Questions and Answers about the proposed Cellular Broadcast Tower at 3990 El Camino Real

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Disclosures (http://www2.bpaonline.org/CellTower/disclosures-jones.html)

Disclaimer: I am not an expert in electromagnetic radiation or in the biological processes that may be affected by it. (That is why I am researching the topic)

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(This is an evolving document – updated as appropriate)

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Q1. What is being built?
A1. A 40-foot tall cellular broadcast tower disguised as a broad leaf tree. The cellular broadcast tower will have 6 antennas; each antenna can have multiple broadcast elements. The base of each antenna panel is 34 feet off the ground, broadcasting electromagnetic radiation in the frequency range 1,850,000,000 Hz to 1,990,000,000 Hz, (1.85GHz to 1.99GHz) with a power of 400 to 500 watts. The signal will be in the Global System for Mobile Communication or (GSM) format. The electromagnetic radiation will be broadcast 24 hours a day 7 days a week forever. Additional antennas could be added in the future.

Q2. Who is building the Cellular Broadcast Tower?
A2. Cingular Wireless

Q3. Where will the Cellular Broadcast Tower be built?
A3. The proposed cellular broadcast tower is to be built at 3990 El Camino Real. This space is occupied by Blockbuster. The cellular broadcast tower will actually be located on Los Robles on the left side of the entrance to the parking lot.
Q4. What does this mean to Barron Park?
A4. There are areas of Baron Park where Cingular Wireless does not have good coverage. Cingular seeks to improve wireless access and services in these low signal coverage areas by constructing a cellular broadcast tower.

Q5. How can Cingular do this?
A5. Cingular has found a property owner willing to lease a portion of their property for construction of a cellular broadcast tower. The lease rates are not disclosed but can be several thousands of dollars per month. I do not know if Palo Alto earns any revenue off the lease or the actual cell phone traffic conducted through the cellular broadcast tower. Cingular and its consultants have submitted plans to the City of Palo Alto to construct the cellular broadcast tower. The City of Palo Alto Planning department has approved the plans with certain conditions.

Q6. Who are the property owners?
A6. Toufic (Tim) and Eva Jisser (they also own the Buena Vista Mobile Home Park)
1195 Nikukina Court
San Jose, CA 95120

Q7. Why is there public discussion?
A7. By normal process Palo Alto has notified residents within a 600-foot radius of the proposed site. I was notified December 21 2004 of this proposed cellular broadcast tower and told that there was a 14-day window to request a hearing or the approval would become final. There was no information about the proposed cellular broadcast tower. Calls to the City of Palo Alto Developmental Center and Planning Department found both departments shutdown for the Christmas holidays. With no time to research the proposal I requested a formal hearing. A hearing was proposed for January but was postponed to March to allow adequate time to research health issues. The Palo Alto Weekly carried a story about the proposed cellular in which I was quoted. I have had several inquires from interested citizens and have discussed the issue with the Baron Park Association Board of Directors. During the investigation material will be posed to the BPA web site.

Q8. Why is there concern about the cellular broadcast tower?
A8. There are several areas of concern related to the cellular broadcast tower; a) the physical design, b) how it looks and c) the safety of people living or working in the path of the broadcast electromagnetic radiation.

a) The design and construction of a cellular broadcast tower is not new and Palo Alto has good processes for building things, this is not a big concern.

b) Cingular has attempted to make the tower look like a broad leaf tree. There may be concerns about how this tree looks and if it will continue to look like a tree.

c) The concern I have is for the safety of the people living or working in the direct path of the radiated electromagnetic energy. The broadcast tower, unlike a cellular phone, cannot be turned off and broadcast electromagnetic radiation 24 x 7 x forever. The closest workplace (Blockbuster) is about 20 feet away. The closest home is less than 45 feet away (apartments across Los Robles) and the second floor living areas are in the direct path of the broadcast electromechanical radiation. In the future the use of cellular phones will increase and the content will migrated from voice to data, music and video. The demand on the cellular broadcast towers will quickly exceed capacity and more antenna elements will be added to existing towers and more antenna towers will be built. The power level of the
broadcast electromagnetic radiation will continue to go up. The medical, scientific and regulating groups from around the world do not agree on what is a safe level of electromagnetic radiation at these frequencies should be. There are several studies that conclude that there are non-thermal health risks from the electromagnetic radiation from the proposed cellular broadcast tower. In 1996 the US government (FCC) made laws that prevented opposition of cellular broadcast tower installation based on health reasons. These regulations only considered the thermal effects of the radiation. (if you stood in front of the antenna would you be cooked as if you were in a microwave oven) There have been many community groups who have opposed cellular broadcast towers on health reasons since then. In 2002 the FCC revisited the health concern question and concluded that not enough was known about the non-thermal health effects of electromagnetic radiation at these frequencies. No federal agency has taken a position on the non-thermal effects of this radiation. It is up to the people who will live in the path of this electromagnetic radiation to determine if there is a health risk, how it will affect them over the years and if there are any problems found what recourse will be available. The time to determine this is before the cellular broadcast tower is installed.

