# INDEPENDENT REVIEW OF THE WELLINGTON WATER REGIONAL WASTEWATER TREATMENT PLANT OPERATING MODEL



# December 2021 Review Report v3.0

Operating model improvement recommendations for the wastewater treatment plants in metropolitan Wellington.

## **REVIEW REPORT V3.0**

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# EXECUTIVE SUMMARY

## Overview

The purpose of a wastewater treatment plant is to receive and treat wastewater (sewage) and discharge the effluent and dispose of the biosolids in a responsible and environmentally sustainable manner. This is to protect the public from health risks and the receiving environment from harmful pollution and contamination and are fundamental business objectives for Wellington Water.

The Wellington region has four metropolitan Wastewater Treatment Plants (WWTPs) at Moa Point, Western, Seaview and Porirua that are managed by Wellington Water Limited (Wellington Water) on behalf of its Client Councils. Under its Service Delivery Strategy, Wellington Water sought to contract with the best available service organisation in New Zealand to provide excellence in operating and maintaining the WWTPs.

To this end, Wellington Water contracted Veolia NZ (Veolia) through a contestable process and expected Veolia, as part of a large global water organisation, to manage and operate the WWTPs effectively to deliver its public health and environmental objectives. However, this has not been consistently achieved and there have been numerous breaches and non-compliance incidents at the WWTPs by Veolia.

Through the contract Veolia has been unable to demonstrate the expected excellence in quality wastewater treatment plant operations. It follows, therefore, that it is unlikely that Veolia has been successful in demonstrating its abilities in protecting the environment. The health of the receiving waters and of the communities who use them as a source of food or for recreational purposes are of paramount importance to the local communities, iwi, the Greater Wellington Regional Council (GWRC) and Client Councils. These failures have resulted in a degradation of trust and confidence in Wellington Water by its stakeholders.

## Review

Wellington Water initiated a formal review of the Veolia contract and engaged two independent reviewers to recommend steps needed to ensure the WWTPs are operated in a proactive, fully compliant and environmentally responsible way. The review was to consider all options available including bringing the activity in-house, termination and retendering.

## Observations

From interviews conducted for this review, and research of the documentation, it is apparent that Veolia failed to provide the much-needed executive oversight on this contract and its performance. Despite making promises to Wellington Water at all levels, including to the Wellington Water Board, Veolia's performance did not meet the levels expected. Veolia did not embed the management and leadership capability required for this type of contract. Recruitment delays meant key skilled plant staff were not retained. This in turn impacted on the required number of operational staff with the necessary skills and experience to operate the WWTPs. The resulting operational teams at each of the four WTTPs were often therefore limited in their experience with key pieces of equipment and in how to respond when something went wrong. The evidence suggests that judgement was sorely lacking to prevent the incidents of untreated discharges from the WWTPs.

Compounding these internal Veolia issues were relationship issues between the contract managers of Veolia and Wellington Water. Wellington Water has not had the appropriate management capacity and

capability, or provided sufficient training, to manage this contract. Roles and responsibilities between Veolia, as the service provider, and Wellington Water, as the client, are not fully understood and/or practiced. Further, roles and responsibilities of staff within Veolia and Wellington Water are not clearly defined and understood by either party.

These issues have culminated in an ineffective culture within the contract and relationship that is tasked with keeping public and environment health as its core purpose. The absence of trust at a contract leadership level has hindered decisiveness and collective problem-solving. While Veolia is responsible for its failure to meet the expectations of Wellington Water in its delivery of operations and maintenance of the four WWTPs, the dysfunctional culture in the contractual environment has played a role in the WWTP performance. Wellington Water has attempted to improve the relationship by undertaking several initiatives, including a contract reset, relationship workshops, and performance reviews. To date, these have been of limited success in addressing the core problems.

Veolia's senior executives have responded positively to the current operating model review. Under the leadership of their New Zealand Country Director, Alex Lagny, Veolia has commenced a "Beyond Compliance Task Force". This task force is undertaking an internal review and improvement within Veolia and based on early progress reports, the reviewers believe that this is a commitment by Veolia to make the changes necessary to deliver to the promises made in their proposal and meet the expectations of Wellington Water as their client.

The key findings of the reviewers are as follows:

- The experiences of breaches and non-compliance by Veolia are not a function of the current contract and, therefore, a change in contract model is not warranted.
- Veolia has responded positively to improving performance and demonstrated their commitment by making a change in their Contract Manager, inviting Wellington Water to be part of the selection and recruitment process for the permanent replacement, and initiating the Beyond Compliance Task Force.
- Despite some asset performance issues, the WWTPs should be able to be operated in a professional, proactive, modern, fully compliant and environmentally responsible way, while meeting expectations of Wellington Water, its Client Councils and mana whenua.
- Significant improvements and changes in behaviour are required of Wellington Water and Veolia management and staff to achieve the strategic objectives through the contract.

The reviewers deliberated strongly over the option of early termination with either bringing the maintenance and operations in-house or going back to the market but considered both options had no greater chance of success and carried significantly higher risk and, given recent market price movements, additional cost in a constrained market for resources and funding.

Considering the above, the reviewers recommend that:

- Wellington Water retains Veolia as its contractor to operate and maintain the four metropolitan wastewater treatment plants within the existing contractual terms but with the proviso that Veolia commits to and delivers on several significant improvements in its planning, delivery and resourcing, as outlined at page 19 of this report.

- Wellington Water significantly enhances and improves its contracts management capability (including staff training, systems and processes) to allow effective management of Veolia in a more collaborative environment
- Wellington Water improves its asset management and planning capabilities in relation to this contract and provides clarity on the expectations from Veolia in preparing and delivering its asset management plans
- Wellington Water and Veolia shape the organisational design necessary to provide the social support required and performance objectives that creates a high performing team
- Wellington Water and Veolia to prepare effective internal and external communications strategies, plans, roles and responsibilities to maintain a high level of trust and confidence with all their stakeholders

## BACKGROUND

## History

In the metropolitan Wellington region there are four Wastewater Treatment Plants (WWTPs):

- **Moa Point** and **Western** service Wellington City. Both were previously operated by Veolia NZ under a 25-year design build and operate (DBO) contract which included the sludge dewatering plant at the Southern Landfill. This contract expired in February 2020.
- **Seaview** services Hutt and Upper Hutt cities. Hutt Valley Water Services (Suez/Beca) operated this plant under a 20-year DBO contract that expired in June 2020.
- **Porirua** services Porirua City and some northern suburbs of Wellington City. Wellington Water previously operated this plant.

