

## **Review by TDR of Statement of Evidence of Michael Martin on behalf of Fonterra Limited**

### **Quarry Remediation Requirements**

- As part of my review of the Essentia Report I requested additional engineering information that supported Perry Group's \$6.65m remediation estimation. This was not provided to me from Perry Group and therefore I did not make comment on the remediation aspect of Essentia's report in my review. I am unsure if Mr Martin has had access to information I did not have access to.
- I am unaware as to whether Perry Group have complied with the conditions of the existing quarry consent. I did ask Council that question at the time of undertaking my review but the answer was not known.
- In 3.10 Mr Martin states that "filling in of the lakes does not appear to meet the intent of the quarry resource consent" and he presumes that the existing lakes are required to be removed and the land returned to pastoral use to comply with the consent. The validity of this statement and whether Perry Groups' remediation assumptions are therefore inappropriate are for others (Council compliance officers, legal) to comment on rather than me. I note that the 1994 Quarry Management Plan (part of the quarry consent documents) envisaged water bodies as part of the remediation. The consent also discussed the Management Plan being updated periodically. From this I would assume that the final remediation plan would not necessarily be the same as the 1994 plan. Therefore in my view, with the information available to me at this time, Mr Martin's conclusion regarding Perry Group being required to remove the lakes (and therefore incur additional remediation costs) is very speculative. Leading on from this:
- 3.12 discusses settlement of existing soils at the base of the ponds as a result of the ponds being filled as part of the site remediation. Settlement, from the fill, would result in depressions on the ground surface that would hold water. To avoid these depressions Mr Martin suggests removing the uncontrolled soils at the base of the pond, conditioning and replacing in controlled conditions. Mr Martin attributes \$5.4m of cost to this exercise. I question, to achieve a similar outcome, whether these areas could not just be over filled by the height of the estimated settlement? This would cost substantially less and achieve a similar outcome. The remediation costs, to be removed from the development feasibility, should only be attributed to works that bring the site back to a pastoral use rather than an engineered outcome suitable for development.
- 3.15 "...BBO confirmed during a recent meeting between the parties' feasibility and geotechnical experts that no design of the earthworks for the quarry remediation was carried out by BBO" I find this surprising given Perry Group's cost consultant has management to derive a cost schedule with specific quantities relating to the remediation. I was not present at this experts meeting so am unaware of what was discussed. However the absence of an earthworks design does not give me much confidence in how Perry Group have derived their overall \$6.65m remediation number.
- Overall Mr Martin concludes that Perry Group should be allowing an additional \$10.58m for rehabilitation costs. In my view this position is dependent on whether Perry Group's remediation assumptions comply with the existing Quarry Consent and its Management Plan. In the event they don't comply and Mr Martin is correct I question whether Mr Martin's assumption that the existing soils in the base of the ponds need to be excavated, conditioned and replaced, as he suggests, is required to demonstrate compliance with the consent. Over filling, as an alternative, would significantly reduce Mr Martin's cost estimate.

## **Industrial Development**

- In principle I agree with Mr Martin that 16% P&G is high for a project such as this. However, the percentage is dependent on what is included within the P&G schedule and this can vary depending on who has prepared the schedule and how it has been priced. For instance some P&G schedules may include allowances for all onsite management while other schedules may have these onsite management costs include in rates in other sections of the schedule. Mr Martin has suggested 8% as a reasonable P&G allowance. This is both an earthworks and civil project and in my experience I have seen P&G allowances for these type of projects as high as 12%. Given the very preliminary nature of this indicative development a P&G percentage allowance of 10% would not be unreasonable.
- Central swale – as part of my review I requested from the applicant supporting engineering information that would support the adopted stormwater strategy for the indicative industrial design. This was not provided to me. Given I did not receive this information I cannot comment on the need for swale or Mr Martin's assumption that it could be removed.
- Finished level v flood level – no comment. Mr Martin has referred to Building Code requirements, however I am unsure if HCC have specific freeboard requirements in their relevant Engineering Development Guidelines.
- Road subgrades – potentially some valid comments. Again I was not provided sufficient supporting engineering information to look at this in any great detail.

## **Alternative Options**

- **Clean fill**
  - A clean fill operation for 10 – 15 years at 70,000m<sup>3</sup>/ annum generating a revenue income of \$7.5m - I have not had sufficient time to research and consider if this volume per annum, at the rates Mr Martin has assumed, is achievable in the Hamilton/ Waikato market.
  - The suggestion of \$7.5m of revenue raises an interesting question on whether (1) the clean fill operation is carried out by the land owner and this revenue is received by the owner or alternatively (2) the development entity is established, the site sold to the development entity, and the clean fill operation is carried as part of the site development. The first option would remove the revenue from the development model and therefore can't be counted unless there is an argument around site improvement that would lift the land value input in the feasibility. This would only be relevant if the resulting development resulted in an above market return and a higher input land value could be justified. The second option makes time of the overall development a much more critical factor. In this instance a discounted cashflow type of model would be more appropriate to assess the development given the length of time of the development. The model would likely assume that the land "purchase" would be input into the model at the start of the development (on commencement of the clean fill operation) and the overall development would not be completed for circa 17 years, the profitability of the development based on an internal rate of return (IRR) basis would be significantly negatively affected.
- **Partial Development**
  - I don't believe any of the parties have considered this option in any detail. Based on BBO's Industrial Site Soil Zones drawing it would appear that a development of this nature would be fragmented and a very inefficient use of land. It would be questionable if more than 50% of the site could be developed efficiently. I would consider this a poor outcome for the site.

## Summary

I believe Mr Martins cost assumptions are heavily reliant on the assumption that Perry Group is required, under its existing quarry consent, to remove the existing lakes on the site. I am not the appropriate person to comment on whether this an appropriate assumption or not. I do believe however, that alternative cheaper methods of filling the lakes to establish levels suitable for pastoral use could be considered if filling of the lakes was required. Therefore I believe Mr Martin's E/O remediation cost assumptions are high.

Mr Martin's \$7.5m clean fill revenue assumption reduces the cost of cut-fill onsite and also creates a revenue stream. From a development model perspective, if the clean fill operation is considered part of the development it would extend the development timeframe from a few years to approximately 17. I would suggest that on this basis a time cost of money (IRR) approach would be more appropriate which I believe would negatively impact the commercial return of a development.

To assist Council in the understanding the implications of Mr Martins cost and revenue assumptions (putting my comments above aside) I have inputted Mr Martin's numbers into my version of the Essentia Feasibility model. The revenue line has been increased by \$9.125m and the costs reduced by \$33.71m. This results in a development margin of \$6.8m or 8.0% margin on cost. On an IRR basis this return would appear worse. I do not consider a 8.0% static margin for a development of this nature to be a suitable commercial return. The assumption that development would be preceded by a 10-15 year wait while the clean fill operation was carried out only makes the development return appear worse.

I still agree with the conclusions I reached in my September 2019 Peer Review Report.

