This document is marked *Limited* as some of the systems at this site cannot be identified

# **EME Guide** MTA for Site Safety

RFNSA Site No: Document Issue No: Document Issue Date: 2065015 07 13/01/2021

RADHAZ

Address: 39 Herbert St ARTARMON NSW 2064

This evaluation <u>does not consider all</u> of the systems operating at this Radiocommunications facility. The mobile carriers' equipment however, has been evaluated against the applicable Australian Standard.



This EME Guide has been prepared by: Radhaz Consulting Pty. Ltd.

## An Important Message to people accessing this building or structure

There are radiocommunications antennas operating on this building or structure. The antennas on this building or structure produce a form of energy known as electromagnetic energy (EME).

You should not access Exclusion Zones, which are areas close to the antennas.

This EME guide is endorsed by AMTA and the MCF as a standard for EME Site Safety Documentation.

The Radiocommunications facility cited below is unable to be declared COMPLIANT with the applicable Australian Standard due to some unidentified radio systems. **The Mobile Carriers' equipment, and other included radio services have been evaluated against, and are compliant to the applicable Australian Standard.** 

Visitors to this site shall note that EME Safe Work Procedures apply.

#### DO NOT STAND IN FRONT OF ANTENNAS

#### DO NOT ACCESS RED AND YELLOW EXCLUSION ZONES

This document will show Exclusion Zones around the antennas, don't enter these areas. The latest version of this EME Guide is accessible at <u>www.rfnsa.com.au</u> or from the facility owner, the mobile carrier, or radio service operators occupying the site.

Exclusion zones are defined by the Australian EME Standard "ARPANSA Radiation Protection Standard - Maximum Exposure Levels to Radiofrequency Fields (RPS3)."

Make sure you view all the Exclusion Zone drawings so you get a complete understanding of the site.



Note - This EME Guide replaces the Radio Communications Site Management Book (RCSMB). This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

Site No: 2065015 Issue No: 07 Ref: 22808-07

Issued 13/01/2021

AMTA EME Guide Template V1.1 Page 2 of 30

#### 1. Be aware of these Access Controls on site

If you need to access this site contact the site owner, manager or the Carriers and Radio Service Operators occupying the site.

#### Access Control Procedures at Site

Structure 1

- Locked Rooftop door.
- "RF Hazard Area Beyond this Point" warning signs are installed at roof access door, on the wall adjacent to the access ladder to roof level 2 and AC Units in North West visible to approaching personnel.
- "General Public RF Hazard Boundary beyond this point" warning signs are installed at AC Unit in South East and on top of the ladder to Cooling Tower visible to approaching personnel.

The General Public limit resulting from antennas mounted on the rooftop does not encroach into accessible areas as there is more than 17.7m clearance from the exclusion zone to ground level and less than 2.1m clearance to lower rooftop. Anyone accessing the rooftop need to ensure that they do not enter the EME exclusion zones without having the antennas powered down. If access into the exclusion zones is required, please contact the antenna operator listed in this guide to arrange a service outage prior to commencement of work. Safe Work Procedures must be followed including the use of personal RF monitors.

#### Structure 2

- The access to the rooftop is through locked access door.
- "RF Hazard Area Beyond this Point" warning sign is installed at the plant screening adjacent to Vodafone ODU visible to approaching personnel.

The General Public limit resulting from antennas mounted on the rooftop does not encroach into accessible areas as there is more than 18.1m clearance from the exclusion zone to ground level. Anyone accessing the rooftop need to ensure that they do not enter the EME exclusion zones without having the antennas powered down. If access into the exclusion zones is required, please contact the antenna operator listed in this guide to arrange a service outage prior to commencement of work. Safe Work Procedures must be followed including the use of personal RF monitors.

This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

#### 2. EME Safe Work Procedures to be followed at this site

- 1. Be appropriately trained
- 2. Receive a safety briefing from Site Manager
- 3. Do not stand in front of antennas
- 4. Observe safety signs
- Ensure you view the current version of this EME Guide (<u>www.rfnsa.com.au</u>)
- 6. Check site drawings & antenna exclusion zones
- 7. Check for site updates see caution sheets
- 8. Use a safe work method statement
- 9. Use a personal RF monitor
- 10. Questions ask for help

### 3. Carriers and Radio Service Operators on site

#### Structure 1

Carrier/RSO	Antenna	Contact No.
Optus	8-13	NSAC: 1800 505 777 (Optus)
Vodafone	1,2,5,6,7	NMC: 1800 683 683 (Vodafone)

#### **Structure 2**

Carrier/RSO	Antenna	Contact No.
Vodafone	3,4	NMC: 1800 683 683 (Vodafone)

#### 4. Site owner or manager contact details

Name	Role	Company	Contact Details
Michael Lonsdale	Site Manager	-	0448 943 998

Please Note: The site owner or manager contact information is current at the Issue Date but may change without notice to the Mobile Carriers or Radio Service Operators occupying the site.

