

File No: WGN160274; SR357837
20 May 2016

Wellington International Airport Limited
C/- Lane Neave
PO Box 2331
Christchurch 8140

For: Amanda Dewar

Dear Amanda

Additional consents required under s91 and further information request under section 92(1) of the Resource Management Act 1991

Thank you for your resource consent application for activities associated with the construction and operation of the proposed airport runway extension at the Wellington airport. Greater Wellington Regional Council (GWRC) and Wellington City Council (WCC) received your application on 29 April 2016.

Your application contains a considerable amount of information on the proposed activities and effects on the receiving environment, however, we have identified an additional consent that will be required in respect of your proposal, and areas where further information is required to better understand consent requirements or effects on the environment and how any adverse effects on the environment might be mitigated.

Given the volume of material submitted for this application and the time we have had to review it, we acknowledge that some of the information requested below could be contained in application document and supporting information. If so, please advise the document where the information is located.

1.0 Additional consent required from GWRC

Post-construction stormwater discharges

- 1.1 Rule R52 of the Proposed Natural Resources Plan (PNRP) requires a resource consent for the discharge of stormwater from airports as a restricted discretionary activity. The runway extension will change the character, intensity and scale of effects of stormwater discharges from the airport site and therefore section 20A of the Resource Management Act (existing use rights until a proposed rule becomes operative) will not apply once the extension has been built. A resource consent for operational discharges from the airport could be applied for at a later date, however it would be appropriate to apply for and consider this consent at the same time as the suite of consents for the runway extension so that any infrastructure

needed for collection and treatment can be incorporated into the detailed design and implemented during construction.

Please apply for resource consent for the discharge of stormwater from the entire airport site under Rule 52 of the PNRP. The application should include:

- A description of the catchment and stormwater discharges from the airport including the identification of high risk areas;
- A description of the current approach to managing stormwater from the airport;
- An assessment of the relevant regulatory documents;
- An assessment of the effects of stormwater discharges from the airport, including the runway extension;
- Details of how the effects of stormwater capture and discharge will be managed including cumulative effects, on aquatic ecosystem health and mahinga kai, contact recreation, maori customary use, sites identified in schedule B PNRP (Nga Taonga Nui a Kiwi), and schedule F PNRP (indigenous biodiversity);
- Details of how the adverse effects of stormwater discharges will be minimised through progressive improvements over time and details of proposed ongoing monitoring of stormwater discharges from the airport.

2.0 Information requested (Combined GWRC & WCC)

Noise

- 2.1 Section 14.1.3 of the operative Regional Coastal Plan (RCP) and section 5.7.2 of the Proposed Natural Resources Plan (PNRP) set out the general conditions relating to noise from activities in the coastal marine area. Please provide an assessment of the proposed activities against the limits in section 14.1.3 of the RCP and 5.7.2 of the PNRP. Note that the requirements under both plans need to be met if the activity is to be considered permitted.
- 2.2 In Technical Report 10 (AECOM, April 2016) section 6.2.2 construction noise is compared to the “ambient noise” and in paragraph 93 of the technical report ambient noise is described as the LA90, which is the background sound level. The author Technical Report 10 confirmed with GWRC/WCC noise expert that the ambient sound levels used for comparison purposes in Table 7 of the report are actually LAeq levels and not LA90 levels. This approach is at odds with the background plus approach recognised in the report (paragraph 48) as potentially more appropriate and the reason why it was important to “*quantify the existing environment when formulating noise conditions*”. It is not considered appropriate to compare the construction noise with the existing high level of airport noise. Airport noise is characterised by individual noise events separated by (sometimes significant) periods of inactivity and not be relied upon to mask construction noise.

Please prepare a table that compares predicted construction noise levels with the background (LA90) sound levels measured at the various locations. This would be a table similar to Table 7 but comparing the predicted LAeq construction noise levels with the measured LA90 background sound levels in the area. This will allow an assessment using the “background plus” approach referred to in paragraph 48 of the report.

- 2.3 The delivery of fill by sea will reduce truck noise. However it is unclear in the application what weighting is being provided to these two delivery options. Please provide an assessment on truck noise based on the likely use of marine based transport.

