# PHYSICS AND ASTRONOMY BUILDING WIRELESS CELLULAR ANTENNAS



UW Environmental Health & Safety (EH&S) provides the following safety information for University personnel who work in or near University locations where wireless cellular antennas are installed.

#### SITE INFORMATION

**Address:** 3910 15th Ave NE Seattle

Carrier(s): Verizon

Antenna type: Sector/Directional antennas

Co-locators: None Location(s): Rooftop

Site access: Two locked access doors **Last survey date:** September 20, 2022

- This building consists of 16 antennas grouped together in four sectors on the rooftop.
- All measurements on accessible areas were below the limit for general public exposure to radiofrequency energy except for upper roof level.

| Location                                           | RF Exposure<br>Measurements                            | Hazard category |
|----------------------------------------------------|--------------------------------------------------------|-----------------|
| Upper roof<br>level - Delta<br>(1)                 | 116 % of the FCC<br>general public<br>exposure limit.  | 2               |
| Upper roof<br>level- Beta<br>(2)                   | Less than 39.5% of FCC general public exposure limit   | 1               |
| Lower roof<br>level- Alpha<br>(3) and<br>Gamma (4) | Less than 38.15 % of FCC general public exposure limit | 1               |

## **AERIAL VIEW OF THE ANTENNAS**

Figure 1 shows an aerial view of the rooftop and where the antennas are located.



Figure 1: View from the rooftop.

## **SIGNS AND BARRIERS**

 Blue NOTICE signs are mounted directly in front of the antennas on upper and lower penthouse level (refer to diagram below).



 Blue NOTICE signs and Yellow DEMARCATION are located on the upper roof level floor as indicated in figure 2 below.

### **WIRELESS CELLULAR ANTENNA LOCATIONS**

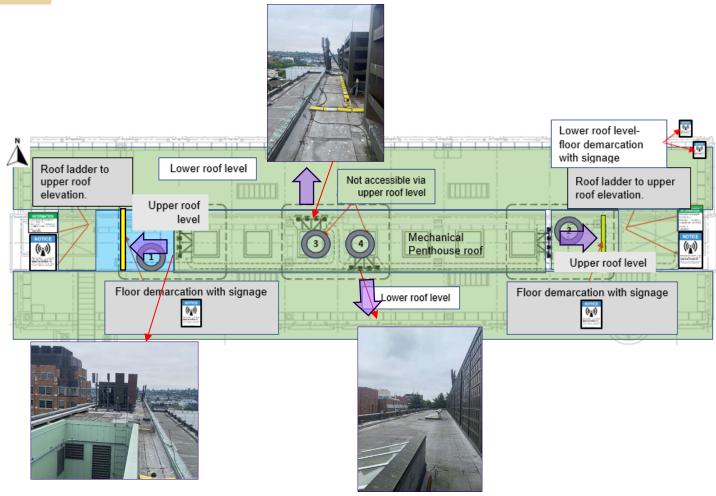


Figure 2: View looking down at the roof of Physics and Astronomy Building (PAB)

| Symbols/<br>Color | Definitions                                                                                                                                                     | Signage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | Direction of mounted antenna or directional RF energy                                                                                                           | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                   | Mounted antenna/panel                                                                                                                                           | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                   | Floor demarcation                                                                                                                                               | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Category 1        | Area where RF fields are too weak to cause exposures greater than general public limit  SAFE FOR GENERAL PUBLIC                                                 | No<br>signage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Category 2        | Area where RF fields could potentially be greater than general public limit but less than occupational limit  NOT SAFE FOR GENERAL PUBLIC BUT SAFE FOR WORKERS. | NOTICE  ((1))  Mark and the state of the sta |

Table 1: Symbols and color legends, definitions and required posting.

Visit the <u>Radiofrequency: Wireless Cellular Antennas</u> page on the EH&S website for more information.

Contact EH&S at 206.543.0463 or <a href="mailto:radsaf@uw.edu">radsaf@uw.edu</a> with questions.