## Notification/Non-Notification Decision (Sections 95A to 95F Resource Management Act 1991)

Application details:

Application number(s): CH16-00147 (BOPRC) and LV-2016-8085-01 (WDC)

Applicant: Bay of Plenty Regional Council

Location of activity: Kopeopeo Canal

#### 1 Introduction

Bay of Plenty Regional Council (the applicant) has applied to the Bay of Plenty Regional Council (BOPRC) and the Whakatane District Council (WDC) to change the conditions of existing consents for the Kopeopeo Canal Remediation Project (existing consents RC67173 and WDC LL-2012-808).

## 2 Appointments

The BOPRC and WDC, acting under section 34A of the Resource Management Act 1991 (RMA), have each appointed independent hearing commissioner Rob van Voorthuysen<sup>1</sup> to decide whether the application to change conditions of consent should be publicly notified, limited notified or non-notified.

The BOPRC and WDC, acting under section 34A of the RMA, have also each appointed Rob van Voorthuysen to hear and decide the application to change conditions of consent.

The letters of appointment are attached to this report as Annexure 1.

## 3 Background

The application to change conditions of consent relates to a proposed new method for removing dioxin contaminated sediment from the Kopeopeo Canal, transporting that sediment to three containment sites, dewatering the sediment and discharging stormwater and filtrate from the containment sites back into the canal. The new method utilises a suction dredge to remove the sediment from the canal and pipe it as slurry to three containment sites (instead of using trucks as originally proposed). To enable the dredge to function effectively the water level in the canal may be maintained at the normal high tide level. At the containment sites the slurry will be dosed with a flocculent (and possibly a coagulant) and lime and thereafter pumped into geotextile tubes for dewatering. Water and filtrate draining from the sealed containment sites will be collected and discharged back into the canal (or re-applied to the containment sites). The sediment remaining in the geotextile tubes will be bio-remediated through the addition of fungal and bacteria cultures and the planting of trees (phytoremediation).

The new methodology has been trialled on a small scale within the canal. Water quality monitoring showed that turbidity levels decrease relatively quickly following dredging, usually within a matter of hours. The community and other interested parties and experts were invited to attend and observe the trial and its results have been published.

Under the existing consents, dioxin contaminated sediment was to be removed from the dewatered canal using excavators and loaded onto trucks for transport to the containment sites. The truck movements were identified as a significant potential source of dust

<sup>&</sup>lt;sup>1</sup> Commissioner van Voorthuysen is an experienced independent commissioner, having sat on over 245 hearings throughout New Zealand since 1998. He has qualifications in natural resources engineering and public policy and was a full member of the New Zealand Planning Institute (NZPI) from 1998 to 2016.

emissions to air, and there were also concerns about the potential for releases of dioxins as a result of spillages of contaminated material and dust generated at the containment sites, especially during sediment handling and mixing.

A Notification Assessment recommendation report<sup>2</sup> (attached as Annexure 3) has been helpfully prepared by an independent consultant to the BOPRC (Paula Golsby). Included as part of that report was a suite of changed consent conditions as now agreed between Ms Golsby and the applicant. Rather than co-signing Ms Golsby's assessment report I have instead produced this decision report so as to provide a fuller record of my own assessment of the relevant RMA section 95A to 95G matters. However, I agree with and adopt Ms Golsby's comparative assessment of effects associated with the proposed new canal remediation methodology, as set out in sections 5.1 to 5.13 of her report.<sup>3</sup>

I do not summarise the application or the background to it in any detail as Ms Golsby's report does that more than adequately and so there is no need for me to repeat that information here.<sup>4</sup> In that regard I refer readers of this report to Sections 2 and 3 of Ms Golsby's report and Table 1 on her pages 7 and 8 in particular.

I record that in the weeks prior to receiving Ms Golsby's assessment report I independently read a large volume of material associated with the application to change conditions of consent. That included the application document and its appendices, the BOPRC's section 92 request for further information, the applicant's section 92 response and its appendices, and a range of technical review reports commissioned by Ms Golsby. The documents that I read are listed in Annexure 2 to this report.

## 4 Notification Considerations

The application is made under section 127(1) of the RMA. Under section 127(3)(a) the application is to be treated as if it were an application for a resource consent for a discretionary activity and sections 88 to 121 of the RMA, with all necessary modifications, apply to it.

With regard to notification, the relevant statutory provisions are sections 95A to 95E of the RMA. In essence, a two stage process is required. Firstly with regard to public notification and secondly with regard to the limited notification of any affected persons.

#### 5 Public Notification.

The relevant tests are set out in sections 95A, 95C and 95D of the RMA.

Under section 95A(1) the councils may, in their discretion, decide whether to publicly notify the application.

Section 95A(2) sets out three situations in which the application must be publicly notified. The first of these is if the activity will have or is likely to have adverse effects on the environment that are more than minor (section 95A(2)(a)). I return to that particular matter later. The second is if the applicant has requested that the application be publicly notified (section 95A(2)(b)). That is not the case here. The third situation is if a rule or national environmental requires public notification (section 95A(2)(c)). That is also not the case here.

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<sup>&</sup>lt;sup>2</sup> Kopeopeo Canal Remediation Project - Variation Applications to Bay of Plenty Regional Council & Whakatane District Council Notification Assessment (Sections 95A to 95F Resource Management Act 1991), Paula Golsby, 16 August 2016.

<sup>&</sup>lt;sup>3</sup> Golsby Assessment Report, pages 10 to 30.

<sup>&</sup>lt;sup>4</sup> Section 2 – Background to Existing Resource Consents, Section 3 – Proposed Variations, pages 2 to 8.

Section 95A(3) precludes public notification if a rule or national environmental standard precludes public notification. That is not the case here.

Section 95A(4) enables the councils to publicly notify the application if they decide that special circumstances exist in relation to the application. I address that specific matter in section 7 of this report.

Section 95C sets out further situations in which public notification must occur.

Under section 95C(2) the application must be publicly notified if the councils requested further information from the applicant under section 92(1), but the applicant either did not provide the information before the deadline concerned or refused to provide the information. A request for further information was made under section 92(1). The applicant did not refuse to provide the information requested and I understand that the applicant provided the requested information within the deadlines specified.<sup>5</sup>

Under section 95C(3) the application must be publicly notified if the councils notified the applicant under section 92(2)(b) that they wanted to commission a report, but the applicant either did not respond before the deadline concerned or refused to agree to the commissioning of the report. I understand that those matters are not relevant in this case.<sup>6</sup>

Consequently, public notification is not required under section 95C.

The remaining consideration is that the BOPRC and WDC <u>must</u> publicly notify the application if the activity will have or is likely to have adverse effects on the environment that are more than minor (section 95A(2)(a)).

In this case, the consideration of adverse effects on the environment (namely whether they are more than minor), and the effects on any person for limited notification purposes, is limited to the effects of the proposed change to the original conditions of consent (section 127(3)). Consequently I have only considered the potential adverse effects of the proposed new methodology against a background environment that entails the existing consented methodology.

In other words, I have considered:

- whether the proposed new methodology increases by more than a minor degree the scale or intensity of adverse effects that were anticipated to arise from the existing consented methodology; and
- if the proposed new methodology will give rise to more than minor adverse effects that would not have arisen using the existing consented methodology.

I understand my approach to be consistent with case law<sup>7</sup> as the Courts have stated:

The appropriate comparison is between any adverse effects which there may have been from the activity in its original form and any adverse effects which would arise from the proposal in its varied form.

I note that 'minor' in this context is a comparative word meaning lesser or comparatively small in size or importance, but not as low as *de minimis.*<sup>8</sup> I also note that the proposed consent conditions are relevant. Namely, if there are potential adverse effects that could be

<sup>7</sup> Application document, Appendix 4, paragraph 10.6.

<sup>&</sup>lt;sup>5</sup> Golsby Assessment Report, page 31.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid, paragraph 10.8.

more than minor, but those effects are able to be avoided, remedied or mitigated to a level which is no more than minor through suitable conditions of consent, then that alone would not occasion public notification under section 95A(2)(a).

When making an assessment under section 95A(2)(a) the matters set out in section 95D must be considered. Section 95D lists situations in which adverse effects must be disregarded.

Under section 95D(a)(i) and (ii) any effects on persons who own or occupy the land in, on, or over which the activity will occur; or any land adjacent to that land must be must disregarded. I have accordingly disregarded any such effects.

There is no rule or national environmental standard that permits an activity with the effects associated with the remediation of the Kopeopeo Canal (section 95D(b)). The application is not for a controlled or restricted discretionary activity (section 95D(c)). There is no trade competition and there are no effects of trade competition (section 95D(d)). Those three sections do not therefore result in effects being disregarded.

No written approvals were provided as part of the application documentation (section 95D(e)).9

Turning now to potentially more than minor adverse effects that might arise from the application I note:

## **Ecological and water quality matters**

- a) The proposed new methodology removes the need for earth bunds to be constructed within the canal and reduces the works required to provide access for trucks to transport sediment from the canal to the containment sites.<sup>10</sup>
- b) During a flood event dredging activities will cease and dredging equipment will be removed from the canal. If flood waters flow through the remediation zone, then the silt curtain structures at each end of the dredging zone will be removed. That is not expected to result in a significant risk of resuspended sediment and the potential for sediment to be re-suspended is substantially less than under the existing consented method which involves a 400m long section of dewatered canal being disturbed by earthworks machinery.<sup>11</sup>
- c) There will now be no need to construct access roads through Whakatane Estuary saltmarsh areas or to drain those areas.
- d) To minimise the duration of high water levels in the saltmarsh it is now proposed to install a control structure near the Keepa Road bridge and enable natural tidal fluctuations to continue within the saltmarsh until such time as dredging is undertaken in that zone.<sup>12</sup>
- e) Under the proposed new methodology adverse effects on saltmarsh habitats will depend on the depth of inundation and the length of submergence. There may be some loss of low-growing herbaceous species, but the main saltmarsh species (sea rush) is unlikely to be affected in the long term.<sup>13</sup>
- f) To mitigate these potential adverse effects water levels within the saltmarsh will be no higher than 0.2m above Moturiki Datum, tidal fluctuations within the saltmarsh will resume as soon as possible following the completion of dredging, and ongoing

<sup>12</sup> Ibid, section 5.2.3, page 16.

<sup>&</sup>lt;sup>9</sup> Application document, Appendices 1-1 and 1-2.

<sup>&</sup>lt;sup>10</sup> Golsby Assessment Report, section 5.2.2, page 5.

<sup>&</sup>lt;sup>11</sup> Ibid, section 5.2.2, page 13.

<sup>&</sup>lt;sup>13</sup> Application document, Appendix 9, Table 1, page 2 and section 11, page 18.

- monitoring of the saltmarsh vegetation will be occur with revegetation being undertaken if required.1
- g) If the remediation works occur outside of the breeding season it is expected that birds that would otherwise use the project area for socialising and feeding will use nearby unaffected habitats.15
- h) Provided that best practice techniques are utilised during the dredging operation, it is expected that the proposed new method of canal dredging and sediment removal will have no adverse effects on terrestrial habitats and only minor adverse effects on estuarine habitats at the site.16
- i) Changes to consented remediation methodologies and proposed consent condition changes, in particular the suction dredging and piping of sediments, rather than excavation from the side of the canal and trucking of sediments, will provide a better ecological outcome.<sup>17</sup>
- Ecological mitigation opportunities are available on-site, including weed control and replanting with indigenous species, although this is may not be required. 18
- k) While extracting the canal sediment as a slurry will require a large volume of water to be taken from the canal, the bulk of that water will be treated and returned to the canal. However, unlike the existing consented methodology, water will not be pumped from the canal and discharged outside of the works zone and there will be no water treatment pond or direct discharge of treated water to the Whakatane River. 19
- The proposed new proposed methodology has a controlled discharge from the sealed containment sites with an option to recycle the water back through a treatment system at each site. The discharge of filtrate and stormwater to the canal has the potential for new water quality and aquatic ecology effects that were not assessed under the original application. However, as dioxin is hydrophobic and binds tightly to fine sediment particles continuous monitoring of turbidity can be used as an indicator of the dioxin content of the filtrate. A system with a turbidity controlled pump can be used to send filtrate to the canal when water in the sump is below a turbidity threshold and to hold or recirculate the water when it is above a threshold.<sup>20</sup> This will avoid those potential new effects.
- m) Appropriate discharge standards (turbidity thresholds) are able to be placed on the filtrate and stormwater discharge from the containment sites using either a proxy based on TSS of 150mg/L or a proxy based on dioxins of 11pg/L. The dioxin standard of 11pg/L is the Grimwood Dobbs (1995) guideline value 'no observed effect concentration' (NOEC) and is conservatively protective of both ecological health and human health.<sup>21</sup>
- n) Independent technical review has confirmed the appropriateness of the applicant's findings on ecological and water quality matters.<sup>22</sup>

## **Groundwater matters**

o) With regard to groundwater, the containment cells will now be lined with a HDPE liner to collect filtrate and stormwater within the containment cells. That removes both contaminant migration pathways associated with the existing consented methodology, namely the movement of dissolved dioxins in groundwater and the movement of dioxins

<sup>16</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Golsby Assessment Report, section 5.2.3, page 16.

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Golsby Assessment Report, section 3.1, page 5 and section 5.2.2, page 12.

<sup>&</sup>lt;sup>20</sup> Application document, Appendix 11, section 6, page 8.

<sup>&</sup>lt;sup>21</sup> Memorandum from River Lake Ltd (Keith Hamill) to Paula Golsby titled "Variation for Kopeopeo Canal Remediation Project (RC67173): review of AEE", 5 May 2016. <sup>22</sup> Ibid.

- by colloidal transport in groundwater. Consequently, the risk of groundwater contamination has reduced and is now considered highly unlikely.<sup>23</sup>
- p) Technical review has confirmed the appropriateness of the applicant's findings on groundwater matters.<sup>24</sup>

## Air quality matters

- q) With regard to air quality, the removal and transfer processes for contaminated sediments are now proposed to be fully enclosed in a pipeline. Dioxin contaminated sediments will be transferred into geotextile bags located within the containment sites. This will result in a significant reduction in the potential for discharges to air of both contaminated and uncontaminated dust. With the removal of heavy vehicle traffic for sediment transport and transfer, a significant potential source of contamination will be eliminated.<sup>25</sup>
- r) Independent technical review has confirmed that the dust emissions from the proposed new methodology to be employed at the containment sites should be no greater than those currently allowed under the existing consent, while dust emissions from the sediment transport phase should be much lower. In addition, dust releases from the geotextile tubes while wood chips are being added can be minimised by ensuring that the work is done under low wind conditions.<sup>26</sup>
- s) The applicant has agreed to adhere to existing air quality monitoring requirements in the form of dioxin in air samples at a site adjacent to one of the containment areas during the early stages of geotextile tube filling, with further air samples being taken if and when the tubes have to be cut open to allow the dewatered sediment to be mixed with additional wood chips in preparation for bioremediation. This can be reflected in consent conditions.
- t) The applicant has agreed to undertake instrumental dust monitoring in the vicinity of one of the containment sites during the first four weeks of construction. This can also be reflected in consent conditions.

## Flooding matters

- u) The applicant proposes a flood management system and has submitted a 'draft' flood management plan that is appropriate for the proposed new methodology and that, if adhered to, would ensure that all flood and drainage related effects are fully addressed to at least the same degree as the dry excavation method already consented.<sup>27</sup>
- v) One potentially more than minor new adverse effect relates to day-to-day drainage and flood-clearing of several low lying gravity drained side-catchments adjacent to the canal. However, the applicant has devised a method for fully avoiding this potential adverse effect and that can be reflected in consent conditions.<sup>28</sup>
- w) Independent technical review has confirmed the appropriateness of the applicant's findings on flooding matters.<sup>29</sup>

## **Geotechnical matters**

<sup>25</sup> Application document, Appendix 14, Executive Summary, page 1

28 Ibid.

 $<sup>^{23}</sup>$  Application document, Appendix 13, Executive Summary, page 1.

<sup>&</sup>lt;sup>24</sup> Janine Barber, Senior Scientist BOPRC.

Memorandum from Graham Environmental Consulting Ltd (Bruce Graham) to Paula Golsby titled "Kopeopeo Canal Remediation Project: Variation to Resource Consent RC67173", 30 June 2016.

Application document, Appendix 7, Executive Summary, pages 1 and 2.

<sup>&</sup>lt;sup>29</sup> Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal", 3 May 2016 (flooding, land drainage and erosion effects). Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal-On-Site Flood Storage Volumes", 15 July 2016.