#### Important Information about this EME Guide

Site safety information including exclusion zone diagrams in this EME Guide have an "Issue date" incorporated on each page and are correct for that date.

To ensure that you have the most current site safety information available, check the on-line version of this EME Guide using the RFNSA number reference found on the front cover.

#### **On-line Site Information**

#### MCF National Site Archive www.rfnsa.com.au

Mobile Site Safety

www.mobilesitesafety.com

This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

Site No: 2065015 Issue No: 07 Ref: 22808-07

Issued 13/01/2021

AMTA EME Guide Template V1.1 Page 5 of 30

#### **Section 1: Site Exclusion Zone Summary**

Isometric View
Ella Street
Power Density Legend (100% of ARPANSA RPS3 limits) Occupational Limit - No Access RF-Workers Only - Limited Access

#### **Section 2: Detailed Site Exclusion Zone Drawings**



This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

. V1.1













AMTA EME Guide Template V1.1 Page 13 of 30





. V1.1















. V1.1



#### Section 3: Equipment Installed at this Site

## Equipment List Structure 1

Diagram Ref	Owner Ref	Owner	Type/Make/Model	Height (m)	Bearing (°)	Mech. Tilt (°)	Elect. Tilt (°)	Pol	System/Sector	Power* (W)
		Vodafone	Tongyu T2040L3R011 Panel	23.7	20	0	2-8	Dual Slant	LTE700 - Sector 1 LTE850 - Sector 1 NB-IOT900 - Sector 1 WCDMA900 - Sector 1	50.1+50.1 50.1+50.1 15.8+0 50.1+50.1
1 11-V							2-8	Dual Slant	NB-IOT900 - Sector 1	0+15.8
	11-V						2-8	Dual Slant	LTE1800 - Sector 1 LTE2100 - Sector 1	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 1 LTE2100 - Sector 1	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 1 LTE2100 - Sector 1	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 1 LTE2100 - Sector 1	50.1+50.1 50.1+50.1
2	12-V	Vodafone	Nokia AEQP Panel	23.59	20	0	6	Dual Slant	NR3500 - Sector 1	50.1+0

This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

			Tongyu T2040L3R011 Panel				2-8	Dual Slant	LTE700 - Sector 3 LTE850 - Sector 3 NB-IOT900 - Sector 3 WCDMA900 - Sector 3	50.1+50.1 50.1+50.1 15.8+0 50.1+50.1
							2-8	Dual Slant	NB-IOT900 - Sector 3	0+15.8
5	31-V	Vodafone		23.7	250	0	2-8	Dual Slant	LTE1800 - Sector 3 LTE2100 - Sector 3	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 3 LTE2100 - Sector 3	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 3 LTE2100 - Sector 3	50.1+50.1 50.1+50.1
							2-8	Dual Slant	LTE1800 - Sector 3 LTE2100 - Sector 3	50.1+50.1 50.1+50.1
6	32-V	Vodafone	Nokia AEQP Panel	23.59	250	0	6	Dual Slant	NR3500 - Sector 3	50.1+0
7	-	Vodafone	ANDREW VHLP1-38 SOLID PARABOLIC	24.5	112.34	0	0	Vertical	Link	0.06
							2-10	Dual Slant	LTE700 - Sector 1	39.8+39.8
		I1-O Optus	Argus R2V4PX306R Panel	22.88	0	2	2-10	Dual Slant	LTE700 - Sector 1 WCDMA900 - Sector 1	39.8+39.8 31.6+31.6
8	11-O						2-8	Dual Slant	LTE1800 - Sector 1 WCDMA2100 - Sector 1 LTE2600 - Sector 1 LTE2300 - Sector 1	50.1+50.1 31.6+0 31.6+31.6 31.6+31.6
							2-8	Dual Slant	LTE1800 - Sector 1 LTE2600 - Sector 1 LTE2300 - Sector 1	50.1+50.1 31.6+31.6 31.6+31.6
							2-8	Dual Slant	LTE2100 - Sector 1	31.6+31.6
							2-8	Dual Slant	LTE2100 - Sector 1	31.6+31.6
9	12-0	Optus	Ericsson AIR6488 Panel	21.38	0	5	3	Dual Slant	NR3500 - Sector 3	50.1+0

