

SUBMISSION ON VARIATION 1: HOUSING INTENSIFICATION

Clause 6 of Schedule 1, Resource Management Act 1991

Problem Statement

The Government requires identification of a 30 years supply of “safe” easily developed and cost effective residential land within the Christchurch boundaries. While various studies have differing numbers, at the lower end it is estimated that Greater Christchurch will need 77,000 new homes in the next 30 years, when the population will likely top 700,000. Global warming with the associated sea rise and significant increased flood risks from larger and more frequent adverse weather events, makes it very clear that the west side of the city offers TC1, largely unproductive land that is safe and cost effective for intensification.

Christchurch International Airport Limited (CIAL), seek to use their worldwide unique 50 dBA Ldn air noise contour as a “qualifying matter” to generate an exemption to the signaled residential intensification. CIAL are likely to submit that if the intensification proceeds that an additional 1,087 people (approximately) would be highly annoyed by aircraft noise, if houses were allowed to be built under the 50 dBA Ldn air noise contour. The premise is that complaints from these “highly annoyed persons” could result in operational restrictions being imposed on airport operations such as a curfew. (Refer attached DAY memo to CIAL)

As will be explained this alleged risk is a complete fabrication. CIAL control all noise complaints following Christchurch City Councils

excluding their company from investigation by Councils dedicated noise investigators. For decades no meaningful action or response to complaints has eventuated. It is submitted that the current perverse policy and noise measuring metrics, Council support, are enabling CIALs non-aviation related development competitive advantages and ability to be the largest night time source of noise pollution with impunity. It is very clear that any action such as a curfew would never even be contemplated let alone enacted. Objectively assessed there is no risk at all that CCC would take enforcement action against its own company. Assertions otherwise are dishonest and misleading

Alleged risks to airport operational restrictions arising from noise complaints pail into insignificance compared to the risks associated with Council failure to provide sufficient land for residential housing. Such a failure will generate huge public anger and generate many thousands of complaints, adversely impacting on the entire Christchurch economy. The large loss of rating income to CCC due to residential intensification lost opportunity is just one obvious adverse impact of allowing the sought “qualifying matter” exemption to intensification.

ECAN are currently in the process of a review of the highly inaccurate existing air-noise contours currently being used to deter residential growth. ECAN are the sole decision makers as to what level the outer control boundary will be set at. It may well be that the 50 dBA Ldn air noise contour will be removed as the outer control boundary. This change would make any decision made by this variation with regards to the requested qualifying matter redundant. The outcome of the ECAN air noise contour review and setting of the outer control boundary is expected to be completed by the end of this year. Therefore the

removal of this matter from Variation 1 pending the ECAN decisions is more efficient and significantly narrows the Variation 1 matters to be considered.

Submission

This submission is made on behalf of a concerned and directly adversely affected Group of land owners living under the air noise and Aircraft Engine testing Contours subjected to the development policies and rules that Christchurch International Airport Limited (CIAL) aided by Christchurch City Council (CCC) its partial owner and Christchurch City Holdings Limited (CCHL) have promoted.

This group now has in excess of 150 members and continues to grow.

The group has organized into a steering committee of which I am one member.

This group has widely submitted on a number of Plan changes, including recently Christchurch Council Plan changes 4 & 5. The Council on-line submitter's evidence relating to these plan changes provides some of the in-depth analysis of how the unique land planning and noise pollution enabling competitive advantages, CIAL benefits from, have been developed over many years. The decision makers to Variation 1 are requested to read these submissions originating from our Land owners group.

It is very unusual for an airport to have such a huge influence over land planning and noise pollution enabling policy rules. CIAL puts almost no effort into at source noise mitigation and almost all its effort into land planning activity exclusion submissions and rejection of land owner's development requests.

Our group has put focus on identifying just how unique, unusual and perverse this influence and planning arena is to the governance bodies that should have addressed the situation earlier.

The Steering committee has met with the Christchurch City Council CEO and Councilors, with ECAN executives and Councilor's, with Minister Pellett and Minister Brownlee, with CIAL executives and has written to CCHL members presenting research documentation and governance concerns.

