

AMENDED
TECHNICAL EXHIBIT 31
ENVIRONMENTAL PROTECTION STATEMENT

IN SUPPORT OF THE MINOR CHANGE APPLICATION
WDHA-FM, DOVER, NEW JERSEY
JUNE 2007

Since the proposed WDHA-FM operation would be from an existing tower site, the environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 4.0 kW (H+V) and a radiation center of 39 meters above ground level, the proposed WDHA-FM operation would have a maximum of 3.9 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field at 2 meters above the base of tower assuming an antenna field factor of 0.2 in the downward direction. The Commission's guidelines for the FM band are 1,000 $\mu\text{W}/\text{cm}^2$ for the occupational/controlled, and 200 $\mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

The present WDHA-FM tower has a security fence around the tower with a locked gate. The above analysis indicates that members of the public and personnel working around the proposed WDHA-FM operation would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, station WDHA-FM will establish procedures to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

In addition, there is a fire lookout tower located adjacent to the WDHA-FM tower structure. The lookout tower is located northwest at a horizontal distance of 24.4 meters (80 feet)¹ and the highest floor where anyone would stand is approximately 30.5 meters

¹ The nearest point of the two towers at ground level is 67 feet. The WDHA-FM tower has a 10 foot face at ground level. The antenna is pole mounted and centered atop the tower structure. The fire lookout tower is

(100 feet) above ground level. The difference in height between the radiation center of the main antenna and 2 meters above the highest floor of the lookout tower structure is 6.5 meters resulting in a downward angle of approximately 15 degrees. As indicated on the attached vertical pattern of the WDHA-FM antenna, for a maximum effective radiated power of 4.0 kW (H+V) and a radiation center located 25.3 meters from a reference point 2 meters above the highest floor of the lookout tower, the proposed WDHA-FM operation would have a maximum of 196.4^2 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field assuming an antenna field factor of 0.970 in the downward direction.

WDHA-FM is also authorized for operation with an auxiliary antenna identical to the main antenna and 4 meters below (35 meters AGL) on the same tower at an ERP of 1 kW (H & V). The difference in height between the radiation center of the auxiliary antenna and 2 meters above the highest floor of the lookout tower structure is 1.5 meters at a downward angle of approximately 6 degrees. As indicated on the attached vertical pattern of the WDHA-FM antennas, for a maximum effective radiated power of 2.0 kW (H+V) and a radiation center located 24.5 meters from a reference point 2 meters above the highest floor of the lookout tower, the proposed WDHA-FM operation would have a maximum of 110.2 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field assuming an antenna field factor of 0.995 in the downward direction.

22 feet at the base and tapers up to a cabin shelter 6 foot square. This results in a separation of 80 feet between the WDEA antenna and the nearest point of the lookout tower shelter.