In 2017, as part of Wellington Water's Service Delivery Strategy – which regionalised the delivery of Three Waters services – the decision was made to contract out for the operation and maintenance of the four WWTPs. The rationale for this approach was primarily:

- Wellington Water's limited capacity and capability at the time to operate and maintain all four WWTPs
- A competitive market of very experienced and capable suppliers
- Increased market leverage and cost optimisation by taking all four WWTPs to market together
- Access to global best practice and process optimisation through international suppliers
- Increased **cost certainty** for the client councils

Through a competitive tender process, Veolia were selected to operate and maintain the WWTPs under a performance-based contract. Veolia were considered the preferred bidder by Wellington Water as their proposal including the following elements:

- Strong cultural fit to Wellington Water and clear alignment of mutual objectives

- Sound operational understanding and proposed practices
- Robust sludge minimisation approach
- Sound transition and risk management plans
- Robust systems and related capability
- High calibre resources
- Best value pricing

Management of the WWTPs was progressively transferred to Veolia under the new Regional WWTP contract as existing contracts expired.

## Performance issues under the Regional WWTP contract

Since the implementation of the regional WWTP contract with Veolia, there have been multiple performance issues across the four WWTP. Unacceptable environmental impacts have resulted from the failures. As a result, Wellington Water have issued a series of abatement, infringement and breach notices to Veolia.

Performance issues primarily concern the following areas:

- non-compliance with consent conditions,
- effluent non-compliance,
- sludge discharges,
- sampling or analysis errors,
- lack of monitoring activities, and
- late or poor reporting.

This year, Wellington Water changed its focus and implemented a moratorium on further fines and breach notices. Focus was instead directed to working collaboratively with Veolia in identifying the underlying issues and measures required to improve plant performance. Wellington Water acknowledged that some of the WWTP assets were not performing as had been previously expected or modelling would suggest.

### Incident prompting this review

On 19th August 2021, an incident at the Porirua WWTP was identified after a member of the public observed water discolouration near the plant outfall. Subsequent analysis (completed by Stantec) suggested that this is likely to have been caused by a dry weather sludge carryover.

Despite several efforts already tried to improve performance, Wellington Water identified it was vital for an independent holistic review of wastewater treatment operations to expedite improvements and restore confidence in the delivery of wastewater services.

## **REVIEW STRUCTURE**

Wellington Water framed the independent review to objectively assess the entire operating model and identify opportunities for improvement.

The objective of the review was -

"To identify model changes and delivery improvements to ensure the wastewater treatment plants are operated in a professional, proactive, modern, fully compliant and environmentally responsible way, such that the expectations of Wellington Water, our Client Councils and mana whenua are met."

The key deliverable for the review was to:

- Deliver a Regional WWTP Review Report to the Wellington Water Board that includes:
  - $\circ$  an objective analysis of the current situation, supplier performance and contract, and
  - recommended model changes and delivery improvements endorsed by the Review Steering Group.

The full Terms of Reference for the Review are provided at Appendix 1 to this report.

#### **Review Governance**

The reviewers were tasked with reporting to the Wellington Water Board by 20 December 2021.

A Steering Group was established to provide direction and ongoing engagement across key stakeholders. Members are as follows:

- Helmut Modlik, CEO, Ngāti Toa Rangatira
- Andrew Dalziel, Deputy CEO, Porirua City Council
- Colin Crampton, CEO Wellington Water
- Alexandre Lagny, Veolia NZ Country Director

The Steering Group have been provided regular updates throughout the review process.

The report resulting from this review will be shared with the client councils and other important stakeholders prior to final endorsement in February 2022. Implementation of the recommendations will then begin in earnest, once endorsed to by the Wellington Water Board.

### The Review Team

To ensure an objective analysis of the situation, two independent expert advisors were commissioned to undertake the review:

#### **Roly Frost**

Roly has a degree in civil engineering and 50 years' experience in the infrastructure sector. He is a former president of Engineering NZ, Chair of the Engineering NZ Foundation and member of the Chartered Professional Engineers Council.

He holds several project management board roles and specialises in independent roles in procurement models and contract administration. He is an independent professional advisor to Waka Kotahi, Auckland Transport, Defence and Kiwi Rail. Roly has presented at international conferences on risk management, asset management and contracting models.

#### Raveen Jaduram

Raveen has a Masters in Civil Engineering and over 30 years' experience working in the water industry in New Zealand, Australia and Fiji. He is currently an independent advisor and on the board of the New Zealand Infrastructure Commission – Te Waihanga. Raveen has deep institutional and systems knowledge of the infrastructure sector. His previous roles include Chief Executive of Watercare Services Limited, Managing Director of Murrumbidgee Irrigation Limited, President and Chair of Water New Zealand and Chair of the NZ Water Sector Senior Executives Forum.

The reviewers have been supported in an administrative and organisational capacity – including where necessary to ensure independence and confidentiality of interviews, by:

**Euan Stitt**, Wellington Water's Chief Advisor - Service Delivery, and **Jessie Williams-Shigeeda** and **Dan Bonifant** from Morrison Low in Wellington.

## **REVIEW PROCESS**

In reviewing of the operating model, relevant documents and outputs from previous reviews undertaken to improve aspects of the contract and WWTP performance, have been considered.

These background documents provided the framework for detailed discussions with stakeholders and interested parties.

### **Documents reviewed**

The review team considered relevant documentation to inform subsequent discussions, including:

- 'Multi Criteria Analysis' for operating model for the WWTPs as part of the Service Delivery Strategy
- Veolia, Wellington Regional WWTP Request for Proposal Response (date)
- The Regional WWTP contract between Wellington Water and Veolia NZ
- Contract events register (including breach notices)
- Jacobs Engineering Group Wellington Water Limited Performance Improvement Plan Review Findings 2021
- AECOM, Wellington Water Relationship Review Report (2021)
- Veolia, Beyond Compliance versions 1 and 2, November and December 2021
- Worley NZ Ltd, Wastewater Treatment Plant Asset Management Review, Dec 2021

### Interviews

As part of the review, 32 interviews have been conducted with a range of stakeholders and interested parties. The format of these interviews encouraged openness and honestly, and stressed confidentiality. The purpose was to identify issues within the operating model. Repeat interviews were conducted with some parties to validate initial findings. From there, clear and common themes have been collated to inform the current situation, gap analysis and recommendations for improvement.

A full list of those interviewed as part of the review is provided at Appendix 2 to this report.

## Other context

#### **Evolving Strategic Environment**

In developing this report, the review team has also been cognisant that it is being completed within the context of significantly changing strategic environment for Wellington Water. These changes include the ongoing Three Waters Reform initiative, the introduction of Taumata Arowai as the waters services regulator and increasing regulatory standards.