- x) The use of geotextile bags and an impermeable HDPE liner at the sediment containment sites will increase the importance of understanding potential settlements compared to the existing consented design and may change the displacement patterns due to seismic loading, but that these issues can be addressed by analysis and design and be reflected in consent conditions.<sup>30</sup>
- y) Independent technical review has confirmed the appropriateness of the applicant's findings on geotechnical matters.<sup>31</sup>

#### Noise matters

- z) The proposed new methodology will significantly reduce the use of large diesel powered machinery and trucks, lowering noise emissions by 5 to 10 dBA. However, no changes are proposed to the noise limits specified in the existing consent conditions and so the existing consented noise limits should be achieved with a greater margin of safety.<sup>32</sup>
- aa) Noise from the equipment and activities associated with the proposed new methodology will comply with construction noise limits at the nearest rural dwellings and at commercial and industrial properties along the length of the canal. The proposed new methodology should reduce noise levels for neighbouring residents and any adverse noise effects will be less than minor.<sup>33</sup>
- bb) Technical review has confirmed the appropriateness of continuing to require compliance with NZS 6803:1999 Acoustic Construction Noise as a condition of consent.<sup>34</sup>

#### **Traffic matters**

- cc) The proposed new methodology eliminates the large majority of truck movements. Road closures are avoided by running pipes through culverts and under bridges. While a small number of heavy vehicles will be required to access the sites to set up and move heavy equipment, it is likely that these infrequent truck movements will not require traffic management and they are likely to have a negligible effect on the surrounding road network for the duration of the works.<sup>35</sup>
- dd) The proposed new methodology reduces risks associated with heavy vehicles such as sediment spillage and dust generation and is not expected to exacerbate any safety or road operation issues.<sup>36</sup>

## Visual amenity matters

ee) The proposed changes to the internal layout of the containment sites will not materially alter effects on the visual amenity of the surrounding rural environment. The effects resulting from the earthworks activities along the canal will be similar, although there will be less modification of canal banks and temporary road construction activities. Consequently, the proposed new methodology will not result in any additional adverse visual effects beyond those which are already provided for under the existing consents.<sup>37</sup>

#### **Productive soil matters**

ff) The three containment sites will not increase in area under the proposed new methodology and there is actually the potential for a reduction in their footprint. Consequently, any adverse effects on high quality soils will be similar or less than those occurring under the existing consented methodology.<sup>38</sup>

<sup>&</sup>lt;sup>30</sup> Application document, Appendix 6, Section 4, page 4.

Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal", 22 April 2016.

<sup>&</sup>lt;sup>32</sup> Golsby Assessment Report, section 5.6, page 23.

Application document, Appendix 12, Section 3, page 7.

<sup>&</sup>lt;sup>34</sup> Lisa Millican, Environmental Health Officer, WDC.

<sup>&</sup>lt;sup>35</sup> Application document, Appendix 10, Executive Summary, page 1.

<sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Golsby Assessment Report, section 5.9, page 26.

<sup>38</sup> Ibid, section 5.11, page 26.

#### **Human health matters**

gg) Taking into account all of the above matters, the proposed new methodology will result in less potential for adverse effects on human health than the existing consented methodology. Previous conditions of consent imposed to ensure the project is managed in a manner that protects people and the environment from effects associated with dioxin contamination have been adapted (where necessary) and are proposed as part of the change of consent conditions application.<sup>39</sup>

In her Assessment Report Ms Golsby undertook a comprehensive comparative analysis of the effects of the proposed new methodology compared to the existing consented methodology and she concluded that the application need not be publicly notified.

Having had regard to the relevant statutory matters and the information contained in the documents listed in Annexure 2 to this report (as summarised in (a) to (gg) above) I have also concluded that the application need not be publicly notified under section 95A(2)(a) because:

- the proposed new methodology will not increase by more than a minor degree the scale or intensity of adverse effects that were anticipated to arise from the existing consented methodology. In fact, with regard to most if not all of categories of potential adverse effect listed above, the scale or intensity of adverse effects will be reduced by the proposed new methodology; and
- where the proposed new methodology might give rise to more than minor adverse effects that would not have arisen using the existing consented methodology, those potential adverse effects are able to be avoided, remedied or mitigated to a level where they are no more than minor by the imposition of consent conditions.

## 6 Affected Persons

Under section 95B(1) of the RMA, if the application is not publicly notified, it is necessary to decide (under sections 95E to 95G) if there is any affected person, affected protected customary rights group, or affected customary marine title group in relation to the activity. Limited notification of the application to any affected person must occur unless a rule or national environmental standard precludes limited notification of the application (section 95B(2).

I note that under section 127(4) of the RMA, for the purposes of determining who is adversely affected by the application, the decision-maker must consider, in particular, every person who made a submission on the original application and who may be affected by the change. I return to that matter later, however I note that a key purpose of the application is to reduce the effects that were of particular concern to submitters who opposed the original application, in particular, dioxin distribution through dust or groundwater.<sup>41</sup>

Under section 95E(1) the decision-maker must decide that a person is an affected person in relation to the proposed activity (which in this case is the proposed new canal dredging methodology) if the activity's adverse effects on a person are minor or more than minor (but are not less than minor).

The High Court<sup>42</sup> has stated:

<sup>&</sup>lt;sup>39</sup> Ibid, section 5.12, page 30.

<sup>&</sup>lt;sup>40</sup> I understand that there are no customary rights groups or affected customary marine title groups in this case. Golsby Assessment Report, page 35.

<sup>&</sup>lt;sup>41</sup> Application document, Appendix 4, paragraph 14.3, page 5.

The statutory tests of "minor", "more than minor", and "less than minor" can only be informed by context. One is dealing with degrees of smallness. Where the line might be drawn between the three categories might not be easily determined. "Less than minor", however, is the only category which relieves a consent authority of its s 95E(1) obligation to notify.

Section 95E(2) sets out matters that must be considered when deciding if someone is an affected person. In that regard there is no rule or national environmental standard that permits an activity with the effects associated with the remediation of the Kopeopeo Canal (section 95E(2)(a)). The application is not for controlled or restricted discretionary activity (section 95E(2)(b)).

Ngati Awa has a Statutory Acknowledgement for the Whakatane River (section 95E(2)(c)). However, Te Runanga o Ngati Awa has provided written support for the proposed new methodology.<sup>43</sup>

Consequently, the section 95E(2) matters are not determinative in this case.

Under section 95E(3)(a) the decision-maker must decide that a person is not an affected person if the person has given written approval to the activity. No written approvals were provided as part of the application documentation.<sup>44</sup>

The original application was publicly notified in April 2013 and 139 submissions were received (69 submissions in support, 66 in opposition, and 4 neutral submissions). In terms of section 127(4) of the RMA and the requirement to consider every person who made a submission on the original application and who may be affected by the change, the issues of concern to the original submitters were helpfully summarised in the application document. I have considered those issues when assessing if the proposed new methodology would affect any of the original submitters. For each issue of concern, I have concluded that the new methodology will not adversely affect the original submitters.

In her Assessment Report Ms Golsby stated:46

The summary of the submissions prepared for the original resource consents has been reviewed and consideration has been given to every person who made a submission on the applications. The Applicant also provided their own review of the effects of the proposed variation on the submitters to the original applications (attached to the Applicant's response to the s92 request for further information). Having regard to my conclusions regarding the adverse effects of the proposed variations (as set out in section 5 of this report), I consider that no person, including those that made submissions on the original application, will be adversely affected by the changes sought to the resource consents.

Ms Golsby went on to conclude that the application need not be limited notified.

Having had regard to the relevant statutory matters and the information contained in the documents listed in Annexure 2 to this report I have also concluded that the application need not be limited notified under section 95B(2) because:

the potential adverse effects arising from the application, taking into account consent conditions that have been agreed between the applicant and the councils, are almost universally (except in relation to flooding as discussed below) smaller in scale and intensity than the corresponding effects that would arise from the existing consented

<sup>44</sup> Application document, section 6.2, page 31.

<sup>&</sup>lt;sup>43</sup> Section 92 Response, Appendix 6.

<sup>&</sup>lt;sup>45</sup> Section 6.2 Affected Persons, pages 31 to 33.

<sup>&</sup>lt;sup>46</sup> Golsby Assessment Report, page 34.

activity. I consider therefore that there are no adverse effects on any person arising from the application that exceed the section 95E(1) 'less than minor' threshold;

- where elements of the proposed new methodology relate to issues that were of concern to submitters on the original application (such as human exposure to dioxin laden dust, multiple truck movements on public roads, groundwater contamination below the containment sites allowing dioxin to enter the food chain), in each case those effects are either avoided by the proposed new methodology or the scale and intensity of those effects is less than what is allowed by the existing consents;
- while there is the potential for some landowners in proximity to the canal to be affected differently by flooding compared to the existing consented methodology, the applicant's expert flooding assessment demonstrates that these potential effects can be remedied through the use of temporary pumping such that they will be less than minor on any person. The applicant's flooding assessment has been endorsed by independent technical review; and
- Te Runanga o Ngati Awa has provided support for the proposal to authorise an alternative methodology for the excavation of contaminated sediment from the Kopeopeo Canal. <sup>47</sup> In that circumstance, limited notification on Ngati Awa is not considered necessary.

## 7 Special Circumstances

I note that case law has established that, to be special, the circumstances would need to be "unusual and exceptional, but may be less than extraordinary or unique". It is also well settled that concern expressed by members of the community about a project is not, of itself, a special circumstance. <sup>48</sup> In this case, the circumstances must relate to the proposed new methodology and not to the existing consented methodology.

The application involves a community project and is centred on technical issues which were thoroughly addressed in the technical reports submitted with the application. Those technical issues are not unusual or exceptional. The applicant's technical reports were subject to rigorous technical review by qualified experts commissioned by Ms Golsby. The public had direct input into the application through community representatives on the Community Liaison Group established under the existing consent. In this case I consider that the public is unlikely to be able to add anything to the technical issues which have already been the subject of expert assessment and review.

Further, the proposed new methodology does not result in any adverse effects (relative to the existing consented baseline) which are any more than minor. Most if not all of the issues that were of concern to submitters on the original application (such as the possible contamination of the environment with dioxin laden dust associated with the trucking of the dredge spoil to the containment sites) are nullified by the proposed new methodology.

Having read the documentation listed in Annexure 2 to this report and having read Ms Golsby's Assessment Report, I am satisfied that no special circumstances exist in relation to the application which would lead me to decide that the application should be publicly notified under Section 95A(4) of the RMA.

<sup>&</sup>lt;sup>47</sup> Section 92 Response, Appendix 6.

<sup>&</sup>lt;sup>48</sup> Application document, Appendix 4, paragraph 11.2.

## 8 Determination

I determine that the Bay of Plenty Regional Council's application to vary the consent conditions for the Kopeopeo Canal Remediation Project (existing consents RC67173 and WDC LL-2012-808 and change of consent condition applications CH16-0147 and LV-2016-8085-01):

- a) need not be the subject of public notification under section 95A of the RMA;
- b) need not be the subject of limited notification to affected persons under section 95B of the RMA; and
- c) should accordingly be processed on a non-notified basis.

Robert van Voorthuysen Independent Commissioner

22 August 2016

Reuben Fraser Consents Manager

22 August 2016

## **Annexure 1: BOPRC and WDC Letters of Appointment**

Bay of Plenty REGIONAL COUNCIL

20 May 2016

Rob van Voorthuysen

Dear Rob

Telephone: 0800 884 880
Facsimile: 0800 884 882
Email: info@boprc.govt.nz
Website: www.boprc.govt.nz

Pollution Hotline: 0800 884 883 International: +64 7 922 3390

## Appointment as commissioner

Further to our communications with you regarding your availability to act as Commissioner under Section 34A(1) of the Resource Management Act 1991, this letter now sets out the terms and conditions of your appointment.

## Agreement

- 1 The Council appoints you as Commissioner under s.34(A)(1) of the Resource Management Act (**Act**) to consider/hear and provide written decisions on a variation to the consent conditions associated with the remediation of the Kopeopeo Canal contamination (application no RM16 009). The decisions may include the determination of notification and whether to grant the variation.
- 2 You agree to perform the Duties and do the other things as set out in this Engagement Letter and the Engagement Terms.
- 3 The Council agrees to pay your Fees and to do the other things set out in this Engagement Letter and the Engagement Terms.
- 4 We agree as set out in this Engagement Letter and the Engagement Terms.
- 5 The Engagement Documents comprise:
  - this Engagement Letter
  - the Engagement Terms (attached to this letter)
  - Delegation of powers to Independent Commissioners (attached to this letter)

If this is acceptable to you, please sign and return the acceptance on the duplicate copy of this Engagement Letter to the Council as soon as possible.

Please note specifically clause 6 of the Engagement Terms which provides for recovery of discounts on administrative charges imposed on the Council under the Resource Management (Discount on Administrative Charges) Regulations 2010 arising from your delay or failure.

Regards

Reuben Fraser

Consents Manager

I accept the terms and conditions of my appointment as set out above.

Signed by Rob van Voorthuysen



#### **Bay of Plenty Regional Council Engagement Terms**

#### Duties

1.1 The Commissioner shall perform the Duties from the date of appointment until completion of the Duties or earlier termination of the appointment and delegation, in accordance with all applicable professional standards, all statutory and regulatory requirements and with due care and skill.

#### 2. Delegation

2.1 The Council hereby delegates pursuant to s.34(A)(1) of the Resource Management Act (Act) the power, duties and authority to the Commissioner reasonably required to perform the Duties.

#### 3. Council instructions

The Commissioner shall perform the Duties in accordance with all reasonable Council instructions and in accordance with the obligations of the Council under the Act.

#### 4. Conflicts

4.1 The Commissioner must avoid all actual or potential conflicts of interest whether direct or indirect and must disclose in writing to Council any such conflict of interest as soon as it arises.

#### 5. Payment

- 5.1 The Commissioner shall submit a claim for payment on a calendar monthly basis.
- 5.2 The Council shall pay the Fees to the Commissioner by the 20<sup>th</sup> of the following month.
- 5.3 Subject to receipt of a valid tax invoice, the Council shall pay GST on all amounts payable under this agreement that is a taxable supply under the GST Act. GST shall be payable on the date for payment of the corresponding supply.
- 5.4 The Council will reimburse the Commissioner all reasonable expenses incurred by the Commissioner in the performance of the Duties

#### 6. Discounts on Administrative Charges

6.1 The Commissioner shall be liable for the amount of any discount of Administrative Charges payable or credited by the Council to any applicant under regulations 6, 7, 8 or 9 or any local authority under regulation 10 of the Regulations, where the discount arises as the result (direct or consequential) of any delay caused by the Commissioner in failing to process the relevant application or request or a joint hearing within the time frames referred to in the Regulations. Where the Commissioner is not responsible for the entire delay but has contributed to the delay, the Commission shall be liable for the Administrative Charges discount to the extent caused by the Commissioner.

## 7. Indemnity

7.1 The Commissioner shall be liable for and shall indemnify the Council in respect of any damages, costs, loss or expenses incurred by the Council, including but not limited to costs incurred under clause 6 or as a direct result of any other negligent or fraudulent error or omission on the Commissioner's part in the performance of the Duties.

#### 8. Termination

- 8.1 The Council may terminate the Commissioner's appointment and revoke the delegation of Duties for any reason by notice to the Commissioner. The Commissioner shall cease providing the Services upon receipt of the notice of termination.
- 8.2 In the event the Commissioner's appointment is terminated and delegation revoked, the Commissioner shall provide all information relating to the Duties performed by the Commissioner and held by the Commissioner to the Council.

#### 9. Disputes

9.1 In the event of a dispute the parties shall actively and openly endeavour to amicably settle such dispute themselves, with a view to achieving prompt resolution. If the parties fail to amicably agree any dispute within a reasonable period, either party may refer the dispute to mediation or arbitration provided that any mediation shall be carried out by one mediator agreed to between the parties and if they cannot agree then as appointed by the Executive Director of LEADR and any arbitration shall be carried out in accordance with the provisions of the Arbitration Act 1996 other than appointment of a single arbitrator who shall be agreed upon by the parties and if they cannot agree then appointed by the Executive Director of LEADR. Any mediation or arbitration shall be in Blenheim.

#### 10. No Employment Contract

10.1 The parties expressly acknowledge that this is not a contract of employment.

#### 11. Amendment

11.1 The agreement cannot be amended, modified or varied or supplemented except in writing signed by duly authorised representatives of the parties.

#### 12. Severance

12.1 The illegality, invalidity or unenforceability of any provision in this agreement will not affect the legality, validity or enforceability of any other provisions.

