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August 5, 2011

John K. Holland
Vice President, Engineering
KABC-TV
500 Circle Seven Drive
Glendale, CA 91201

RE: Recent RF exposure measurements on the roads atop Mt. Wilson, California.

Dear Mr. Holland,

The attached preliminary report from RF Safety Consultant Richard R. Strickland describes the radiofrequency (RF) exposure measurement survey that Mr. Strickland and I performed on July 28 & 29, 2011.

Exposure measurements were made along Video Road, Weathervane Drive, and the southwest portion of Mt. Wilson Circle. The full extent of the surveyed area is shown by the shaded portions of the "Mt. Wilson Circle" road map on page 4 of Mr. Strickland's report.

The highest exposure condition found during the survey was 85.1 percent of the Federal Communications Commission (FCC) Maximum Permissible Exposure (MPE) limit for General Population / Uncontrolled exposure. The location of the highest exposure condition was near the Post Office (Building 13), as described on page 2 of the attached report.

All other points measured along the roads of interest had measured exposure levels less than the 85.1 percent of the Public MPE limit. The Public MPE limit is defined as 100 percent of frequency-weighted power densities summed across a wide frequency band. Our measurement instruments automatically perform this frequency-weighting and power density summation in accordance with FCC guidelines.

The results of the recent survey indicate there are no excessive public RF exposure conditions in the surveyed areas.

The stated conclusion is based on my measurements of the highest exposure conditions found during the survey, and the comparison of measured RF conditions in specific areas with the corresponding safe exposure limits set forth in the FCC guidelines.

The FCC exposure limits are based on recommendations by federal and private entities with the appropriate expertise in human safety issues.

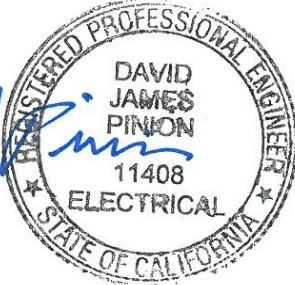
QUALIFICATIONS

I am an experienced radio engineer whose qualifications are a matter of record with the Federal Communications Commission. I am a partner in the firm of Hatfield & Dawson Consulting Engineers, I am registered as a Professional Engineer in the States of California, Washington, Oregon and Hawaii.

All representations contained herein are true to the best of my knowledge.

5 August 2011

David J. Pinion

A circular professional engineer seal for the State of California. The seal contains the text: "REGISTERED PROFESSIONAL ENGINEER" at the top, "DAVID JAMES PINION" in the center, "11408" below the name, "ELECTRICAL" below the number, and "STATE OF CALIFORNIA" at the bottom. There are two stars on either side of the bottom text.

David J. Pinion, P.E. Expires 12/31/2011



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August 5, 2011

KABC TV
500 Circle Seven Drive
Glendale, CA 91201

Subject: RF Radiation Safety on the Roads at the Mt. Wilson Antenna Farm

Attention: John K. Holland, Vice President, Engineering

Dear John:

Overview

David Pinion, PE of Hatfield & Dawson Consulting Engineers and I spent Thursday, July 28, and Friday, July 29, 2011, evaluating the magnitude of the radio frequency (RF) fields on the roads of the central area of the Mt. Wilson antenna farm.

Measurements were made over all portions, i.e. across the full width of the road, of Video Road, Weathervane Drive, and the southwest section of Mt. Wilson Circle Road. All recorded values are based on spatially averaged measurements—the instruments used have the ability to make spatially averaged measurements—representative of the average exposure of an adult male standing on the ground. Spatially averaged measurements are specified in the Federal Communications Commission (FCC) Regulations and are used in all the major RF exposure standards worldwide. David and I used two sets of survey instruments, each of which includes the same probe (sensor). This probe—Narda Safety Test Solutions model B8742D—is by far the best probe available for accurately assessing RF fields at complex, multi-signal broadcast sites such as Mt. Wilson. The shaped frequency response design of the probe automatically compensates for the differences in Maximum Permissible Exposure (MPE) limits at different frequencies in the FCC Regulations and yields results in terms of the percentage of the MPE limit for General Population/Uncontrolled exposure. All the major standards vary the exposure limit with frequency.