In addition, the effects of the COVID-19 pandemic on global supply chain, market constraints and a broad increasing of Wellington Water's Client Council investment in water services are relevant context.

#### Previous improvement efforts

Earlier in the year, Veolia developed a Performance Improvement Plan (PIP) to drive performance at the WWTPs. This was submitted to the Wellington Water Board. The focus of this plan was on:

- staffing (including training)
- international support
- process work
- asset renewals.

A subsequent independent review of the performance improvement plan (PIP) by Jacobs Engineering Group identified further areas to direct effort, including:

- increased involvement of international Veolia experts in process optimisation,
- improved governance and management,
- specific training needs,
- enhanced maintenance strategies and
- process improvements required<sup>1</sup>.

In August 2021, Wellington Water also commissioned AECOM to focus on the improving relationships between the two companies.<sup>2</sup> The recommendations were acknowledged to not be immediate solutions however significant improvements would be achieved if changes were made, including:

- more informal and solution-focused engagement between the parties

<sup>&</sup>lt;sup>1</sup> Jacobs Engineering Group – WWL PIP Review Findings 1 October 2021

<sup>&</sup>lt;sup>2</sup> Aecom – Wellington Water and Veolia – Relationship Review, 15<sup>th</sup> September 2021

- increased performance reviews
- developing a relationship charter
- independent facilitation of meetings, and
- a contract reset workshop

#### Asset Management

Asset management is one of the existing areas of concern surrounding the WTTPs. Wellington Water commissioned Worley NZ Ltd to provide an assessment of the current maintenance practice and approach, and in particular:

- The current asset renewal strategy and capital expenditure (Capex) decision process.
- Identification and classification of critical assets.
- The design and ongoing improvement of the current preventive maintenance (PM) programme for critical assets.
- The level and access to the required resources, both in-house and contracted services.<sup>3</sup>

The Worley review identified the following actions:

- Develop a Strategic Asset management Plan for the WWTPs to ISO55000
- Review the Veolia asset criticality assessment against the Wellington Water Criticality Framework
- Improve the process for capex investment in the WWTPs
- Revise the preventative maintenance programmes for each plant
- Refresh the periodic failure/condition and analysis process

It was also noted that Wellington Water is currently developing a Strategic Asset Management Plan for the WWTPs.

<sup>&</sup>lt;sup>3</sup> Worley NZ Ltd – Wastewater Treatment Plant Asset Management Review, Dec 2021

# **KEY REVIEW FINDINGS**

### Summary

As an organisation, Veolia has the capacity and capability to be a successful operations and maintenance service provider to Wellington Water. There are positive examples of Veolia being a long-term contractor to other clients in New Zealand. A successful contract relationship requires alignment and focus on its primary objectives, much of which must be reinforced by positive behaviours from Wellington Water.

The recent failures at the WWTP that resulted in breaches and non-compliances were avoidable. These were due to one or more of: human error; lack of resources; poor judgement; inadequate procedures; insufficient management oversight; or absence of planning.

As well as these issues, this review has confirmed there are significant relationship issues between contract management officers from Veolia and Wellington Water. The poor relationship has had an adverse impact on the trust between the two organisations, and the loss of the necessary collaborative approach to problem definitions, solutions, urgency and good decision-making.

While it is noted that Veolia are looking to move "Beyond Compliance", they have nevertheless failed to deliver the fundamentals to achieve the environmental objectives that are set in the resource consent conditions and expectations by Wellington Water.

Wellington Water is the agency responsible for wastewater management for its Client Councils. Failures at the WWTPs reflect poorly on Wellington Water – its Board, management and staff. Wellington Water's objective for its wastewater management responsibilities was to contract the operations and maintenance of the plants with an international provider highly proficient in the business, that would bring global innovation and expertise to the table, and would work collaboratively to deliver the environmental outcomes the community sought.

In its tender proposal accepted by Wellington Water, Veolia promised to meet these objectives. In practice, over the short period of operations, Veolia has failed to demonstrate that it has brought international capabilities and competencies to Wellington. The increased levels of breaches and non-compliance at the treatment plants are evidence of this failure. Surprisingly, the issues were not isolated to Seaview and Porirua but evident at Moa Point and Western – the two WWTPs that Veolia has been previously operating, maintaining and upgrading as part of its Design-Build-Own (DBO) contract.

In the relatively short period the contract has been in effect, Wellington Water has raised with Veolia concerns about non-compliance, health and safety, asset failures, response times and management. It has commissioned numerous improvement initiatives and reviews, but there is little evidence these have had any positive impact. The key findings of this review are that both Veolia and Wellington Water must both improve their operations to deliver on the desired outcomes and the review findings are outlined below.

## **1. Contract Suitability**

The contract is generally fit-for-purpose and contractual issues have not been raised by either party. However, there are gaps between the wider expectations of Wellington Water and assumptions made by Veolia within it. While compliance with WWTP consents has not been achieved, there is no dispute. Veolia accepts that it has not delivered in accordance with its promise and that it has not met the expectations of Wellington Water.

Veolia were characterised as having a solely commercial and financial focus and which limits operations to meeting compliance only. However, there was no evidence to suggest Veolia's failure to meet environmental performance objectives was due to its desire to maximise financial gains. A lack of money was not a prevailing theme. There were no issues raised in relation to insufficient funds, or that the tenders had been bid at a price that was proving difficult for Veolia to sustain. There have been no significant variations and disagreements relating to financials.

Veolia were the incumbent on two of the four WTTPs. The process of due diligence on the plants at the time of tender was sufficient and there was no evidence from the interviews that Veolia took over plants that were in a significantly different asset condition than expected.

Veolia offered an operator-maintainer model with cross-trained and upskilled operators in wastewater treatment but staffing limitations and incidents shows that the performance promise has not been delivered. As an example, Veolia promised to put controls to reduce the high risk of resource consent compliance challenges at Porirua WWTP. These have not been implemented.

Maintenance at the WWTPs remains mostly reactive despite Veolia's proposal to move to a more proactive maintenance approach to address deferred maintenance at the WWTP. Compliance has not been achieved and, therefore, Veolia has failed to deliver on its promised non-negotiable approach to compliance with 100% achievement.

Since the award of the Contract:

- $\circ$  there have been breaches of performance standards by Veolia.
- Wellington Water has issued Identification Notices s10.7 of the Contract.
- there has been non-compliance by Veolia as per Schedule 6 of the Contract.

