where they would become redundant as wastewater flows reduce in future as a result of undertaking networks upgrades.

Consent Condition Framework

To achieve these contributions towards an overall enhancement in Wairoa River's water quality, while keeping in mind the social, economic, and cultural wellbeing of the community, a condition framework setting parameters for the discharge, specifying specific upgrades over the short term and committing WDC to a programme of action to work towards a reduction in river discharge is proposed. This will keep the momentum towards achieving the ultimate goal of no wastewater discharge to the river. In summary, the framework:

1. Prescribes upgrades and work to be undertaken within the first 6 years of granting consent, including:
 - a. Installation of sand filtration and UV disinfection to improve effluent quality – primarily intended to at least partly address public health, river health, social, and cultural values,
 - b. Preparation of a Network Management Plan including specific upgrades to specific pump stations to avoid overflow discharges,
 - c. A specific project to establish a 50 ha land application area to assist in reducing discharge volumes to the river, particularly during summer/low flows,
 - d. Preparation of a Wastewater Education Plan designed to increase the public's understanding and awareness of how their [the public's] actions/activities can influence wastewater volumes and reticulation reliability, and the ways in which the public can reduce water use and unnecessary burdens on the sewer reticulation and treatment plant,
 - e. Preparation of a Catchment Enhancement Plan to facilitate the involvement of WDC and their community in activities that improve the quality of freshwater within the wider Wairoa River Catchment,
2. Establishes a discharge regime, that once UV treatment has been installed, allows greater flexibility to discharge during greater portions of the day when river flows are elevated so as to avoid pressure and storage capacity issues in the system that could lead to overflow discharges elsewhere, or force larger discharges during subsequent periods of lower river flows,
3. Sets out a clear framework to be followed in the event that the outlet structure requires upgrading or relocating, with a certification process embodied within it. Initially, and to respond to the immediate overflow issue, a replacement outfall with a specific design and location is proposed for construction as soon as is reasonably practicable after consents are granted,
4. Upon undertaking the above upgrades/work (to improve system performance, reduce overflow discharges and improve effluent quality), and primarily in response to social and cultural values, sets out a framework for WDC and the community to do ongoing work and refinement to investigate further ways of reducing discharges to the river during low flows. This includes investigating, and where possible, developing land application and increasing storage via a System Review exercise at years 5, 10 and 20, followed by the preparation of

System Improvements Plans to give effect to further actions agreed between WDC and the community. Specific review topics and outcomes will include ongoing network management works, treatment technologies, expanded storage capacity, expanded land discharge areas, modified river discharge regimes, and catchment enhancement initiatives,

5. Establishes a programme to enable ongoing community collaboration with WDC in decision making and implementation through the System Review and System Improvement exercises,
6. Enables adaptive monitoring of the river environment to reflect changes to the river discharge system and/or observations of effects. The Monitoring Plan will be certified by the Regional Council prior to implementing any changes to monitoring programmes,
7. Provides opportunity for cultural monitoring and advice, and
8. Provides for improved record keeping and notification around overflow events with this information being considered through the successive System Review exercises so as to maintain the focus of reducing overflow discharges.

Initial Actions

The first 6 years of the consent term focus on resolving matters that are currently before the WDC i.e. high inflow and infiltration, overflow discharges and poor background river water quality. It does this via a multifaceted approach involving physical works to the reticulation system, improving effluent quality to enable flexibility around discharge times so as to reduce constraints on the system, and attempting to develop small to modest storage and irrigation operations. WDC will also continue working with the community to ensure that their views are reflected in decisions for future expansion of irrigation and taking a wider catchment view with associated actions around improving the whole river's health and water quality.

Key points to note are:

- UV treatment is expected to enable discharge on outgoing tides regardless of the time of day during flows greater than ½ median (during flows less than ½ median discharge will still be limited to the night time hours),
- Having more time to discharge will avoid pressure building up in the system,
- Avoiding pressure building up in the system is expected to reduce the potential for overflow discharges at the outlet, further assisted by the proposed upgrades to the outlet structure,
- Reducing inflows and infiltration and undertaking the specific upgrades to the reticulation system will reduce the potential for overflow discharges at the pump stations.

Subsequent Future Actions

Having focused initially on more natural environmental matters during the initial 6 years of consent, the framework moves to a phase with a greater focus on social and cultural values through the System Review and System Improvements Plan exercises.

Although not prescribing particular upgrades, which is not possible at this point in time, the intent of the System Review exercise, as detailed in the Draft Consent Conditions, is to maintain progress towards ceasing discharges to the river. While the exact solutions and timing to achieve this are not prescribed or certain, the Draft Consent Conditions still seek to place a regulatory and enforceable programme around working to this outcome; noting that this goes beyond the requirement of conditions to control the effects of the activity for which consent is sought.