It is fair to say the Councilors (CCC and ECAN) now have a better understanding of how the airport company has used its position to create and protect its world-wide unique 50dBA Ldn residential avoidance air noise contour. They have also had pointed out to them that previous decisions have been based on exaggerated model parameters and data inputs designed to suit its position rather than the wider need for increased residential housing. To say that much of the data CIAL presents are very creative is being kind. It is asserted that there have been ongoing Governance failures which may now have some prospect of being addressed with the appointment of public sector audit expert Michael Rondel as an independent Director of CCHL.

These meetings have resulted in the long overdue re-evaluation of the air noise contours being required by ECAN to be carried out by CIAL this year. It should have been completed in 2017. ECAN has appointing a review panel to evaluate the results of CIALs initial re-evaluation. It has reached the stage that CIAL has provided the data and the panel is in the process of reviewing it.

ECAN are the final decision makers with regards to the noise level that the outer control boundary for the air noise contour will be set at. As

stated no other airport in the world has residential activity avoidance rules set at 50 dBA.

Our Group has commissioned independent expert evidence and research which has identified amongst other issues the continued exaggeration of CIAL led evidence as to its commercial aviation growth. The resulting report CHC Noise Contour Traffic Forecast Considerations from AILEVONPACIFIC Aviation Consulting was received July 2021. It identified that CIAL, was even prior to the adverse impacts of the pandemic, in very serious air movement decline. A decline, so significant, as to explain why its move to purchase land at Tarras was initiated. While land vendors were initially advised that a large scale pip fruit orchard operation was proposed, the real intent always was the building of a new International Airport. CIALs objective is an attempt to claw back lost air movement business. CIAL, CCC and Christchurch City Holdings Limited (CCHL) have all been made aware of this report but refuse to engage with our group over its contents. More perversely CIAL continue to assert growth assertions.

CIAL earns **more revenue** from its **Property Management** businesses than it does from all its aviation activities. This is a very important point given the unique land planning and noise pollution enabling competitive advantages it enjoys.

Possibly CIAL's main intangible asset is that it is majority owned by Christchurch City Council. It is no coincidence that this ownership relationship has enabled a land planning and pollution enabling development régime.

This may seem an extreme assertion but three brief examples amongst the many our group has identified will quickly identify the extreme

outliner planning arena CIAL enjoys and ongoing CCC and CCHL governance failures.

- 1) No where else in the world has any jurisdiction concluded that there is justification to support any commercial or residential development avoidance rules based on alleged harm or any adverse effects including amenity adverse effects on humans set at the extremely low level of 50 dB Ldn. This noise is akin to slightly elevated normal speech. Yet Christchurch City Council have for many years simply accepted CIAL led acoustical evidence from Marshall Day that such harm exists. As recently as 8 July 2022 Mr. Day has asserted in a Memo furnished to CIAL, refer Document Mm006 at page 2: "Aircraft noise inside the 50 dB Ldn contour causes adverse effects on people and this is not a desirable noise environment in which to increase residential density." A copy of this document is attached. Under cross examination during the 2016 Replacement District Plan hearings Day indicated that he holds an undergraduate degree which comprises a couple of acoustical papers, he has never published any peer reviewed acoustical research let alone research relating to alleged noise harm and has been the Acoustical expert of choice for CIAL for several decades. He provides no supporting evidence for his statement. Evidence from Professor J P CLARKE an American based world leading acoustical expert is attached. His qualifications, peer reviewed research, awards and New Zealand relevant expert experience cement his expert status. His findings supported by other expert studies are very clear that the threshold for negative effects of aviation noise is approximately Ldn 56 db. Therefore noise levels below Ldn= 56dB are entirely suitable for residential development. Clarkes conclusion is that the use of an Ldn-50 dB contour is

excessive in that it places restrictions on those that own property within the contour band between $L_{dn}=50$ dB and $L_{dn}=55$ dB without commensurate environmental benefits (refer attached Will Say statement). Further at page 5 points 19-30 of evidence he gave to the Christchurch Replacement District Plan Clarke advised that where existing population density exceeds 2000 persons per square kilometer that the background DNL (day-night sound level) would already be above 55 DNL (excluding highway traffic noise). Clarke's view is that it does not make sense to control activity in a sound level range that is lower than the background sound level. Clarke suggested that it would be logical to base the noise limits in the district plan on the population density in each neighborhood.

