

Management of Noise Associated with the Use of  
Helipads and Heliports  
**Issues Paper**

April 2019



# Table of Contents



- 1 Definitions..... 1
- 2 Executive Summary..... 3
- 3 Introduction..... 3
- 4 Objectives..... 3
- 5 Helicopter Noise Management ..... 4
  - 5.1 Responsibility for Management of Noise ..... 4
    - 5.1.1 Local Government..... 4
    - 5.1.2 Civil Aviation Safety Authority (CASA) ..... 4
    - 5.1.3 AirServices Australia (ASA)..... 5
    - 5.1.4 NSW Environment Protection Authority (EPA) ..... 5
    - 5.1.5 NSW Department of Planning and Environment ..... 5
    - 5.1.6 Federal Department of Infrastructure and Regional Development and Cities .. 5
    - 5.1.7 Airports..... 6
    - 5.1.8 Aircraft Noise Ombudsman ..... 6
  - 5.2 EPA Policies and Guidelines..... 6
    - 5.2.1 Noise Guide for Local Government ..... 6
    - 5.2.2 Noise Policy for Industry ..... 7
  - 5.3 Australian Standards ..... 7
    - 5.3.1 AS 2021 Acoustics – Aircraft noise intrusion – Building siting and construction7
    - 5.3.2 AS 2363 Acoustics – Measurement of noise from helicopter operations ..... 8
    - 5.3.3 AS 1055 Acoustics – Description and measurement of environmental noise .. 9
- 6 Development Consent..... 9
  - 6.1 Tweed Local Environmental Plan 2014 ..... 9
  - 6.2 Environmental Planning and Assessment Act 1979..... 9
  - 6.3 Designated Development and the Environmental Planning and Assessment Regulation 2000..... 9
  - 6.4 State Environmental Planning Policy (Infrastructure) 2007 ..... 10
- 7 Possible Development Assessment Criteria..... 11
  - 7.1 Development Application Considerations..... 11
  - 7.2 Noise Criteria ..... 12
- 8 Conclusion..... 13
- 9 List of Figures/List of Tables..... 14
- 10 References ..... 14
- 11 Appendix/Abbreviations ..... 14





## 1 Definitions

**Air transport facility:** an airport or a heliport that is not part of an airport, and includes associated communication and air traffic control facilities or structures.

**Airport:** a place that is used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport. Note airports are a type of air transport facility.

**Airstrip:** a single runway for the landing, taking off or parking of aeroplanes for private aviation only, but does not include an airport, heliport or helipad.

**Emergency services facility:** a building or place (including a helipad) used in connection with the provision of emergency services by an emergency services organisation.

**Emergency services organisation:** any of the following:

- (a) Ambulance Service of New South Wales,
- (b) Fire and Rescue NSW,
- (c) NSW Rural Fire Service,
- (d) NSW Police Force,
- (e) State Emergency Service,
- (f) New South Wales Volunteer Rescue Association Incorporated,
- (g) New South Wales Mines Rescue Brigade established under the Coal Industry Act 2001,
- (h) an accredited rescue unit within the meaning of the State Emergency and Rescue Management Act 1989.

**Health services facility:** a building or place used to provide medical or other services relating to the maintenance or improvement of the health, or the restoration to health, of persons or the prevention of disease in or treatment of injury to persons, and includes any of the following:

- (a) a medical centre,
- (b) community health service facilities,
- (c) health consulting rooms,
- (d) patient transport facilities, including helipads and ambulance facilities,
- (e) hospital.

**Helipad:** a place not open to the public used for the taking off and landing of helicopters.

**Heliport:** a place open to the public that is used for the taking off and landing of helicopters, whether or not it includes:

- (a) a terminal building, or
- (b) facilities for the parking, storage or repair of helicopters.

Note heliports are a type of air transport facility.

**Hospital:** a building or place used for the purpose of providing professional health care services (such as preventative or convalescent care, diagnosis, medical or surgical treatment, psychiatric care or care for people with disabilities, or counselling services provided by health care professionals) to people admitted as in-patients (whether or not out-patients are also cared for or treated there), and includes ancillary facilities for (or that consist of) any of the following:

- (a) day surgery, day procedures or health consulting rooms,
- (b) accommodation for nurses or other health care workers,

- (c) accommodation for persons receiving health care or for their visitors,
- (d) shops, kiosks, restaurants or cafes or take away food and drink premises,
- (e) patient transport facilities, including helipads, ambulance facilities and car parking,
- (f) educational purposes or any other health-related use,
- (g) research purposes (whether or not carried out by hospital staff or health care workers or for commercial purposes),
- (h) chapels,
- (i) hospices,
- (j) mortuaries.