### 2. Governance and Contract Management

Wellington Water does not have a governance board or senior executive in a client/sponsor role for the contract. Wellington Water has experience in managing a design-build-operate contract for wastewater treatment plant operation, but less experience amongst its staff in managing collaborative contracts

Veolia's team assigned to deliver on the contract had asset management and engineering consultancy experience, but less experience in leading wastewater treatment operations, or collaborative contract delivery Its staff viewed their treatment by Wellington Water as that of a 'master-slave relationship and felt that client power dynamics may have impacted adversely on Veolia's performance.

Efforts made by Wellington Water to address the relationship issues by initiatives such as a contract relationship reset, relationship workshops and performance reviews had limited impact on performance.

Veolia staff felt there have been too many reviews, taking them away from their operational delivery functions. There appears to have been a lack of urgency from both Veolia and Wellington Water to collaboratively resolve management issues.

There are too many contract management meetings with unclear overall structure, issue escalation structures or inter-relationship. Audit/assurance functions have become blurred through poor delivery and unclear roles and responsibilities.

## 3. Trust and Confidence

Veolia's performance has adversely affected the trust and confidence of Client Councils, iwi, stakeholders and community groups in Wellington Water. Stakeholders have doubts about Wellington Water's ability to deliver improvements to receiving water quality in a timely fashion.

Wellington Water, in turn, has lost confidence in Veolia delivering on its promises. This lack of trust has affected relationships and cooperation between key personnel from Wellington Water and Veolia. Wellington Water has at times exhibited a blame approach rather than jointly problem-solving.

The WWTPs previously successfully operated and fully understood by Veolia (Moa Point and Western) have not met compliance requirements either or performed in an acceptable manner. The change in performance on these plants has further eroded Wellington Water's confidence in Veolia. The incidents at the WWTPs were avoidable and suggest the absence of clear operating procedures, or compliance with those that exist.

## 4. Resourcing and structures

There is a lack of clarity in roles and responsibilities between Wellington Water and Veolia. This has resulted in blurred ownership, responsibility, and authority, which has delayed issue resolution. There is also a lack of clarity of roles and responsibilities, as they relate to the WWTP contract, within the respective organisations and there appears to be insufficient capacity and capability across the board in both organisations.

The scope of the WWTP Contract Manager role within Wellington Water is too broad and there is gap in a client or broader management sponsor function.

Veolia appears to have resourcing issues:

- There are insufficient resources within Veolia to undertake the operational tasks, including preventative maintenance activities, required to manage the WWTPs to an acceptable standard.
- Need to appoint an appropriate Regional Manager and ensure support from across Veolia NZ.
- Need for dedicated asset management planning resource and operations management capability.
- Misalignment of skills and roles (or training required to meet role responsibilities).
- Needs a clear organisation structure established with defined and delineated roles and responsibilities across management and operations at the plants.

### 5. Innovation

There is little evidence of Veolia's international capability and vision, as outlined in the Veolia proposal, being applied to the Wellington contract. Process challenges at the WWTPs have been left to local operators to resolve.

## 6. Asset Planning and Management

Performance and/or condition of some treatment plant assets may not have been as expected at the initial contract handover. It is noted that while exact information is extremely difficult to ascertain within an operational plant, the opportunity was provided through the tender process for bidders' to carry out their own due diligence, that two of the plants were previously operated by Veolia and this situation is not wholly unusual for WWTPs.

Despite funds being made available by Client Councils, capital projects have not been delivered in the WWTPs in a timely manner (for example, the UV upgrade at Porirua WWTP).

Clear asset management planning has not been delivered, including clear strategic direction from Wellington Water or criticality considerations, proactive maintenance and scheduled renewals planning and delivery by Veolia. Basic asset management strategy has not been evident. This includes consideration of redundancy or availability of critical spares.

## 7. Stakeholders and Communications

There is a very clear desire from local communities and iwi to not have the receiving environments degraded further by discharges from the WWTPs. Local community expectations appear to exceed what is reflected in the current resource consents (for Porirua WWTP). Iwi consider that there hasn't been the required urgency in addressing the issues (especially at Porirua) given their objections to discharges of treated wastewater to receiving waters.

Internal communications (and consultation) within Veolia among its staff about what is expected and happening at the four WWTPs and in other parts of NZ where Veolia operates is poor. Communication to local communities, especially during and after an adverse event, has not been effective and suffers from unclear responsibilities and ownership.

# FUTURE STATE

While the reviewers were engaged to recommend steps that need to be taken to operate the wastewater treatment plants in a fully compliant and environmentally responsible way, there was a strong message from iwi, the community, and stakeholders that meeting compliance without ongoing improvements, additional redundancy and planning for growth was an unacceptable position for Wellington Water and their operator. All parties wanted to see proactive improvements.

Through the process the following parties expressed clear aspirations for the future state of the wastewater treatment plants. The review recommendations are made within this future state context:

#### lwi

lwi has intergenerational responsibility for the care of waterways. They were keen to see improvement to the receiving environments and willing to be a partner in the development of plant improvements. The base compliance of no dry weather overflows was a given and they want stronger relationships with Wellington Water who they hold to account for reducing the number and extent of overflows, both from the plant and the network. This would be achieved by improved operator performance and plant upgrades.

#### Councils

As part of the review all Client Councils were invited to meet with the review team and Porirua and Hutt City Councils did so. Like iwi, receiving environments, harbours and their health are of paramount importance to the Councils. The Councils accept circumstances beyond the control of Wellington Water may result in failures that cause overflows (electricity, intense storm event) but dry weather overflows and the increasing frequency of non-compliance as has been the case recently, is not acceptable. The Councils had different views on the levels of communication from Wellington Water, with one satisfied and the other seeking improvements. As asset owners, some Councils are seeking a stronger demonstration of both compliant operations and on-time improvements to the plants and want additional visibility on progress. A stronger display of international expertise/best practice by Veolia in conjunction with Wellington Water improvements to project delivery would be required to meet expectations.

#### Community (Your Bay, Your Say)

The community group Your Bay, Your Say, which is focused on Titahi Bay, has low trust in Wellington Water to deliver improved WWTPs performance. Representatives point to inadequate and inconsistent communication as part of the reason for the low level of trust. They want clean bays, with an improved environment and regard recent non-compliances more as a management issue by Wellington Water than an operator issue. While they accept current improvements will assist, they have taken too long to be implemented and a stronger focus on timely upgrades and improvements is required. Under normal business operations in the event of overflow discharges, the safety of recreational beach users has been unsatisfactory with a lack of adequate signage and information.