#### 13. Waiver

- 13.1 No right under this agreement shall be deemed to be waived except by notice in writing signed by the party providing the waiver.
- 13.2 A waiver by either party will not prejudice its rights in respect of any subsequent breach of this agreement by the other party.
- 13.3 Any failure by either party to enforce any clause of this agreement, or any forbearance, delay or indulgence granted by a party will not be construed as a waiver of that party's rights under this agreement.

#### 14. Set off

14.1 The Council may and is hereby authorised by the Commissioner to deduct any moneys payable by the Commissioner to the Council from any moneys payable by the Council to the Commissioner under this agreement.

#### 15. No Assignment

15.1 The appointment of the Commissioner under this agreement is personal to the Commissioner. The Commissioner may not assign his or her rights under this agreement.

#### 16. Governing Law and Jurisdiction

16.1 This agreement will be governed by and construed according to the law of New Zealand.

#### 17. Costs

17.1 Each party shall bear its own costs incurred in the preparation and execution of this agreement.

#### 18. Notices

18.1 All notices, documents, requests, demands or other communication to be given for the purposes of this agreement must be in writing and may be served personally, sent by facsimile or sent by registered mail to the last known address for notice known to each party.

## 19. Entire Agreement

19.1 This agreement constitutes the entire agreement between the parties and supersedes all prior correspondence, understandings, representations or warranties or agreements whether written or oral

## 20. Definitions

20.1 In this agreement:

**Administrative Charge** means an administrative charge as defined in the Regulations.

**Duties** means the powers, duties and authority to be exercised by the Commissioner under this agreement.

**Engagement Documents** means the engagement letter, the engagement terms and the specification sheet.

**Engagement Letter** means the engagement letter to which these engagement terms are attached.

**Engagement Terms** means these engagement terms.

Fees means the Fees set out in the Engagement Letter and calculated in accordance with this agreement.

 $\ensuremath{\mathsf{GST}}$  means goods and services tax chargeable under the GST Act.

GST Act means the Goods and Services Tax Act 1985

**Regulations** mean the Resource Management (Discount on Administrative Charges) Regulations 2010.

 $\mbox{\bf Working Day}$  means any day other than a Saturday, Sunday or a public holiday in the Bay of Plenty.



## **MEMORANDUM**

TO:

Chief Executive

SUBJECT:

APPOINTMENT OF COMMISSIONER FROM POOL OF COUNCIL APPOINTED

**COMMISIONERS** 

DATE:

27 May 2016

- An application for land use resource consent has been received by the planning department of the Whakatane District Council. The application is seeking a variation to a previous consent for the remediation of 5.1 km of the Kopeopeo Canal.
- Consents are required from both the Bay of Plenty Regional Council and Whakatane District
  Council. It is expected that a joint hearing will be held. It is therefore appropriate and efficient
  that the two consent agencies appoint a Commissioner who can make decisions for the two
  agencies.
- 3. The key issues in regards to the consents are technical in nature. Therefore a Commissioner with expertise, experience in these matters is considered to be most suitable. Discussions with officers of the Bay of Plenty Regional Council, in its capacity as a consent agency, have resulted in the selection of a Commissioner with the breadth of knowledge and experience required. This is Rob van Voorthuysen who has already been appointed by the Regional Council. Rob has 31 years' experience in environmental and resource management, policy analysis and senior corporate management in both the central and local government sectors. Prior to becoming a consultant he was on the staff of the Hawke's Bay Regional Council, Environment Waikato, the Department of Conservation and the Ministry of Works and Development. He holds a current certificate from the Ministry for the Environment Program to act as a Commissioner. In addition he holds a chairman certificate.
- 4. In accordance with the resolutions passed by Council in regards to appointment of a Commissioner from the Council appointed pool, I ask that you confirm the appointment of Rob van Voorthuysen as Commissioner for the purpose of making decisions on this land use consent application.

The formal resolution follows.

Thank you.

John Mandemaker SENIOR PLANNER

A1090152

## **RESOLUTION:**

THAT in accordance with Schedule G of the Delegations Register, I Martin David Grenfell, Chief Executive of the Whakatane District Council, hereby confirm the appointment of Rob van Voorthuysen to make decisions under Section 95 and 104 of the Resource Management Act 1991, on behalf of the Whakatane District Council for land use consent application LV-2012-8085-01 by the Bay of Plenty Regional Council.

Martin David Grenfell

CHIEF EXECUTIVE

Dated:

## **Annexure 2: Documents Read by the Commissioner**

- Kopeopeo Canal Remediation Project: Application to Change Resource Consent Conditions. Document prepared by Harrison Grierson Consultants on behalf of the Bay of Plenty Regional Council, Whakatane, April 2016
- BOPRC Section 127 Application Form (Appendix 1-1 of the application document)
- WDC Section 127 Application Form (Appendix 1-2 of the application document)
- BOPRC Consent Condition Amendments s127 (Appendix 2-1 of the application document)
- WDC Consent Condition Amendments (Appendix 2-2 of the application document)
- Kopeopeo Canal Area to be Remediated and Containment Sites Gis-487835 (Appendix 3 of the application document)
- Cooney Lees Morgan (April 2016) Kopeopeo Canal Remediation Project Variation Application – Notification (Legal Opinion (Appendix 4of the application document)
- Conceptual Plan of CS-1 (Appendix 5-1 of the application document)
- Conceptual Plan of CS-2 (Appendix 5-2 of the application document)
- Conceptual Plan of CS-3 (Appendix 5-3 of the application document)
- Ice Geo & Civil (2016). Kopeopeo Canal Remediation: Containment Sites –
   Geotechnical Considerations (Appendix 6 of the application document)
- Peter West (April 2016). Kopeopeo East Canal Restoration Project; Flooding and Drainage Management Plan for Wet Dredging Method (Appendix 7 of the application document)
- Dr Chris Anderson and Dr Joanne Kelly (February 2016). Support of the application for variation to the resource consent to remove the contaminated sediment from the Kopeopeo Canal (Appendix 8 of the application document)
- Wildland Consultants (March 2016). Potential ecological effects of proposed changes to the resource consent for remediation of the Kopeopeo Canal (Appendix 9 of the application document)
- Jacobs (March 2016). Kopeopeo Canal Remediation Traffic Impact Assessment (Appendix 10 of the application document)
- Opus (April 2016). Kopeopeo Canal Remediation Project. Discharge Water Quality from the Kopeopeo Canal Containment (Appendix 11 of the application document)
- Design Acoustics (January 2016). Proposed Kopeopeo Canal Remediation Construction Noise from Revised Remediation Method (Appendix 12 of the application document)
- Jacobs (2016). Kopeopeo Canal Remediation Bay of Plenty Regional Council Revised Groundwater Assessment (Appendix 13 of the application document)
- Jacobs (April 2016). Kopeopeo Canal Remediation Project: Revised Air Quality Assessment (Appendix 14 of the application document)
- Feedback Summary (Appendix 15-1 of the application document)
- Bay of Plenty District health Board (February 2016). Feedback to Kopeopeo Canal Remediation Project – proposal for variation to consent 67173 and LL-2012-8085-00 conditions (Appendix 15-2 of the application document)
- Section 92 Request (May 2016). Kopeopeo Canal Remediation project Applications to Bay of Plenty Regional Council and Whakatane District Council to Vary Resource

- Consents RC 67173 (BOPRC) and LL-2012-8085 (WDC) Request for Further Information (s92 RMA).
- Section 92 Response (June 2016). Kopeopeo Canal Remediation project Application to Vary the Conditions of Resource Consents RC 67173 and LL-2012-8085
- BOPRC Consent Condition Amendments (Appendix 1 to the s92 Response)
- Peter West (June 2016). Kopeopeo East Canal Restoration Project On-site Flood Storage Volumes (Appendix 2 to the s92 Response)
- OPUS (June 2016). DRAFT Kopeopeo Canal Remediation Memo regarding Filtrate Discharge (Appendix 3 to the s92 Response)
- Wildland Consultants (May 2016). Section 92 Request for Further Information on Ecological Effects of Remediation of the Kopeopeo Canal (Appendix 4 to the s92 Response)
- Jacobs (June 2016). CS1B Groundwater Monitoring (Appendix 5 to the s92 Response)
- Te Runanga o Ngati Awa (June 2016). Bay of Plenty Regional Council Kopeopeo Canal Remediation Project Consent Variation (Appendix 6 to the s92 Response)
- Submission Analysis (Appendix 7 to the s92 Response)
- Dredging Trial Turbidity Monitoring (Appendix 8 to the s92 Response)
- Letter from GHD Australia (Andrew Kohlrusch) to Brendon Love titled "Kopeopeo Canal Remediation - Consent Variation Application Independent Monitor comments in relation to Contaminated Land aspects", 13 May 2016
- Memorandum from Graham Environmental Consulting Ltd (Bruce Graham) to Paula Golsby titled "Kopeopeo Canal Remediation Project: Variation to Resource Consent RC67173", 30 June 2016
- Memorandum from River Lake Ltd (Keith Hamill) to Paula Golsby titled "Variation for Kopeopeo Canal Remediation Project (RC67173): review of AEE", 5 May 2016
- Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal", 22 April 2016 (geotechnical matters)
- Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal", 3 May 2016 (flooding, land drainage and erosion effects)
- Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal- Silt Curtain Proposal-Review 2", 1 July 2016
- Memorandum from Sue Southerwood (Contract Engineer) to Paula Golsby titled "Technical Review for Resource Consent Application Variation, -Bay of Plenty Regional Council – Kopeopeo Canal-On-Site Flood Storage Volumes", 15 July 2016

## Kopeopeo Canal Remediation Project - Variation Applications to

# Bay of Plenty Regional Council & Whakatane District Council Notification Assessment

(Sections 95A to 95F Resource Management Act 1991)

Report From: Paula Golsby

Consultant Planner - PMG Planning

**Report to:** Rob van Voorthuysen

**Independent Commissioner** 

**Date**: 16 August 2016

**Application Numbers**: CH16-00147 Bay of Plenty Regional Council

LV-2016-8085-01 Whakatane District Council

#### 1. Introduction

The Bay of Plenty Regional Council has applied for variations to the resource consents it holds for the Kopeopeo Canal Remediation Project. The Whakatane District Council ('WDC' or 'the District Council') and Bay of Plenty Regional Council ('BOPRC' or 'the Regional Council') consents were granted on 14 February 2014 following an Independent Commissioners Hearing in December 2013. An Environment Court appeal (by a submitter) was resolved by a consent order dated 14 November 2014.

The existing consents authorise the removal of contaminated sediment from a 5.1km section of the Kopeopeo Canal, in Whakatane, and the transportation of the sediment to three separate sites where the sediment is to be contained and remediated using bioremediation techniques.

The variation application seeks to amend conditions of the District and Regional Council consents to enable the use of an alternative method for the removal, transportation and containment of the sediment.

The assessment of the original consents identified many overlapping matters of assessment between the district and regional consents and this is reflected in the conditions of the consent, many of which are the same between the two consents.

This report assesses the variation applications to the Bay of Plenty Regional Council and the Whakatane District Council (as the consent authorities) against sections 95, and 95A to 95F of the Resource Management Act 1991 ('the RMA') and makes a recommendation on whether the applications should be notified, either publicly or in limited form.

## 2. Background to Existing Resource Consents

## 2.1. History & Context

Section 2.3.3 of the variation application provides a useful summary of the background to the project. The summary is provided below for context:

The Kopeopeo Canal has become contaminated with dioxins from the historical discharge of contaminated stormwater from the former Pinex sawmill which operated from a site on the outskirts of Whakatane. Investigations into the nature and extent of this contamination have concluded that dioxin levels in the sediment within parts of the canal are unacceptably high. In addition, investigations have shown that eels inhabiting the canal are contaminated with dioxins, posing a risk to human health from their consumption.

Dioxins are the generic name for two groups of compounds with similar molecular structure:

- Polychlorinated dibenzo-p-dioxins (PCDDs or dioxins)
- Polychlorinated dibenzofurans (PSDFs or furans)

Dioxins can persist for a long time in the environment because their structure is resistant to chemical degradation and they biodegrade very slowly. Two key characteristics of dioxins that are important in the context of the Kopeopeo Canal are:

- 1. Dioxins are highly hydrophobic and would not be expected to be found within the canal waters as freely dissolved molecules.
- 2. Dioxins are highly lipophilic and are likely to be strongly attached to organic matter found in soil and sediments. This characteristic also means that they will bioaccumulate and biomagnify in the food chain.

Human exposure to dioxins may occur through background exposure and accidental and occupational contamination.

## 2.2. Summary of Consented Activities

In summary, the consented proposal includes the following:

- a. The preparation of three containment sites with earthworks at each site ranging between 13,115m³ and 18,643m³. The containment sites were to be constructed with bunded earth walls, with separate cells within each site created by internal bunds.
- b. Damming and dewatering of the canal to enable removal of contaminated sediment via long-reach excavators located on the banks of the canal. Under the original consent the canal was to be maintained in a wet state (although the majority of water was to be removed) to ensure no dust would be generated during works. The consent allows for up to 47,000m³ of sediment to be removed from the Canal (which was based on 33,600m³ of sediment estimated to be present in the Canal, plus an additional 40% for contingencies).
- c. Works were to proceed in a west to east direction, commencing at the State Highway 30 bridge and ending at the junction of the Canal with the Orini Canal.
- d. A water treatment pond was to be constructed and used to treat water pumped from the canal during the dewatering phase of the project. The treatment pond was to discharge treated water back to the canal and to the Whakatane River.
- e. A range of works was proposed to enable the excavation of sediment from the Canal and the construction of the containment sites. This included modifications to increase the height of the Whakatane River stopbank, removal of vegetation in the vicinity of the canal and containment sites, and the upgrading of access routes (including the access route between Paroa School and State Highway 30, and Kope Canal Road between Shaw Road and Keepa Road).
- f. Prior to excavation of sediment eels were to be caught and euthanised, prior to disposal at the Containment Sites.

- g. Sediment removed from the Canal was to be loaded onto trucks for transportation to the containment sites and a range of conditions are included on the resource consents to address potential spills from trucks during the transportation of sediment. Under this method there would be thousands of truck movements associated with the transportation of sediment.
- h. A temporary causeway was to be constructed within the saltmarsh to the east of Keepa Road to enable access to Containment Site 3. Conditions were included within the consent requiring monitoring and rehabilitation of the saltmarsh (if it did not occur naturally).
- i. Containment sites were to be formed and lined with a geotextile liner, which would allow for water to drain, but that would retain the contaminated sediment.
- j. After sediment was deposited in the containment cells lime, wood chips, and fertiliser was to be added to condition the sediment. The cells would then be covered with geotextile, top soil and grassed. The containment sites would then be left for a minimum of six months to enable partial dewatering of the sediment. Following the sediment conditioning phase (approximately six months), bioremediation processes would commence (including mycoremediation (fungal) and phytoremediation (plant) processes). This involves the addition of fungal and bacterial slurries to the cells, followed by the planting of trees inserted into holes within the geotextile layer that are made to enable the addition of the slurries. Poplar trees were to be used within CS-2, and the species selected for CS-1 and CS-3 were to be chosen in consultation with Ngati Awa, Whakatane Harbour Care, and the remediation project team.
- k. The target level for bioremediation at each site is 40 pg I-TEQ/g. The Applicant allowed 15 years for the sediment to reach the target level.
- I. The target level for the Canal is a maximum sediment-dioxin concentration of 60 pg I-TEQ/q.