**Public authority:**

- (a) a public or local authority constituted by or under an Act, or
- (b) a Public Service agency, or
- (c) a statutory body representing the Crown, or
- (d) a Public Service senior executive within the meaning of the Government Sector Employment Act 2013, or
- (e) a statutory State owned corporation (and its subsidiaries) within the meaning of the State Owned Corporations Act 1989, or
- (f) a chief executive officer of a corporation or subsidiary referred to in paragraph (e), or
- (g) a person prescribed by the regulations for the purposes of this definition.

---

## 2 Executive Summary

The development of new helipads and heliports or where changes to existing operations are proposed can often raise legitimate concerns for local communities. This is particularly noticeable in areas that have not been previously exposed to such noise or where early morning and night time helicopter operations may cause sleep disruption.

The response to helicopters and helipads is dependent on many factors, some of which are unrelated to absolute level of helicopter noise. Each helipad or heliport is a unique situation and the development approval process and final decision may not result in a satisfactory outcome for every resident, community or operator.

Individual consideration must be given that includes local community consultation to ensure a helipad or heliport will operate without unacceptable adverse effect on the amenity of residents and the aesthetic values of the locality.

This issues paper seeks to outline how noise from helicopter activity is regulated in New South Wales, provides development assessment guidance for applicants seeking approval for a helipad or heliport, and outlines how an application for a helipad or heliport may be assessed.

It is recommended that this issues paper be utilised as supporting information for Council staff in the assessment and regulation of helipads and heliports within the Tweed.

## 3 Introduction

Noise pollution has many sources, most of which are associated with urban living including road and air transport, industrial noise, and neighbourhood and recreational noise.

The level of annoyance or discomfort depends on the individual tolerance of the person as well as the type, timing, duration and frequency of noise, or if the disturbance is out of the ordinary. Noise pollution can have negative impacts on the quality of life and health of people and needs to be addressed in planning and pollution control strategies.

Helicopter operations require flexibility as they can be required to fly over residential areas that are rarely flown over by other aircraft. The noise helicopters generate can therefore be particularly noticeable to people who are not accustomed to aircraft noise on a regular basis.

Occasional helicopter flights may be tolerated where used by services that benefit the community such as firefighting, crime prevention, search and rescue, construction, and media. Regular flights however may be considered a nuisance or intrusive leading to opposition by residents within the community.

## 4 Objectives

The purpose of this issues paper is to:

1. Outline how noise from helicopter activity is regulated in New South Wales;
2. Provide guidance on the preparation of a development assessment guideline for applicants seeking development approval for a helipad or heliport; and
3. Outline how a development application for a helipad or heliport may be assessed and regulated.

## 5 Helicopter Noise Management

### 5.1 Responsibility for Management of Noise

The responsibility for helicopter noise management is shared between airline and aircraft operators, air navigation providers, airports, federal government agencies, and state and local governments.

#### 5.1.1 Local Government

Local Government is responsible for managing growth and development to create a better living, working, and recreational environment for the community.

For helipads and heliports where development consent is required, this includes:

- Assessing amenity impacts of a proposal to ensure it will not create unacceptable noise impacts and, where approved, provide suitable conditions of consent for compliance;
- Monitoring and seeking compliance for any unauthorised or non-complying land use; and
- Investigating noise impacts from plant and article operation (e.g. noisy aircraft engine maintenance activities on the ground) at privately operated airports or helicopter premises not covered by Schedule 1 of the Act - *Protection of the Environment Operations Act 1997* and *Protection of the Environment Operations (Noise Control) Regulation 2017*.