			Argus R2V4PX306R Panel	22.88	150	2	0-10	Dual Slant	LTE700 - Sector 2	39.8+39.8
							0-10	Dual Slant	LTE700 - Sector 2 WCDMA900 - Sector 2	39.8+39.8 31.6+31.6
10	21-0	Optus					0-10	Dual Slant	LTE1800 - Sector 2 WCDMA2100 - Sector 2 LTE2600 - Sector 2 LTE2300 - Sector 2	50.1+50.1 31.6+0 31.6+31.6 31.6+31.6
							0-10	Dual Slant	LTE1800 - Sector 2 LTE2600 - Sector 2 LTE2300 - Sector 2	50.1+50.1 31.6+31.6 31.6+31.6
					0-10	Dual Slant	LTE2100 - Sector 2	31.6+31.6		
							0-10	Dual Slant	LTE2100 - Sector 1	31.6+31.6
11	22-0	Optus	Ericsson AIR6488 Panel	21.38	150	0	3	Dual Slant	NR3500 - Sector 3	50.1+0
							2-8	Dual Slant	LTE700 - Sector 3	39.8+39.8
			ıs Argus R2V4PX306R Panel	22.88	240	2	2-8	Dual Slant	LTE700 - Sector 3 WCDMA900 - Sector 3	39.8+39.8 31.6+31.6
12	31-O	) Optus					2-8	Dual Slant	LTE1800 - Sector 3 WCDMA2100 - Sector 3 LTE2600 - Sector 3 LTE2300 - Sector 3	50.1+50.1 31.6+0 31.6+31.6 31.6+31.6
							2-8	Dual Slant	LTE1800 - Sector 3 LTE2600 - Sector 3 LTE2300 - Sector 3	50.1+50.1 31.6+31.6 31.6+31.6
							2-8	Dual Slant	LTE2100 - Sector 3	31.6+31.6
							2-8	Dual Slant	LTE2100 - Sector 3	31.6+31.6
13	32-0	Optus	Ericsson AIR6488 Panel	21.38	240	2	3	Dual Slant	NR3500 - Sector 3	50.1+0

\* Maximum power into the antenna per port

This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

Struct	ure <u>2</u>									
Diagram Ref	Owner Ref	Owner	Type/Make/Model	Height (m)	Bearing (°)	Mech. Tilt (°)	Elect. Tilt (°)	Pol	System/Sector	Power* (W)
							2-10	Dual Slant	LTE700 - Sector 2 WCDMA900 - Sector 2 LTE850 - Sector 2 NB-IOT900 - Sector 2	50.1+50.1 50.1+0 50.1+50.1 15.8+0
							2-10	Dual Slant	LTE700 - Sector 2 WCDMA900 - Sector 2 LTE850 - Sector 2 NB-IOT900 - Sector 2	50.1+50.1 0+50.1 50.1+50.1 0+15.8
3 21-V	21-V	Vodafone	Tongyu T2040L3R011 Panel	23.7	160	0	2-10	Dual Slant	LTE1800 - Sector 2 LTE2100 - Sector 2	50.1+50.1 50.1+50.1
							2-10	Dual Slant	LTE1800 - Sector 2 LTE2100 - Sector 2	50.1+50.1 50.1+50.1
							2-10	Dual Slant	LTE1800 - Sector 2 LTE2100 - Sector 2	50.1+50.1 50.1+50.1
							2-10	Dual Slant	LTE1800 - Sector 2 LTE2100 - Sector 2	50.1+50.1 50.1+50.1
4	22-V	Vodafone	Nokia AEQP Panel	23.59	160	1	6	Dual Slant	NR3500 - Sector 2	50.1+0
14	-	BigAir	ANDREW VHLP1-18 Parabolic	19.8	336.39	0	0	Vertical	BigAir Link	0.224

\* Maximum power into the antenna per port

- Optus antenna height was adjusted based on site photos

Note: There are unknown antennas mounted on the structure 1 rooftop however the owner and nature of these services cannot be identified. As such they are not included in this assessment and the assessment covers listed antennas only.

This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue

#### **Section 4: Site Specific Documents**

Site Photographs taken from RFNSA website for assessment. <u>Structure 1</u>



This Document is Uncontrolled when printed. See www.rfnsa.com.au for the current issue



#### Structure 2