## 2.3. Resource Consent Requirements

The following table summarises the activities and rules under which the regional and district council consents were granted for the original application:

Bay of Plenty Regional Water & Land Plan			
Rule 1C	To carry out earthworks within the Kopeopeo Canal and the containment sites	Discretionary	
Rule 2C	To disturb land and soil as a result of vegetation clearance on the margins of the Kopeopeo Canal	Discretionary	
Rule 35	To disturb a contaminated site and discharge contaminants to water associated with the remediation of the Kopeopeo Canal and works associated with Containment Site 3 and treatment pond	Restricted Discretionary	
Rule 37	To discharge contaminated sediment and water to land and water	Discretionary	
Rule 43	To take water from the Kopeopeo Canal at a rate exceeding 15m <sup>3</sup> per day	Discretionary	
Rule 46A	To dam the Kopeopeo Canal west of the Keepa Road bridge	Restricted Discretionary	
Rule 48	To dam the Kopeopeo Canal east of the Keepa Road Discretionary		

	bridge and where there will be effects on the water quality within a wetland				
Rule 71	To disturb the bed of the Kopeopeo Canal east of the Keepa Road bridge	Discretionary			
Rule 85	To modify a wetland resulting in adverse effects associated with the degradation of water quality and changes to water flow, quantity and drainage	Discretionary			
Bay of Plenty Regional Gravel Management Plan					
Rule 4	To disturb the bed of, and excavate gravel from, the Kopeopeo Canal east of Keepa Road bridge	Discretionary			
Operative Whakatane District Plan					
Rules 4.1.2.1 & 4.1.2.2	Earthworks to remove approximately 5,000m <sup>3</sup> of soil from within the Coastal Protection Zone at CS-3	Restricted Discretionary			
Rules 4.1.2.1 & 4.1.2.2	Earthworks to construct part of the temporary causeway within the Coastal Protection Zone near the confluence of the Kopeopeo and Orini Canals	Restricted Discretionary			
Rule 4.6.1(27)	To establish and operate three solid waste management and disposal sites	Discretionary			
National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health ('NES for Soils')					
Regulation 10	To disturb soil in the bed of the Kopeopeo Canal (a piece of land) for a 5.1km length between the SH30 intersection with Kope Drain Road, and the confluence of the Kopeopeo and Orini Canals	Restricted Discretionary			
Regulation 11	To disturb soil in the area of Containment Site 3 and the treatment pond	Discretionary			

Table 1: Summary of Resource Consent Requirements – Original Proposal

Subdivision consent was also obtained from Whakatane District Council (SS-2013-8133-00) to create a separate lot to accommodate the establishment of Containment Site 1. The variation application does not apply to the subdivision consent.

## 2.4. Notification of Original Applications

The Applicant requested that the original resource consents applications be publicly notified under section 95A(2)(b) of the RMA.

The application was publicly notified in April 2013 and 139 submissions were received (69 submissions in support, 66 in opposition, and 4 neutral submissions). A summary of submissions was provided Appendix D to the s42A report prepared for the Hearing on the applications. They key submission points are also summarised in section 7.2 of the s42A report (Part A).

In summary, submissions in opposition raised concern about a range of adverse effects, and many were concerned with contamination and health related issues. Other concerns raised about the project included matters associated with flooding, the science and technical reports supporting the application (including the proposed bioremediation methodology, geological conditions and suitability of the containment sites, health assessments, and the assessment of exposure pathways), the resource consent process, and the planning provisions assessed by the applicant.

Submissions in support of the application related to improvement in the health and environmental quality of the Canal, including reduced contamination, the return of eels, the

ability to collect kai moana, maintaining the cultural significance of the area, and the removal of sediment from the Canal to increase the flood/stormwater carrying capacity of canal.

## 3. Proposed Variations

## 3.1. Summary

The proposed variations are described in detail within the variation application prepared by Harrison Grierson entitled 'Kopeopeo Canal Remediation Project – Application to Change Resource Consent Conditions – Bay of Plenty Regional Council' dated April 2016 ('the AEE'), and the s92 response entitled 'Kopeopeo Canal Remediation Project – Application to Vary the Conditions of Resource Consents RC67173 and LL-2012-8085 – Bay of Plenty Regional Council' dated 28 June 2016.

In summary, the proposed changes to the resource consents seek to enable an alternative method for the excavation, transportation and containment of the sediment to be removed from the Kopeopeo Canal. The proposed method involves:

- a. The extraction of sediment via suction dredge;
- b. The transportation of the sediment from the Canal to the Containment Sites via an enclosed pipeline;
- c. Containment of the sediment at the containment sites within geotextile tubes/bags ('geotubes') with a secondary impermeable liner; and
- d. Dewatering of the sediment, with the filtrate (and any stormwater run-off) being captured and discharged back to the Canal (or re-applied to the containment site).

The variation application identifies the following as the main elements of the project that will change as a result of the revised methodology:

- a. The remediation zone within the canal will not be isolated using earth dams, however, control structures are proposed at each end of the remediation zone within the canal to control water quality and, potentially, water levels within the remediation zone. Within the remediation zone it is likely that the canal will not be divided into as many sections as proposed under the consented method.
- b. The canal sections will not be dewatered and the sediment will be extracted as a slurry rather than excavated under relatively dry conditions. This will involve the take of a large volume of water from the canal. The bulk of the water will be treated and returned to the canal.
- c. Depending on the design of the control structures at each end of the remediation zone, the water level in the canal will remain at natural levels or maintained at a high-tide water level. Maintaining a high water level will require water to be able to flow into the remediation zone by flowing over or through the control structures.
- d. Sediment will be transported to the containment sites by pipeline rather than loaded onto truck and trailer units.
- e. The containment cells will be lined with an impermeable HDPE liner. Filtrate from the dewatering process and stormwater will be collected and discharged back into the canal. This water may also be collected and used to irrigate the containment cells to maintain moisture content for plant growth.
- f. There will be no water treatment pond or direct discharge of treated water to the Whakatane River.

The other aspect of the proposed methodology that varies to that originally consented is the potential for lime and inoculated woodchips to be added to the dredging slurry, which would avoid the need to open the geotubes and add these agents after the geobags have been filled.

The proposed methodology is described in more detail in section 2.1.3 of the variation application and the differences between the consented and proposed methods are highlighted in section 2.1.4. Table 1 from the variation application (setting out the key differences) is reproduced below. Notes have been added (in italics) providing further detail/clarification.

The variation application also included amended conditions for the Regional Council and District Council consents. Following the s92 request for further information the Regional Council consent conditions were refined and the Applicant proposes that the changes made also apply to the District Council consent (where the consent conditions are duplicated).

PROJECT COMPONENT	CURRENT METHODOLOGY	PROPOSED DREDGING METHODOLOGY	
Containment site design	Permeable geotextile fabric lined cells. Water drains through cells and discharges to groundwater.	The containment cells are constructed with a HDPE liner (non permeable) which provides a secondary containment layer. The sediment is contained within geotubes (primary containment) and is placed on the HDPE liner. A sump collects water within the cells which is stored on site and then either discharged back to the canal or applied by sprinkler back onto the containment cells to aid plant growth.	
		The overall footprint of the containment cells at each site is likely to be smaller with this method of containment.	
		A treatment plant is required to be established at each containment site.	
Preparatory works	Earth dams are constructed to divide the canal into three main sections and sheet pile dams further divide the canal into a total of 14 sections. The canal banks are modified to enable machinery and vehicle access and temporary access roads constructed in some	No earth dams are required. Control measures will be installed at the ends of the remediation zone and within the zone the canal as required. The total number of sections is likely to be less than the 12 sections proposed under the current consented methodology.	
	locations, including through the saltmarsh at the eastern end of the remediation zone.	There are a variety of options for the control structure construction, including sheet pile weirs or silt curtains.	
		There is limited vegetation clearance and canal bank modification required to allow the dredge to access the canal.	
Sediment removal	Each dammed section of the canal is sequentially dewatered by pumping water between canal sections and the sediment is	Sediment is removed from the canal bed using a suction dredge which is mounted on a floating barge.	
	excavated using a long-reach excavator and loaded onto trucks.	To enable the dredge to function effectively the water level in the canal may be maintained at the normal high tide level. This is likely to require water to flow through or over the control measures at either end of the remediation zone or be pumped into the remediation zone to maintain the required water level.	
Sediment transport	Sediment is transported by truck and trailer to the containment sites	Sediment slurry is pumped to the containment sites via a pipeline which is either floating in the canal or running along the canal bank. Depending on the distance to the containment sites booster pumping may be required.	
Deposition and containment	Sediment is deposited (tipped) into geotextile lined cells and mixed with lime and fungi-inoculated woodchips using earthworking	At the containment sites the sediment slurry is dosed with a flocculent. The sediment slurry is pumped into the geotubes for dewatering. Geotubes mostly	

	machinery.	dewater over a 12-24hr period with complete dewatering over a 6 month period.
	Once full the containment cells are covered with a geotextile liner and topsoil and then left to dewater for a period of approximately 6 months.	
Treatment	Sediment is inoculated with fungi, trees are planted and bioremediation commences	Sediment is inoculated with fungi, trees are planted and bioremediation commences (no change).
		Note: It has been identified that there is potential for lime and inoculated woodchips to be added to the dredging slurry, which would avoid the need to open the geotubes and add these agents after the geobags have been filled. If the addition of woodchips in the slurry is not successful, the Applicant may need to revert to the original proposal to open up the containment sites to add and mix in the woodchips.

## 4. Resource Management Act

## 4.1. Section 127 - RMA

A consent holder may apply to a consent authority for a change or cancellation of a condition of a resource consent under s127 of the RMA. In accordance with section 127(3), sections 88 to 121 of the RMA apply and the application is to be assessed as if it were an application for resource consent for a discretionary activity. For the purposes of determining who is adversely affected by the change or cancellation, the consent authority must consider, in particular, every person who made a submission on the original application and any person who may be affected by the change or cancellation.

Case law has established principles for determining whether an application for a variation to an existing resource consent should be assessed as a change under s127, or whether it should be assessed as a new application for consent under s88. To proceed as a variation under s127, the application should not result in a fundamentally different activity or one having materially different adverse effects. Following an assessment of the variation application lodged by the Applicant it is considered that the proposed changes can be assessed as a variation under s127 as the activities and adverse effects are not fundamentally different to those assessed under the original application.

In addition, it is noted that the environmental effects that are to be considered as part of a variation application are the effects of the change, not the effects of the proposal as already granted. The assessment of the variation applications essentially requires an analysis of the effects of the change compared with those allowed by the existing resource consents.

### 4.2. Sections 95, 95A-95F - RMA

Section 95 of the RMA requires the consent authority to decide whether to give public or limited notification of an application for resource consent within 20 days of the application being lodged. If it decides to give notice of the application, this must also be done within 20 days of the application being lodged.

In accordance with section 95A, a consent authority may in its discretion decide to publicly notify an application for resource consent. However, it must publicly notify an application if:

- a. It decides that the activity will have or is likely to have adverse effects on the environment that are more than minor;
- b. The Applicant requests public notification of the application; or
- c. A rule or national environmental standard requires public notification of the application.

Despite this the consent authority must not notify an application if a rule or national environmental standard precludes notification and the applicant has not requested public notification. However, a consent authority may publicly notify the application if it decides special circumstances apply.

If the consent authority does not give public notice of the application it must decide, in accordance with sections 95B, and 95D to 95F whether there are any affected persons that require limited notification of the application. As noted in section 4 of this report, in relation to a variation application, the consent authority must consider, in particular, every person who made a submission on the original application and any person who may be affected by the change or cancellation. No persons have provided written approval with respect to the variation application.

The adverse effects of the proposal are assessed in section 5 of this report and my recommendation on whether or not the application should be notified (either public or limited) is provided in section 7.

## 4.3. Technical Input

The variation application has been referred to a number of technical advisers to provide a review of the technical information provided with the application, and to provide advice on the changes and proposed conditions. Table 3 below sets out the technical advisers assisting the consent authorities.

Area of Expertise:	Name:	Position:	Company / Organisation:
Ecology	Keith Hamill	Director / Ecologist	River Lake Limited
Groundwater	Janine Barber	Senior Environmental Scientist	Bay of Plenty Regional Council
Air Quality	Dr Bruce Graham	Environmental Scientist / Air Quality Specialist	Graham Environmental Consulting Limited
Hydrology & Engineering	Susan Southerwood	Contract Engineer	Bay of Plenty Regional Council
Noise	Lisa Millican	Environmental Health Officer	Whakatāne District Council
Transportation	Abner Salanguit	Transportation Engineer	Whakatāne District Council

Table 3: Technical Advisers Assisting Consent Authorities

In addition, the Independent Monitor (Andrew Kohlrusch, Principal Environmental Scientist, GHD (Sydney)) appointed in accordance with the conditions of the resource consents has provided technical advice to the Applicant and consent authorities in relation to matters associated with contaminated land management.

The advice provided is addressed in the relevant sections of the effects assessment (where relevant).

## 5. Assessment of Environmental Effects

#### 5.1. Introduction

The actual and potential adverse environmental effects associated with the original application were associated with:

- a. Water quality and aquatic ecology;
- b. Terrestrial ecology;
- c. Bank stability;
- d. Flooding;
- e. Soil and groundwater quality;
- f. Noise;
- g. Air quality;
- h. Traffic:
- i. Visual amenity;
- j. Cultural effects;
- j. Loss of productive land; and
- k. Health effects.

In addition to the adverse effects of the original proposal, a range of positive effects were identified, including the remediation of a contaminated site that currently poses a health risk to the community, maintaining the effective functioning of the Rangitaiki Drainage Scheme, cultural benefits, and the fulfilment of the statutory and regulatory responsibilities of the local authority and land owner.

The following sections provide an assessment of the adverse effects of the proposed variation in comparison with the effects of the consented project and associated methodology.

## 5.2. Ecology

## 5.2.1. Ecological Values

The ecological values of the canal and surrounding area were described in detail within the Ecological Assessment prepared by Wildland Consultants attached as Appendix C to the AEE supporting the original resource consent applications (for RC67173 and LL-2012-8085-00).

The most significant terrestrial ecological values are associated with the large area of saltmarsh rushland, which is identified as a significant wetland and habitat for indigenous vegetation and fauna. The Whakatane Estuary also includes a number of bird species that are 'Threatened' and 'At Risk'.

The aquatic habitat of the canal is identified as being moderately degraded and susceptible to fish kills in summer when conditions can be very poor due to heat, extremes of oxygen saturation, pH and high levels of ammonia.

There are few fish of ecological significance present in the canal, although species present include 'At Risk' species (Longfin eel, inanga, bluegill bully, redfin bully, giant kokopu, and shortjaw kokopu). The AEE provided with the original application concluded this is likely to be associated with the floodgates at the downstream end of the Orini Canal which limit the migration of fish species, the lack of suitable habitat and, at times, the poor water quality.

With respect to water quality within the canal, the AEE submitted with the original application shows dioxin concentrations in water samples taken ranged between 0.00216 and 0.094 picograms per millilitre of dioxins as measured using the internationally derived Toxicity Equivalent factor ('pg I-TEQ/ml') for sampling carried out in 2006 and between 0.0004 and 0.00085 pg I-TEQ/ml for sampling carried out in in 2008. Dioxin concentrations in water samples taken downstream of the Pinex Sawmill discharge point in 2006 are identified in the AEE as being around twice the typical concentration for locations downstream of mill discharge points in New Zealand. The AEE (page 34) states that a probable cause of the decrease in dioxin concentrations measured 2008 is that dioxin bound particulates are being progressively covered within the canal bed matrix.

## 5.2.2. Aquatic Ecology & Water Quality

The adverse aquatic ecology and water quality effects associated with the consented method are:

- a. Increased sedimentation associated with:
  - i. Installation and removal of dams (earth bunds and sheet pile walls);
  - ii. Dewatering and excavation works within the canal;
  - iii. Discharges of water to downstream sections of the canal (outside of the works zone) and the Whakatane River:
  - iv. Earthworks and transport of sediment in close proximity to the canal;
- b. Increases in dioxin concentrations as a result of disturbing sediment in the canal;
- c. Creation of barriers to fish passage; and
- d. Effects on aquatic species.

The nature of the adverse effects on aquatic ecology and water quality associated with the proposed methodology are considered to be the same as the consented method, with the exception of the filtrate and stormwater being captured and discharged from the Containment Sites to the Canal. This is to be an on-going discharge which is to be monitored and managed following the completion of the remediation works within the canal.

#### Increased Sedimentation & Dioxin Concentrations

As dioxins are insoluble and adhere to sediment particles, the transfer of dioxin can occur through the

transport of sediment. It was assessed that the consented proposal would result in increased sediment within the canal as a result of works within the remediation zone of the canal and, potentially, as a consequence of earthworks and transportation of sediment in locations in close proximity to the canal. In addition, the discharge of treated water pumped from the remediation zone of the canal to the Whakatane River and lower sections of the canal had the potential to result in adverse effects on water quality. As stated in the AEE submitted with the original application, sediment can affect habitat and aquatic organisms while in suspension and as a result of deposition in the canal bed and banks.

The canal is manmade (although east of Keepa Road it is identified as a 'modified watercourse') and is characterised by high concentrations of suspended solids. It exhibits low numbers of fish species, which is said to be due to the lack of quality habitat and the presence of the floodgates at the end of the canal, which restrict fish migration.