Traffic

- 2.4 Has consideration been given to the amenity impacts from a safety perspective (including perceived safety) of (High Performance Motor Vehicles) HPMVs on lengths of residential and business streets included in the proposed truck routes? These include streets such as Vivian Street, Karo Drive, Wellington Road, Lyall Parade, Onepu Road, Rongotai Road, Evans Bay Parade. If yes, what were the conclusions?
- 2.5 There are a number of alternative route options that have not been completely analysed. Please provide an assessment of alternative haulage routes, which at a minimum, assesses the following options:
- a) Using only the airport for inbound and outbound traffic during day as well as night.
 - b) Outbound trucks using Tirangi Road, Coutts Street, Bridge Street, Rongotai Road, and Jean Batten (or Tory Street).

Note: it is acknowledged that this latter option may have implications from a noise perspective, but may have improved traffic impacts

- 2.6 Has consideration been given to the option of using smaller, less intrusive trucks as an alternative to HPMV's? If yes, what were the considerations for and against and the conclusions reached?
- 2.7 What consideration has been given to the option of using water-borne delivery of fill material as the primary method? What investigations have been carried out on sources of fill and the constraints and opportunities relating to this option? For example the option of barging fill across the harbour to Miramar Wharf with a short road based haul through the Airport to the Moa Point reclamation site would have significant advantages in reducing/removing the need for large numbers of HPMVs to use busy inner city or residential streets with their associated adverse environmental effects.

Note that before Horokiwi Quarry could be selected, it will be necessary for an investigation to be undertaken on the adequacy of the section of Horokiwi Road, which is a city council local road, to carry maximum size HPMVs in regard to road user safety, geometric layout and geotechnical resilience.

Detailed investigations

- 2.8 The application (AEE) states that detailed investigations of ground conditions will be undertaken and the results of such investigations may determine that ‘stone columns’ need to be installed. Although not specifically identified in Tables 1-2 and 1-3 of the application it is assumed that the application for resource consent is intended to include these structures. Please confirm whether other activities or structures may be required following detailed investigations and whether these will require resource consent.

Dust

- 2.9 Table 1-3 of the application lists a requirement for a discharge permit to discharge contaminants (dust) to air during construction. It is assumed that this is because there is no rule in the PNRP that would specifically provide for discharges of dust from a construction site as a permitted activity. GWRC’s Environmental Policy advisors have confirmed that Rule 27 of the PNRP (handling of aggregates) is intended to apply to activities such as those proposed. Please provide an assessment of the activity against Rule 27 PNRP and confirm whether the permitted activity rule can be complied with.
- 2.10 The application states 1.5 million cubic meters of material will be hauled to the construction site. If the loads are uncovered (presently unstated) then it is reasonable to assume that a small but measurable percentage of the material may be discharged to the atmosphere as fugitive dust. Please provide an assessment of effects of fugitive dust emissions along haulage routes.

Stormwater outlets

- 2.11 Please confirm whether any modification to existing stormwater outlets or new stormwater outlets are necessary as a result of the proposal and if so whether resource consent is required.

Protecting Moa Point wastewater pipeline

- 2.12 The application states that part of the proposal will be to protect the Moa Point wastewater outfall structure to prevent damage due to the placement of the rock dyke. Please:
- confirm what stage in the construction sequence these protection works will be undertaken;
 - outline any ongoing maintenance requirements of the protection structure (see general question about ongoing maintenance below); and
 - Provide an assessment of the relevant regional plan rules and what resource consents you will need for the construction and maintenance of the protection structure.

Surf Wave focussing structure (SWFS)

- 2.13 The consent requirements for the construction and maintenance of the surf wave focussing structure are not specifically assessed in Tables 1- 2 and 1-3 of the application. The application proposes to specify maintenance requirements as a condition of consent (proposed condition 66). However, please confirm what consents you are applying for in relation to the wave focussing structure. Please also provide an outline of ongoing maintenance required for the SWFS so that GWRC can assess the effects of these works (see general maintenance question below).
- 2.14 Technical Report 11 (DHI, April 2016) recommends that further field monitoring is undertaken to confirm findings of pre-construction assessments, document changes in local wave field, nearshore bathymetry and surfing amenity. Technical Report 20 (September 2015) recognises the need for a detailed survey at the proposed site of SWFS to obtain detailed knowledge of complexity of habitat, surface texture, local hydrodynamics and movement/scour/accumulation of surrounding sediments.

What timeframe is required to complete the above baseline monitoring? When will this information be obtained in relation to preparation of the proposed Surf Mitigation Adaptive Management Plan (SMAMP)?

