



17 April 2025

OIAD-1544

9(2)(a)

Tēnā koe 9(2)(a)

Thank you for your email of 2 April 2025 requesting the following under the Official Information Act 1982 (the Act):

*Under the Official Information Act 1982, I am requesting information regarding the Ministry for the Environment's (MfE) research and studies related to persistent aircraft contrails and their environmental and health impacts. Specifically, I am interested in the following:*

*1. Research on Persistent Contrails*

- a) Has the MfE conducted any studies or gathered data on the formation and persistence of aircraft contrails?*
- b) If so, can you provide details on any findings regarding how persistent contrails might impact weather patterns, cloud formation, or other environmental factors?*

*2. Health Impact Studies*

- a) Has the MfE conducted or been involved in any studies on the health effects of persistent contrails and their potential impact on public health, such as respiratory diseases, long-term health conditions, or any other effects related to exposure to aerosols or chemicals from contrails?*
- b) If the MfE has not conducted any research on the health impacts of persistent contrails, could you explain why this is the case, and if there are any plans to investigate this in the future?*

*3. Collaboration with Other Agencies*

- a) Has the MfE collaborated with other agencies, such as NIWA, MetService, the Civil Aviation Authority (CAA), or any military or private contractors, regarding the study of persistent contrails and their environmental or health impacts?*
- b) If so, can you provide details of such collaborations and the nature of the research, data sharing, or monitoring activities involved?*

*4. Transparency and Access to Data*

- a) If the MfE holds any studies or data related to persistent contrails, aerosol emissions, or health impacts, I would appreciate it if you could provide access to these records.*
- b) If the MfE has not conducted research on the above topics, could you provide a justification for why this has not been addressed?*

*5. Response & Next Steps Under the Official Information Act 1982, a response is required within 20 working days. If an extension is necessary, please provide a clear justification. If the MfE refuses or avoids answering these questions, I reserve the right to escalate this request to the Ombudsman for review.*

The Ministry for the Environment (the Ministry) has provided a response to each part of your request below:

#### Part 1

The Ministry has not conducted any studies or gathered data on the formation and persistence of aircraft contrails.

#### Part 2

The Ministry has not conducted or been involved in any studies on the health effects of aircraft contrails, and there are no plans to investigate this in the future. Contrails are formed by water vapour emitted from the exhaust of high altitude aircraft condensing into ice particles and do not pose any risk to public health.

You can find further details on the cause and regulation of aircraft trails in New Zealand on the website of the Civil Aviation Authority at: <https://www.aviation.govt.nz/safety/notify-us/aviation-concerns/aircraft-trails/>.

#### Part 3

The Ministry has not collaborated with any other agencies regarding the study of persistent contrails and their environmental or health impacts.

#### Part 4

The Ministry does not hold any studies or data related specifically to persistent contrails, or aerosol emissions or health impacts related to contrails.

Because contrails are not identified as posing a risk to public health or the environment, these topics are not within the scope of the Ministry's environmental monitoring and reporting.

The Ministry and Statistics NZ published the Our Air 2024 report in accordance with the Environmental Reporting Act 2015, which provides information about air pollutants in New Zealand and their impacts on human health and the environment. The report can be accessed on our website at: <https://environment.govt.nz/publications/our-air-2024/>.

Contrails form part of the indirect climate change effects of aviation emissions. As such they are mentioned in the Ministry's *Measuring Emissions* guide around calculating the emissions factors of air travel and air freight. The guide is available on the Ministry's website at: <https://environment.govt.nz/publications/measuring-emissions-a-guide-for-organisations-2024-detailed-guide/>

Please note that the Ministry located a scientific paper on the topic of the climate impacts of aircraft contrails in our database from pre-2006, however, while this has been located on our system, it is not a publication produced by the Ministry. This paper has the following citation:

Travis, D. J., Carleton, A. M., & Lauritsen, R. G. (2004). Regional variations in U.S. diurnal temperature range for the 11-14 September 2001 aircraft groundings: Evidence on jet contrail influence on climate. *Journal of Climate*, 17(5), 1123-1134. [https://doi.org/10.1175/1520-0442\(2004\)017<1123:RVIUDT>2.0.CO;2](https://doi.org/10.1175/1520-0442(2004)017<1123:RVIUDT>2.0.CO;2)

You have the right to seek an investigation and review by the Office of the Ombudsman of my decision relating to this request, in accordance with section 28(3) of the Act. The relevant details can be found on their website at: [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz).

Please note that due to the public interest in our work the Ministry publishes responses to requests for official information on our [OIA responses page](#) shortly after the response has been sent. If you have any queries about this, please feel free to contact our Ministerial Services team: [ministerials@mfe.govt.nz](mailto:ministerials@mfe.govt.nz).

Nāku noa, nā,

A handwritten signature in blue ink, appearing to read 'Sophie Heighway', with a long horizontal flourish extending to the right.

**Sophie Heighway**  
Manager – Policy Evidence  
Ministry for the Environment | Manatū Mō Te Taiao