*“Schedule 1 Helicopter-related activities:*

*(1) This clause applies to a helicopter-related activity, meaning the landing, taking-off or parking of helicopters (including the use of terminals and the use of buildings for the parking, servicing or maintenance of helicopters), being an activity:*

*(a) that has an intended use of more than 30 flight movements per week (where take-off and landing are separate flight movements), and*

*(b) that is conducted within 1 kilometre of a dwelling not associated with the landing, taking-off or parking of helicopters,*

*but not including an activity that is carried out exclusively for the purposes of emergency aeromedical evacuation, retrieval or rescue.*

*(2) The activity to which this clause applies is declared to be a scheduled activity”.*

#### 5.1.2 Civil Aviation Safety Authority (CASA)

Civil Aviation Safety Authority (CASA) regulate Australian aviation safety, license pilots, and register aircraft. CASA can determine whether a flight path complies with civil aviation safety requirements and manages the pilot, aircraft, and airspace.

Although CASA does not regulate helicopter landing sites, pilots are required to adhere to the CASA Civil Aviation Advisory Publication (CAPP) 92-2(2) *Guidelines for the establishment and operation of on-shore Helicopter Landing Sites (HLS)* when operating at these locations.

Unless otherwise permitted, pilots must not fly lower than 1000 feet over built-up areas, or 500 feet over any other area. Log books with details of each flight made are required to be maintained by helicopter pilots under the *Civil Aviation Regulations 1998*.



CASA's authority in relation to aircraft noise is limited to the engineering aspects of aircraft type certification and have no authority regarding enforcing conditions that apply within a land development approval.

### **5.1.3 AirServices Australia (ASA)**

AirServices Australia (ASA) is responsible for Australia's airspace management, aeronautical information, aviation communications, radio navigation aids, aviation rescue and firefighting services. This includes maintaining technology used by the industry for navigation and surveillance and aircraft noise monitoring.

ASA is responsible for managing noise complaints and enquiries about aircraft noise and operations through its Noise Complaints and Information Service (NCIS). This service is the Australian aviation industry's main interface on aircraft noise and related issues for the community.

For areas of controlled airspace, ASA is responsible for air traffic services, including managing designated flight paths. With respect to aircraft outside of controlled airspace, this is the extent of ASA's involvement.

The authority to approve a helipad or heliport rests with the relevant planning authority (for the land use) and CASA (for aviation aspects). ASA do not have the authority to limit or stop any operation outside controlled airspace.

### **5.1.4 NSW Environment Protection Authority (EPA)**

The Environment Protection Authority (EPA) provides expert advice to the relevant planning authority regarding any potential environmental impacts, including noise.

The EPA advise that noise from aircraft in flight, taking off, landing, and taxiing should be reported to ASA. For noise from aircraft on the ground undergoing maintenance activities this is a matter for the local council.

For helicopter noise from a scheduled activity where there are more than 30 flight movements per week (with take-off and landing being separate flight movements) the noise should be reported to the EPA.

Although not specifically referring to helipads or heliports, the EPA recommends that effective land use planning plays a key role in preventing potential noise impacts, both at the strategic planning level for an area and at a project-specific level. Where development consent conditions have been breached, Council may take action under the *Environmental Planning and Assessment Act* (EPA Act) 1979.

### **5.1.5 NSW Department of Planning and Environment**

The State government determines planning frameworks for areas around airports to ensure that inappropriate developments are avoided where aircraft noise is particularly high (or could be particularly high in the future).

### **5.1.6 Federal Department of Infrastructure and Regional Development and Cities**

The Australian Government through the Department of Infrastructure and Regional Development and Cities advises government on the policy and regulatory framework for

Australian airports and the aviation industry. The Department provides policy advice to the Minister on the efficient management of Australian airspace and on aircraft noise.

### 5.1.7 Airports

Airports ensure that noise-generating activities such as ground running and helicopter take-offs are placed as far away as possible from residential areas to minimise noise impact on local communities. Some airports develop voluntary codes i.e. *Fly Neighbourly Agreements* to reduce the noise impact of aircraft operations on residential areas near airports.

### 5.1.8 Aircraft Noise Ombudsman

The independent office of the Aircraft Noise Ombudsman works with the aviation industry to improve the way in which it can respond to community concern above the impact of aviation on communities.

## 5.2 EPA Policies and Guidelines

### 5.2.1 Noise Guide for Local Government

The *Noise Guide for Local Government* (EPA 2013) and *Noise Guide for Local Government Update: Changes arising from the Noise Control Regulation 2017* (EPA 2018) provides practical advice for Council officers on planning, assessing, managing, and preventing local noise problems.