Ongoing maintenance

- 2.15 The activity descriptions in Table 1-3 of the application include the maintenance of the reclamation and structures. GWRC understands that ongoing maintenance will be required once the runway extension has been constructed. However, there are no details in the application about what this ongoing maintenance will entail. These details are required so that GWRC is able to assess the effects of any ongoing maintenance requirements. Please provide:
- 2.16 Details of ongoing maintenance requirements including what structures need to be maintained (i.e. toe of reclamation, surf wave focussing structure, structure protecting Moa Point wastewater outfall etc.), and details of the specific maintenance that will be required including the scale, methodology and frequency of these works;
- 2.17 Confirmation of what maintenance work will not meet or is unlikely to meet the permitted activity rules in the operative and proposed regional plans and therefore requires resource consent.

Effects on recreation

- 2.18 Please explain short-medium term effects on marine-based recreational activities, particularly surfing, necessitated by a temporary construction exclusion zone to construct the proposed runway and SWFS.
- 2.19 The application refers to the possibility of marine based transport (barges) to transport fill and rocks to the construction site. The application does not reference or provide details of the route that may be taken by barges and towing vessels (if required), nor the space required

for manoeuvring, particularly around the area of the construction site itself. It is possible that the 12 two way movements per day of vessels could lead to adverse short-medium term effects for marine recreational activities not only within Lyall Bay, but elsewhere within Wellington Harbour according to the route taken. Please provide an assessment on the likely impacts on marine-based recreational activities along the possible transport routes. In addition, please advise whether the proposed construction exclusion zone encompasses the area required for manoeuvring vessels and whether impacts on recreational activities may extend beyond the exclusion zone.

2.20 Participant observation has been used to investigate human behaviour in public spaces, and the application reports on data collected on seven days during March 2015. Given the limited data set, please outline any limitations that should be recognised in drawing conclusions from the data, including:

- The design of the participant observation technique used;
- any circumstances that were prevailing on the days which observations were conducted (e.g. weather) that may have influenced the data;
- what level of activity might have been reported had observations been made at other times of the year – particularly in peak summer months
- what further observation investigations need to be undertaken to understand recreational use in Lyall Bay
- Tables 7-2, 7-3 and 7-4 all refer to Scenario 1 as being a “Large Event” and not a “Common Surf Event” (or common surf conditions). Paragraph 7.3.10 of the AEE report states: “*Modelling such a structure for Scenario 1 (common surf conditions) predicted a longer right hand and left hand rides with larger wave face heights in the lee of the structure*”. Please clarify to which surfing scenario the paragraph cited above refers.
- The application proposes a number of amenity & recreational improvements in the vicinity of the project that is outside land owned by WIAL, which will form part of the overall mitigation. Please provide confirmation that landowner approval has been sought, and is likely to be forthcoming, for the establishment of such works.

Landscape and visual effects

2.21 Section 5 of Appendix 1, *Technical Report 24 (Boffa Miskell, April 2016)* presents a 7-range Significance of Effects Scale, ranging from *Extreme* to *Negligible*. This scale, with terminology drawn from the NZILA Best Practice Note¹ is applied in assessing the magnitude of visual amenity affects. The application of the scale is underpinned by several assumptions regarding sensitivity, including the proposition that resident populations are

¹ New Zealand Institute of Landscape Architects. (2010). Best Practice Note: Landscape assessment and sustainable management 10.1. NZILA. S91 AND S92(1) LETTER

more sensitive to adverse effects than transient populations (which include travelers and recreationists who chose to use Lyall Bay for recreational purposes). It appears the factors indicating degrees of significance (Table following paragraph 8.3, Appendix 1) have been ‘constructed’ by the assessor, and the assessed level of significance is that of the assessor/s only.

Please advise whether the Significance of Effects Scale has been validated in the field with reference to resident and transient populations, and if not, what validity and reliability can be attributed to the ratings (e.g. what might constitute a rating from Extreme to Negligible in terms of the lived experience of the wider community, whether resident or transient?)

- 2.22 Footnote 30 to paragraph 8.97 of Technical Report 24 (Boffa Miskell, April 2016) refers to a recreation effects report prepared by Rob Greenaway². This document is also referenced in the bibliography to the Landscape and Visual Effects Technical Report. The Greenaway document was not among the Technical Reports distributed with the AEE. Please provide a copy of the Greenaway report, and outline its status in the application.