Rather than show a preliminary report with a selection of discrete measurements, we are including a drawing of the subject roads with colors added that represent the maximum spatially averaged value within a particular area. For example, the drawing shows the spatially averaged RF field levels on Weathervane Drive to be no higher than 50 percent of the MPE limit for General Population/Uncontrolled (public) exposure. David and I based this assessment on walking over all surfaces of the road at least twice with the probes in constant motion to cover the largest possible area. We found three small areas where the magnitude of the RF fields was somewhat higher than anywhere else on Weathervane Drive. A minimum of three spatially averaged measurements were made at each of these three locations. The results of these spatially averaged measurements indicate that the maximum RF field levels on Weathervane Road are less than 50 percent of the public MPE limit. The same approach was used on Video Road and the southwest section of Mt. Wilson Circle Road. The highest RF field levels were found on a very short section of Video Road that extends from the door of the Post Office (Building 13) west to the gate of the Poole Building (Building 12). This section of Video Road was surveyed a minimum of three times. Enhanced spatial averaging techniques were used to determine the magnitude of the RF fields in the area where the very highest fields were found, a small area less than 5 feet in diameter. The spatially averaged RF field level in this very small area—the highest level found on any of the three roads surveyed—were 85.1 percent of the FCC's MPE limit for General Population/Uncontrolled exposure.

Conclusion

These roadways are fully compliant with the regulatory requirements of the Federal Communications Commission (FCC) regarding RF radiation, and there are no RF health hazards for anyone traveling or working on the three subject roads.

This conclusion is based on the following:

1. The maximum spatially averaged RF field level found anywhere on Video Road, Weathervane Drive, and the southwest section of Mt. Wilson Circle Road is less than the FCC's Maximum Permissible Exposure (MPE) limit for General Population/Uncontrolled exposure.
2. The MPE limits for General Population/Uncontrolled exposure are only one-fifth of the biologically-based MPE limits for Occupational/Controlled exposure. The vast majority of experts in the area of RF safety use these upper tier MPE limits as the reference point for biological concerns.

Comparison to Previous Surveys

The results of this survey are reasonably similar to the measurements made by Alfred Resnick of Carl T. Jones Corporation on behalf of Richard Tell Associates as documented in a report dated July 31, 2006.

There have been three reports by Aurora Industrial Hygiene, the most recent dated October 28, 2009. This report indicates that a few discrete locations on Video Road and one location on the southwest section of Mt. Wilson Circle Road had RF field levels in excess of the stated MPE limit of 200 $\mu\text{W}/\text{cm}^2$. There are several flaws with this report and the previous reports:

- The MPE limit varies with frequency. Yes, it is $200 \mu\text{W}/\text{cm}^2$ for FM radio stations and television Channels 2 through 13. But the MPE limit increases linearly above 300 MHz to 1,500 MHz. The MPE limit is $313 \mu\text{W}/\text{cm}^2$ for Channel 14, $400 \mu\text{W}/\text{cm}^2$ for Channel 35, and even higher for Channels 36 and above.
- Spatial averaging techniques were not used. The use of this technique is not mentioned in the report, and the meter used does not have this capability. The typical spatially averaged RF field at any location on the roads is roughly 60 percent of the peak field level at that point on the road.
- Typical industrial hygiene sampling techniques were used to assess the magnitude of the RF fields. While this may be fine for evaluating indoor air quality, it is inappropriate for areas with complex RF fields.

In summary, the reports generated by Aurora Industrial Hygiene were based on evaluations of measurements made with less than ideal test equipment—equipment unable to make spatially averaged measurements nor compensate for the variance in MPE limit—and were conducted by personnel who have no apparent background in or understanding of RF fields.

Sincerely,



Richard. R. Strickland
RF Safety Consultant

c.c. David J. Pinion, PE
Hatfield & Dawson Consulting Engineers