Increases in suspended solids concentrations above those that naturally occur were expected to be short term and limited to the duration of the works period (7 to 8 months for Stage 2 works associated with the excavation and deposition of sediment). A range of measures were proposed to mitigate effects associated with the potential for machinery and earthworks activities to result in increased sedimentation, however, it was acknowledged that the works would disturb sediment within the canal and that this was a necessary effect of the project. Given the original proposal included earth dams at each end of the works done, the effects of releasing contaminated sediment were limited to the works zone.

Some effects would occur outside of the remediation zone in association with water pumped out of the remediation zone and treated prior to being discharged back into the lower sections of the canal and the Whakatane River. It was also anticipated that there would be potential for increased sediment when the dams were removed following the works phase of the project.

To minimise the potential for contaminated sediment to be dispersed beyond the works zone as a result of the removal of the earth dams, a condition was included in the Regional Council consent (RC68173 condition 10.2) requiring the consent holder to install sediment control devices during the construction and dismantling of earth bunds. A number of conditions were also included in the consent to manage effects associated with discharges of water pumped from the canal.

The variation proposes to change the methods for containing and delineating the works zone, and also seeks to change the method for extracting sediment from the canal and transporting it to the containment sites.

The changes that have potential to affect the generation and distribution of sediment include:

- a. The use of either sheet pile weirs or silt curtains at each end of the 5.1km stretch of the canal to contain the remediation zone;
- b. The removal of sediment from the canal bed using a suction dredge mounted on a floating barge;
- c. To enable the dredge to function effectively the water level in the canal may be maintained at the normal high tide level. This will allow water to be let into the remediation zone from areas up or down stream. In addition, water may go over the weirs or silt curtains may be removed if a flood is to occur during works.
- d. Transportation of sediment from the canal to the containment sites via an enclosed pipeline.

The proposed methodology removes the need for earth bunds to be constructed within the canal and reduces the works required to for access for trucks to transport sediment from the canal to the containment sites. As a consequence, the potential effects associated with the generation and distribution of sediment associated with ancillary works is reduced. In addition, the water will not be pumped from the canal and discharged outside of the works zone.

The revised methodology includes the provision of control structures at each end of the works zone, and it is anticipated that these are likely to be silt curtains, sheet pile weirs, or other similar devices. If

weirs are to be used it is proposed that water within the remediation zone will be contained, except during a flood event when floodwaters exceed a height of 1.8m RL. If needed water can be let into the remediation zone to provide the amount of water required for optimal dredging conditions. If silt curtains are used in place of solid weir structures, water will be able to pass through the remediation zone, but suspended sediment will be contained by the silt curtain.

The applicant proposes consent conditions 4.3 and 13.1 of the Regional Council consent to require the provision of details of the control structures to the consent authority and to ensure that the excavation of the sediment from the canal does not increase dioxin concentrations by more than 20% above the background levels outside of the remediation zone (to be measured at a point no further than 50m from the control structures). If background levels are exceeded during works, the Applicant proposes to cease works immediately and will only recommence excavation when it is confirmed compliance can be achieved.

Under the proposed methodology it is expected that the extraction and deposition of sediment will take around six months. Increased sediment within the Canal associated with the extraction of sediment will therefore be limited to this period and is not expected to result any adverse effects beyond those that are already consented.

In response to the potential for contaminated sediment to be released from the works zone during a flood event the Applicant advises (see s92 response) that dredging activities will cease and dredging equipment will be removed from the Canal. If during a major flood event it is necessary to allow flood waters to flow through the remediation zone, it may be necessary to remove the silt curtain structures from the Canal. Conditions (condition 4.3 of the Regional Council consent) are proposed that require the flow velocity and water level triggers to be established, which once exceeded, will require the opening of the silt curtains. The application states that flood water flowing through the works zone is not expected to result in a significant risk of resuspended sediment be released outside of the remediation zone. The reason for this is that the only area of the canal bed disturbed by the dredging operation is the area being actively disturbed by the dredge head and a plume of higher turbidity immediately surrounding the dredge head. The Applicant considers that this level of disturbance and potential for sediment to be re-suspended and distributed is substantially less than the consented method which involves a 400m long section of dewatered canal disturbed by earthworks machinery.

The Applicant also states that water quality monitoring was undertaken during the trial dredging operation and provides data on turbidity levels in the water immediately surrounding the dredging operation during and post dredging. The Applicant states that the trial results demonstrate that turbidity levels decrease relatively quickly following dredging, usually within a matter of hours. The results are considered to represent a worst-case scenario for the following reasons.

- 1. The dredge used for the trial was not a specialist head and operated at only a very low speed. Efficiency should be well above this in full scale when pump rates are high compared to auger speed.
- 2. The dredging area for the trial was very confined and re-suspended particulate had very little space to settle out. Therefore remained higher than expected in a larger canal. Natural attenuation of suspended solids is expected to occur in a larger water body compared with the trial.

It is important to note that the area of disturbance is very limited at any given time. The dredge extracts disturbed material therefore minimal suspended material is generated that could be carried downstream by floodwaters, particularly if dredging activity ceases within 6 hours of the rainfall/increased flow event.

Having regard to the information provided with the application, the proposed conditions of consent, and the advice of Keith Hamill, it is considered that any additional adverse effects associated with sedimentation and associated dioxin concentrations will be less than minor.

## Filtrate & Stormwater Discharge from Containment Sites

The current methodology includes containment cells with a permeable geotextile liner, which would result in water draining through the cells to the soil and groundwater below. The proposed methodology includes the containment of sediment within geotubes, which are placed on impermeable an HDPE liner within the containment site. This results in an additional layer of containment, and the impermeable layer means that no water will drain through the site. Under the revised proposal, the dredging slurry is dosed with a flocculent before being pumped into the geotubes (to separate the particulate matter from the water) and the filtrate and stormwater is then collected and stored in sumps within the containment sites. The water will then be discharged back to the canal or re-applied by sprinkler back to the containment cells to aid plant growth.

The Applicant expects that dewatering of the containment cells will take approximately 3 months (to reach an equilibrium, which is about 25% moisture content). Most of the dewatering is expected to occur within the first few days (although this will depend on the sediment characteristics) and the quantity of the discharge will reduce over time until the containment sites have dewatering sufficiently. Following the initial period of discharge, any further discharge from the site will be associated with stormwater collected at the sites (rather than filtrate draining from the geotubes).

The discharge of filtrate and stormwater to the canal results in the potential for new water quality and aquatic ecology effects that were not assessed under the original resource consents. To manage these effects the Applicant has proposed water quality limits and a monitoring regime, including early warning limits triggering management responses (including investigating causes for elevated dioxin concentrations), as well as compliance limits which require the consent holder to cease works and remedy non-compliances before discharges can resume. The final water quality limits and monitoring regime are reflected in the proposed conditions (conditions 12.1 to 12.10, and 13.1 to 13.3 of the Regional Council consent), which have been refined as result of the s92 request and response from the Applicant, and the technical review undertaken by Keith Hamill.

The water quality limits have been selected to provide appropriate protection for aquatic life and human health, and to protect against sedimentation and water clarity.

The proposed conditions include a monitoring regime which reduces over time, however, more frequent monitoring will be required if the defined water quality limits are exceeded. In addition, the conditions include early detection limits which, if exceeded, require a management response to ensure compliance limits are not exceeded.

Based on the water quality limits, and the proposed monitoring and response mechanisms set out in the proposed consent conditions, Mr Hamill advises that the adverse effects on water quality and ecology associated with the discharges from the containment sites will be less than minor. I accept Mr Hamill's advice on these matters.

## Barriers to Fish Passage & Effects on Aquatic Species

The AEE submitted with the original application states that eels inhabiting the canal are contaminated with dioxins and their consumption poses a risk to human health. It is also stated that the removal of contaminated sediment from the canal will improve the ecological functioning of the canal and allow the local population to use the canal for, amongst other things, eel harvesting and consumption. This is one of the key drivers for the project.

The AEE (section 6.2.3, page 86) supporting the original application also states that adverse effects on eels are necessary to remove contaminated eels and allow for the population to regenerate. With respect to the loss of fish and habitat as a result of damming the canal, the AEE states that the effects are expected to be less than minor because:

- a. The existing habitat is poor quality from a biological perspective:
- b. Few species of significance have been identified in the canal;
- c. Pumps used for dewatering will be fitted with screens to prevent fish from getting trapped; and
- d. Any stranded fish will be destroyed and disposed of at the containment sites.

Under the current consent all fish species (including eels) were to be removed from the remediation zone and euthanised. The conditions of the Regional Council consent (conditions 46.1 to 46.4 of RC67173) currently require:

- a. Pumps for dewatering to be fitted with screens to prevent fish from becoming trapped in the pumps:
- b. Prior to dewatering of each section of the canal the consent holder is required to ensure that the particular section of the canal is substantially free of fish species;
- c. The removal of fish and eels was to be undertaken using fyke nets (or other method agreed by the Chief Executive of the Regional Council or delegate);
- d. All fish species are to be euthanised and disposed of at the nearest Containment Site.

The variation application includes structures at each end of remediation zone which will obstruct fish passage in a similar manner to the consented method. The variation application seeks to retain the conditions associated with capturing, euthanising and disposing of fish and eels located within the remediation zone. This is with the exception of condition 46.1 which requires dewatering pumps to be fitted with screens to prevent fish from becoming trapped. In this regard, the Applicant advises that it is not technically feasible to fit the suction dredge head with a screen. This is not considered to be a significant issue given the loss of aquatic species within the remediation zone was accepted as a necessary effect of the proposal.

The variation application has been reviewed by Keith Hamill (Ecologist at River Lake Limited) and no concerns have been raised with the proposed approach.

Having regard to the similarities between the existing and consented methods which result in physical barriers to aquatic species at each end of the remediation zone, and the Applicant's proposal to retain the conditions that require fish and eels to be captured, euthanised and disposed of to the Containment Sites, it is considered that the variation and proposed methodology will not result in any additional adverse effects on fish and eel species as a result of loss of life, habitat, and fish passage compared with the consented method.

## 5.2.3. Terrestrial Ecology - Wetland

In terms of terrestrial ecology, it was assessed that the consented method would result in adverse effects on terrestrial ecology as a consequence of vegetation clearance, altered hydrological flows, deposition of contaminated soil, compaction of estuarine vegetation and sediments, sedimentation as a result of earthworks, and displacement of avifauna. The most significant adverse ecological effects of the consented method are those associated with the potential for the salt marsh to dry out during works, and as a result of the disturbance of the saltmarsh (east of the Keepa Road bridge), which would be caused by the construction and use of a temporary causeway providing truck access to Containment Site 3. Resource consent conditions required a range of management measures to ensure the wetland remained in sufficiently wet state, avoidance of works during the critical bird breeding season, and programme of monitoring and rehabilitation to ensure that the saltmarsh recovered following the works phase of the project (see conditions 47.1 to 47.9 of RC 67173 and 29.1 to 29.9 of LL-2012-8085-00).

The variation application states that the key difference between the ecological effects of the current and proposed methodologies is that the proposal to sustain high water levels in the canal to assist the dredging operation, whereas the current method involves maintaining the canal in a dewatered state while excavation is undertaken. The use of silt curtain type control structures will result in no changes to the natural variations in water level in the canal and the dredging operation will work around the tidal cycles with dredging of the intertidal areas at high tide. This option will avoid any ecological effects associated with sustained inundation of the saltmarsh vegetation.

The variation application is supported by an ecological assessment prepared by Wildlands. Wildlands have concluded that some proposed changes to the consented methods (including dredging from a barge and piping sediments) will provide for better ecological outcomes. Potential adverse effects identified include altered hydrological flows, vegetation submergence, avifauna displacement and

possible sedimentation. The variation application states that these potential effects are largely managed through the project methodology and for most project components the ecological effects are considered to be similar or improved relative to the consented method.

The potential for saltmarsh vegetation to be submerged for a prolonged period has been identified as a new ecological effect under the proposed methodology. It has been identified that this has potential to adversely affect saltmarsh vegetation on the upper limits of the high tide area. However, plant communities are expected to recover once the water level regime returns to normal.

To mitigate the adverse effects associated with elevated water levels during construction, Wildlands recommend:

- a. Limiting water levels within the saltmarsh to no higher than 0.2m above Moturiki Datum (RL 0.2m);
- b. Allowing tidal fluctuations in water levels within the saltmarsh to resume as soon as possible following the completion of dredging; and
- c. Ongoing monitoring of the saltmarsh vegetation with revegetation undertaken if natural regeneration does not occur.

To minimise the duration of high water levels in the saltmarsh it is proposed to install a control structure upstream of the saltmarsh near the Keepa Road bridge and enable natural tidal fluctuations to continue in the saltmarsh until such time as dredging is undertaken in the saltmarsh section of canal and there is a need to control water levels. The use of a silt curtain control structure would enable natural water levels within the canal to be maintained for the duration of the project, thereby avoiding the need to install this additional control structure upstream of the saltmarsh.

In summary, the Wildlands assessment concludes that, provided best practice techniques are utilised during the dredging operation, it is expected that the proposal will have no adverse effects on terrestrial habitats and only minor adverse effects on estuarine habitats within the saltmarsh. They advise their (Wildland Consultants 2016) assessment that there will be some adverse short-term effects is conservative, and allows for a worst case scenario. When compared with the effects currently permitted, Wildlands considers such effects will be less than what has already been consented.

Changes are proposed to the current resource consent conditions (47.1 to 47.8 of the Regional Council consent) relating to the saltmarsh to recognise the changes in methodology and to include the Wildlands recommendations. The proposed conditions address maximum water levels within the saltmarsh area, require the reinstatement of natural tidal variations as quickly as possible following completion of the works, and set out a vegetation monitoring programme with a requirement for revegetation if necessary.

The Wildlands assessment and proposed conditions have been reviewed by Keith Hamill, who has confirmed the assessment and proposed conditions are acceptable. Having regard to the assessment of Wildlands, the proposed conditions, and the advice of Mr Hamill, it is considered that any adverse ecological effects on the wetland and estuarine environment will be no greater than those effects already allowed by the existing consents.

#### 5.3. Geotechnical

The original proposal resulted in actual and potential adverse effects associated with stability of the banks of the Kopeopeo Canal, settlement of the Containment Site 3 ('CS-3'), and seismic risks. These effects are considered relevant for the revised methodology and the variation application identifies a new effect associated with potential effects on stability of Whakatane River stopbank caused by pressure resulting from the impermeable liner at CS-3. These matters are addressed in the following sections.

## 5.3.1. Bank Stability

The assessment of the original application identified that dewatering the canal had the potential to affect the stability of the canal banks and nearby infrastructure. A preliminary assessment of the potential effect of dewatering on the canal banks carried out by SKM (attached as Appendix R to the AEE supporting the original application) concluded that there is no evidence to suggest that the banks are currently unstable, and that the impact of temporary dewatering on bank stability is likely to be negligible. In relation to infrastructure, the AEE stated that any deformation of the canal is unlikely to be a significant concern given the height and distance of infrastructure relative to the canal.

To ensure any unexpected effects on bank stability and infrastructure would be appropriately managed, the consents included conditions (19.1 to 19.5 of the Regional Council consent and 9.1 to 9.5 of the District Council consent) requiring a pre-condition survey, an asset management plan, monitoring, and remedial works (if necessary).

Given revised methodology seeks to retain water within the canal to enable sediment to be extracted via suction dredging it is anticipated that the risk of adverse effects on the stability of the banks of the canal and nearby infrastructure will be less than the original consented method which included the dewatering of the canal. In addition, it is proposed to retain the existing conditions of consent which require a pre-condition survey, asset management plan, monitoring, and remedial works (if necessary). Having regard to the above, it is considered that the revised method will not result in adverse effects associated with bank stability that are beyond those already allowed by the current consents.

## 5.3.2. Settlement of Containment Sites & Seismic Considerations

As part of the original application it was assessed that there was potential for settlement at CS-3 due to the presence of previous wood waste disposal. To ensure the effects associated with settlement at this site were identified and managed appropriately, a condition was included on the Regional Council consent (38.1 of the Regional Council consent) requiring the consent holder to undertake annual topographical surveys at CS-3. In event that the annual surveys show the height of the containment cell bunds at CS-3 are less than required, the bunds heights are required to be increased so as to achieve the required level.

In relation to seismic considerations, the original application considered the potential risk of earthquakes on the integrity of the containment sites and the potential for contaminated sediment to be released as a result of damage to the containment sites following an earthquake. To address this concern, a condition was included on the consents (24.4 of the Regional Council consent and 12.4 of the District Council consent) requiring the consent holder to prepare and submit a programme for regular inspection of the containments sites to ensure that all sediments are contained and prevented from being released from the cells. The programme was to identify the timing and frequency for regular inspections after rainfall events (exceeding a 5 year ARI) and earthquakes exceeding certain magnitudes as set out in the consent. In the event that inspections revealed sediment had leaked or been released from containment cells the consent holder is required to clean and validate the affected area.