- 2) The commercial activity of repairing aircraft engines is carried out on premises CIAL lease to Air New Zealand Engineering. CIAL and Day assert that the noise generated on routine early morning engine testing of those repair is not industrial in nature. This assertion cannot withstand any objective scrutiny. CCC which holds the statutory enforcement powers relating to excess noise refuses to seek independent expert evidence on the definition of industrial noise. Again it is sometimes not what CCC do but what they don't do that provides the competitive advantage. The issue boils down to deciding if on wing engine testing activity is industrial in nature. If the answer is yes then the metric to measure it, (L_{eq}) and the requirements to mitigate a source are obvious. Aircraft engines are repaired for a cost. They are then tested on the aircraft wings following repair. The engineering repairs are entirely industrial in nature as is the resulting noise. This testing generates the worst

industrial noise impacting on Christchurch residences at night and in the small hours of the morning in the entire District. Industrial noise is measured by a Leq metric. In New Zealand industrial noise pollution is required to be mitigated at source. CCC has a dedicated noise enforcement group to ensure that noise complaints and industrial noise pollution are investigated and the law is complied with. This is the process with one major exception. All Christchurch Airport related noise complaints are removed from this dedicated noise enforcement group and referred to a CIAL housed committee. Why the preferential treatment for the Districts worst nighttime industrial noise polluter exists remains unexplained? CCC and Christchurch City Holdings Limited (CCHL) refuse to question the assertion that this is not industrial noise. Flowing on from this assertion an Ldn (seven day averaged) metric has been applied to engine testing. An Ldn metric measures the sound footprint of a plane taking off and receding away or approaching and landing. It is a completely inappropriate metric to use in the circumstances of parking an airplane following engine repairs and then revving those engines up and down often for in excess of half an hour, usually at night or in the small hours of the morning. The seven day average means that the polluter gains an advantage for every hour the pollution is not taking place. To further add insult to this dishonest régime engine testing contours have been generated that act to further victimize the very land owners being woken up by this industrial pollution by restricting those land owners land use rights because of the noise pollution. Despite an entire international industry that designs and builds Ground Run-Up Enclosures CIAL enjoys a total exemption from the requirement to mitigate its

industrial noise at source. Clarke also gave evidence relating to the CIAL and Day proposed metric for measuring this noise. He gave the following evidence with regards to the 7 day rolling average DNL metric that shall not exceed 65dB at five engine testing compliance, monitoring positions, currently being used. “There is no basis for this metric in the acoustics literature, and thus no way for anyone to judge a priori whether ground run-up noise that satisfies that proposed limit would be acceptable. In fact it would be unwise for any entity, especially a public entity to utilize a metric for which there is no basis in the scientific literature.” A metric used no-where else in the world, enabling industrial noise pollution that is the worst in the Canterbury District at night and in the early hours of many mornings is what CCC accepts.

- 3) As part of the Earthquake recovery new development enhancing Council Policies the Central City Business District (CBD) and identified key activity Areas were designated for development ahead of other areas. Christchurch International Airport is clearly not part of the CBD nor was it designated as a Key Activity area for priority development. The process whereby CIAL and CCC agreed in PC84 that CIAL could continue its development to the point that it **significantly adversely affected the CBD recovery before the CCC would take any action has been investigated and documented.** To date CCC refuses to investigate this inappropriate agreement. Our group comprehensively submitted on this in Plan Change 5. A plan change that alleges it was designed to strength the policy of directing development to the CBD and key activity areas. There is no doubt that the biggest impediment to the CBDs recovery has been the huge development enabled at the Airport that has and continues

to strip development away from the CBD. The latest being an outline consenting process whereby City Care headquarter offices will be removed from the CBD and new offices leased by CIAL to them at the Airport. CCC did not provide a Legal expert witness to the council staffer at that Independent Commissioner led outline hearing process. As stated it's often what CCC and CCHL does not do that enables CIAL. Such as not seeking independent from CIAL acoustical expert evidence, not providing senior legal assistance to staffers at outline hearings, not investigating what industrial noise is, not investigating any noise complaints relating to its company's noise pollution and failure to investigate any of the serious issues we have raised that provides the greatest enabler to CIAL. These are all governance issues and as indicated some realization of the risks associated with these governance failures is emerging.