#### Wellington Water Ltd

Wellington Water wants to demonstrate it is a competent, reliable water services management company that brings expertise and innovation to Wellington in running the four WWTPs. They want to be able to trust that

the promises Veolia makes will be translated into delivery through a solution-focussed contract. Wellington Water want to improve from a base of fully compliant operations to demonstrable improved responsibility and delivery in environmental management. They want to upskill their strategic asset management capability, and a stronger focus on timely project delivery. While Wellington Water has operated plants in the past, their desire is to work seamlessly with a trusted, proven operator to meet iwi Council and community expectations in this function.

#### Veolia

Veolia wants a collaborative contract management environment, where they are accepted as the contractor of choice in wastewater management. They want clear roles within and between the two parties with no micro-management, or poorly run, unnecessary meetings distracting staff from doing their job. They want the right people in the right roles and to be able to demonstrate greater input from the wider Veolia international group. In full collaboration with Wellington Water, Veolia seeks prompt decisions made by Wellington Water, with appropriate management oversight, and improved asset management capability. In order to provide better value, improved opportunity to introduce innovation, and assist with prompt risk management, Veolia wants to upskill to be the preferred contractor for upgrades and improvements on the plants up to a value of around \$5M.

# ADDITIONAL INFORMATION

In response to the commissioning of this review, Veolia initiated an internal response, called Beyond Compliance. The Review team has taken this work into consideration in preparing its recommendations and includes an overview of the Veolia initiative here.

## Veolia's 'Beyond Compliance' Task Force

Veolia NZ has established a task force to consider its own operations, entitled Beyond Compliance, with the aim of considering:

"How can we, jointly, go Beyond Compliance and align our service with community expectations?"

The Veolia task force notes the following in its Terms of Reference<sup>4</sup>:

- Veolia New Zealand is committed to a culture of sustainability, environmental awareness and compliance across all of its Wellington operations.
- Veolia's early performance within the Regional WWTP Contract has fallen short of community and client expectations and has seriously impacted the trust and confidence of the community in Wellington Water.
- Veolia acknowledges the significant efforts required to rebuild the trust and confidence of the community in Wellington Water's and Veolia's capability
- In order to give Wellington Water confidence in our commitment the main objective of this task force is to review how Veolia delivers on our joint sustainability and environmental aspirations, identify opportunities for improvement, and reach new levels of environmentally sensitive operation.
- This Task Force will remain in place until Wellington Water have confidence in Veolia's ongoing performance

The Task Force has six principal workstreams, which are reproduced below (along their scope and the key initiatives being undertaken in each):

- **Staff and Training** how we structure the teams and operations at all plants and will review if staffing level/skills are adequate to ensure community expectations are met at all times.
  - Staff interviews and changes (including a new contract manager)
  - Structure review with possible new roles
  - Technical Role review
  - Refresher training and clarity on roles and responsibilities
- **Communications** to ensure we better communicate with all stakeholders about the issues we are facing at the plants and how we address them, this will cover as well timely reporting of potential incidents
  - $\circ$  To Wellington Water, within Veolia and supporting public comms
  - Enhanced collaboration framework

<sup>&</sup>lt;sup>4</sup> Veolia NZ, Beyond Compliance Task Team Update, 2 December 2021

- **Process Optimisation** expanding the existing work already undertaken to further review how plants are operated from a process perspective to optimise treatment.
  - Undertaking a 'Paris review' to optimise processes to improve individual plant performance, i.e.
    - Porirua Sludge Management
    - Western sampling data analysis
    - Moa Point dewatered sludge performance
    - Seaview detailed analysis of suspended solids plant performance
    - Carey's Gully peroxide dosing optimisation
- **Plant Upgrades -** consider options for asset upgrades which could impact positively on plant performance, not only to meet consent, but to go beyond
  - $\circ$  Identify key opportunities to improve plant performance (Paris) 29 to date
  - Some delivered (Porirua Returned Effluent, solids handling at Seaview)
  - Some under development (Seaview SCADA upgrades, online sludge blanket monitoring for Porirua)

- Asset Management - review condition assessments, maintenance practises and critical spare parts to make sure we minimise assets failures and their potential impact on compliance

- Implementing alignment to Wellington Water Criticality Framework
- Preventative Maintenance plans under review
- Critical spares inventory revision
- Improved contingency planning
- **Culture -** review our culture across our Wellington operations and make sure all employees are aligned to meet community expectations.
  - Activity rigour adherence and discipline
  - Key relationships and Team Charter
  - Communication expectations
  - Environmental incident process review

As can be seen, this review has separately identified similar areas for improvement as this independent review has and, to an extent, mirrors the previous PIP put forward by Veolia. In contrast to the previous Plan, however, it appears that Veolia has broadened the scope and considered the review of the PIP commissioned by Wellington Water (and other analyses or reports), The broader capabilities of Veolia are now being brought into the Wellington contract and positive changes have already started.

The final update for this Veolia review is on the 16<sup>th</sup> December 2021.

## **OPTIONS**

The panel considered five options for the continuance of the wastewater contract. They were

- 1. Continue with the current incumbent on as is basis
- 2. Continue with the current incumbent but seek radical improvement
- 3. Continue with the current contractor on two plants and retender the balance
- 4. Invoke the early termination clause and retender the contract
- 5. Invoke the early termination clause and bring the operations and maintenance contract within WWL

Options 1 and 3 were quickly discounted as being unaccpetable in achieving the regional goals and expectations of WWL and the community.

The panel reviewed the rationale for the choice of the current model. Although the context had changed significantly over the two years, the panel considered the decision for an outsourced model of operations and maintenance, strategic asset management with WWL was still valid, albeit not as clear cut. The panel deliberated further over the period of the interviews and tested these options with the interviewees through specific questions.

It became very clear to the panel that there was not strong support for bringing the contract in-house from Wellington Water, stakeholders or community. There was unanimous support that Veolia had the capability and experience to provide the expected level of support from those interviewed

While the panel felt that to recommend early termination would send the strongest message to Veolia, the panel considered that the significantly higher risk and additonal costs in a constrained resources and funding market far outweighed the need to message of unacceptable performance.

The panel felt that the best chances of success was to work with the incumbent to make the required paradigm shift in performance and selected Option 2 as the right model.

The panel considered options of further penalties to improve performance but considered that this was not the right approach to a collaborative contract. The panel then focussed on the requirements necessary to be introduced to achieve the expectations the community, iwi, Wellington Water, Client Councils and other stakeholders.

