

BEFORE THE QUEENSTOWN LAKES DISTRICT COUNCIL

IN THE MATTER OF the Resource Management Act 1991

AND

IN THE MATTER OF Queenstown Lakes Proposed District Plan Hearing
Stream 15 (District Wide)

STATEMENT OF EVIDENCE BY MICHAEL CLAY
(SUBMITTER 2618 AND FURTHER SUBMITTER 2759)

6 August 2018

1. INTRODUCTION

- 1.1 My name is Michael Clay. I am the General Manager Operations and Safety for Queenstown Airport Corporation Limited (QAC). I have been employed at QAC in this role since January 2015.
- 1.2 I hold a Graduate Diploma in Business Studies; Graduate Diploma in Occupational Safety and Health; and Certificate in Business Studies, all from Massey University. I am an International Airport Professional under the International Civil Aviation Organisation and Airport Council International Global Airport Management Professional Accreditation Programme, and have completed the Concordia University (Montreal, Canada) Airport Executive Leadership Program.
- 1.3 In my role as QAC's General Manager Operations and Safety I hold overall responsibility for managing Queenstown Airport's airside and terminal operations and infrastructure. I report directly to the Chief Executive Officer of QAC and I lead QAC's Operations Team.
- 1.4 I am also responsible for regulatory compliance, health and safety, environmental management (including aircraft noise), and sustainable business practice. I have responsibility for the operational management of Wanaka Airport and oversee the general maintenance of Glenorchy Aerodrome on behalf of Queenstown Lakes District Council.
- 1.5 Prior to my role at QAC I was the Manager – Aeronautical Policy at Auckland International Airport Limited for eight years. Key responsibilities were around operational planning; health, safety and risk management; continuous improvement; and performance reporting; with direct responsibility for that company's (pan-business) health, safety and environmental strategies. I was responsible for matters such as:
- 1.5.1 The health and safety performance of all capital infrastructure projects, including property projects across the business;

- 1.5.2 Management of aeronautical corporate risk management, including reporting to the Board Safety and Operational Risk Committee; and
- 1.5.3 The development and testing of the company's aeronautical crisis management framework and operational contingency planning.

Scope of Evidence

- 1.6 QAC filed a number of submissions and further submissions in respect of Stage 2 of the Proposed District Plan (PDP). This included a number of submissions that directly or indirectly relate to operational matters at Queenstown and to a lesser extent, Wanaka Airport.
- 1.7 In this statement of evidence I address:
 - 1.7.1 The effects of poorly managed earthworks on aircraft operations;
 - 1.7.2 The proposed new "informal recreation zone" on the Lower Shotover Delta.

2. EARTHWORKS

- 2.1 Poorly managed earthworks have the potential to pose a significant risk to aircraft on approach or departure to Queenstown and Wanaka Airports. This is primarily as a consequence of:
 - 2.1.1 Dust;
 - 2.1.2 Ponding water; and,
 - 2.1.3 Soil disturbance.
- 2.2 Dust plumes generated by earthworks have the potential to impede the visibility of aircraft pilots on approach or departure at Queenstown and Wanaka Airports. While aircraft technology assists with both take-off and departure for some aircraft, visual observations are still used by pilots and

their crew to identify risks and take steps as necessary to mitigate those risks on approach/departure. Irrespective of the technology in use, the final stages on an approach and the take-off roll are visually flown. It is therefore imperative that dust suppression controls are imposed on earthworks in the vicinity of flight paths to ensure visibility is maintained.

