Environmental EME Report

Location	280-286 Point Cook Road, POINT COOK VIC 3030		
Date	14/12/2020	**RFNSA No.**	3030059

How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at 280-286 Point Cook Road, POINT COOK VIC 3030. These levels have been calculated by Kordia - IRFA using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).
A document describing how to interpret this report is available at ARPANSA's website:
A Guide to the Environmental Report.

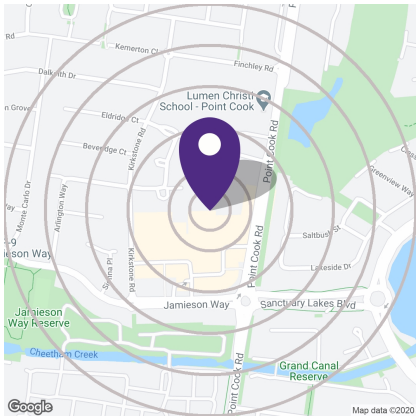
A snapshot of calculated EME levels at this site

There are currently no existing radio systems for this site.

The maximum EME level calculated for the **proposed** changes at this site is

3.88%

out of 100% of the public exposure limit, 63 m from the location.



EME levels with the proposed changes

Distance from the site	Percentage of the public exposure limit
0-50 m	3.22%
50-100 m	3.88%
100-200 m	2.78%
200-300 m	2.24%
300-400 m	1.05%
400-500 m	0.59%

For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at *http://www.rfnsa.com.au/3030059*.

Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration.
The proposal would modify the base station to include all the services listed under the proposed configuration.

	Existing		Proposed	
Carrier	**Systems**	**Configuration**	**Systems**	**Configuration**
Optus			4G, 5G	NR3500 (proposed), NR2300 (proposed), LTE700 (proposed), LTE900 (proposed), LTE1800 (proposed), LTE2100 (proposed), LTE2300 (proposed), LTE2600 (proposed)

An in-depth look at calculated EME levels at this site

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360º circular bands.

	Existing configuration			Proposed configuration		
Distance from the site	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
0-50m				10.83	311.08	3.22%
50-100m				11.99	381.42	3.88%
100-200m				9.66	247.54	2.78%
200-300m				7.90	165.48	2.24%
300-400m				5.43	78.23	1.05%
400-500m				4.07	43.86	0.59%

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the Communications Alliance Ltd Deployment Code C564:2018 or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Maximum cumulative EME level for the proposed configuration

Location	Height range	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
No locations identified				