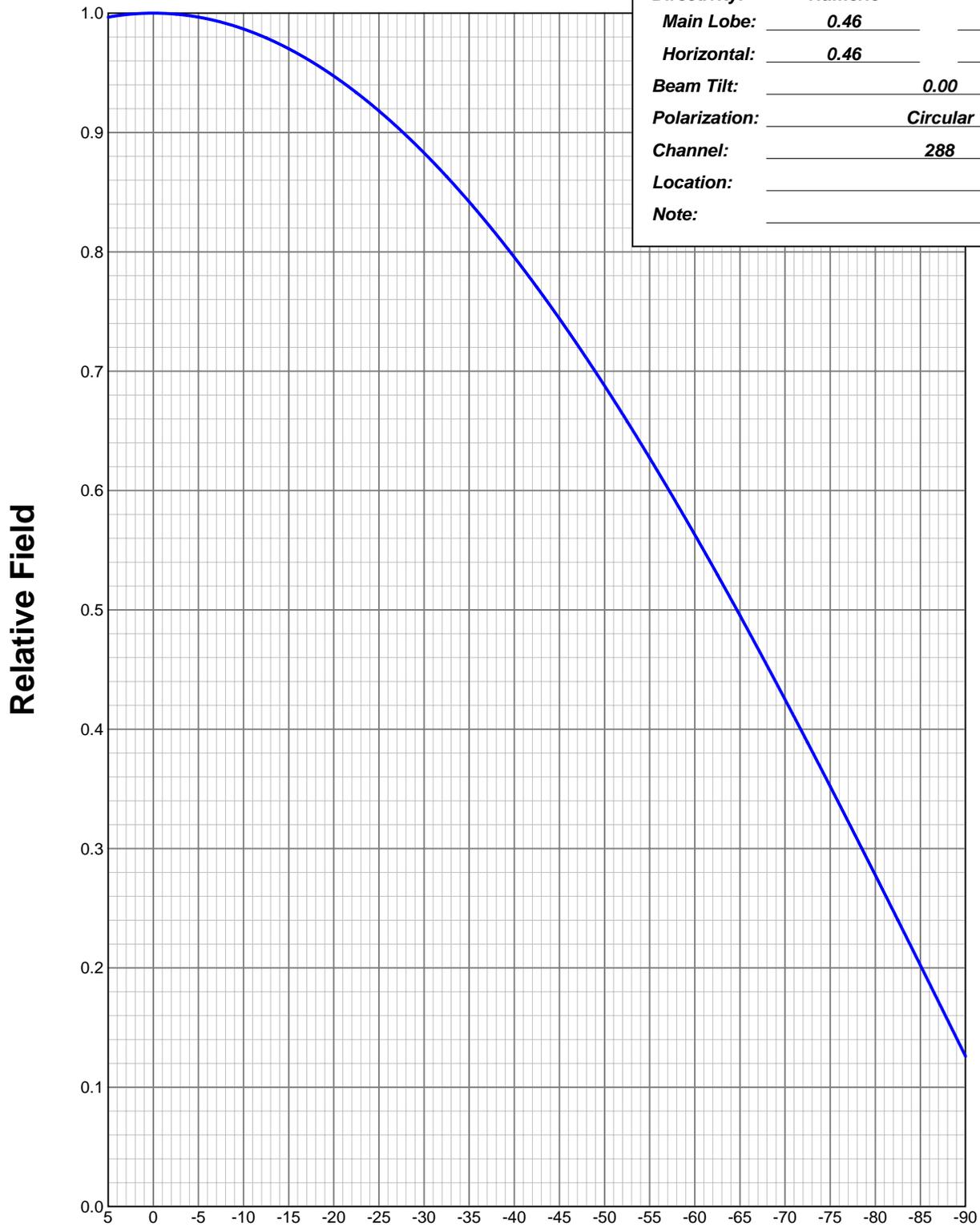
² RFR measurements will be conducted to insure RFR compliance with respect to the FCC guidelines of $200 \mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.



ELEVATION PATTERN

Type:	LPX1F	
Directivity:	Numeric	dBd
Main Lobe:	0.46	-3.36
Horizontal:	0.46	-3.36
Beam Tilt:	0.00	
Polarization:	Circular	
Channel:	288	
Location:		
Note:		