Specific Submission Requests

Our group's key point is that the 50 dBA Ldn Air noise contour should not be accepted as or come under the classification of a qualifying matter so as to restrict further residential intensification.

It is very clear that the current contours are highly inaccurate. Professor John-Paul Clarke carried out the last review of the contours back in 2007 having been engaged by Selwyn District Council to serve as their expert in the deliberations surrounding the appropriate extent of the noise contours around Christchurch International Airport. He ultimately ended up chairing the group, often referred to as the 'Panel of Experts' that estimated the future operations at Christchurch International Airport and subsequently developed noise contours. Interestingly during that exercise CIAL projections were found to be so exaggerated

that the then contours shrunk by approximately one third of the previous residential development restricting contours, once more accurate data was feed into the process. One outcome result was that residential intensification on Land in Rolleston was allowed as previous 50 dBA Ldn contours shrank. To our knowledge no increased noise complaints resulted certainly this change has had no adverse impact on CIAL operations despite their assertions that it would.

The Experts Agreement reached agreement including somewhat of a strained agreement with CIAL on the actual data inputs and process to evaluate the contours in an ongoing manner. CIAL initially asserted that the CIA runways had capacity of 220,000 air movements annually. This was reduced to 176,000 which Clarke has advised is still considered exaggerated. There was an agreed requirement that the parties would re-evaluate the contours every 10 years. As a result the contours should have been re-evaluated in 2017. Future air movement growth projections, actual runway capacity and actual noise profiles of the current flying aircraft fleet are critical components of the input data that result in the contour size. Just one example, as to why the current contours grossly exaggerate the size of the contours, is that the entire fleet of planes and their associated noise profiles used in the 2006 contour development have been replaced with planes with order of magnitude quieter noise profiles. This is why exaggeration of CIAL led data is of such concern. As indicated this review is now being carried out by an ECAN led panel of experts with the skills and will to objectively review CIAL led inputs. The outcomes of this process and setting of the outer control boundary is expected by the end of this year.

It is submitted that as the entire question around the outer control boundary and accuracy of the air noise contours is already the subject of Regional Council deliberation, that in the interests of reducing the matters for consideration of Variation 1 and in making decisions based on accurate, up to date information that the issue raised by CIAL regarding the 50 dBA Ldn contour being considered as a qualifying matter, be rejected. This includes Rule MRZ-BFS1, assessment matter RES-MD15 planning Maps and the Supporting section 32 Analysis.

With regards to RES-MD15 Effects from qualifying matters-airport noise, if the Variation 1 decision makers are inclined not to reject the qualifying matters issue that the current wording be altered.

Current wording RES-MD15

1 The extent to which effects, as a result of sensitivity of aircraft are proposed to be managed including avoidance of any effect that may limit the operation, maintenance or upgrade of Christchurch International Airport.

It is submitted that this discretion appears badly worded- it is difficult to reconcile “managed” with “avoidance” It is recommended that if retained it would be better worded.

1. The extent to which effects, as a result of the sensitivity of activities to current and future noise generation from aircraft are proposed to be managed, in particular through building design.
2. If “including avoidance” is retained CIAL will oppose all applications seeking to install unrealistic and unnecessary resource consent barriers.

3. In the decision making it would be appreciated if a realistic determination of the alleged risk of CCC ever limiting its company's operations arising from noise complaints. It is submitted past behaviours indicate no risk is present at all.

Finally I refer you to Professor Clarke's expert evidence in his Will say statement:

"Noise levels below Ldn 56 dB are entirely suitable for residential development"

"My conclusion is that the use of an Ldn =50dB contour is excessive in that it places restrictions on those that own land within the contour band between Ldn=50 dB and Ldn-55dB without any commensurate environment benefits."

A non-existent risk asserted by CIAL that noise complaints could result in airport operational restraints of any type, let alone a curfew should be totally rejected. Remember CIAL is a property management company with the ability to carry out the very activities it seeks to exclude from adjacent land owners. The currently used 2006 contour maps are totally inaccurate and certainly should not be used in the Variation 1 process.

Critically needed residential Intensification should not be allowed to be undermined via this cynical CIAL attempt to gain qualifying matter exclusions aimed at promoting their property management goals.

D.M. LAWRY

