

23 November 2021

Scott Chambers
sgchambers@bigpond.com

Tēnā koe Scott

I refer to your requests relating to the National Erebus Memorial, the first of which was received on the 27 October 2021. I also acknowledge your subsequent emails on the same topic on 1,4,7,8 November 2021. As you are aware, these emails have been considered under the Official Information Act 1982. Given the numerous emails received from you, we have made best efforts to note the requests in a single list below. We have asked you to confirm whether this list captures the entirety of your request. We have not received a response and therefore have interpreted your questions as below. It is important to restate that requests that ask for an opinion are not considered to be official information as per the guidance from the Office of the Ombudsman. Please find a response to each part of your request:

1. How many tonnes of concrete will be used in the construction [of the National Erebus Memorial] ?

There is approximately 55.3m³ of concrete used in the construction of the memorial. This equates to 132 tonnes of concrete.

2. What is the impact on the soil ecosystem of pouring tonnes of concrete into the soil and embedding the concrete in the roots of the 200-year-old pōhutukawa tree?

The memorial is located outside of the dripline of the tree where it is clear of the roots of the notable pōhutukawa. The plans have been reviewed by numerous arborists and deemed acceptable. The independent arborist has confirmed the memorial poses no risk to the health or longevity of the tree.

Further to this, beneath the concrete will be installed a Damp Proof Membrane or DPC, which means the concrete will not be in direct contact with the soil.

3. What is the potential future impact on the cliff face that the proposed structure is close to?

Engeo (Geotechnical engineers) have completed a stability assessment of the memorial site. The assessment determined this met required standards for stability.

4. Is it correct that you will be using in excess of 100 tonnes of concrete to build this structure?

Please see question one.

5. Are you aware that for each tonne of concrete produced, 600 kg of CO₂ is released ? (<https://www.nature.com/articles/d41586-021-02612-5>)

The Ministry is not aware of the cited article.

6. Is it correct that you have commenced construction of the concrete panels off site already?

No – this is incorrect.

- 7. In view of the climate emergency we are facing, New Zealand's role in addressing climate change / and the COP26 Conference; Do you still believe that it is appropriate to build a concrete structure rather than consider alternatives with a more suitable material?**

Requests that ask for the formation of an opinion are not considered to be “official information” as previously advised.

- 8. Have any other design options been considered that are less environmentally damaging?**

Details regarding how the memorial design was selected are available on the FAQ page of the project website: www.mch.govt.nz/erebus-memorial/faqs. There, you will note the various criteria the Waitematā Local Board required the memorial design to meet. The design was reviewed by the Auckland Urban Design Panel and granted resource consent by Auckland Council prior to receiving final landowner approval from the Local Board.

- 9. The International Energy Agency has estimated that for every kg of cement produced, around the same amount of C02 is released into the atmosphere, therefore for each tonne of concrete you are producing for this structure, you are releasing an equal amount of C02. Has this been considered by the Ministry ?**

Not explicitly, however, we note that the scale of the memorial is minor, when taken in the context of construction in Auckland or New Zealand.

While the government works to support New Zealand’s transition to a low-carbon, green economy for the future, it continues to act across other portfolio areas, including by appropriately commemorating significant moments in New Zealand history.

- 10. The evidence in the literature is that concrete leaching into the soil ecosystem can cause alkaliisation that is detrimental to the soil ecosystem. This issue has not been addressed in the arborist report you have provided. Has the Ministry considered this issue in the project ?**

We acknowledge that alkaliisation can occur when cement (not concrete) is in contact directly with soil. When concrete is properly cured, the risk of alkaliisation is significantly reduced. Additionally, the risk of alkaliisation also takes into account the direction of water flow (even underground). As the notable pōhutukawa is located above the memorial, there is no risk of alkaliisation transferring to a higher ground level.

Furthermore, as noted above, the memorial structure has a DPC installed between the concrete and the soil, so no direct contact is made between the memorial concrete structure and the soil.

- 11. The proposed concrete memorial extends to the region of a cliff face - water run-off from concrete surfaces can lead to erosion. Please advise what you consider to be the potential impact of water runoff from the concrete structure on the surrounding cliff face and environment ?**

We note that the design has been approved through the resource consent process with the current design. While we note this, we are currently working on an improved solution to ensure any runoff from the memorial captured by the drainage system will not adversely impact the cliff face.

In addition to these questions, on 16 November 2021 you also asked additional questions which we have responded to below:

12. Is it correct that the construction of the proposed monument in Dove Myer Robinson Park / Mataharehare will use in excess of 200 tonnes of concrete?

See question one.

13. if so, is it appropriate in this era of climate change and the impact of concrete production on C02 emissions globally (accounting for 8% of all C02 emissions) that the Ministry, headed by PM Jacinda Ardern, is using such a toxic material?

For clarity, the Prime Minister does not “head” the Ministry. Rt Hon Jacinda Ardern is an Associate Minister for Arts, Culture and Heritage with specific delegations that can be found here: <https://dpmc.govt.nz/our-business-units/cabinet-office/ministers-and-their-portfolios/delegations> The Chief Executive is responsible for the operations of the Ministry.

The Ministry has previously advised you on several occasions that questions which require the formation of an opinion, and therefore constitute new information are not considered to be a request for information under the OIA.

14. Has the Ministry consulted the Climate Change Commission on whether it is appropriate to pour a massive amount of concrete into a green space of Pōhutukawa trees?

No. As outlined above, the amount of concrete required to construct the memorial is relatively minor. For example, the Auckland Sky Tower consists of 15,000 cubic metres of concrete.

The Ministry has previously advised you on the steps that have been taken to minimise risk to the notable pōhutukawa. Repeat requests for similar information may be considered vexatious as per guidance from the Office of the Ombudsman.

If you wish to discuss this decision with us, please feel free to contact oia@mch.govt.nz.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Nāku noa, nā



Brodie Stubbs
Manager, Te Pae Mahara