This approach is seen by WDC to be preferable to taking a shorter-term view where such a vision is not provided for in a regulatory manner, which would arguably be a less certain approach; being a series of shorter-term consents would generate uncertainty while each consent renewal application was processed, which would in turn likely halt or delay WDC's progress on implementing alternatives to the river discharge. Further, the costs of the repetitive consenting processes would also be cumulatively greater and would divert the limited funds from implementation into consenting processes; this is particularly inefficient when a clear roadmap for the outcomes generally sought by the community is already proposed to be locked into enforceable consent conditions.

A key aspect of the progressive implementation programme is the System Review exercises undertaken at years 5, 10 and 20. It could be argued that this is a wastewater asset management function and should not be connected with a particular resource consent. However, WDC have elected to link the ongoing System Review exercise to the surface water discharge consent so that it shows a clear community commitment to seriously investigate and, where possible, implement actions to cease discharges to the Wairoa River. Specifically, the System Review will:

1. Review work undertaken to reduce inflow and infiltration,
2. Summarise trends in wastewater quality, any changes that have been made to the wastewater treatment plant, potentially feasible additional and alternative treatment technologies and processes including their implications that have been considered, and details of any changes proposed,
3. Provide an analysis of discharge volume, frequency, and river flow and tidal conditions, and opportunities to lessen the frequency and volume of any discharges below 3 x median river flow,
4. Provide an analysis of frequencies, durations, volumes (if possible), rainfall, and river flow conditions of overflow discharges from the pump stations or outlet overflow structure. This will include a commentary around how works undertaken to reduce inflow and infiltration have reduced the frequency of overflow discharges, including an analysis of any trends in discharge frequency and rainfall depths that generate overflows. Based on this analysis, it will include a list of actions proposed to be taken to further reduce overflows,
5. Provide a summary of potentially feasible irrigation locations and systems that have been considered and plans or opportunities to increase the irrigation areas,
6. Provide a summary of potential storage sizes, locations, and designs that have been considered and plans or opportunities to increase storage volume, and
7. Outline key contributions considered, made, or potentially feasible to improve the river water quality across the wider Wairoa River Catchment.

The purpose of this programme is to facilitate discussion on the options available at the time of each review to reduce the volume of wastewater that needs to be discharged to the Wairoa River, with the aim being to develop and update programmes that will progressively transition to land discharges. Direction, or targets, around the volume of storage and the land area required for land application as options to achieve this are embodied in the conditions such that consideration is focused around achieving these outcomes.

The strength of this approach is not in its certainty of details and timing, but in its direction and embodiment within an enforceable but adaptable regulatory framework so as to maintain commitment and resourcing. It is this, rather than a prescribed outcome, that is suggested to provide for cultural and social values to the best extent possible in the context.

FURTHER DISCHARGE CONSENT CONDITION

The existing wastewater discharge structure is not operating as intended. Its capacity has been compromised by siltation of the river channel and an emergency overflow structure has been used more often than intended.

Modifications already made and yet to be made to the overflow and outfall require resource consent. Discharge flow restrictions have recently largely resolved the overflows. The non-compliance and resulting abatement notices that have been served on WDC have required cessation of overflows and requested design detail be provided. WDC have provided a design as required. Once consent has been granted, the following process will be followed in order to expediently complete modifications to avoid discharges at locations other than the nominated outfall:

1. The design will be finalised with all relevant details and specifications,
2. A design report and related documents including a proposed construction timeline will be prepared and submitted to HBRC for certification as required by Condition 10,
3. HBRC will need to certify the plans as described in Condition 11,

4. WDC will complete procurement processes for the proposed works, and
5. Construction will be programmed to account for supply of materials, availability of staff and equipment, and suitability of river flow conditions and tidal cycles.

To assist with committing to urgent action once consents have been granted a new Draft Consent Condition is proposed:

- 9a Within 3 months of the commencement date of this consent, a Structure Design Report, according to the requirements of Condition 10, shall be prepared and provided to the Council to give effect to the Plans labelled 'Offshore Coastal Engineering Limited, Wairoa River Outfall Replacement General Details, Drawing No, 190504-001, Rev 1'. Commencement of work shall follow the process and requirements of Conditions 11-13.

Advice Note: For avoidance of doubt, this condition only relates to the modifications to the outfall pipeline and its overflow and outlet structures that are to be implemented as expediently as possible to resolve existing overflow concerns following granting of these consents. Construction shall adhere to the timeframes included with the Structure Design Report, subject to any adjustments authorised by HBRC.

It is anticipated that further refinement of the Draft Consent Conditions will occur, and these will hopefully reflect input from other parties, including submitters following consent notification.

Hopefully the attached response to the questions asked and the above summary provide the clarification sought. Please contact Hamish Lowe at Lowe Environmental Impact (phone 06 359 3099 or email hamish@lei.co.nz) if you require any further information.

Yours sincerely



Stephen Heath
Group Manager Community Assets and Services
Wairoa District Council

Stephen@wairoadc.govt.nz

Encl

Further Information Response Table