Q9. What needs to be done to remove concern about the cellular broadcast tower?

A9. Different people have different concerns. If you are concerned about a) the structural safety or b) the look you can work directly with other concerned folks such as your self and work directly with the Palo Alto Planning Department and Cingular Wireless. If you are concerned about c) the potential health risks, as I am, you can work with me and other concerned folks. The goal is to determine what the non-thermal health risk are and if there is a safe distance from the cellular broadcast tower.

There is a large amount of information available that needs to be reviewed and valid assessments drawn from it.

Action Item 1) Search literature for the non-thermal health effects of electromagnetic radiation in the 1850Mhz to 1990Mhz or 1.85GHz to 1.99GHz range (MHz = Mega hertz, GHz = Giga Hertz). My next posting will be to organize the information I have collected to date. Researchers are needed, especially those who have access to medical libraries on-line. Health experts are needed to direct the areas of research, which biologic process and functions are affected by this radiation.

Action Item 2) Review the potential health risks with qualified health experts. Reviewers and Health experts are needed.

Action Item 3) Organize this research for publication on the BPA web site.

Action Item 4) Determine final action to take based on outcome of research. This could include preparation of a presentation for City of Palo Alto public hearing. People familiar with the process of the Palo Alto City government may be needed.

This investigation can have three possible outcomes;
I) There is no non-thermal health risk so there should be no opposition to the cellular broadcast tower based on health concerns.
II) There are non-thermal health risks and a safe distance has been determined. Then the cellular broadcast tower should be placed at a safe distance from any homes or those homes or families need to be relocated to a safe distance. All property within the area of risk will need to be de-
valued and the owners compensated. There could be large opposition to this conclusion because of the lost tax revenues and large compensation amounts due from wireless carriers for homes within risk zones surrounding all cellular broadcast towers.

III) There are non-thermal health risks but a safe distance cannot be determined from the cellular broadcast tower. In this case the cellular broadcast tower should be opposed until a safe distance can be determined. This conclusion will meet with similar opposition and will require work on federal regulation working with local and national politicians, the Surgeon General, FDA and FCC to update guidelines for cellular broadcast tower placement.

Q10. What information is available for public viewing, about the project, at the Planning Department?
A10. There is a file available for public viewing. The planning department is very open and helpful when asked to look at the files. Within the file is;
   - A conditional approval letter from the Planning Department
   - A set of drawings
   - An engineering report

Q11. What concerns are there about the project information?
A11. The drawings and pictures show the tower in two different locations. If the plans were read incorrectly the antenna could be built less than 30 feet from a home (Buena Vista Mobile Home Park). The plans call for 6 broadcast antennas, 3 to be installed when built and 3 to be added at some later date. There are no specifications for the actual broadcast antenna, which will be placed on the tower or the equipment to be placed on the ground. The proposal does not give clear information about all the health effects of the broadcast electromagnetic radiation. There is an engineering report with a general equation for broadcast electromagnetic power and a FCC recommended power level. The equation is not the actual equation for the antenna to be installed. There are no references to any certifications for the broadcast equipment. There is no specification for what will be placed on the tower in the future. The process for maintaining, upgrading and expanding the number of antennas on the tower is not specified.

Q12. How do I contact the City of Palo Alto for more information about the project?
A12. You can visit the Planning Department on the 5th floor of Palo Alto City Hall. The project planner is Clare Campbell at 650-617-3191 or Clare.Campbell@cityofpaloalto.org. Clare has been very helpful in answering questions.

Q13. How can I contact Cingular Wireless?
A13. Cingular has also been very open and helpful. Many of the people living and working in the area surrounding the cellular broadcast tower are Cingular customers. Through Clare I was put in contact with Kelly Pepper at 415-495-5961.