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ELEVATION TABULATED DATA

Type: LPX1F

Polarization: Circular

Angle	Field	dB	Angle	Field	dB	Angle	Field	dB	Angle	Field	dB
5.00	0.997	-0.03	-6.50	0.994	-0.05	-42.00	0.776	-2.21	-88.00	0.156	-16.11
4.75	0.997	-0.03	-6.75	0.994	-0.05	-43.00	0.765	-2.32	-89.00	0.141	-17.00
4.50	0.997	-0.02	-7.00	0.993	-0.06	-44.00	0.755	-2.44	-90.00	0.126	-17.99
4.25	0.998	-0.02	-7.25	0.993	-0.06	-45.00	0.744	-2.57			
4.00	0.998	-0.02	-7.50	0.993	-0.07	-46.00	0.733	-2.70			
3.75	0.998	-0.02	-7.75	0.992	-0.07	-47.00	0.722	-2.83			
3.50	0.998	-0.01	-8.00	0.991	-0.07	-48.00	0.711	-2.96			
3.25	0.999	-0.01	-8.25	0.991	-0.08	-49.00	0.699	-3.11			
3.00	0.999	-0.01	-8.50	0.990	-0.08	-50.00	0.688	-3.25			
2.75	0.999	-0.01	-8.75	0.990	-0.09	-51.00	0.676	-3.40			
2.50	0.999	-0.01	-9.00	0.989	-0.09	-52.00	0.664	-3.56			
2.25	0.999	-0.01	-9.25	0.989	-0.10	-53.00	0.652	-3.72			
2.00	0.999	0.00	-9.50	0.988	-0.10	-54.00	0.640	-3.88			
1.75	1.000	0.00	-9.75	0.987	-0.11	-55.00	0.627	-4.05			
1.50	1.000	0.00	-10.00	0.987	-0.12	-56.00	0.615	-4.23			
1.25	1.000	0.00	-11.00	0.984	-0.14	-57.00	0.602	-4.41			
1.00	1.000	0.00	-12.00	0.981	-0.17	-58.00	0.589	-4.60			
0.75	1.000	0.00	-13.00	0.978	-0.20	-59.00	0.576	-4.79			
0.50	1.000	0.00	-14.00	0.974	-0.23	-60.00	0.563	-4.99			
0.25	1.000	0.00	-15.00	0.970	-0.26	-61.00	0.550	-5.20			
0.00	1.000	0.00	-16.00	0.966	-0.30	-62.00	0.536	-5.41			
-0.25	1.000	0.00	-17.00	0.962	-0.34	-63.00	0.523	-5.63			
-0.50	1.000	0.00	-18.00	0.957	-0.38	-64.00	0.509	-5.86			
-0.75	1.000	0.00	-19.00	0.952	-0.42	-65.00	0.495	-6.10			
-1.00	1.000	0.00	-20.00	0.947	-0.47	-66.00	0.481	-6.35			
-1.25	1.000	0.00	-21.00	0.942	-0.52	-67.00	0.467	-6.60			
-1.50	1.000	0.00	-22.00	0.936	-0.57	-68.00	0.453	-6.87			
-1.75	1.000	0.00	-23.00	0.931	-0.63	-69.00	0.439	-7.15			
-2.00	0.999	0.00	-24.00	0.924	-0.68	-70.00	0.425	-7.43			
-2.25	0.999	-0.01	-25.00	0.918	-0.74	-71.00	0.411	-7.73			
-2.50	0.999	-0.01	-26.00	0.912	-0.80	-72.00	0.396	-8.04			
-2.75	0.999	-0.01	-27.00	0.905	-0.87	-73.00	0.382	-8.37			
-3.00	0.999	-0.01	-28.00	0.898	-0.94	-74.00	0.367	-8.71			
-3.25	0.999	-0.01	-29.00	0.890	-1.01	-75.00	0.352	-9.06			
-3.50	0.998	-0.01	-30.00	0.883	-1.08	-76.00	0.337	-9.44			
-3.75	0.998	-0.02	-31.00	0.875	-1.16	-77.00	0.323	-9.83			
-4.00	0.998	-0.02	-32.00	0.867	-1.24	-78.00	0.308	-10.24			
-4.25	0.998	-0.02	-33.00	0.859	-1.32	-79.00	0.293	-10.67			
-4.50	0.997	-0.02	-34.00	0.851	-1.41	-80.00	0.278	-11.13			
-4.75	0.997	-0.03	-35.00	0.842	-1.49	-81.00	0.263	-11.61			
-5.00	0.997	-0.03	-36.00	0.833	-1.59	-82.00	0.248	-12.12			
-5.25	0.996	-0.03	-37.00	0.824	-1.68	-83.00	0.233	-12.67			
-5.50	0.996	-0.04	-38.00	0.815	-1.78	-84.00	0.217	-13.26			
-5.75	0.996	-0.04	-39.00	0.805	-1.88	-85.00	0.202	-13.89			
-6.00	0.995	-0.04	-40.00	0.796	-1.99	-86.00	0.187	-14.56			
-6.25	0.995	-0.05	-41.00	0.786	-2.10	-87.00	0.172	-15.30			



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