

Exhibit #22  
ENVIRONMENTAL PROTECTION ACT  
VERMONT PUBLIC RADIO  
Minor Change to Licensed Facility  
WNCH  
BLED-20041013ABV  
Norwich, Vermont  
January 2011

CH 201B

1.6 kW H & V DA

The applicant proposes the use of existing registered tower ASR #1060721, constructed in 1998. Since this tower was constructed prior to March, 2001, and the applicant proposes no change to the tower structure or profile, it is exempt from further environmental testing.

The proposed antenna will be energized so that it radiates 1.6 kW in both the horizontal and vertical planes, from a height above ground of 98 meters. Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the existing facility produces a "worst-case" maximum R.F. non-ionization radiation level at a position six feet above the tower base (head level - based on the C.O.R. of 100.5 meters above ground minus 2 meters) of 11.019 microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). This figure is without regard for the antenna's vertical elevation field value toward the nadir, which will cause a reduction in the predicted "worst case" calculations. 11.019  $\mu\text{W}/\text{cm}^2$  is 5.51 percent of the maximum for this uncontrolled area.

Since "worst case" calculations were used, and since it is well known that the actual RF power density level is considerably reduced at vertical angles toward the nadir the applicant is confident that actual RF contribution of this antenna will be less than is predicted here. After researching the Mass Media and ULS databases, it was determined that there are thirteen other authorized sources of RF emissions on the tower. Several communications antennas on the tower were deemed categorically excluded, due to the antenna height and/or transmitting ERP. The contributions to the level of RF emission at ground level from each remaining source are:

Call	Ch/Freq	Power	Height	Level	Max	Percent
		(kW)	(m)	( $\mu\text{W}/\text{cm}^2$ )	( $\mu\text{W}/\text{cm}^2$ )	Uncontrolled
WNCH (New)*	201	1.6 H/V	100.5	11.019	200.0	5.51
WHDQ*	291	1.6 H/V	92.0	13.199	200.0	6.60
WVPR*	208	1.7 H/V	102.0	11.359	200.0	5.68
W17CI**	17	1.5 H	12.0	2.158	327.3	0.50
WNNE-D**	25	117.0 H	81.0	6.263	359.3	1.74
Totals				43.998		20.03
* Worst Case,						
** 0.1 vert field						

The proposed FM station will not increase the amount of RF emissions over that which is permissible by Section 1.1307 of the FCC's Rules. The applicant will protect workers on the tower by either reducing ERP or terminating transmission.

Consequently, it appears that the proposed FM station will be in full compliance with the Commission's human exposure to radiofrequency electromagnetic field rules and regulations.