## RECOMMENDATIONS

In order to deliver the performance required of the wastewater treatment plants, and meet broader expectations of stakeholders, the following recommendations are made for Wellington Water and Veolia to make together:

## **Recommendation 1 - Contract**

Retain Veolia NZ as the contractor to operate and maintain the four metropolitan wastewater treatment plants within the existing contractual terms but with the proviso that the contract is continued on the basis that Veolia NZ commits to and delivers on the following improvements:

- Full compliance with resource consent conditions be demonstrated over the balance of the contract.
- A fit-for-purpose organisational structure, led by a customer-focussed Regional Manager, supported by a management and technical team with the requisite skills, and resourced by the necessary number of experienced operations and maintenance staff as are required.
- Restore the confidence of and maintain a trusted relationship with Wellington Water at all levels, from the Contracts Manager to the Board of Directors.
- Introduce innovations that were promised and are expected of a global water company to optimise the management and processes at the wastewater treatment plants, providing greater benefits to the environment and to communities. This includes open sharing of data between Veolia and Wellington Water.
- Participate in the asset management planning by Wellington Water by providing timely and effective critical asset condition information, and plans for preventative maintenance and replacement and asset renewal.
- Provide leadership in the project management and delivery of the agreed capital upgrade programmes.

#### Implications

The success of the delivery of the outcomes expected of Veolia NZ is dependent on the degree of trust and confidence that Wellington Water has of its ability to do so, and less on Veolia's international experience. Trust is damaged on every occasion that a non-compliance activity is recorded. This is particularly so when the incidents were avoidable. If Veolia develops and implements a fit for purpose management structure that is fully resourced with capable and experienced staff; collaborates with Wellington Water to develop proactive asset management and maintenance plans, and is diligent in accepting its responsibility for compliance with resource consent conditions, this will put in place the building blocks for restoring trust. Transparent and honest communications between the two organisations, accompanied by a desire to collaboratively resolve issues, will build strong respect for one another, and build strong relationships.

### **Recommendation 2 - Contract Management**

Significantly improve the contracts management capability within Wellington Water in relation to this contract and provide training, systems and processes to allow effective management of Veolia:

- Define and agree within Wellington Water, the scope of its role in the management of the contract with Veolia, ensuring that the client risks and obligations are actively managed
- Determine the size, structure, skillset and competencies required of the contract management team and assign and train the staff to function in the more collaborative environment required for this contract
- Clarify the roles and responsibilities of all staff related to the contract, including that of the Contracts Manager who should be Wellington Water's primary representative when dealing with Veolia
- Establish an appropriate governance structure for the contract management team, considering any potential benefits of including Veolia senior management and external membership to complement the requisite experience
- Communicate and share with Veolia staff, the vision, values and strategic objectives of Wellington Water and specifically of the outcomes expected from the long-term relationship between the two organisations. Open information sharing of data between Wellington Water and Veolia.
- Implement an effective performance management framework to ensure Veolia is meeting the requirements of the contract, to enable proactive intervention by Wellington Water when required and not to be used as punitive measures

#### Implications

An effective contract management team is vital to ensure Wellington Water's objectives are met during the contract period. The value of this contract over its term is more than \$200 million and deserves an appropriate governance structure. Wellington Water's vision, values and strategic objectives must be communicated to and shared with Veolia so that a collaborative approach is able to be taken to resolve issues and the two organisations are aligned to achieving their objectives.

### **Recommendation 3 – Performance Management**

Wellington Water and Veolia to shape the organisational context necessary to provide social support and performance objectives that creates a high performing team and jointly prepare:

- A Charter of how the two organisations will work together to achieve the strategic purpose of the relationship for the benefit of the community.
- A Policy Statement as to how they will meet the objectives of sustainability, environmental and stakeholder expectations
- Register of environmental aspects and impacts for each of the four WWTP and their receiving environments (effluent, odour, noise, nuisance)
- Operational control procedures for managing significant risks what, who, when, how

- Performance evaluation and audit plans – internal audit, external audit, inspection plans, frequencies and non-conformance and corrective action programs. These would be for all areas of significant risk and include asset management, treatment processes, relationship management, stakeholder communications and the like.

#### Implications

The desire by Veolia and Wellington Water is to deliver contracted services in a collaborative manner. Externally, the expectations are for Wellington Water to deliver. Internally, Veolia needs to operate as if it were a part of Wellington Water. If the purpose, culture and processes are siloed, the collaborative environment will not be sustained, and the contractual framework will fail. The stretch and disciplines of good performance management will stimulate Veolia to deliver high quality results, while the support and trust will provide latitude and security necessary to perform. The charter, systems and controls should be designed to reinforce the collaborative attitudes and behaviours of both organisations.

## Recommendation 4 - Asset Management

Improve the asset management and planning capabilities within Wellington Water in relation to this contract and provide clarity on the expectations from Veolia in preparing in preparing and delivering its plans:

- Ensure that Wellington Water has the functional capacity and capability to define and manage the framework around planning, designing and constructing replacement and new assets relating to the four wastewater treatment plants in the context of its wastewater system
- Wellington Water, in conjunction with its Client Councils, to set strategic objectives for the four wastewater treatment plants, including levels of service, statutory compliance, performance criteria, acceptable levels of risk, and how these are to be delivered within financial constraints
- Wellington Water, with the assistance of Veolia, to set standards and expected levels of asset inspection, audit and performance and key performance indicators and ensure effective communications to all staff involved in the operation of the treatment plants
- Wellington Water and Veolia to identify and agree on the components that each organisation is
  responsible for in the process of asset management planning and in the creation of asset (or facility)
  management plans identifying critical assets, failure modes, predictive or degradation models,
  condition monitoring, options for risk mitigation, cost-benefit analyses, planned maintenance schedules,
  renewal and replacement programs and new capacity requirements to meet the strategic objectives
- Wellington Water and Veolia to agree on the definition of capital expenditure in relation to this contract and to document the agreed processes that will be followed to prepare relevant business cases, obtain approvals and deliver projects within scope, budget and program without adversely constraining the day-to-day operations at the wastewater treatment plants.
- Veolia should resource and upskill their delivery capability to undertake capital improvements within the plants on a timely and cost-effective basis up to an agreed value
- Implement the findings of the Worley NZ Review

#### Implications

Effective asset management is vital for Wellington Water to provide a sustainable and acceptable standard of service while attempting to meet competing demands in a fiscally constrained environment. Wastewater treatment plants have active assets and components that are exposed to corrosive elements. Wellington Water needs to understand the purpose, condition and criticality of the assets to be able to plan how it will intervene if any asset fails. It will be in an informed position to decide whether to repair or replace assets. It also needs to consider impacts of growing demands due to population growth and desires to improve processes to meet initiatives such as reduced energy use and lower carbon footprints. With the operations and maintenance contracted to Veolia, a collaborative approach is necessary to develop a robust asset management approach that encourages good decision making, better utilisation of budgets, and timely investments in assets that allows efficient operation of the wastewater treatment plants.

