

Engineering Report  
Exhibit 8 Page 1  
Technical Statement  
STA for W294AH, Columbus, OH

This report is prepared on behalf of Sandyworld, Inc., licensee of W294AH, Columbus, OH, in support of an application for Special Temporary Authorization (STA) to operate with reduced facilities from an alternate antenna location due to the loss of its authorized transmitter / antenna site. The lease on the tower specified in the license has not been renewed.

### **Fill In Translator (Exhibit 7)**

This request is also to change the primary station of W294AH to WTOH, Upper Arlington, OH as a fill in translator.

Exhibit 7 of this application is a map showing the W294AH F(50,50) authorized 60 dbu contour, and the F(50,50) 60 dbu contour requested herein, showing that the temporary facilities are well within the authorized contour, and greatly reduced.

Exhibit 7 also shows that this translator's 60 dbu contour is encompassed by the service contour of WTOH, so that it serves as a fill in translator for that station.

### **Environmental Statement (Exhibit 11)**

The proposed antenna will be temporarily mounted on the roof of an existing building. This installation is excluded from environmental processing and environmental review because:

The antenna will be mounted on a structure constructed prior to March 16, 2001 and:

- The mounting of the antenna will not result in a substantial increase in the size of the antenna or tower structure.
- Prior to the collocation, the tower or structure has not been determined by the FCC to have an effect on one or more historic properties,
- The tower or structure is not the subject of a pending environmental review,
- The collocation licensee has not received a written or electronic notification that the FCC is in receipt of a complaint that the collocation has an adverse effect on one or more historic properties.
- The structure is not required to be registered in the FCC WTB tower registration system.

It is exempt from environmental processing under FCC section 1.1306 as:

- The site is not within an officially designated wilderness area or wildlife preserve.
- The mounting of the antenna will not effect endangered species.
- The site is not in a floodplain.
- The mounting of the antenna will not involve a significant change in surface features.
- The tower will not use high intensity white lights.
- The mounting of the antenna does not exceed human exposure limits. See below.

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- Compliance with RF safety requirements in accordance with FCC part 1.1306(8)b does not exceed human exposure limits, as demonstrated in the exposure worksheet below.

RF Worksheet #1 - FM (Including translators and boosters)

**Effective Radiation Center Height** Line #

Enter the proposed "Height of radiation center above ground"	29 m	
or as listed in Line 1 of Worksheet 1A	29 m	(1)
Is the Antenna supporting structure located on the roof of a building	YES	YES/NO (2)
if Line 2 is "YES" enter the building height measured at the base of the antenna supporting structure in line 3		
If line 2 is "NO" enter "0" in Line 3	25 m	(3)
Subtract Line (3) from Line (1)	4 m	(4)
Subtract the value 2.0 from Line (4)	2 m	(5)

**Total Effective Radiated Power**

If "beam tilt" is utilized, list maximum values)

List Effective Radiated Power in the Horizontal Plane	0.001 kW	(6)
List Effective Radiated in the Vertical Plane	0.001 kW	(7)
Add lines 6 and 7 OR listed value from line 2 in Worksheet 1A	0 kW	(8)

**PERCENTAGE OF FCC RF LIMIT(S) FOR MAXIMUM PERMISSIBLE EXPOSURE**

Multiply line 8 by 3341	6.7	(9)
Multiply the value listed in line 5 by itself	4.0	(10)
Divide line 9 by line 10	1.671	(11)
Multiply line 11 by .5	0.835 %	(12)

**DETERMINATION OF COMPLIANCE WITH CONTROLLED/OCCUPATIONAL LIMIT**

Does Line 12 exceed 100% NO YES/NO (13)

**IF YOU ANSWERED "YES" IN LINE 13, THE WORKSHEETS MANY NOT BE USED IN THIS CASE.\***

**IF YOU ANSWERED "NO" IN LINE 13, THEN THE SITE SHOULD COMPLY WITH THE FCC CONTROLLED/OCCUPATIONAL RF EXPOSURE LIMITS FOR GROUND LEVEL EXPOSURE. #**

**DETERMINATION OF COMPLIANCE WITH UNCONTROLLED/GENERAL POPULATION LIMIT**

Does Line 12 exceed 20% NO (14)

**IF YOU ANSWERED "NO" IN LINE 14, THEN THE SITE SHOULD COMPLY WITH THE FCC'S UNCONTROLLED / GENERAL POPULATION RF EXPOSURE LIMITS FOR GROUND LEVEL EXPOSURE. NO FURTHER STUDY REQUIRED**

## **Extraordinary Circumstances (Exhibit 12)**

The licensee of W294AH has lost its lease for the authorized tower location of the FM Translator. An alternate transmitter/antenna location has been identified and will very shortly be the subject of a minor change application for W294AH.

Building permit applications and final negotiations are not yet complete for the alternate permanent location. The new permanent location is also at the edge of the authorized W294AH 60 dbu contour, making it impossible to contain a 60 dbu contour from the new permanent location within the authorized contour, which makes it an unsuitable site for STA operation.

This temporary site meets these requirements, as no local permits are required, and the site allows the licensed 60 dbu contour to completely contain the STA contour.

This STA is required to permit W294AH to provide service to the public in the interim while final site negotiations, engineering is completed, and the FCC and local building permit applications are pending.