s 9(2)(a)

Graduate Researcher – Health Sciences, University of Canterbury, Christchurch, New Zealand. s 9(2)(a)

16 April 2018

To: HON David Parker – Minister for the Environment

Cc: Associate Ministers for the Environment – Nania Mahuta, Eugenie Sage.

HON James Shaw – Minister for Climate Change

Other selected members of parliament, and interested parties.

RE: Atmospheric Geoengineering by aerosol spraying from aircraft in New Zealand

Kia ora Minister Parker,

Since at least 2010 officials of the Ministry for the Environment (including former ministers Adams and Smith) have been corresponding with various members of the public about alleged high-altitude atmospheric aerosol geoengineering operations. As part of my research I have viewed and evaluated a selection of this correspondence, and it is my assessment that many of the details provided by ministry staff (and the ministers themselves) to the public is erroneous, and that ministry officials have made false assurances to the public that cannot be substantiated by any evidence held by the Ministry. In short, the public have been misled.

I'm bringing this matter to your attention to enable you, and the associate ministers, to investigate this matter and determine whether there has been any negligence or wrong-doing by ministry officials, and to set the matter aright.

In July 2014 the Minister for the Environment stated in correspondence (1) that:

The New Zealand Government does not allow geoengineering and there is no evidence to suggest it has been used in New Zealand or internationally.

This is simply incorrect, there is a significant volume of potential evidence and ministry officials are aware of this. For the period May 2010 to January 2012 the Ministry for the Environment disclosed it had received a total of 11 separate reports of alleged evidence of aerosol spraying operations from the public covering an excess of 15 occurrences (2), as well as correspondence to the same from and to the Mayor of the Kaikoura district (3). To my knowledge ministry officials failed to properly investigate these reports. There are numerous further examples of misleading and/or unsubstantiated correspondence during that period (4). For the period February 2013 to December 2015 a further 14 reports covering at least 22 further alleged sightings/occurrences were received by the Ministry (5), and again it appears none were investigated.

The former minister claimed the government "does not allow geoengineering", but ministry officials admitted they had no policy or consultation underway at that time for the monitoring or regulation of atmospheric geoengineering operations. With no policy or regulatory framework, yet receiving frequent correspondence from the pubic and geoengineering researchers (6). Assertions by the former minister that "New Zealand is not involved in any programme of geoengineering or atmospheric aerosol solar radiation management" (7) cannot be considered credible if the reports received and held by ministry officials were never investigated.

Further, in March 2016 a ministry official requested the destruction of an internal memo (16-D-00142), which was subsequently withdrawn one month later (8) after the contents of the memo was made public. The memo indicated that ministry officials regularly monitored public and media attention concerning alleged atmospheric geoengineering operations in New Zealand, and were therefore conversant with a much wider range of possible evidence than the aforementioned reports held or disclosed by the Ministry.

This is a serious matter:

- It appears ministry officials may have deliberately misled the public by failing to investigate their reports/enquires, and by providing false assurances.
- Providing assurances to the public about 'not allowing' geoengineering, but having no
 policy or regulatory framework for monitoring alleged geoengineering activities, or
 properly investigating the reports they had knowledge of.
- The request for destruction of memo 16-D-00142 indicates a deliberate attempt to supress information, and impede legitimate public good research.

Due to the scale of alleged high-altitude aerosol spraying operations it is simply implausible for the Ministry for the Environment to deny knowledge of these. Since 2010 there have been thousands of reported sightings to social media groups, and some media coverage of the issue. Evidence consists of photographs, videos, eye-witness accounts, and analysis of possible aerosol chemical residue concentrations in rainwater (the contents of memo 16-D-00142 indicates ministry staff were aware of this). There has been more than a 1000% increase (over the previous five year period 2005-2009), in frequency of public enquiries or reporting to the Civil Aviation Authority (9). It is likely that the alleged scale of these operations may be found to violate a number of international treaties to which New Zealand is a signatory (10), as well as domestic legislation covering chemical discharge into the environment, air quality for public health, and hazardous substances.

I therefore request the following:

- 1. A summary of steps taken by the Ministry for the Environment since 2015 to establish a regulatory framework for the monitoring and governance of atmospheric geoengineering in New Zealand.
- 2. A summary of further reports/enquires by the public of alleged high altitude aerosol spraying from aircraft received by the Ministry since January 2016.

3. Advice from your office about steps the Ministry will now take to reopen the reports received from the public of alleged high altitude aerosol spraying operations since 2010, and how these will be investigated.

In 2016 I wrote to Vicky Robertson, Ministry CE & Secretary for the Environment, outlining five recommendations for commencing development of the governance of atmospheric geoengineering in New Zealand (11), so I would be very interested to hear what the Labourled coalition government intend to do about this.

Thank you for your consideration and I will await your advice.

Kind regards,

s 9(2)(a)

References

1. Hon. Amy Adams, Minister for the Environment, 4 July 2014 (Letter; ENV12110).

- 2. Director Climate Change, 30 June 2016 (OIA 16-D-00669).
- 3. Director Information, 27 May 2010, (Letter; ENV4443).
- 4. Letter: 3 Feb 2011 (OIA191 submitted 31 December 2010); 10 March 2011 (ENV6401); 14 April (ENV6749); 5 Dec 2011 (ENV7876, 7936, 8004).
- 5. Director Climate Change, 29 February 2016 (OIA 16-D-00142); Minister, Hon. Nick Smith, 11 April 2016 (OIA 16-O-00321).
- 6. Climate Directorate e-mail, 20 November 2015: approximately one request received per month concerning SRM operations in New Zealand.
- 7. Hon. Nick Smith, Minister for the Environment, 11 April 2016.
- 8. Director Climate Change, 20 April 2016, (Letter; 16-P-001).
- 9. New Zealand Civil Aviation Authority data released under the Official Information Act (OIA): 2005-2009; 2010-2016.
- 10. Environmental Modification Convention (ENMOD, 1984)¹; UN Convention on Biological Diversity (1993)²; Basal Convention (1994)³.
- 11. Letter: s 9(2)(a) to Vicky Robinson, 5 April 2016.

¹ There are numerous military surveillance and weapons systems applications for metallic aerosols in the atmosphere (Freeland, 2014, 2018). Alleged NZDF involvement in high-altitude aerosol spraying operations using unmarked aircraft has been denied by the NZDF, but a request for an independent inspection and audit of selected NZDF facilities was refused by the Minister of Defence (G. Brownlee, 2 November 2016). What exactly could the NZDF be concealing at its RNZAF bases? One point is fairly certain – military force involvement in large-scale geoengineering operations would likely be ruled a violation of ENMOD.

² The COP10 (October 2010) adopted a decision that amounts to a *de facto* moratorium on geoengineering by setting four explicit conditions that would effectively rule out open field trials of geoengineering technologies (Lukacs, 2017). The scale of aerosol spraying operations reported in New Zealand since 2010 would indicate a likely breach of the COP10 declaration.

³ Analysis chemical concentrations found in aerosol samples in the United States (Herndon, 2015, 2016) indicates evidence of industrial chemical by-product in aerosols sourced from the United States. Reported visits by U.S. registered tanker aircraft to RNZAF facilities would indicate aerosols alleged to be used in New Zealand may originate from the U.S., with high-altitude dispersal over thousands of kilometres aerosol fall-out crossing national borders may be ruled a violation of the Basal Convention.