

**From:** [Grant Allen](#)  
**To:** [Fiona Morton Horizons](#)  
**Cc:** [Laura Hickey](#); [Mike Ryan](#); [Doyle Richardson](#); [Amanda Good](#)  
**Subject:** RE: Question of clarification: APP-2006012018.02 - Response to s92(1) Request for Further Information  
**Date:** Friday, 12 September 2025 3:29:24 pm  
**Attachments:** [10001-063-1 -Updated Improved Baseline Scenario.pdf](#)

---

Hi Fiona,

Thanks for passing through Laura's queries. Amanda has drafted the clarifications below, which I've reviewed. Please see our response as follows:

### **Discharge concentrations used**

Where consent limits are specified in Condition 19 of the original consent, those concentrations were applied to model a maximum allowable discharge scenario. For parameters without limits, we intended to use the 95th percentile concentrations of the treated discharge (April 2014-September 2024), but in the Improved baseline scenario column of Table 1 of our s92 response memo, this was not applied correctly.

A corrected version is attached, which now shows both the discharge quality values applied in the modelling and the resulting downstream water quality. These should be read in place of the corresponding part of Table 1 in the original memo. The other columns remain unchanged. This correction and addition do not affect the analysis or the conclusions presented.

### **Results in context**

As the updated table shows, many parameters already exceed guidelines upstream, even under an improved water quality scenario. The modelled increases from the discharge are not considered material, particularly in a naturally degraded river with severely limited aquatic fauna. Two additional parameters (ammoniacal nitrogen and soluble inorganic nitrogen) shift under the revised modelling; however, even under this unlikely alignment of conservative assumptions, these changes are not expected to hold ecological significance in the Whangaehu River. This reflects both the severely degraded condition of the mainstem (including the absence of resident fish or sensitive invertebrate species) and the fact that applying stringent aquatic guidelines is of limited relevance in a crater-lake influenced system.

### **Discharge volume limit used**

The modelling was based on a maximum discharge rate of 5,200 m<sup>3</sup>/day, which is the limit specified in Condition 2a of the current consent. The proposed reduced volume of 4,000 m<sup>3</sup>/day has not yet been finalised, so it was not used in the modelling.

Please let us know if any further detail would be helpful.

Cheers, Grant

**Grant Allen** PhD MRSNZ MEIANZ  
Director | Lead Environmental Scientist

### **Viridis Limited**

Unit A1, 72 Apollo Drive, Mairangi Bay, Auckland 0632

PO Box 301709, Albany, Auckland 0752, New Zealand  
M 027 543 9888 E [grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz) W [www.viridis.co.nz](http://www.viridis.co.nz)

This electronic communication (including any attachments) is confidential and may be privileged. If this email is not intended for you, you must not use, disclose, distribute, retransmit or copy this communication or any of its contents, and please delete this communication from your information system. We are not responsible for any changes made to, or interception of, this communication after sending, nor for the consequences of any virus or other defect. Nothing in this communication designates an information system for the purposes of section 11(a) of the Electronic Transactions Act 2002.

---

**From:** Fiona Morton Horizons <[fiona.morton@horizons.govt.nz](mailto:fiona.morton@horizons.govt.nz)>  
**Sent:** Friday, 12 September 2025 9:38 am  
**To:** Grant Allen <[grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz)>  
**Cc:** Laura Hickey <[Laura.Hickey@horizons.govt.nz](mailto:Laura.Hickey@horizons.govt.nz)>  
**Subject:** Question of clarification: APP-2006012018.02 - Response to s92(1) Request for Further Information

Hi Grant,

Laura just has a couple of points of clarification on the s92 information provided.

Specifically:

In response to Q4, the Applicant has provided a table which models the impact of the discharge under two different scenarios.

Are you able to clarify what discharge concentrations were used for these calculations?

The response states that the model incorporates the maximum allowable discharge rate – therefore, are these calculations assuming discharge at the consent limits i.e. those outlined in condition 19?

Some of these parameters don't have limits so what was used for these?

Laura's understanding is that the discharge volume limit was used – is this the original limit or the proposed 4000 m<sup>3</sup>/day?

Are you able to come back to us with clarification on those matters?

Many thanks  
Fiona

---

**From:** Grant Allen <[grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz)>  
**Sent:** Tuesday, 9 September 2025 5:34 PM  
**To:** Fiona Morton Horizons <[fiona.morton@horizons.govt.nz](mailto:fiona.morton@horizons.govt.nz)>  
**Cc:** Mike Ryan <[mikeryan@wpinz.com](mailto:mikeryan@wpinz.com)>; Doyle Richardson <[doyle.richardson@mitchelldaysh.co.nz](mailto:doyle.richardson@mitchelldaysh.co.nz)>; Amanda Good <[amanda.good@viridis.co.nz](mailto:amanda.good@viridis.co.nz)>  
**Subject:** APP-2006012018.02 - Response to s92(1) Request for Further Information



Hi Fiona

Please find attached our formal response to Council's s92(1) request for further information (document no. 10001-062-1, dated 9 September 2025), along with the supporting Excel datasets referred to in the letter.

We trust this addresses all matters raised and look forward to the outcome of the notification assessment. We also wish to record our support for limited notification to Ngāti Rangī so the process can progress without delay, noting that Uenuku have previously provided support as set out in Appendix I of the AEE.

Could you please also confirm the day we are currently sitting at in the processing timeline?

