

June 25, 2004

## HAND-DELIVERED

Patricia Moulton Powden, Chair Vermont Environmental Board National Life Records Center Building Drawer 20 Montpelier, VT 05620-3201

## <u>Re:</u> <u>Burlington Broadcasters, Inc. d/b/a WIZN, Charlotte Volunteer Fire and Rescue</u> <u>Services, Inc., and John Lane, Land Use Permit Application #4C1004R-EB</u>

Dear Ms. Powden:

Enclosed for filing with the Board are an original and ten copies of the *Supplemental Findings of Fact* submitted by Applicant, Burlington Broadcasters, Inc. d/b/a WIZN (WIZN) in the above-referenced matter.

As this Board is aware, the Appellants seek the removal of WIZN's broadcast facility on Pease Mountain in Charlotte despite 17 years of continuous operations from this facility without any demonstrated effects on the health of nearby residents. In order to achieve this result, Appellants must show that WIZN's transmissions create an adverse health or safety effect such that they are "air pollution" pursuant to Criterion 1 (Air).

In order for the Board to make findings on this issue, it must adopt a standard to determine at what level radio frequency (RF) emissions create such an effect and determine whether evidence exists that WIZN has violated that standard. After voluminous pre-filed testimony and three (3) days of hearing, the *only* clearly articulated standard presented to the Board are the RF emission guidelines adopted and enforced by the Federal Communications Commission (FCC) Guidelines. That standard, based on the best scientific evidence currently available, has a 50-fold safety margin built into it (i.e., RF emissions must be below 1/50<sup>th</sup> of the level at which the expert scientific community has determined that "adverse health or safety effects" begin to occur). The FCC Guidelines provide an objective, measurable standard -- that the maximum permissible exposure (MPE) for an operator in WIZN's frequency band is .2 mW/cm<sup>2</sup>.

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In contrast, Appellants have failed to set forth a clear standard against which to measure WIZN's transmissions. One of Appellants' witnesses claims that RF emissions at levels as low as one-billionth  $(1 \times 10^{-12})$  of the current standard may have some effect on human cells. Another witness sought to mandate "zones of exclusion" -- distances from human dwellings within which RF transmission sources should not exist. As one Board member correctly observed, the exclusion zone for which this witness advocated would prohibit the siting of broadcast facilities in nearly all of the settled areas of Vermont.

While failing to articulate a coherent standard to measure the impact of RF on human health, Appellants' witnesses sought to discredit the standard accepted by the scientific community. They attempted to do so by arguing that dozens of agencies and organizations, made up of thousands of experts within their fields, are wrong, have been wrong for years and may be acting in bad faith or with a hidden bias. These types of arguments have been posited in numerous papers for decades, and presented to dozens of expert agencies, but have been resoundingly rejected as unpersuasive, inconclusive, politically-motivated or based on bad science. Nonetheless, the Appellants now ask the Board to reject the consensus of the scientific community, and adopt the speculation contained in a handful of papers that low-level RF exposure *might* have *some* negative health effects.

Rather than engage in such speculative exercises, WIZN retained a recognized expert, Mr. Haes, to take over 600 separate readings in the vicinity of the tower. Mr. Haes' readings included measurements taken in areas alleged by Appellants to have high levels of RF. His reports document that there is no point at which WIZN violates the FCC's Guidelines. These measurements are consistent with both the findings of the FCC after taking measurements at the site in 1997, and with the FCC's theoretical model for determining RF exposure levels.

In contrast, Appellants hired Mr. Kasevich, who had never before taken field measurements of a radio station. After rejecting the FCC's theoretical model, he set out to prove that WIZN's RF levels were far greater than what WIZN's expert measured. However, it became clear that Mr. Kasevich used unreliable equipment, violated sound engineering practices and blatantly disregarded the specific measurement techniques set forth by the government and expert organizations. Further, in an apparent effort to avoid "standard operating procedures" and in contravention of accepted measurement standards, Mr. Kasevich took readings with his meter in direct proximity to metal objects. By failing to maintain the proper separation, Mr. Kasevich caused these

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objects to function as powerful antennas for his meter, grossly exaggerating his readings. All of his "hot spots" (i.e. measurements which allegedly approached or exceeded the FCC's Guidelines) resulted from this fundamental error.

When Appellants' faulty readings properly are rejected, the Board is left with overwhelming evidence that WIZN's operations produce RF at or below one-tenth (1/10) of the current legal limit, and one-five hundredth (1/500) of the level where there is scientific agreement that adverse health effects begin. By any rational measure, such activities do not "create an adverse health or safety effect" so as to constitute "undue air pollution" under 10 V.S.A. § 6086(a)(1). Therefore, WIZN has carried its burden on this criterion. Because a stipulation has removed all other issues from this case, the Board should grant WIZN's application.

Please do not hesitate to contact me if you have any questions.

Very truly yours,

Liam L. Murphy, Esq. <u>Imurphy@mskvt.com</u> 00003515.DOC

Enclosures

Cc: See Certificate of Service Jay Williams Robin Martin John P. Cain, Esq. Fred Hopengarten, Esq. Ron Petersen Donald Haes Kenneth Foster

