

## Exhibit 18.1

### **COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES**

This firm was retained to study the potential for human exposure to non-ionizing radiofrequency radiation at the existing WWCS(AM) site. There are no other broadcast sources of RF radiation located within 315 meters of the site.

The proposed WWCS(AM) facility will operate on a frequency of 540 kHz with a daytime and nighttime two tower directional array. The daytime power will be modified to 3.8 kW, while the nighttime power will remain unchanged at 0.5 kW. The vertical radiators for WWCS(AM) are  $63.5^\circ$  or  $0.176 \lambda$  (wavelengths) for each tower. Existing Fencing for each tower is no less than 5.0 meter at the shortest distance.

This site has been evaluated for compliance with the FCC guidelines concerning human exposure to radiofrequency radiation. The standards employed are detailed in OET Bulletin No. 65 (Edition 97-01).

Software packages were used to determine the individual contribution of each station. A software package designed for use with AM stations (under the previous OST Bulletin No. 65, October 1985) was used to determine the contribution of this facility to the non-ionizing radiofrequency radiation present at this site. This program bases its calculations on data found in Figures 1, 2, and 3 of Appendix D of OST Bulletin No. 65, October 1985.

The results of the evaluations for all stations are shown in both graphical and tabular forms at the end of this report. The tabular form lists the portion of the tabular output for each station, showing the region of maximum non-ionizing radiation. (The maximum values have been indicated by the use of **highlighted print.**) For WWCS(AM), the maximum contribution has been assumed using the daytime directional power of 3.8 kW at the tower fence distance of no less than 5.0 meters. The tabulation of AM data use the units of measurement,  $V^2/m^2$  and  $A^2/m^2$ , which were used in the previous standards as set forth in OST Bulletin No. 65, October 1985. Inspection of the tabulations will show that the maximum daytime contribution of WWCS(AM) at the AM tower is made by the magnetic field. At this point, the field has a predicted value of  $0.3319 A^2/m^2$ , or  $0.5761 A/m$ , which represents 35.34% of the more stringent  $1.63 A/m$  uncontrolled limit.

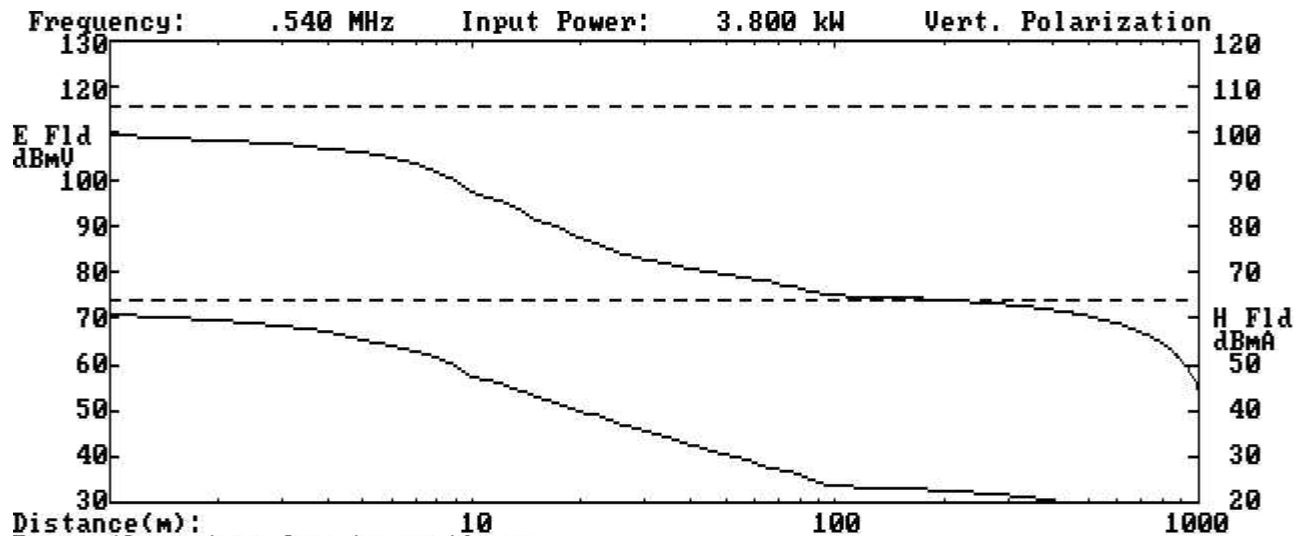
Since the Decimal Fraction is less than unity for the uncontrolled environment, the operation of the WWCS(AM) transmitting plant is in compliance with the provisions of OET Bulletin No. 65 (Edition 97-01). Protection of the uncontrolled environment implies protection of the controlled environment. There are no other broadcast sources of radiofrequency non-ionizing radiation present at this site.

In addition to the protection afforded by the existing AM fencing, the facility is properly marked with signs, and entry to the facility is restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of FCC guidelines, an agreement, signed by all broadcast parties at the site, is in effect for the offending transmitter(s) to reduce power, or cease operation during the critical period.

# PLOT AND TAB OF ELECTRIC AND MAGNETIC FIELD STRENGTHS

## WWCS(AM) – Canonsburg, PA – 3.8 kW Operation



Summary of Input Data:      WWCS      Frequency: .540 MHz  
Horizontal Input Power :      .000 kW      Vertical Input Power :      3.800 kW

Antenna Type: AM NON-D  
Horizontal Element Type Number: 0.    Vertical Element Type Number: 1.  
Height of observer above reference plane: 2.0 Meters

Element Data:      Vertical Number of elements: 1  
Distance from analysis reference point: .0 meters  
Azimuth from analysis reference point: N .0 E  
Height of tower above reference plane: 63.5 Degrees

Element Number	Distance From Center (wavelengths)	Relative Power	Relative Phase
1.	.00	1.000	.0

### Calculated Results:

Distance (meters)	Horizontal Polarization		Vertical Polarization		Total Power Density (mW/cm <sup>2</sup> )
	E2 Field (V2/m2)	H2 Field (A2/m2)	E2 Field (V2/m2)	H2 Field (A2/m2)	
1.00	0.	.0000	86805.	1.2543	32.9970
2.00	0.	.0000	72588.	.9683	26.5110
3.00	0.	.0000	59641.	.7192	20.7104
4.00	0.	.0000	47965.	.5071	15.5952
5.00	0.	.0000	37560.	.3319	11.1653
6.00	0.	.0000	28738.	.2574	8.6013
7.00	0.	.0000	21095.	.1924	6.3711
8.00	0.	.0000	14631.	.1369	4.4746
9.00	0.	.0000	9346.	.0907	2.9119
10.00	0.	.0000	5241.	.0540	1.6830
11.00	0.	.0000	4259.	.0461	1.4013
12.00	0.	.0000	3379.	.0388	1.1450
13.00	0.	.0000	2600.	.0321	.9139
14.00	0.	.0000	1923.	.0261	.7082
15.00	0.	.0000	1349.	.0207	.5278