Effects on birdlife

- 2.23 The Wellington south coast, which includes Moa Point is the regional stronghold for reef heron (a Nationally Endangered species). This species has also been identified as a Regionally Critical species as numbers recorded are low and are considered to have declined by 10-50% over recent years. While the impact of the construction of the runway extension on these birds is difficult to predict, the fragility of this population should be taken into account. It is highly likely that some reef heron are breeding on nearby Moa Point. Please provide an assessment of the fragility of the reef heron population located at Moa Point in terms of short-long term disturbance effects from the construction of the proposed runway.
- 2.24 The area in which the construction is proposed is scheduled in the PNRP as a significant site for coastal bird species. Under Policy P41: “*Managing adverse effects on ecosystems and habitats with significant indigenous biodiversity values*”, a precautionary approach is to be taken when assessing the potential for adverse effects on ecosystems and habitats. Please provide an assessment of the proposed activity against P41 considering schedule F2c.
- 2.25 The effect of suspended sediment from construction activities on penguins has not been identified. While penguins are present throughout the harbour, other developments are proposed in the area and there is concern about cumulative effects for this “At Risk” species. Please provide an assessment of the effect of suspended sediment on little blue penguins during construction of the proposed runway.

Note: More recent bird monitoring data related to the proposed development area is available from Hugh Robertson at the Department of Conservation.

² Wellington International Airport Runway Extension: Recreation Assessment of Environmental Effects. Prepared by Rob Greenaway & Associates, 2015
S91 AND S92(1) LETTER

Sediment accumulation post-construction

- 2.26 In Technical Report 16 (NIWA, February 2016) Section 3.4 p 27 noted the following: “*If hydrodynamic modelling data indicates that some areas of Lyall Bay will have greater depositional tendencies...then it would be useful to characterise a greater range of contaminants in this fine grain size fraction.*”. However, Technical Report 17 (NIWA, March 2016) hydrodynamic modelling shows that there are no areas in the inner bay that have “*greater depositional tendencies*”. Based on the findings of Technical Report 17, please advise whether any further monitoring/analysis of fine grain size fraction is warranted.

Erosion and sediment control measures

- 2.27 The application proposes an adaptive management approach when monitoring sediment discharges. Once monitoring has occurred, the assessment of monitoring results will lead to “adapted” development and operation to ensure any effects of the activity are at an acceptable level. The proposed turbidity limits are therefore compliance limits. Please explain what adaptive steps or management measures will be implemented prior to exceeding this limit (e.g. alert trigger levels and response).

Coastal process and modelling assessment

- 2.28 A JONSWAP spectrum was used in the spectral model. JONSWAP was developed for the North Sea and does not represent a fully developed sea. It is not necessarily applicable to swell from the Southern Ocean, which has travelled hundreds if not thousands of km from generation. Were the spectral parameters (peakedness factor and spectral width parameters) calibrated using spectra from the Baring Head wave record? If not, why not?
- 2.29 For Scenario 3, what was the surf quality? For Scenario 1 it was high, and for Scenario 2 it was good, but the quality for Scenario 3 is not specified.
- 2.30 How were the boundary conditions for the Boussinesq model derived? One assumes that it was derived from a JONSWAP spectrum synthesized into the time domain using random phase. Is that correct? Were the boundary conditions for existing bathymetry and airport extension exactly the same?
- 2.31 Technical Report 15 (NIWA, March 2015), p 8, reports that waves and storm-tide assessments were done, not by NIWA, but by AECOM and the results are presented in Technical Report 7 (AECOM, April 2016). Indeed, Appendix D of Technical Report 7 is an extreme wave assessment. However, there does not appear to be any extreme-value analysis of storm-tide, incorporating sea level rise - this is important because it establishes the appropriate level for the platform. Has such an analysis been carried out? If so, where are the results? If not, then please note this work needs to be carried out in order to establish the validity of setting the platform level at 9 m above MSL.

- 2.32 In Technical Report 7 (AECOM, April 2016), Table 5.2 Summary of Key Design Criteria (which is repeated as Table 4.1 in the AEE), says that for waves, $H1/10 = 10.5$ m and $H_s = 12.5$ m, whereas Table 2 in the wave report (Appendix D) has $H_s = 10.5$ m and $H1/10 = 12.5$ m. Is this simply a transcription error? Which wave height was used for design?