Cheers, Grant

Director | Lead Environmental Scientist



#### Viridis Limited

Unit A1, 72 Apollo Drive, Mairangi Bay, Auckland 0632  
PO Box 301709, Albany, Auckland 0752, New Zealand  
M 027 543 9888 E [grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz) W [viridis.co.nz](http://viridis.co.nz)



This electronic communication (including any attachments) is confidential and may be privileged. If this email is not intended for you, you must not use, disclose, distribute, retransmit or copy this communication or any of its contents, and please delete this communication from your information system. We are not responsible for any changes made to, or interception of, this communication after sending, nor for the consequences of any virus or other defect. Nothing in this communication designates an information system for the purposes of section 11(a) of the Electronic Transactions Act 2002.

---

**From:** Fiona Morton Horizons <[fiona.morton@horizons.govt.nz](mailto:fiona.morton@horizons.govt.nz)>

**Sent:** Friday, 18 July 2025 9:05 am

**To:** Grant Allen <[grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz)>

**Subject:** RE: APP-2006012018.02 -Update on Consultation with Iwi and s92 Response - WPI WWTP Resource Consent Renewal

Thanks Grant,

Will add this to the file

Regards

Fiona

---

**From:** Grant Allen <[grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz)>

**Sent:** Thursday, 17 July 2025 12:04 PM

**To:** Fiona Morton Horizons <[fiona.morton@horizons.govt.nz](mailto:fiona.morton@horizons.govt.nz)>

**Cc:** Mike Ryan <[mikeryan@wpinz.com](mailto:mikeryan@wpinz.com)>; Doyle Richardson <[doyle.richardson@mitchelldaysh.co.nz](mailto:doyle.richardson@mitchelldaysh.co.nz)>

**Subject:** APP-2006012018.02 -Update on Consultation with Iwi and s92 Response - WPI WWTP Resource Consent Renewal



Hi Fiona,

I wanted to give you a quick update on the WPI WWTP consent renewal (APP-2006012018.02). We're working through the s92 questions and, as part of this, have continued engaging with iwi.

WPI has met with Ngāti Rangī and others on several occasions to discuss the applications and the future of the site. I've attached a recent letter Mike sent following a meeting on 25 June, which sets out where things sit with the proposed site sale and how the consent is designed to support better cultural and environmental outcomes.

Please let me know if there's anything further you'd like on the consultation side in the meantime.

Cheers, Grant

**Grant Allen** PhD MRSNZ MEIANZ  
Director | Lead Environmental Scientist



**Viridis Limited**

Unit A1, 72 Apollo Drive, Mairangi Bay, Auckland 0632  
PO Box 301709, Albany, Auckland 0752, New Zealand  
M 027 543 9888 E [grant.allen@viridis.co.nz](mailto:grant.allen@viridis.co.nz) W [viridis.co.nz](http://viridis.co.nz)



This electronic communication (including any attachments) is confidential and may be privileged. If this email is not intended for you, you must not use, disclose, distribute, retransmit or copy this communication or any of its contents, and please delete this communication from your information system. We are not responsible for any changes made to, or interception of, this communication after sending, nor for the consequences of any virus or other defect. Nothing in this communication designates an information system for the purposes of section 11(a) of the Electronic Transactions Act 2002.

This email is covered by the disclaimers which can be found here:

<https://www.horizons.govt.nz/about-our-region-and-council/terms-conditions>

This email is covered by the disclaimers which can be found here:

<https://www.horizons.govt.nz/about-our-region-and-council/terms-conditions>

**Table 1. Modelled assessment of downstream Whangaeahu River water quality under improved upstream water quality.**

Parameter	Upstream water quality	Modelled downstream water quality	Treated effluent quality <sup>1</sup>
pH (unitless)	4.4	-	8.6
Un-ionised hydrogen sulphide*	<0.002	2.4	93
Volatile suspended solids	<3	6	180
Total suspended solids	10	20	423
Soluble cBOD <sub>5</sub> (g O <sub>2</sub> /m <sup>3</sup> )	<2	3.8	110
Total cBOD <sub>5</sub> (g O <sub>2</sub> /m <sup>3</sup> )	<2	5.1	163
Ammoniacal nitrogen	0.027	0.28	10
Nitrate nitrogen	0.041	0.1	2.2
Soluble inorganic nitrogen	0.055	0.27	8.5
Total nitrogen	0.12	1.1	37
Dissolved reactive phosphorus	<0.004	0.09	3.5
Total phosphorus	0.019	0.21	7.5
<i>Escherichia coli</i> (cfu/100 mL)	<1	≤260	-
Aluminum	12	12	0.14
Arsenic**	0.0013	0.0015	0.011
Boron	0.15	0.14	0.066
Cadmium	0.00021	0.0003	0.0036
Chromium***	0.0041	0.0043	0.015
Copper	0.011	0.013	0.1
Lead	0.00011	0.00016	0.002
Manganese	0.30	0.38	3.2
Nickel	0.0097	0.0099	0.02
Zinc	0.037	0.057	0.83

**Notes:** Units in g/m<sup>3</sup> unless stated; metal and metalloid concentrations are in the dissolved fraction; <sup>1</sup> For parameters that have consent limits, the maximum allowable concentration has been used. For parameters without limits, the 95th percentile of monitoring data (April 2014-September 2024) has been used; NPS-FM attribute bands have been assigned using the annual median thresholds, consistent with the way the original assessment was framed. NPS-FM Attribute Band A is shaded light green, Attribute Band B is shaded light blue, Attribute Band C is shaded orange; exceedances of a One Plan value or an ANZG DGV (or both) are shown in red text. Refer to Table 3 of the AEE for the guideline values considered in this assessment; \*un-ionised hydrogen sulphide, measured as [S]; \*\* as arsenic (III); \*\*\* hexavalent.