In addition, to ensure the geotextile fabric used within the containment cells was strong enough to retain the sediment, a condition was included within the consents (15.2 of RC67173 and 8.2 of LL-2012-8085-00) requiring the geotextile fabric to be a non-woven, synthetic fabric with a minimum grab tensile strength of 1000.0 N when tested in accordance with AS2001.2.3.

The variation application sets out the geotechnical considerations relevant to the proposed variation and draws on the geotechnical assessment (and recommendations) prepared by Ice Geo and Civil (attached as Appendix 6 to the variation application). The key aspects of the assessment within the variation application (section 6.1.9, page 28) are as follows:

"The proposed use of geotubes to dewater and contain the sediment at the containment sites and the associated modifications to the design of the sites have been considered to determine whether there are any geotechnical design considerations that need to be taken into account as a result of these changes. Ice Geo and Civil have undertaken a geotechnical assessment of the proposal with a particular focus on seismic stability, liquefaction and settlement aspects. A copy of this assessment is included as Appendix 6.

The assessment has identified that the geotubes and HDPE cell liner will need to be designed to be able to stretch without tearing under seismic loading. The preparation of the base of the containment cells will also need to be designed to account for settlement and the potential for differential settlement. These are the same design considerations that apply to the consented method, although the importance of designing for differential settlement is increased as the impermeable liner in the containment cells will need to have sufficient fall to ensure water drains to the collection sump.

The use of an impermeable liner at Containment Site 3 introduces a new potential effect on the integrity of the existing stopbank between the containment site and the Whakatane River. This effect is associated with the potential for high water pressures to develop beneath the liner when the river is in flood. These high pressures could cause upwards flow around the edges of the containment site, high hydraulic gradients and the potential for piping to develop. It is recommended that this potential effect be considered and addressed in the final design of the containment site."

To account for the recommendations of the geotechnical report it is proposed to include a new condition on the Regional and District Council consents to require the design for the containment sites be subject to static and seismic analyses using a design earthquake magnitude of 6.1 and to achieve the performance standard required for Level 2 structures in NZS 1170.0:2002. In addition, it is proposed to vary condition 15.2 of the Regional Council consent and condition 8.2 of the District Council consent to reflect the design requirements for the HDPE liner rather than the geotextile fabric, which was to be used in the original methodology.

The potential for settlement of the containment sites is a matter the Applicant has identified needs to be considered and addressed through the final engineering design of the containment cells and this is reflected in the proposed conditions (new condition 4.2 of the Regional Council consent and a corresponding condition in the District Council consent).

The Applicant considers that potential effects associated with bank stability are largely dealt with through the existing design requirements and conditions, but that there will be a need to require the design of CS-3 to specifically consider the potential for piping through the Whakatane River stopbank and to incorporate mitigation measures into the design. The Application states that this is a standard engineering consideration and the most common solution involves the installation of pressure relief drains which allows ground water to escape. It is proposed to address this matter through the design requirements for CS- 3 as required by new condition 4.2 of Regional Council consent and a corresponding condition on the District Council consent. In addition, conditions requiring inspections of containment sites following high rainfall and earthquake events are to be retained.

The application and Geotechnical Assessment have been reviewed by Sue Southerwood (Contract Engineer for the Regional Council) who has advised she is in agreement within the assessment and the recommendations to manage potential effects associated with geotechnical matters.

Having regard to the assessment provided and the proposed conditions of consent, it is considered that any adverse effects associated with the geotechnical conditions of the site can be managed through the design of the containment sites, such that any adverse effects will be less than minor.

## 5.4. Flooding

The AEE submitted with the original applications (section 4.1.2, pages 26 to 30) addresses the flood hydrology of the Kopeopeo Canal and states that the canal is the largest component of the Kope-Orini Canal system, which is a system of drains and canals draining 49.6 km<sup>2</sup> of the low lying coastal plains between the Rangitaiki and Whakatane Rivers. The variation application identifies that the

implications of a flood event occurring while works are being undertaken within the canal is an important consideration for the project, particularly given the importance of the canal in providing flood relief and day to day drainage within the Rangitaiki Plains.

The assessment of the original application identified that the project has potential to affect the flood carrying capacity of the Canal during the works phase, but that the flood carrying capacity of the canal would be enhanced once the excavation of the sediment from the canal had been completed.

The potential effects of flooding during canal works was assessed as part of the original applications and evidence was provided by Bruce Crabbe (Rivers and Drainage Operations Manager at the Regional Council) at the Hearing which concluded:

- Routine drainage and flood protection up to the design standard of the Scheme will be provided by the project.
- b. A suite of mitigation measures is proposed to be implemented in a staged manner to manage over-design rainfall events as the volume of floodwater increases.
- c. The project will implement all practicable steps to avoid overtopping of stopbanks along the Kopeopeo Canal, up to and including as a last resort implementing flood pumping from the existing Kope-Orini Flood Pump at Keepa Road.
- d. At that stage (i.e. with the Kope-Orini Flood Pump station operating) the flood protection and drainage systems have significant extraordinary mitigation measures in excess of what would otherwise be provided during a flood event.
- e. If there has still been stopbank overtopping and/or extended pasture inundation as a result of the rainfall event then this would have occurred to at least that extent regardless of the Project being underway.
- f. This project will achieve an important objective of allowing the continued functioning of this key drainage system into the future in a safe and efficient manner.

The Hearing Panel accepted the evidence of Mr Crabbe that the proposed flood management measures were adequate to avoid or minimise adverse effects due to flooding of the canal and areas of containment cells during remediation activities and for the containment cells after remediation is complete. A range of conditions were included within the Regional Council consent (conditions 7.1 to 7.5) requiring the development and implementation of a Flood Management Plan to give effect to the management measures described in Mr Crabbe's evidence.

The key difference between the consented method and the revised proposal is that the proposed methodology seeks flexibility in the way that the works zone within Canal is delineated and this could involve weirs at each end of the works zone (potentially with sheet piles in between), or the use of silt curtains at each end. If silt curtains are to be used water will be able to flow through the works zone as usual (although sediment will be retained and the silt curtains will need to be managed to ensure they do not prevent the flow of water). In the event weirs are installed at each of the works zone, water will be prevented from flowing through the remediation zone, except if the water levels within the canal exceed the height of the weirs (to be set at 1.8m RL).

An assessment of the flood risks associated with the revised methodology has been undertaken by Peter West, a Contract Engineer for the Regional Council (as Applicant). Mr West's assessment has assumed solid control structures will be in place at the ends of the remediation zone and is therefore considered to be a conservative approach. In the event that silt fences are to be used at the ends of the remediation, the effects would be less than assessed by Mr West.

The variation application states:

"One change with the potential to give rise to a new environmental effect has been identified with the proposed method. Maintaining a high tide water level within the remediation zone has the potential to slow the rate that side drains which flow into the Kopeopeo Canal can drain water from land adjacent to the canal. This means it will take longer for surface ponding and groundwater levels to recede following rain events. This potential effect can be remedied by installing a temporary pumping system

which will pump water from the side drains into the canal, so that no issue should arise. Under the consented method these drains would be blocked from discharging into the canal while it is being actively dredged and the water from these catchments was to be pumped into sections of the canal which are not in a dewatered state.

The key flood management principle of avoiding floodwaters being conveyed through the remediation zone to the maximum extent possible will continue to apply. This will be achieved by diverting floodwaters within the drainage scheme using temporary pumping, stopbank top-ups, supplementary culverts and other methods.

The removal of the need to construct earth bunds at either end of the remediation zone has been identified as a benefit of the proposed method. The use of sheet pile dams, weirs, or other similar structures will enable active control of floodwaters, thereby eliminating the risk of uncontrolled inundation of the remediation zone.

It is proposed to retain the current conditions (conditions 7.1 - 7.5) with changes where necessary to refer to the updated Site Management Principles and Flood Management Principles prepared by Peter West. Other minor changes are required to conditions 12.7 and 23.1 to reflect the flood and stormwater management measures associated with the new method.

Included as part of the attached flooding assessment is a draft Flood Management Plan, which has been prepared specifically for the proposed dredging methodology. The plan sets out a flood management system and procedures which, if followed, will ensure that all flood and drainage related effects of the proposed method are managed to at least the same degree as the current consented method. The purpose of this draft Flood Management Plan is to demonstrate an approach that can be implemented to manage floodwaters in accordance with the requirements of the amended consent conditions. There is a need to retain some flexibility to enable the detailed flood management measures to be developed into a final Flood Management Plan for the specific methodology adopted by the contractor. A factor that will significantly influence the final flood management plan is the type of control structure, specifically whether it is a barrier-type structure or a silt curtain system."

The assessment provided with the variation application initially indicated that the revised methodology would result in a loss of flood storage within the canal as a result of maintaining water within the remediation zone of the canal at high tide level. However, as part of the Applicant's response to the s92 request for further information Mr West has confirmed that whilst the water level in the canal at the onset of a flood event is likely to be lower under the consented method than the proposed variation, the available floodwater storage volume would be greater. This is primarily due to the higher crest height of the control structures proposed under the variation application compared with the earth bunds in the current consents.

The Applicant further notes that capacity for flood storage within the remediation zone as part of the Flood Management Plan is only relevant if a barrier-type control structure is used. If a silt curtain type structure is used there will be no ability to provide storage. Under normal conditions there will be some conveyance of water through the remediation zone and during flood events, silt curtains may need to be opened to allow floodwaters to pass unimpeded.

The variation application and associated flooding assessments prepared by Mr West have been reviewed by Sue Southerwood (Contract Engineer for the Regional Council as consent authority). The following summaries the comments provided by Ms Southerwood:

- a. Regarding land drainage, although not all proposed supplementary pumping rates have been included, I am in agreement that all land draining to the canal system can be continued at the current pumping or gravity flow regime while works are being undertaken.
- b. Flood mitigation is a mixture of storage, diversion and discharge as previously proposed. Depending on the location of the active cell(s) during a rainfall event, there are different options available for flood mitigation. As not all of the information regarding flood management and

placing of flood control structures has been confirmed to date, I am in agreement that the existing consent condition regarding the presentation of a flood management plan for review prior to exercise of the consent remains.

- c. I do not consider that maintaining water levels at high tide levels within the actively dredged cell will have an impact on flooding effects. Considerable effort has been placed into weather forecasting and water level monitoring so that if needs be, water levels can be reduced via the treatment pump. I agree that day to day drainage will be affected but can be mitigated with supplementary pumping.
- d. Further detailed work has been provided concerning the canal system hydrology and hydraulics and the flood management plan. The plan indicates that for three main types of flooding and for up to a 20 year event storm, flooding effects due to the proposed works can be mitigated. For larger rainfall events, the proposal is to remove all plant and machinery from the site leaving only the necessary pumping equipment and pipework and use as much as possible of the work site for storage. Based on five flood control structures, it has been shown that flood mitigation is possible, however it has not been confirmed that the five control structures will be part of the final proposal. Therefore the consent condition regarding review of the flood management plan prior to exercise of the consent will still be required.

As a result of queries raised in Ms Southerwood's memo dated 3 May 2016 and the s92 request for further information, the Applicant has provided further information demonstrating the flood storage available within the canal if water is to be held at high tide level during remediation works within the canal. Following her review of the Applicant's response to the s92 request (including Mr West's memo dated 1 June 2016), Ms Southerwood has advised she is satisfied that, provided the flood control structures allow for storage volumes to R.L 1.8m, there will be no decrease in the available flood storage volume in the work site.

Based on the information provided with the application, the Applicant's response to the request for further information and the advice of Ms Southerwood, and the proposed consent conditions, I am satisfied that with the revised flood management conditions in place, the proposal is able to proceed in a manner that will not result in additional flooding effects beyond those that have been provided for as part of the current resource consents.

## 5.5. Soil and groundwater quality

The consented method includes containment cells lined with a geotextile fabric designed to contain the sediment but allowing water to filter through the geotextile layer. Although most sediment will be contained, very fine sediments are expected in the 'pore' water draining from the cells. The AEE provided with the original application suggested that pore water draining through the geotextile layer will enter fine grained soils and then migrate into shallow groundwater and eventually discharge into the Kopeopeo Canal. The Applicant assessed that this process would result in a natural filtering of pore water and particulate matter will be retained in the soil matrix. Further to this, the AEE states that it is expected that, with time, less fine grained sediments will pass through the geotextile layer.

Based on tests carried out on samples taken from the Canal, which demonstrate the level of contaminants filtering through the geotextile layer will be well below the USEPA standard (30 pg/L), the AEE concluded that dioxins leaching from the sediment in the containment cells will have no significant effect on the environment. The AEE also states, however, that there will be some localised short term contamination of the soil beneath the containment sites prior to bioremediation taking place.

Monitoring of the level and quality of groundwater quality at each Containment Site was proposed to assess any changes on groundwater as a result of the remediation activities at the containment sites, and corrective actions were proposed to address adverse effects if they eventuated. The programme of monitoring and remedial actions is reflected within conditions 37.1 to 37.11 of the Regional Council consent, along with groundwater quality limits.

An assessment of the groundwater effects of the proposed methodology has been undertaken by Jacobs NZ. It has been assessed that the introduction of an impermeable HDPE liner into the design of the containments sites will remove the two potential contaminant transport pathways identified in the original consent application. These pathways are the movement of dissolved dioxins in groundwater and the movement of dioxins by colloidal transport in groundwater. The revised methodology reduces the risk of groundwater contamination and the risk is now considered negligible.

Given the reduced risk of groundwater contamination, the Jacobs report recommends a revised groundwater monitoring plan. The key changes to the plan are:

- a. A reduction in the frequency of water level monitoring from monthly to bi-monthly;
- b. A reduction in the frequency of groundwater monitoring immediately following the placement of sediment from monthly to quarterly;
- c. A reduction in long term monitoring frequency from six-monthly to annually;
- d. A reduction in the number of monitoring wells required to be monitored.

The Applicant has proposed amended conditions to reflect the recommendations contained within the Jacobs report.

The variation application and groundwater assessment have been referred to Janine Barber (Senior Environmental Scientist at the Regional Council) for review. Ms Barber considers the Jacobs report to be comprehensive and she advises the assessment of groundwater matters provides no matters of concern and advises that the option being proposed is an improvement that will help address the issues raised about potential for contamination of groundwater.

Based on the assessment provided by the Applicant and the advice of Ms Barber it is assessed that the adverse effects associated with groundwater quality will be less under the revised methodology than the current consented method. The variation application does not specifically address the quality of soil under the containment sites but it is reasonable to conclude that the localised effects originally anticipated will be no greater under the revised proposal than they will be under the current consented proposal.

#### 5.6. Noise

The potential effects associated with noise were assessed as part of the original application (section 6.8 of the AEE supporting the original application) and an acoustic assessment was prepared by Design Acoustics in support of the application (Appendix M to the AEE).

The assessment identified that a range of machinery would be used for various aspects of the work, including:

- a. Earthmoving associated with construction and removal of the four major bunds;
- b. Steel sheet piling associated with the construction of earth bunds:
- c. Pumps for dewatering sections of the canal;
- d. Earthmoving associated with excavation of each section of the remediation zone;
- e. Transportation of spoil to the containment sites.  $\Box$

Works under the original consent were restricted to the hours 7.30am and 6.00pm, Monday to Saturday and no works were permitted to occur on Sundays and Public Holidays. Activities associated with the pumping of water from the remediation zone of the canal, and any mitigation measures necessary to manage dust, odour, sediment spills, flood events, or any other effects associated with the exercise of the consents are exempt from these time restrictions.

The Design Acoustics assessment indicated that noise levels from all activities associated with the project were expected to comply with the construction noise standard NZS 6803:1999 (as required by the Whakatane District Plan), noting that some minor noise control treatment may be required where construction work such as piling or de-watering is carried out near to rural dwellings or adjacent to industrial properties within the Gateway development. Design Acoustics concluded that the adverse

effects of the consented method would be less than minor provided these types of measures were adopted. Design Acoustics recommended conditions requiring compliance with NZS 6803:1999 and suggested that a Construction Noise Management Plan may be appropriate. Design Acoustics recommendations are reflected in conditions 5.1 to 5.3 of the District Council consent.

The variation application assesses the differences in noise to be generated by the revised methodology compared with the current consented method and provides an acoustic assessment by Design Acoustics.