## **Recommendation 5 - Communications**

Wellington Water and Veolia to prepare effective internal and external communications strategies, plans, roles and responsibilities to maintain a high level of trust and confidence with the community and all their stakeholders:

- Develop and clearly articulate policies for the protection of public health and natural environment
- Develop communications to address concerns around impacts to the environment due to growth in housing and the strategies for addressing infrastructure requirements
- Develop communications on the sustainability of the wastewater assets aging infrastructure, funding and financing
- Develop processes for timely notifications to Client Councils, GWRC, iwi and communities of service interruptions and overflows to the receiving environments
- Encourage community participation in discussions, plans, challenges and solutions
- Review the way the contract is managed and communicated both between Veolia and Wellington Water and within the respective organisations
- Prepare and share the priority list of all significant environmental impacts, objectives and targets, and the schedules for addressing them

#### Implications

The primary objective of providing a wastewater service is to protect public health and the health of the environment should be at the forefront of all communications internally within Veolia and Wellington Water and externally with all their stakeholders. By its nature, this contract involves a vast array of inter-connecting entities and relationships. These exist not only between Wellington Water and Veolia, but also with and between other stakeholders including customers, special interest groups, regulators, iwi and shareholder councils. Crisis will happen and dysfunctional organisational cultures will be exposed. The leadership of both organisations must work together rather than score points or deflect blame. They are there to serve the greater purpose of protecting public health and the environment.

# IMPLEMENTATION

The reviewers formed the view early on in the process, that whatever option was chosen for the ongoing operations and maintenance model for the WWTP's there was a significant period of implementation required by both parties to reach even a satisfactory level of compliance.

The implementation timeline of several possible operational model options was assessed. Termination – with replacement found either through going back to market or bringing the contract in-house – had the longest periods of implementation. The reviewers measured either of these possible replacement options as highly complex and posing significant risk in an environment of constrained resources and skills. There was no evidence that the bedding in period of a new appointment would run any better than the poor implementation of the current contract.

In the current context of water reform and Wellington Water seeking new consents for Porirua, the panel felt that a period of strong performance compliance with improved asset management planning and improvements would best demonstrate Wellington Water's desire to meet the aspirations of the community and stakeholders.

Continuing with Veolia as the current operator on an improved performance basis, presented the lowest risk with the ability to achieve the aspirational goals. This was confirmed by most of the interviewees stating that Veolia could meet full compliance of all the plants with a restructured and refocussed team.

Even so, the reviewers felt that there had been attempts at reviews and implementation of initiatives over the first two years of the contract that had not achieved the desired result. Therefore, implementation of the review's recommendations would not happen without a concerted effort by both parties over the first half of 2022.

As part of acceptance of the review recommendations Wellington Water is advised to use a dedicated management team, possibly including an independent, to implement their recommended changes in the new year. The Veolia task force, currently set up, should also remain in place for the same period. It is anticipated there would be close exchange of the initiatives between the two groups, but for staff confidence the two groups would need to have separate links back into their own companies. The two task forces should report to a Steering Group during the set-up phase and should remain in place until the governance group is fully satisfied that a conforming operations and maintenance contract with the desired improvement in asset management planning is business as usual.

Changes required to the existing contract agreement are more in the area of clarification of ambiguities rather than significant variations of the conditions.

Implementation has not been costed. However, it is the expectation of the panel, that increases, if any, in annual contract cost would be minor. The likely area of additional expenditure would be to get ahead on the planning and design of preferred options for improvements and operational asset management to the plant. Capital budgets would remain on the same approval process as current.

The reviewers wish to thank all those that have participated and supported in their work in undertaking this review.

# **APPENDICES**

- 1. Terms of Reference
- 2. List of persons/organisations interviewed
- 3. Some recent examples of non-compliances

## Appendix 1 – Review Terms of Reference

## Regional Wastewater Treatment Contract Review - Terms of Reference

(v2.0 – Final, for external)

#### Background:

As part of the Service Delivery Strategy, Wellington Water progressively implemented a performance based Regional Wastewater Treatment Contract with Veolia. However, this contract and the performance delivered under it, has not met the expectations of WWL, our Client Councils or Mana Whenua and has had an adverse effect on our environment, resulting in multiple infringement and performance notices being issued.

#### **Deliverables:**

By 20th December 2021, the Review team will:

- Deliver a Regional WWTP Review Report to the Wellington
  Water Board that includes:
  - an objective analysis of the current situation, supplier performance and contract, and
  - recommended model changes and delivery improvements endorsed by the Review Steering Group.
- Have provided regular updates to Councils and key stakeholders
- Be cognisant of other initiatives in Wellington Water that affects WWTP operations in the region:
  - consenting strategy for the Porirua Wastewater Treatment Plant
  - ongoing communications and reporting strategy for WWTP performance
  - WWTP condition assessment activities and other technical reports that are being undertaken concurrent to the review
  - Capital works and other Plant or Network upgrades.

#### Inputs:

- Regional WWTP contract
- Stakeholder Interviews
- Veolia RFP response
- Performance and Technical Reports
- Asset Condition Reports

#### **Roles and Responsibilities:**

#### **Review Steering Group**

- Andrew Dalziel, Deputy CEO/GM Infrastructure
   Porirua City Council
- Helmut Modlik, Ngati Toa
- Alex Lagny, Veolia
- Colin Crampton, CEO Wellington Water

#### **Review Team**

- Raveen Jaduram, Independent Reviewer
- Roly Frost, Independent Reviewer
- Euan Stitt, Chief Advisor Service Delivery, WWL

#### Key WWL resources:



#### **Objectives:**

To identify model changes and delivery improvements to ensure the wastewater treatment plants are operated in a professional, proactive, modern, fully compliant and environmentally responsible way, such that the expectations of WWL, our Client Councils and Mana Whenua are met.