- 2.3 Dust plumes can also present issues for aircraft engines, in particular turbine engines, which require increased maintenance if subjected to the ingestion of dust, dirt or sand.
- 2.4 Poorly managed earthworks also have the potential to attract birdlife to construction sites. This could be in the form of ponding water and/or disturbed top soil creating a source of food for nearby birdlife.
- 2.5 QAC has a reasonable understanding of the bird species that frequent the surrounds of Queenstown Airport and their flight characteristics (i.e. times of day/year they are present and their preferred flight tracks). This knowledge allows us to proactively manage bird strike risk through the implementation of a number of bird control measures. Changes in the surrounding environment however, for example, ponding of water or disturbances of soil on larger construction sites changes the characteristics of this bird habitat. This can result in an increase presence of birds as well as the introduction of new species.
- 2.6 The increased presence of birdlife results in an increased risk of bird strike. This poses a potentially significant safety risk for aircraft and therefore requires appropriate management and consideration for large earthworks proposals.
- 2.7 For the reasons set out above, I support the Council Officer's recommended retention of objectives, policies and methods that require consideration of the effects of earthworks on regionally significant infrastructure such as Queenstown and Wanaka Airports, including the imposition of dust management requirements for all earthwork activities and the proposed restrictions on earthwork volumes.

3. LOWER SHOTOVER RIVER INFORMAL RECREATION ZONE

- 3.1 I understand that as part of Stage 2 of the PDP, the Queenstown Lakes District Council is proposing to rezone an existing recreation reserve in the Lower Shotover Delta from Rural to Informal Recreation Zone.
- 3.2 I have reviewed the list of activities that are proposed to be enabled within the new zone. This includes activities permitted or enabled by way of resource consent. A significant portion of these activities are incompatible with the aircraft operations.
- 3.3 Under both national and international aviation regulations, Airport Operators (such as QAC) are required to provide Runway End Safety Areas (RESA) at the end of the runway strip. At Queenstown Airport, a 90m RESA is provided at each end of the runway, within the QAC property boundary. These RESA also fall within QAC's designated land holdings.
- 3.4 Many aviation authorities overseas also define "runway protection zones" or "public safety zones" beyond the RESA. Within these areas, land use controls are typically imposed to protect the public from the risk of an incident of an aircraft undershooting or overshooting the runway. Although the risk of an incident of this nature is of very low probability, the consequences of such an event would be high if it occurred whilst there were significant numbers of people congregating in the affected area. While the provision of such areas is not currently required by New Zealand aviation regulations, a number of airports in New Zealand have started moving towards the provision of similar protection/safety zones in the interests of providing greater health and safety outcomes for the public. For example, Christchurch, Palmerston North and Hamilton Airports all have protection zones in place.
- 3.5 While such safety/protection zones are not currently in place at Queenstown Airport, it desirable to limit the introduction of intensified land use activities where an opportunity exists to do so.

- 3.6 Based on my observations, the Lower Shotover Delta is currently used by the community for passive recreation purposes. This primarily includes the use of the area for walking, biking and motorcycling. The proposed range of activities enabled by the Informal Recreation Zone would potentially encourage greater public presence and use of an area that is currently only used for passive recreation. From an operational perspective, it is desirable for the area to remain used for such less formalised purposes.
- 3.7 The proposed range of activities provided for within the informal recreation zone also provides for “gardens, including botanic and community gardens” and “conservation planting”. While I do not have an issue with these types of activities in principle, careful consideration of species selection is required to ensure birds are not attracted to the site.
- 3.8 It is not entirely clear what types of activities would fall within the definition of “public amenities” and whether this might include structures such as rubbish bins, refuse collection points and/or lighting. Rubbish bins and refuse areas, if poorly designed and managed, can attract birds and therefore should be discouraged in the Lower Shotover Area. Similarly, poorly designed or located lighting can create confusion and/or glare for pilots on arrival or departure which poses a potential safety risk.
- 3.9 In light of the above and having considered the list of activities provided for in the Informal Recreation Sub Zone, in my view, only the following activities should be provided for as a permitted activity:
- informal recreation (Rule 38.9.2);
 - parks maintenance (Rule 38.9.5);
 - new buildings associated with a permitted activity, not otherwise listed in Table 38.1 (Rule 38.9.24);
 - Recreation Trails (walking, horse and cycling trails) (Rule 38.9.27);
 - Construction of vehicle access and car parking areas, accessory to permitted activities, up to 200m² (Rule 38.9.29);

3.10 The remaining activities should be subject to some form of consent requirement that allows QAC to provide input into the risks of such activities establishing, and where possible, whether there are management responses available to address those risks.

Michael Clay

6 August 2018