Table 1.3 of the guide confirms that Council is the appropriate regulatory agency for noise resulting from privately operated airports and helicopter premises not covered by Schedule 1 of the *Protection of the Environment Operations Act* (POEO Act) 1997 and that:

*“noise from aircraft on the ground not taxiing, taking off, or landing can be directly controlled through the POEO Act provisions. Therefore, noisy aircraft engine maintenance activities on the ground can be controlled by, for example, specifying permitted hours and/or noise limits at affected residences”.*

For helicopter premises *“AirServices Australia is responsible for noise from aircraft in flight and aircraft movements (taxiing, take-off, and landing) and the POEO Act provisions cannot be applied to these activities. This includes conditions specifying for example:*

- *Noise limits that apply to aircraft in flight and aircraft movements;*
- *Permitted hours for movements;*
- *Permitted number of movements;*
- *Except in limited circumstances, permitted aircraft models e.g. models certified to meet a certain noise level in certain specified test conditions”.*

The planning requirements for a helipad or heliport are not specifically addressed in the guide where Council’s role includes development assessment, refusal or development consent with conditions, and regulation.

The guide recognises that the Environmental Noise Control Manual previously published by the EPA does not contain current information on noise management and should not be used or relied upon for assessing helicopter noise.

## 5.2.2 Noise Policy for Industry

The *Noise Policy for Industry* (EPA 2017) balances the need for industrial activity with the community's desire to minimise intrusive sounds. The policy sets assessment noise levels, consistent methods, and best practice measures to manage industrial noise, and is based on scientific research regarding noise's health effects.

The policy is designed for large industrial and agricultural sources that may not always be applicable to the types of sources Council may need to address.

Council may find the *Noise Policy for Industry* helpful in assessing noise from premises it regulates and for land use planning responsibilities.

The policy does not apply to transportation corridors including air corridors, but may be applicable to noise resulting from aircraft on the ground undergoing excessively noisy engine maintenance activities.

## 5.3 Australian Standards

### 5.3.1 AS 2021 Acoustics – Aircraft noise intrusion – Building siting and construction

AS 2021 utilises a noise exposure system calculated in Australian Noise Exposure Forecast (ANEF) units. ANEF charts are contour maps that show a forecast of aircraft noise levels that are expected to exist in the future.

ANEFs are primarily used by state, territory, and local government planning agencies for land use zoning purposes and take into account the following features of aircraft noise:

- The intensity, duration, tonal content, and a spectrum of audible frequencies of the noise of aircraft take offs, approaches to landing, and reverse thrust after landing;
- The forecast frequency of aircraft types and movements on the various flight paths, including flight paths used for circuit training; and
- The average daily distribution of aircraft arrivals and departures in both daytime (7.00am to 7.00pm) and night-time (7.00pm to 7.00am).

Under the ANEF system for residential receivers a level not exceeding 20 ANEF is considered to be acceptable for residential occupancy. This is where noise from other sources other than aircraft tends to predominate over aircraft noise. Aircraft noise in these areas may not be unnoticeable however individual reactions to aircraft noise may differ.

For persons newly exposed to aircraft operations it is generally accepted that there is a different level of sensitivity to such operations.

Council engaged the services of The Acoustic Group in 2018 for peer review in relation to the assessment of helicopter noise and helipads within the Tweed. The Acoustic Group recommended the most relevant criteria is 20 ANEF based upon persons being pre-exposed to aircraft noise, however for new flight tracks or airports on greenfield sites, 13 ANEF should be applied.

ANEF and approximate Leq levels:

20 ANEF = 55 dB(A) Leq  
13 ANEF = 48 dB(A) Leq

The assessment of a helipad or heliport under the ANEF system involves all noise associated with the helicopter that is detected at affected residential receivers from start-up of the helicopter to shut down of the helicopter.

### 5.3.2 AS 2363 Acoustics – Measurement of noise from helicopter operations

In 1990 the aircraft noise committee of Standards Australia issued the helicopter noise standard AS2363 that set out procedures for the measurement of helicopters. The standard included noise targets over a 12 hour period with different criteria for day and night.

The objective was to provide methods for the measurement of noise from existing or proposed helicopter landing sites and helicopter overflights, and provide technical guidance for local planners, government agencies, and operators in calculating the acoustic environment near existing and proposed helicopter landing sites or routes as a result of helicopter operations.