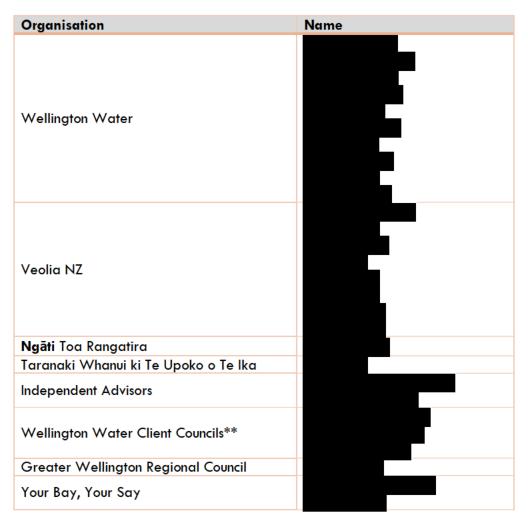
#### **Supporting Principles:**

- Open and Inclusive engage the honest views of all parties
- Outcome focused have a common goal of improving WWTP future performance to improve environmental outcomes
- Collaborative working constructively together
- A holistic, broad review to ensure a strategic and sustainable response – 'nothing off the table'

#### **Reporting and Comms:**

- Reporting will include
  - Fortnightly updates to inform discussions at the Steering Group
  - Ongoing updates to Councils via email
  - Weekly updates to SLT, or as required
- The key recommendations will be shared with stakeholders as they are refined and developed.
- The initial report will be issued to the Wellington Water Board at its meeting on the 20<sup>th</sup> Dec

## Appendix 2 - List of persons interviewed



\* Second interviews also undertaken

\*\* All Client Councils Reps were invited to participate

# Appendix 3 - Recent non-compliance incidents

Date	Type/Contract Ref	Facility	Comment
Jul-19	R2	Porirua	Effluent Flow transmitter failed for several hours on 14th July 2019
	R1	Porirua	Autosampler failed 5 July 2019
	R1	Porirua	Sampling errors by operators
Aug-19	R1	Porirua	Some skip dried sludge missing samples
Mar-20	R1	Porirua WWTP & Carey's Gully SDP	Incorrect quarterly final effluent analysis resulting in several analytical missing for the Porirua WWTP report. Missing sulphides sample at the Carey's Gully SDP
	R2	Regional	Failure to submit an accurate and complete monthly report
	R2	Porirua	Consent No. 1536 Minor Noncompliance due to GWRC not receiving the complaint within 24hours of receipt last March 2020
	PS-1	Moa Point	Effluent Non-compliance due to RAS Failure and sludge pipeline failure
	R1	Carey's Gully SDP	Failure to notify about the odour complaint over Easter long weekend.
	R2	Carey's Gully SDP	Formal Warning regarding sludge discharge
		Regional	Continued poor performance in WWTP Contract
Apr-20	PS-1	Western	Western WWTP effluent non-compliance May 2020
		Regional	Non compliance Initial Principles
	R1	Regional	Failed to submit deliverable (Carbon Emission Reduction Plan)
	R2	Seaview WWTP	Consent 24539 Minor Noncompliance due to unconsented discharge related to the scum line valve failure last June 2020
Aug-20	PS-1	Moa Point	Effluent Non-compliance from August to December 2020
Sep-20	PS-1	Western	Unconsented Discharge Western WWTP
Sep-20	R2	Seaview	Failure to notify of wet weather discharge at Seaview WWTP within 24 hours
Oct-20	PS-1	Porirua	FC Effluent Non Compliance due to sampling error in October 2020
	R2	Regional	Failure to follow health and safety plan due to expired certificates for cranes and pressure vessels
	PS-1	Seaview WWTP	Dry Weather Discharge at Seaview WWTP 3rd December due to Operator Error
Dec-20	accepted	Porirua WWTP	Porirua WWTP non-compliance with the final effluent faecal coliform limits in December 2020
	accepted	Seaview WWTP	Dry weather discharge on 19th December 2020 at the Seaview WWTP due to Power Spike

Regional WWTP Contract – performance issues (incl. infringement, abatement, breach notices and formal warnings)

	PS-1	Seaview WWTP	Seaview WWTP non-compliance with the final effluent faecal coliforms consent limits in Dec 2020, Jan - March 2021
Jan-21	PS-1	Moa Point WWTP	Effluent non-compliance January to March 2021
	PS-1	Western WWTP	Effluent non-compliance suspended solids and faecal coliform for Jan 2021
	R1	Porirua WWTP	Failure to notify in required timeframe in relation to the release of undisinfected effluent in Porirua WWTP due to power surge
	PS-4	Moa Point	Failure to meet the required %DS on Dewatered sludge
	PS-2	Moa Point	Non-compliant Air discharge in IPS for Jan and Feb 2021
Feb-21	PS-1	Seaview WWTP	Unconsented Discharge to Waiwhetu Stream during main effluent pump station maintenance 16/02/2021
	PS-1	Western WWTP	FC noncompliance March 2021 due to hydraulic imbalance March & April 2021
Mar-21	R2	Porirua WWTP	Failure to ensure continuous UV monitoring related to the release of undisinfected effluent in Porirua WWTP last March 23rd
	PS-1	Porirua WWTP	Failure to ensure continuous UV monitoring related to the release of undisinfected effluent in Porirua WWTP last March 23rd
Feb-21	R2	Porirua WWTP	Failure to maintain a secure site due to incidents related to Porirua WWTP's gates being unsecured 16/02/2021
	PS-2	Seaview WWTP	Abatement notice given last 14th June for the 16th and 18th March and 14 April 2021 odour incidents. Infringement Notice given last 12 July 2021 for 16th and 18th march incident.
	PS-1	Moa Point	Effluent suspended solids non-compliance for May 2021 to June 2021
	PS-1	Western WWTP	Non-compliance with final effluent BOD and suspended solids parameters for Western WWTP.
May-21	R2	Seaview WWTP	Failure to comply with resource consent requirement: sampling after wet weather events discharge
		Porirua WWTP	Sludge Carryover in Porirua WWTP during Rain Event
	R2	Moa Point WWTP	Post Scrubber H2S reading for WWTP exceeded the consent limit due to the instrument running out of chemicals. The issue was resolved after the chemicals had been replenished.
	R1	Regional	Failure to obtain ISO 9001:2015 and ISO 14001:2015 by 31 May 2021 as stated in the regional contract

Jul-21	R2	Seaview WWTP	Failure to undertake required analysis of the wastewater effluent entering the stream during the MOP Failure discharge
Jun-21	R2	Moa Point WWTP	Blockage in the air flow meter at the Moa Point IPS caused spikes in the discharge flow readings. This issue was resolved when the condensation in the flow meter was cleared.
Sep-21	accepted	Seaview	Dry weather discharge due to power spike
	PS-1	Moa Point	Effluent non-compliance July to present
Oct-21	R1	Regional	Failure to update and maintain any deliverables in relation to asset inventory report
	PS-2	Моа	H2S non-compliance due exceedance last 26th Oct Discharge to air in Moa Point IPS
Nov-21	PS-1	Western	Western WWTP effluent non-compliance Nov 2021