The Design Acoustics assessment (on the variation) notes that the revised method will significantly reduce the use of large diesel powered machinery and trucks, therefore lowering noise emissions. Noise levels are predicted to be 5-10 dBA lower with the revised method. The variation application states that no changes are proposed to the noise limits specified in the current consent conditions but that the reduced noise emissions associated with the method will ensure the noise limits are achieved with a greater margin of safety and any noise effects on the surrounding residents will be reduced relative to the consented method.

As the revised methodology will generate less noise, the Applicant seeks to allow for dredging activities to be undertaken during evening and weekend hours if it can be confirmed that the works will meet the relevant noise limits of the District Plan. The Applicant suggests that enabling evening and weekend dredging will potentially reduce the overall duration of the dredging operation.

The acoustic assessment indicates that daytime and night time limits are likely to be achieved at dwellings located 150m or more from the dredging plant. As a consequence, the assessment suggests a 24-hour dredging operation can be considered where the separation distance of 150m can be achieved. However, the assessment states that it is unlikely dredging activities will be able to meet the 45 dBA night time limit in locations where dwellings are located within 150m of the canal.

The variation application states that the exact equipment to be used for the dredging process is yet to be confirmed and, as a consequence, the noise assessment is based on estimates of the likely noise from the dredging equipment. To address the potential uncertainty, the Applicant proposes to provide confirmation that the ability to meet the noise limits prior to the commencement of works through a Construction Noise Management Plan. This is reflected in condition 34.2 of the Regional Council consent and 5.3 of the District Council consent.

The variation application and supporting acoustic assessment has been referred to Lisa Millican (Environmental Health Officer at the Whakatane District Council) for review. The following summarises the comments provided by Ms Millican:

- a. Generally supports the proposal and understands this will be a quieter method of removal and transporting the contaminated sediment as there will be less trucks, trailers, machinery, less sheet metal piling, digging, etc.
- b. There will be pumps, possibly booster pumps, mobile pump station platforms and piping of the slurry and water. Some concern was expressed regarding the potential for noise to be generated by pumps and associated generated.
- c. Agrees with Design Acoustics assessment that NZS 6803:1999 is the appropriate standard.
- d. Recommended that if the dredging is allowed to occur 24 hours per day 7 days per week, compliance with the noise levels to minimise night sleep disturbance in rural and residential zones (Leq 45 dBA and Lmax of 75 dBA) needs to be ensured and reflected in the conditions of consent.
- e. Supports the proposal to provide a Noise Management Plan.

Ms Millican identified that the Design Acoustics assessment did not address the potential for tonal

characteristics and lower frequency noise that may cause 'noise nuisance' effects. Further clarification was sought on this matter as part of a s92 request for further information. Design Acoustics responded to this advising that NZS 6803: 1999 states that the measured noise levels (for construction noise) are to be compared directly with the applicable noise limits without adjustments for special audible characteristics. Their advice is that construction noise is assessed differently than other environmental noise and any penalty due to tonal characteristics or low frequencies is effectively built in to the specified noise limits without any further adjustment being required.

Having regard to the likely noise sources of the consented and proposed methodology, the proposed conditions of consent which retain the original noise limits (based on NZS 6803:1999 which is accepted as the appropriate standard) and requirements for a Construction Noise Management Plan demonstrating compliance with the noise limits, I agree with the Applicant's conclusion that the revised construction methods will result in reduced noise effects compared with the consented methods.

I acknowledge Ms Millican's concerns that that compliance with the noise limits has not been proven by the Applicant, however, I consider it appropriate to enable the Applicant to confirm these can be achieved through the construction noise management plan. In my experience, this is a common requirement for construction projects and is appropriate in this instance. In my opinion, the conditions of the consent are clear that the relevant noise limits of NZS 6803:1999 are to be met and the management plan is an appropriate mechanism to demonstrate how that can be achieved. This approach is also consistent with that provided for by the current consent conditions.

## 5.7. Air Quality

The variation application provides a concise and helpful summary of the key differences between the potential air quality effects associated with the consented and proposed methodologies. The variation application (section 6.1.6, page 26) states:

One of the key advantages of the proposed methodology over the consented approach is the reduced potential for adverse air quality effects. Under the current consents the dewatering of the canal, excavation of sediment under relatively dry conditions and transportation to the containment sites using trucks travelling over unsealed roads had the potential to generate dust. This includes the risk of undetected sediment spills drying out and forming dust. An extensive package of mitigation measures has been developed to avoid these effects wherever possible and mitigate any unavoidable effects.

The proposed methodology described in this application does not require dewatering of the canal and transports the sediment in a slurry form through a sealed pipeline system which minimises the potential for spills. Vehicle movements are limited to the transport of people and equipment to and from the site. These aspects of the proposal substantially reduce the potential for any adverse effects on air quality.

Following the completion of the excavation and dewatering phases of the project, it is possible that the geotubes may need to be opened to enable the sediment to be inoculated with fungi as part of the bioremediation treatment process. This is similar to the consented methodology and the potential for dust generation will be mitigated in the same manner by using sprinklers to keep the sediment damp. Dust associated with earthworks associated with the containment site construction will be managed through the existing consent conditions which require an Erosion and Sediment Control Plan to be prepared and submitted prior to commencing works. The changes proposed to the containment site design will not significantly affect the potential for dust generation during the construction of the containment sites.

The variation application (including the Air Quality Assessment prepared by Jacobs in support of the variation) has been referred to Dr Bruce Graham for review of the air quality related aspects of the proposal.

The following provides sets out the key points of Dr Graham's advice:

"A key feature of these proposals is the elimination of the several hundred truck movements that would have been required for carrying the sediment from the canal to the containment sites. This would have the effect of completely removing the potential for dust emissions to air, and associated dioxin releases, from the transport phase of the operation.

The use of a closed pumping system will also remove the potential for discharges to air from the initial sediment handling and mixing at the containment sites. However, these releases may not be entirely eliminated if the Geotubes have to be cut open to allow the mechanical mixing of additional inoculated wood chips to promote bioremediation.

## Conclusion with Regard to Potential Dust Emissions to Air

The Applicant has indicated that the proposed changes to the consented operation will substantially reduce the potential for any adverse effects on air quality, and I generally agree with that conclusion. Under the revised proposal the main potential source of discharges to air will be the dust generated during construction of the containment sites. Some minor variations have been proposed in the design of the containment sites but these should not have any significant effect on the potential for dust releases. As a result the dust emissions from this part of the operation should be no greater than those currently allowed under the consent, while the releases from the transport phase should be much lower. In addition, dust releases from the Geotubes while wood chips are being added can be minimised by ensuring that the work is done under low wind conditions.

### Conclusion with Regard to Potential Dioxin Emissions to Air

The only aspect of the operations with the potential to cause dioxin releases to air would be when the Geotubes are opened to allow the mixing of additional wood chips. I would expect the potential for releases to be low, but would recommend that this be confirmed by air monitoring prior to and during that phase.

### Proposed Changes to Consent Conditions

Conditions 40 and 42 of the [Regional Council] consent cover some specific requirements for air monitoring, which the Applicant has proposed could now be modified on the basis that the potential air quality impacts from the revised process should be very low. I generally agree with that position but would suggest that a minimal amount of monitoring should still be required in order to meet two of the key outcomes of the monitoring activities, namely:

- to confirm that dust management methods are being applied effectively, and,
- to provide reassurance to local residents and to the Regional Council that the □concentrations of any air contaminants are within acceptable levels.□

At a minimum, I would recommend that the following monitoring be required:

- The collection of at least two dioxin in air samples at a site adjacent to one of the containment areas during the early stages of Geotube filling, and a further two air samples if and when the bags have to be cut open to allow the dewatered sediment to be mixed with additional wood chips in preparation for bioremediation.
- Instrumental dust monitoring in the vicinity of one of the containment sites during the first 4 weeks of construction. □

If the results from this monitoring indicate that there are no adverse effects associated with the activities then the monitoring could be stopped. The decision to do so would be made by the Regional Council (as regulator), but preferably after the Consent Holder has consulted with the Community Liaison Group."

The Applicant proposes air quality monitoring for dioxins and instrumental dust monitoring in a manner recommended by Dr Graham. These monitoring requirements are reflected in conditions 40.1 and 42.1 of the Regional Council consent, along with air quality limits and requirements for remedial action which are consistent with the requirements of the original consent conditions.

Based on the information provided with the application, the advice of Dr Graham, and the Applicant's

proposed conditions it is concluded that the risk of adverse effects associated with air quality (including potential contamination associated with dioxins and the generation of dust) will be significantly less under the proposed methodology compared with the consented method.

#### 5.8. Traffic

The consented method involves the loading of excavated sediment onto trucks for transportation to the containment sites. The AEE submitted with the original application estimated that this would require around 8,000 truck movements, split between the three containment sites. Key issues relating to traffic and the transportation of sediment were associated with the volume of traffic, impact on regular road users, the safety of the road network (particularly at State Highway intersections), the potential for sediment to be spilled and/or tracked on roads, pedestrian safety associated with Paroa School, and potential impact on Whakatane District Council's roading infrastructure. These effects were to be managed through a comprehensive Traffic Management Plan required by condition 6.1 of the District Council consent and specific management measures required by conditions 6.2 to 6.12. A range of conditions were also included on the consents to ensure that any spills were identified, cleaned and validated.

The proposed method results in significantly less truck movements compared with the consented method, as the truck movements associated with the transportation of sediment from the canal to the containment sites are no longer required. The Traffic Impact Assessment ('TIA') prepared by Jacobs in support of the variation application states that the elimination of truck movements associated with the transportation of sediment to the containment sites reduces the potential impacts on the operation and safety of the road network.

The TIA notes that there will be some heavy vehicle movements associated with the set up of equipment on site, but that such vehicle movements will generally be at the start and finish of works within each section of the canal, rather than vehicle movements throughout an entire work day. Truck movements are expected to be infrequent and significantly lower than the current methodology and Jacobs conclude that it is likely the proposed methodology will have negligible effects on the road network. Traffic associated with site workers is not expected to result in any adverse effects on the safety and operation of the road network and Jacobs conclude that no specific site or access management is required for traffic associated with site workers. The TIA also recommends that the requirement for a Traffic Management Plan be retained and that this should be amended to address measures associated with any over-dimension vehicles required for the set up and removal of heavy equipment and heavy vehicles used for setting up pipes and pumps. Specific traffic management measures are also recommended to provide for access and safety.

The Applicant proposes to retain condition 6.1 in the existing consent to require a Traffic Management Plan to be prepared and submitted to the District Council in accordance with the recommendations provided in the Jacobs TIA.

Based on the assessment provided with the variation application (including the Jacobs TIA), it is concluded that the adverse transportation associated with the project will be significantly reduced as a result of the revised methodology.

## 5.9. Visual Amenity

In relation to visual amenity, the variation application states:

The proposed changes to the containment site design will not affect the overall appearance of the containment sites once the dredging phase of the project has been completed. There will be security fencing and screen planting around the perimeter of the sites and the cells will be topsoiled and planted as proposed under the consented method. The changes to the internal layout of the containment sites will not materially alter the effects on the visual amenity of the surrounding rural environment. The effects resulting from the earthworks activities along the canal will be similar although there will be less modification of canal banks and temporary road construction activities.

I fully agree with, and accept this assessment. I further note, that the revised proposal result in works being undertaken in one season and, as a consequence, the containment sites will not be left vacant between the two works seasons as originally proposed. This was an issue that was identified in Part C to the s42A report prepared in relation to the original consent applications.

It is concluded that the revised proposal will not result in any additional adverse visual effects beyond those which are already provided for under the existing consents.

#### 5.10. Cultural Effects

The significance of the project to Tangata Whenua, and the cultural benefits that it would deliver were acknowledged in the assessment of the original applications. The submission of Ngati Awa in support of the proposal was also acknowledged along with some concerns raised in relation to:

- a. Ensuring the containment sites were appropriately designed and located;
- b. Removing sediment from the containment sites in the event bioremediation was not successful;
- c. The potential to uncover unidentified sites of cultural significance;
- d. The potential for contamination effects at Paroa School.

These concerns were acknowledged and addressed through the assessment of the application and conditions were imposed on the resource consents relating to:

- a. The design standards of the containment sites;
- b. Management measures and monitoring to ensure dust with potential to result in contamination would not be generated;
- c. The provision of an Accidental Discovery Protocol for Dealing with koiwi or taonga unearthed during the project; and
- d. The invitation for Ngati Awa to appoint a cultural monitor to oversee and provide advice on the project with respect to cultural matters.

The variation application states (section 6.1.15, page 30) that the methodology for the project was developed with involvement by Te Runanga o Ngati Awa ("Ngati Awa") to ensure it is consistent with tikanga Maori. The key principles of this approach were:

- Remediation of the contaminated sediment at the containment sites rather than permanent containment:
- Dealing with the problem of contamination locally and not transferring it to another area to deal with:
- Avoiding the contamination problem being passed on to future generations.

The variation application states that the revised methodology adheres to these principles.

The Applicant advises that the proposed changes have been developed in consultation with the Cultural Monitor appointed by Ngati Awa to the project. Direct consultation with Te Rununga o Ngati Awa ('TRoNA') has also been undertaken and the lwi has provided a letter of support for the variation application. In the letter (dated 14 June 2016 and provided with the Applicant's response to the s92 request for further information), TRoNA acknowledge that previous concerns raised in respect of the project have now been addressed as a result of the following:

- a. The alternative enclosed methodology will reduce the risk of release of contamination at the canal, in transit and at the containment sites;
- b. The opportunity for Pukenga/Kaumatua to inspect the area of the trial excavation for the presence of culturally significant items prior to works commencing. TRoNA requests that this opportunity is extended for the full length of the proposed works.
- The scientific response from the trial excavation that indicates that the enclosed methodology will
  not reduce the ability for effective bioremediation of the contaminated sediments;

d. The appointment of the cultural monitor for the trial. TRoNA requests that this opportunity is extended for the wider Kopeopeo Canal Remediation Project and that this role should extend to the Matauranga aspects of the project as well as the discovery and treatment of koiwi and taonga that may be encountered.

The requests by TRoNA in relation to cultural monitoring and aspects of the works area by Pukenga/Kaumatua are provided for by the conditions of consent (Regional Council consent condition 33.1 and District Council consent condition 22.1). In addition, the Applicant proposes to provide details for cultural monitoring in the Dredging Management Plan proposed by the Applicant. It is anticipated that this monitoring will be developed in consultation with the Cultural Monitor appointed to the project and will therefore reflect the range of activities they will oversee and provide advise on.

Based on the information provided with the variation application and the letter of support from TRoNA, it is considered that the revised methodology (including the proposed consent conditions) will not result in adverse cultural effects beyond those that are allowed by the original consents.

## 5.11. Effects on High Quality Soil / Loss of Productive Land

The assessment of the original resource consent applications considered the effects of the proposal on the loss of productive land as a result of the construction of the containment sites. The variation application states:

There will be no change to extent of the containment sites and therefore no difference in the effects of the proposal on the availability of versatile soils (containment sites 1 and 2) resulting from the proposed change. There is the potential for a reduction in the footprint of the containment cells with the proposed method. The overall effects of the proposed changes on high quality land are considered to be similar or less than the consented method.

I am in full agreement with and accept the Applicant's assessment in relation to productive land.

#### 5.12. Health Effects

The assessment of the original consent application considered the potential for adverse effects as a consequence of dioxins being released into the environment as a result of the remediation project. It was identified that the project needed to be carefully managed to ensure were no unacceptable risks to human health as a result of the project. The original application identified that dioxins can result in serious adverse effects on human health and that reducing risk to human health as a result of contaminated sediments was one of the key drivers for the remediating the Canal. Although the project is intended to deliver positive health outcomes, it was acknowledged that the project has the potential to result in adverse effects on human health if not managed appropriately.

The AEE submitted with the original applications (section 6.12, page 105) addressed matters associated with human health and concluded that the remediation process would result in minimal adverse effects on the environment. The Applicant identified the key concerns of the community to be the potential for contamination and adverse health effects associated with:

- a. The generation of dioxin contaminated dust;
- b. Contamination of groundwater as a result of contaminated water draining from the containment sites; and
- c. The potential for accidental sediment spills.

A range of mitigation measures were proposed and the resource consents were granted subject to conditions requiring comprehensive mitigation measures and monitoring to ensure the project would not result in adverse health effects associated (particularly as a result of dioxin contamination).

Despite the risk of adverse health effects being low, the original applications acknowledged the concerns within the community about the proposed remediation activities and the anxiety this can cause to people. Consent conditions requiring a qualified Independent Monitor to oversee and advise on the project, and the establishment of the Community Liaison Group were a direct responses to

concerns raised by the community in terms of the validity of the methods of the project, and concerns regarding the safe execution of the works.