The Acoustic Group advised that Table A1 of Appendix A reproduced below had set out the recommended noise targets that identified maximum noise level targets and LAeq targets for different types of receivers for the day and night periods.

AS2363 (1990) Appendix A Table A1:

RECOMMENDED ACCEPTABILITY CRITERIA FOR 12-HOUR PERIODS

Usage of premises and zoning	LAeq,T (Hel)		LAm <sub>ax</sub> (Hel) (see Note 3)	
	Daytime	Nighttime	Daytime	Nighttime
Residential and hospital areas	60 (see Note 2)	50 (see Note 2)	85	80
Commercial areas	65	65	95	90
Other areas (churches, schools, theatres, etc.)	60	60	90	90

NOTES:

1. This Standard makes no recommendation on limits in industrial areas
2. For these area classifications, LAeq,T (Amb) + 10 dB(A) can be used instead of LAeq,T (Hel) if the former is lower
3. Special consideration may be given to the operation of aerial ambulances. For this reason, LAeq,T (Hel) either night or day, must be satisfied, but LAm<sub>ax</sub> (Hel) is not specified for aerial ambulances.
4. In the absence of further information, daytime is understood to be between 0700 hours and 1900 hours and nighttime between 1900 hours and 0700 hours.
5. If the existing ambient level exceeds the LAeq level specified in the table, the introduction of helicopter operations should not raise the level by more than 2 dB(A).

Although the criteria in Table A1 is no longer in AS2363, the table may be used to supplement an analysis to confirm the acceptability of noise impacts, particularly to identify the relevant target criteria in quieter areas.

The standard identifies that a helicopter is typically operated at low altitudes and as a result frequently comes within the audible range of people. Helicopters are becoming more widely used in both urban and suburban areas and the sound is generated in close proximity to where people live and work. This closeness accentuates the concern associated with the external sound of the helicopter and its acceptability to the communities in which it operates.

Individual consideration should be given to such factors as ambient noise and the specific nature of the noise sensitive areas which may be affected by helicopter operations.

The standard assumes that the user of the document would be adequately trained in the science of acoustics and thoroughly experienced in noise measurement and assessment.

### **5.3.3 AS 1055 Acoustics – Description and measurement of environmental noise**

AS 1055 sets out general procedures for the description and measurement of environmental noise. It applies to noise emitted from industrial, commercial, and residential premises however does not apply to the measurement or assessment of in-transit air transportation.

## **6 Development Consent**

### **6.1 Tweed Local Environmental Plan 2014**

Helipads and heliports are permitted with consent in some land use zones under the Tweed Local Environmental Plan (LEP) 2014, either stand-alone or in association with within an air transport facility, airport, emergency services facility, health service facility, or hospital.

Development consent is not required for the use of a helicopter engaged in an agricultural activity, in conjunction with the lawful use of any rural land for agriculture.

### **6.2 Environmental Planning and Assessment Act 1979**

The *Environmental Planning and Assessment Act 1979* (EPA Act) sets out the framework for strategic planning, development assessment, and the coordination of approvals required under environmental and other legislation.

The EPA Act considers potential adverse amenity impacts that may occur from a development. Any application for a helipad or heliport should be supported by an acoustic assessment prepared by a suitably qualified acoustic consultant with demonstrated experience in assessing helicopter noise.

### **6.3 Designated Development and the Environmental Planning and Assessment Regulation 2000**

Designated Development requires particular scrutiny because of the nature of the development or the potential impact. Where a proposal is considered designated development, the applicant must prepare an Environmental Impact Statement (EIS) based on the requirements of Department of Planning.

The *Environmental Planning and Assessment Regulation 2000* Schedule 3 Clause 2 is the trigger point for designated development for aircraft facilities including helicopter facilities.

*“2. Aircraft facilities*

*Aircraft facilities (including terminals, buildings for the parking, servicing or maintenance of aircraft, installations or movement areas) for the landing, taking-off or parking of aeroplanes, seaplanes or helicopters:*

*(a) in the case of seaplane or aeroplane facilities:*

*(i) that cause a significant environmental impact or significantly increase the environmental impacts as a result of the number of flight movements (including taking-off or landing) or the maximum take-off weight of aircraft capable of using the facilities, and*

*(ii) that are located so that the whole or part of a residential zone, a school or hospital is within the 20 ANEF contour map approved by the Civil Aviation Authority of Australia, or within 5 kilometres of the facilities if no ANEF contour map has been approved, or*

*(b) in the case of helicopter facilities (other than facilities used exclusively for emergency aeromedical evacuation, retrieval or rescue):*

*(i) that have an intended use of more than 7 helicopter flight movements per week (including taking-off or landing), and*

*(ii) that are located within 1 kilometre of a dwelling not associated with the facilities, or*

*(c) in any case, that are located:*

*(i) so as to disturb more than 20 hectares of native vegetation by clearing, or*

*(ii) within 40 metres of an environmentally sensitive area, or*

*(iii) within 40 metres of a natural waterbody (if other than seaplane or helicopter facilities)”.*

With respect to flight movements, a take-off is a movement and a landing is a movement.

Clause 37A of the Schedule includes provision for an exemption from Designated Development where the helipad or heliport is ancillary to the development.

*“37A. Ancillary development*

*(1) Development of a kind specified in Part 1 is not designated development if:*

*(a) it is ancillary to other development, and*

*(b) it is not proposed to be carried out independently of that other development.*

*(2) Subclause (1) does not apply to development of a kind specified in clause 29 (1) (a)”.*

## **6.4 State Environmental Planning Policy (Infrastructure) 2007**

Under the State Environmental Planning Policy (SEPP) (Infrastructure) 2007, helipads and heliports associated with an **emergency services facility** or **health services facility** may be permitted without consent where carried out by or on behalf of a public authority.

**Air transport facility** (heliport) may be carried out by or on behalf of a public authority without consent on certain land use zones. The respective public authority would need to undertake a Part 5 Review of Environmental Factors.

Development for the purposes of an **emergency services facility** may be carried out with consent in a prescribed zone by an **emergency services organisation** that is not a public authority.

## 7 Possible Development Assessment Criteria

### 7.1 Development Application Considerations

The issue of potential noise generation impacting neighbouring residents should be thoroughly considered. Noise generated by the arrival and departure of the aircraft should be monitored and appropriate flight paths designed to minimise potential impacts to the community.

Applicants must ensure that an application for a helipad or heliport fully describes the proposal, adequately identifies amenity impact and land affected by the proposal, and is supported by an acoustic assessment prepared by a suitably qualified acoustic consultant with demonstrated experience in assessing helicopter noise.

#### **Council may consider the following matters in a development application:**

- Proposed hours of operation of the helipad/heliport and helicopter;
- Proposed number of flight movements proposed per day/week, where a take-off is a movement and a landing is a movement;
- Proposed use of the helipad/heliport;
- Type of helicopter/s proposed;
- Load of proposed helicopter/s;
- Nominated flight path/s for the helicopter/s in different wind conditions noting deviation from approved flight path/s is not permitted;
- Minimum distance that helicopters must keep clear of residences (both vertically and laterally);
- Whether storage of fuel and refuelling of the helicopter is proposed on the subject site;
- Whether aircraft engine maintenance activities are proposed on the subject site;
- Activities and structures associated with the helipad/heliport; and
- Suitable shielding for externally mounted artificial lighting, including security lighting, to prevent light or glare creating a nuisance to neighbouring or adjacent premises.

#### **The applicant should also note:**

- Where the nominated flight path/s cannot be used due to adverse weather conditions, the helicopter/s may not take off from the site or on arriving to the area the helicopter may need to seek an alternative landing site;
- Additional flight paths would be subject to separate development application/modification and supported by appropriate acoustic measurements and assessment;
- Operations may be restricted to the helicopter type and load assessed;

- The operation and use of the helipad/heliport may require maintenance of a flight log detailing the date and time of all inbound flights to and outbound flights from the subject site;
- A Plan of Management may be required that identifies the abovementioned matters, as well as methods to measure and monitor compliance with any conditions of consent, and maintaining and acting upon complaints about helicopter movements; and
- Council may recommend an application be subject to independent peer review by a suitably qualified acoustic consultant with demonstrated experience in assessing helicopter noise.

## 7.2 Noise Criteria

Council engaged the services of The Acoustic Group in 2018 for peer review in relation to the assessment of a proposed helipad within the Tweed.

It is noted that when reviewing an acoustic assessment for a helipad or heliport there is often confusion about the noise criteria that applies. This is a result of different noise criteria having been specified over the years with different interpretations as to what components of helicopter noise are controlled by each agency. The Acoustic Group have provided relevant criteria for the assessment of helicopter noise including any on ground component.

This advice has been prepared in consideration of the Chief Judge of the Land & Environment Court in relation to the helipad at the Highland Heritage Estate (Orange East Heliport) in *Nessdee Pty Ltd v the Orange City Council* which summarises the acoustic issue/criteria.

### **The following noise criteria may be considered with any development application:**

- *Environmental Planning and Assessment Act 1979* (EPA Act) to consider potential adverse amenity impacts that may occur from a development including whether the proposal is deemed designated development under the regulation. Any application should be supported by an acoustic assessment prepared by a suitably qualified acoustic consultant with demonstrated experience in assessing helicopter noise;
- The *Noise Guide for Local Government* (EPA 2013 updated 2018) provides practical advice on planning, assessing, managing, and preventing local noise problems. Sleep disturbance is considered background plus 15 dB(A) within this guide;
- The *Noise Policy for Industry* (EPA 2017) does not apply to helicopter engine noise, even when the helicopter is on the ground, however can assist in the assessment of other activities proposed in association with the helipad or heliport.
- Australian Standards particularly AS 2021 *Aircraft noise intrusion – Building siting and construction* and AS 2363 *Measurement of noise from helicopter operations*.
- Australian Noise Exposure Forecast (ANEF) 20 (or 13 ANEF for new flight tracks/greenfield areas not previously exposed to aircraft noise);
- AirServices Australia's (ASA) *Environmental Principles and Procedures for Minimising the Impact of Aircraft Noise 2002*. Although no longer used by ASA it may



---

be used a reference document for assessment purposes in association with Helicopter Association International's (HAI) *Fly Neighborly Guide*;

- CASA Civil Aviation Advisory Publication (CAPP) 92-2(2) *Guidelines for the establishment and operation of on-shore Helicopter Landing Sites (HLS)* that provides guidelines based on international standards and advice on the Australian civil aviation regulations that pilots must adhere to when operating at these locations;
- Referral to CASA, AirServices Australia, and Gold Coast Airport; and
- Consideration of local residents' concerns about potential noise and hours of operation of a helipad or heliport.

## 8 Conclusion

Where Council is the approval authority for a helipad or heliport, Council plays a crucial role in balancing the needs of the applicant and the potential impacts of the surrounding community.

Although safety concerns may be referred to CASA or AirServices Australia, noise impacts will ultimately be directed to Council to monitor and seek compliance.

Each helipad or heliport is a unique situation and the development approval process and final decision may not result in a satisfactory outcome for every resident, community or operator.

Individual consideration must be given that includes local community consultation to ensure a helipad or heliport will operate without unacceptable adverse effect on the amenity of residents and the aesthetic values of the locality.

## 9 List of Figures/List of Tables

AS2363 (1990) Appendix A Table A1 – Recommended Acceptability Criteria - Page 9

## 10 References

Peer Review – Acoustic Assessment for Proposed Helipad, 477 Urliup Road, Bilambil prepared by The Acoustic Group dated 7 November 2018 (Reference: 48.5332.R2:MSC).

Court Determination - Nessdee Pty Limited v Orange City Council [2017] NSWLEC 158

## 11 Appendix/Abbreviations

ANEF – Australian Noise Exposure Forecast

ASA – AirServices Australia

CASA – Civil Aviation Safety Authority

EIS – Environmental Impact Statement

EPA – Environment Protection Authority

EPA Act – Environmental Planning and Assessment Act 1979

HAI – Helicopter Association International

HLS – Helicopter Landing Sites

LEP – Local Environmental Plan

NCIS – Noise Complaints and Information Service

POEO Act – Protection of the Environment Operations Act 1997

SEPP – State Environmental Planning Policy





Customer Service | 1300 292 872 | (02) 6670 2400

[tsc@tweed.nsw.gov.au](mailto:tsc@tweed.nsw.gov.au)

[www.tweed.nsw.gov.au](http://www.tweed.nsw.gov.au)



PO Box 816

Murwillumbah NSW 2484