

Environmental Health Referral Response - industrial use

Application Number:	DA2020/0661
Date:	07/07/2020
To:	Phil Lane
Land to be developed (Address):	Lot 7356 DP 1167221 Crown Licence RI 569549 , 7356 / 1167221 Huston Parade NORTH CURL CURL NSW 2099

Reasons for referral

This application seeks consent for large/and or industrial development.

And as such, Council's Environmental Investigations officers are required to consider the likely impacts.

Officer comments

General Comments

The proposed telecommunications facility will comprise a 22.5 metre monopole, six panel antennas, fourteen remote radio units, council floodlights, an outdoor cabinet and other associated ancillary equipment and will have a total height of 25.7m (including antennas and floodlights).

The main issue for consideration is Electromagnetic Radiation and Councils flood lighting of playing fields.

Due to public concern about possible health effects of electromagnetic energy (EME) the applicants comments are repeated here to assist the reader :

EME & HEALTH

Optus acknowledges some people are genuinely concerned about the possible health effects of electromagnetic energy (EME) from mobile phone base stations and is committed to addressing these concerns responsibly. Optus, along with the other mobile phone carriers, must strictly adhere to Commonwealth Legislation and regulations regarding mobile phone facilities and equipment administered by the Australian Communications and Media Authority (ACMA).

In 2003 the ACMA adopted a technical standard for continuous exposure of the general public to RF EME from mobile base stations. The standard, known as the Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003, was prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is the same as that recommended by ICNIRP (International Commission for Non-Ionising Radiation Protection), an agency associated with the World Health Organisation (WHO). Mobile carriers must comply with the Australian Standard on exposure to EME set by the ACMA.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that Optus can transmit to and from any network base station. The general public health standard is not based on distance limitations, or the creation of 'buffer zones'. The environmental standard restricts the signal strength to a level low enough to protect everyone at all times. It has a significant safety margin, or precautionary approach, built into it.

The use of the Standard in development applications involving Telecommunications Facilities was tested and supported by decisions made in the New South Wales Land and Environment Court, having particular regard to Telstra Corporation Limited Vs Hornsby Shire Council [2006] NSWLEC 133 which tested whether the proposed EME levels will harm the health and safety of the residents.

The Land and Environment Court ruled in favour of Telstra, on the basis that the Standards set by the ACMA are scientifically proved & robust. The Court stated that Councils should adopt these standards

when measuring and determining EME levels, given that it is the ACMA that has the responsibility for ensuring exposure limits do not adversely affect the health and amenity of the community.

The Court further stated that it was not appropriate for the Court to set aside or disregard the existing safety standard nor is it appropriate for the Court to pioneer its own standards. The Court ruled it was appropriate for safety standards to be set by authorities with special expertise, such as ARPANSA.

In order to demonstrate compliance with the standard, ARPANSA created a prediction report using a standard methodology to analyse the maximum potential impact of any new telecommunications facility. Carriers are obliged to undertake this analysis for each new facility and make it publicly available.

Importantly, the ARPANSA-created compliance report demonstrates the maximum signal strength of a proposed facility, assuming that it's handling the maximum number of users 24 hours a day.

In this way, ARPANSA requires network carriers to demonstrate the greatest possible impact that a new telecommunications facility could have on the environment, to give the community greater peace of mind. In reality, base stations are designed to operate at the lowest possible power level to accommodate only the number of customers using the facility at any one time. This design function is called 'adaptive power control' and ensures that the base station operates at minimum, not maximum, power levels at all times.

The maximum environmental EME level from the site at Curl Curl, once it is operational, has been estimated as being well within the ACMA mandated exposure limit (refer to Appendix E). This maximum level is extremely low and the maximum environmental EME level from the site, once it is operational, will comply with the ACMA mandated exposure limit. Optus complies with the public health and safety standard by a significant margin.

and also

Optus relies on the expert advice of national and international health authorities such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the World Health Organisation (WHO) for overall assessments of health and safety impacts. The WHO advises that all expert reviews on the health effects of exposure to radiofrequency fields have concluded that no adverse health effects have been established from exposure to radiofrequency fields at levels below the international safety guidelines that have been adopted in Australia

The estimated maximum EME is 1.42% of the 100% public exposure limit.

Lighting is to be restricted to the playing areas and approved times of operation.

Recommendation

APPROVAL - subject to conditions

The proposal is therefore supported.

Note: Should you have any concerns with the referral comments above, please discuss these with the Responsible Officer.

Recommended Environmental Investigations Conditions:

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Prior to completion of all work and ongoing use

The levels of radio frequency (RF) electromagnetic energy (EME) around the wireless base station shall be measured by a suitably qualified person using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and a certificate of compliance

with applicable standards shall be issued to the certifying Authority and a copy to Council. Levels shall include those from all sources in the area to 500m distance from the tower so the accumulative impact is documented.

Reason: To ensure the levels of radio frequency (RF) electromagnetic energy (EME) are compliant with Australian Standards and do not pose a risk to the community.

ON-GOING CONDITIONS THAT MUST BE COMPLIED WITH AT ALL TIMES

Lighting Spill and Glare

Flood lighting shall be installed and used to ensure that light spill and glare is contained within the playing areas and non habitable areas.

Lighting shall be turned off immediately following any approved playing activities and times.

Reason: To ensure that light spill and glare does not adversely impact on residential premises.