Economic impact assessment

(The following questions relate to Technical Report 27 (Ernst & Young))

- 2.33 It is difficult to derive the economic ‘shock’ that is used in the assessment (Table 4). Please prepare a table showing:
- The temporal distribution of the shock (for each of the quantified impacts)
 - The values used to translate the shock into expenditure/business activity
 - PAX numbers over time by route and the pricing
 - The baseline values used.
- 2.34 Does the assessment include the construction effects? If these effects were excluded from the analysis, please outline the rationale for this exclusion.
- 2.35 Please provide detail on your approach to estimate the import/export freight generated in the Wellington catchment? Ideally, we would like to see the sectoral breakdown of the commodities transported by air and how this relates to the macro economic output within the Wellington Airport “catchment” (referred to on p 17)
- 2.36 On page 16, the Hawaiian Airlines example is used to show that visitors to NZ have increased by 40%. Over what period did this growth occur? Did the existing services (airlines) add capacity on this route to ‘capture’ a share of this growth or was all of this growth captured by Hawaiian Airlines? In a similar vein, how much of the growth cited in the other examples was captured by ‘existing services’ adding capacity?
- 2.37 With reference to section 6.5, please define direct, indirect and induced impacts? It is not clear if these are used in an Input-Output context or some other way.
- 2.38 With reference to Table 10. It is unclear if the multipliers listed in table are ‘output’ or ‘value added’ (or GDP) multipliers and also if these are Type 1 or Type 2 multipliers. Please clarify.

(The following questions relate to Technical Report 4 (Sapere Research Group))

- 2.39 The economic cost benefit analysis (CBA) assumes that the extension will be funded by central government. What would the CBA be if it was funded via landing charges (i.e. user pays with the cost transferred to airlines and PAXs)?
- 2.40 The assessment uses ratios derived from the MBIE events assessment work. Is it appropriate to use these ratios given that the type of visitor attending an event has a different spending

profile to that of a 'normal' visitor. Similarly, how does the assessment capture the spending profiles of different visitor groups (e.g. VFR, Business, Holiday or other)?

- 2.41 What are the potential effects on other airports and regions due to the shift of movements to WLG (e.g. the loss of the WLG-AKL sector of international travel)?
- 2.42 Please provide a breakdown of the PAX growth rates by market (e.g. Australia, China, UK) for the different scenarios (Table 10).
- 2.43 With reference to footnote 67, the referenced report does not contain any information about intermediate consumption. Please provide the correct reference (note: the link in the report has been moved so the 'reference report may have been changed).
- 2.44 The report on p 72 notes that by diverting the passengers away from them the other airports could see 'an increase in the real value of outputs supplied'. Please elaborate on the mechanisms through which this increase will take place.
- 2.45 On p 75, it is assumed that the additional airline service would be provided by foreign airlines and so the cost and benefits are excluded. However, given Air NZ's important role in the NZ market and its large share of the domestic market (and the connections), is this assumption realistic.

3.0 Aircraft emission assessment

- 3.1 Air discharges from the operation of the proposed runway are permitted under R33 of the PNRP. The National Environmental Standard for Air Quality Regulations 2004 (NES-AQ) sets outdoor limits in air for PM10, CO, NO2, SO2, O3. The Wellington City airshed is not deemed to be a polluted airshed for PM10 so section 17 of the NES-AQ (that involves resource consents for discharges involving PM10) is not invoked.

Whilst no consent is required for the discharge to air from aircraft exhaust emissions, it would be prudent to provide an assessment on the impacts of any increased plane activity against ambient air standards NES-AQ (including PM2.5) and the National Ambient Air Quality Guidelines 2002. We envisage a desktop screening assessment would be sufficient.

Please note this information will be useful when we assess your application against relevant provisions under s104(1)(b) of the Resource Management Act 1991.

4.0 Date information required

Please provide the information requested in section 2.0 of this letter to me by **13 June 2016**. If you are not able to supply the information requested³ by this date, you must let us know in writing within this timeframe, either that you require additional time (at which time we will set a reasonable

³ Under section 92A of the Resource Management Act 1991.

timeframe for you to provide the information) or that you refuse to provide the requested information.

5.0 Processing of your application

Your application has been placed on hold, and the statutory ‘clock’ stopped⁴, until such a time that either I receive the requested information, receive written notice that you refuse to provide it, or the time period for providing the requested information has expired.

As soon as one of these occurs, the statutory ‘clock’ will restart and I will continue processing your application.

Please feel free to contact me on 04 830 4148 or Peter Daly (WCC) on 04 801 4305 if you have any questions or concerns.

Yours sincerely

Jude Chittock

Senior Resource Advisor, Environmental Regulation

Copy to: Peter Daly email: Peter.Daly@wcc.govt.nz

⁴ Under section 88C of the Resource Management Act 1991
S91 AND S92(1) LETTER