The variation application and further information response has been reviewed by Andrew Kohlrusch, a contaminated land specialist, accredited site auditor, and the Independent Monitor appointed in accordance with condition 6.1 to 6.3 of the Regional Council consent. Mr Kohlrusch advice is that the information provided with the variation application has demonstrated that dredging the sediments from Kopeopeo Canal is a practical alternative method to the consented method. With appropriate planning and execution, Mr Kohlrusch considers the alternative method will allay community concerns regarding dust generation and contamination of other areas, avoid hundreds of truck movements carting contaminated sediments, maintains the water flow in the Canal during remediation and allows the sediments to be placed in a controlled and safe manner that can be accessed for the bioremediation phase. Mr Kohlrusch provided the following comments in support of his conclusion regarding the appropriateness of the revised methodology:

- a. The proposed method will effectively act as a closed loop with the sediments being transferred to the containment areas in the pipeline with direct discharge into the Geotubes. There will be little if any exposure of the sediments to the atmosphere, thereby mitigating one of the community's key concerns with the consented approach release of dioxin laden dust to the atmosphere during the excavation of the sediments and subsequent placement into the containment areas.
- b. The proposed method will also provide a more efficient system of working and remove a number of risks (e.g. noise, truck movements, decontamination of trucks and other equipment, dioxin migration to groundwater) that were of concern in the original method.
- c. There will be better homogenisation of the sediments which will result in ease of application of ameliorants for bioremediation as well as generating consistent monitoring data.
- d. It is understood that the RAP will be replaced in the Variation Consent by a Dredge Management Plan (DMP). The DMP should include the key relevant elements of the RAP as well as the steps required to dredge the sediments in an environmentally sensitive and safe manner taking into account the site specific characteristics.
- e. The proposed method includes treatment of the sediment/water mix with flocculent and coagulant which will control the amount of dioxin that may be present in the water discharged from the Geotubes into the sump and then into the canal. Tests of the filtrate during the treatment trial showed that the amount of dioxin n the aqueous fraction would not lead to recontamination if the sediments of the canal.
- f. The sump may need to be larger than indicated on the containment cell diagrams to accommodate the large amount of water that will be generated with a 3 per cent sediment load.
- g. The use of an HDPE liner will act as an appropriate barrier of release of leachate into the groundwater. The groundwater monitoring programme nominated by Jacobs (2016) will be necessary to demonstrate the effectiveness of the HDPE liner.
- h. The capture of sediment in the Geotubes is not likely to generate dust or require specific long term management and provides a controlled environment for the subsequent bioremediation.
- i. The proposed method will prevent dioxin transport to groundwater in the containment cell areas with filtrate from dewatering discharged to the canal. The HDPE liner will offer far greater protection to groundwater and the surface water drains will minimise water accumulation in the containment cell.
- j. The proposed method will significantly reduce dust generation due to the removal of the requirement for transporting the sediment to the containment cells.
- k. The consented method was to involve contaminated sediment drying out in the containment cells which could generate dust which has a potential exposure pathway for dioxin release. The exposure pathway will be removed by the proposed method as the sediment will be contained in a pipeline which will discharge directly to the Geotubes.
- I. The potential for spillage of dioxin contaminated material during the excavation process and the transport from the canal to the containment cells will be removed. The proposed method removes a number of potential opportunities for spillage that were present in the original method and reduces the potential risk of spillage to ground of contaminated sediments. Leaks in the pipeline and/or the Geotubes could result in an uncontrolled release and an appropriate response to such incidents should be recognised in the DMP.

m. Peter West (2016) has provided information that will allow bespoke design of the containment cells to account for the unique features of the Rangitaiki flood plain. The dredging along with the containment cell design is aimed at mitigating impacts to both surface water quality and flow.

The areas of potential risk and recommendations provided by Mr Kohlrusch have been addressed through the Applicant's proposed conditions (see conditions 4.1, 29.6, and 37.1 to 37.9 of the Regional Council consent conditions).

In relation to the additional information provided by the Applicant in response to the s92 request for further information, and comments from other experts assisting the consent authorities, Mr Kohlrusch has provided additional advise on detailed aspects of the proposal which has been reflected in the proposed conditions of consent. These matters relate to air quality and water quality monitoring, removal of the silt fences/control structures, sizing of pipelines and sumps, the potential for leaks/spills from the pipelines.

Based on the information provided with the application, the assessment provided throughout this report, and the advice of Mr Kohlrusch, I am satisfied that the revised methodology will result is less potential for adverse effects on human health than the current methodology. Previous conditions of consent imposed to ensure the project is managed in a manner that protects people and the environment from effects associated with dioxin contamination have been adapted (where necessary) and are proposed as part of the variation application.

## 5.13. Summary of Effects

In summary, having regard to the information provided with the variation application (including the proposed consent conditions) and the advice of the consent authorities technical reviewers, I have concluded that many adverse effects are no greater than provided for by the current consents, and some are less than they would be if the proposal proceeds in accordance with the current methodology.

The revised methodology does, however, result in some new effects in relation to flooding, water quality and aquatic ecology, terrestrial ecology, and the integrity of the Whakatane River stop bank. In relation to flooding and the integrity of the stopbank, it has been concluded that these matters have been addressed through the flood management plan requirements and the design requirements for Containment Site 3 (respectively).

Potential adverse effects associated with aquatic ecology and water quality as a result of filtrate and stormwater discharges are considered to be less than minor with the proposed conditions in place, which provide for water quality limits to protect environmental values and human health.

In addition, the potential adverse effects associated with inundation of the saltmarsh (if hard control structures are used at each end of the remediation zone) are considered to be minor and are less than the adverse effects that would have occurred as a result of the temporary causeway which was to be constructed under the consented method to provide for truck access to Containment Site 3.

#### 6. Sections 95A to 95F – Checklist

## 6.1. Is Public Notification required?

#### Step 1

•				
Has the applicant requested that the application be publicly notified (s95A(2)(b))?				
	Yes – PUBLICLY NOTIFY			
Note date and method of request:				
$\overline{\mathbf{V}}$	No - go to Step 2.			

Step 2  Does a rule or a national environmental standard (NES) require public notification (s95A(2)(c))?							
<b>V</b>	go to Step 3.						
Ste	р 3						
		est for further information (s92(1)) been made or has the applicant been notified of the commission a report (s92(2))?					
$\checkmark$	Yes	go to Step 4.					
	No -	go to Step 5.					
Ste	p 4						
		plicant failed to respond by the deadline specified, refused to provide the information or refused to agree to the commissioning of the report (s95C)?					
	Yes -	- PUBLICLY NOTIFY					
$\overline{\mathbf{V}}$	✓ No - go to Step 5.						
Ste	p 5						
Doe	s a rul	e or an NES preclude public notification (s95A(3)(a))?					
	Yes	- go to Step 7.					
Iden	tify rule	e and plan (Rule: , Plan: ); or					
Iden	tify NE	S:					
<b>✓</b>	No -	go to Step 6.					
Ste	p 6						
		tion of whether the adverse effects of the activity on the environment will be or are likely to be minor (s95A(2)(a) and s95D).					
(a)	In fo	ming this opinion, you <u>must</u> disregard any effect:					
	1	On persons who own or occupy the land on which the activity will occur or any land adjacent to that land (s95D(a)). Have you disregarded any effects under this provision?					
		✓ No – go to 2.					
		Yes – Identify any effects that you have disregarded on this basis. Go to 2.					
	2	Trade competition and the effects of trade competition (s95D(d)). Have you disregarded any effects under this provision?					
		✓ No – go to 3.					
		Yes – Identify any effects that you have disregarded on this basis. Go to 3.					
	3	On a person who has given written approval to the relevant application (s95D(e)). Have you disregarded any effects under this provision?					
		✓ No – go to (b).					

		ntify any effects that you have disregarded on this basis and the relevant parties provided written approval. Go to (b).					
(b)	activity with that effect effects under this pro	n, you <u>may</u> disregard an adverse effect of the activity if a rule or NES permits an et (s95D(b)) (Note - this can include a district plan). Have you disregarded any evision? Note that that the discretion to disregard any effects should consider t with the purpose of the RMA to do so.					
	✓ No – got to (	c).					
	☐ Yes - Identify	y any effects that you have disregarded on this basis.					
(c)	In the case of a controlled or restricted discretionary activity (RDA), you <u>must</u> disregard an adverse effect of the activity that does not relate to a matter for which a rule or national environmental standard reserves control or restricts discretion (s95D(c)).						
	Are any of the activities	s a controlled activity or an RDA?					
	✓ No – go to (d	I).					
	Yes.						
	Identify rule and plan (	Identify rule and plan (Rule: , Plan: )					
	Have you had regard to which Council's disc	o any effect that does not relate to a matter specified in the plan or proposed plan cretion is restricted?					
	☐ No – go to (d	1).					
(d)	Taking account of (a), (b) and (c) above, identify whether that the activity will have or is likely to have adverse effects on the environment that are more than minor:						
	Refer to Section 5 of re	eport.					
	the activity have, or be 5A(2)(a))	likely to have, adverse effects on the environment that are more than minor?					
	Yes – PUBLICLY NOT	TFY					
<b>V</b>	No - go to Step 7.						
Ste	p 7						
matt matte	ters which justify public ters does not compel pub	ances which warrant public notification (s95A(4)) or are there any other c notification (s95A(1))? Note that the existence of special circumstances/ olic notification – a decision must still be made as to whether those uch to warrant public notification.					
П	Yes – PUBLICLY NOT	TFY					

Note the special circumstances:

✓ No - go to Step 8.

The variation application includes a legal opinion from Cooney Lees Morgan regarding the matters relevant to determining notification requirements for variation applications under s127 of the RMA.

The legal opinion identifies that the consent authorities have discretion to publicly notify the variation applications under s95A(1), but the opinion notes that the former presumption in favour of public notification was removed as a result of the 2009 RMA amendments. In relation to 'special circumstances' the legal opinion states that the courts have held that to be 'special', the set of circumstances would need to be unusual and exceptions, but may be less than extraordinary or unique. CLM also considers it to be well settled in the courts that concern expressed by members of the community about a project is not, in itself, a 'special circumstances'. CLM suggest the ultimate question, which should influence the discretion whether to publicly notify an application, is whether notification might elicit additional information that would inform the decision.

#### The CLM advice states:

"In this case we are dealing with a variation application which focuses on construction methodology and associated mitigation and monitoring conditions. These are principally technical issues which are thoroughly addressed in the technical reports submitted with the application, which will be the subject of expert peer review by the consent authority as considered appropriate...

...it is a focused variation application which proposes methodology changes rather than a new project. Notification cannot be expected to provide any additional information necessary to determine the application which is not already before, or available upon request to, the consent authority."

I agree with the advice of CLM that the variation applications principally involve changes to the methodology for the project and associated mitigation and monitoring matters associated with the changes. The application was supported by detailed technical advice which has been peer reviewed by the consent authorities technical advisers. Having regard to the proposed changes to the resource consents, the information provided with the application, the advice of the technical advisers, and the legal opinion provided by CLM I do not consider that the applications result in 'special circumstances' that warrant public notification.

## 6.2. Is Limited Notification required?

## Step 8

**Determination of whether there are adversely affected persons (s.95E)** Note that a person is an affected person if the effects of the activity on the person are minor or more than minor, but not less than minor.

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In for	ming an opinion as to who may be adversely affected:
(a)	You must have regard to any relevant statutory acknowledgements. (s.95E(2)(c)).
	Identify if there are any statutory acknowledgements relevant to this application and describe how you have had regard to this:
	☐ No statutory acknowledgements.
	✓ Name of Statutory Acknowledgement and how have you had regard to it:
	Ngati Awa has a Statutory Acknowledgement for the Whakatane River. The Statutory Acknowledgement sets out the cultural, spiritual, historical, and traditional association of Ngati Awa with the Whakatane River. Regard has been given to the Statutory Acknowledgement through consultation with Ngati Awa and the on-going involvement of Ngati Awa through the Project Steering Group, Cultural Monitor appointed to the project, and the Community Liaison Group, which has enabled the lwi to express their concerns, desires and preferences in relation to the project.
(b) You <u>may</u> disregard an adverse effect on a person if a rule or NES permits an activity wi (s95E(2)(a)). Have you considered any person to be not an affected person on this basis?	
	✓ No - go to (c).
	Yes - Identify any effects that you have disregarded on this basis and the relevant parties who have provided written approval. Go to (c).
(c)	You <u>must not</u> identify a person who has given written approval to the application (and has not withdrawn that approval in a written notice received before the decision whether there are any affected persons has been made) (s95E(3)(a)). Have you identified any parties who have provided written approval as being adversely affected? Note – beware of conditional approvals.
	✓ No - go to (d).
	Yes – list persons form whom written approval has been received:
(d)	In relation to controlled or restricted discretionary activities, you <u>must not</u> treat a person as being affected if the adverse effects of the activity do not relate to a matter specified in the plan or proposed plan for

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which control is reserved or discretion is restricted. (s.95E(2)(b))

	Identi	fy whether this application is for a controlled or restricted discretionary activity.				
	$\overline{\mathbf{V}}$	No - go to (e).				
		Yes				
	Identi	fy rule and plan (Rule: , Plan: )				
		you treated a person as being affected if the adverse effects of the activity do not relate to a matter fied in the plan or proposed plan for which control is reserved or discretion is restricted?				
		No - go to (e).				
(e)	In relation to application under s.127 (change to consent), you must consider every person who made a submission to the original application and every person who may be affected by the change.					
	Is the application under s.127?					
		No - go to (f).				
	<b>V</b>	Yes – Identify every person who made a submission to the original application and state whether that person is affected by the change and the reasons for this view – go to (f).				
	The summary of the submissions prepared for the original resource consents has been reviewed and consideration has been given to every person who made a submission on the applications. The Applicant also provided their own review of the effects of the proposed variation on the submitters to the original applications (attached to the Applicant's response to the s92 request for further information).					
	sectio	ng regard to my conclusions regarding the adverse effects of the proposed variations (as set out in 5 of this report), I consider that no person, including those that made submissions on the original cation, will be adversely affected by the changes sought to the resource consents.				
(f)	You must not treat a person as being affected if it is unreasonable in the circumstances to seek the written approval of that person. (s95E(3)(b)) (Note that "unreasonableness" in this context relates to the impracticability of contacting a person or obtaining their approval, not any perceived "unreasonableness" in relation to the withholding of approval).					
	Has it	been unreasonable in the circumstances to obtain any approval?				
	$\overline{\checkmark}$	No.				
		Yes - identify whether any persons have not been treated as affected on this basis and state the reasons why it is unreasonable to seek the approval of that person:				
		account (a) to (f) above, are there any affected persons in relation to the activity (s95B(1))? is excludes anyone who has given written approval.				
	Yes	<ul><li>identify who is affected and the relevant effect(s) – Go to Step 9.</li></ul>				
$\overline{\mathbf{Z}}$	No-	Go to Step 10.				
Step	9					
Is the	re a r	ule or NES that precludes limited notification of affected persons (s95B(2))?				
	Yes – go to Step 10					
	No – PROCESS LIMITED NOTIFIED <b>(s95B(2).</b> Serve notice on the affected persons identified in Step 10. Note that affected order holders (see Step 10) also need to be notified.					

# Step 10

**Determination of whether there are adversely affected order holders (s95F).** You must decide that a person is an affected order holder, in relation to an activity, if —

(a) the person is the holder of a customary rights order; and

- (b) the activity may have any adverse effects on a recognised customary activity carried out under the order in accordance with section 17A(2); and
- (c) the person has not given written approval to the activity or has withdrawn approval to the activity in a written notice received by the authority before the authority has decided whether there are any affected order holders.

Taking into account (a) to (c) above, are there any affected holders of customary rights orders(s) (s95B(1))? Note that this excludes anyone who has given written approval.

Yes – identify affected holders - PROCESS LIMITED NOTIFIED (s95B(3))

✓ No – PROCESS NON-NOTIFIED

### 7. Recommendation:

In accordance with the assessment set out in this report I recommend:

- a. That variation application CH16-0147 to change the conditions of Bay of Plenty Regional Council Resource Consent RC67173 be processed on a non-notified basis; and
- b. That variation application LV-2016-8085-01 to change the conditions of Whakatane District Council Resource Consent LL-2012-8085-00 be processed on a non-notified basis.

Paula Golsby

Consultant Planner - PMG Planning

Date: 16 August 2016

Rob van Voorthuysen Independent Commissioner

Date: