

**PROPOSED MINOR AMENDMENT TO PENDING LPFM FACILITY
PORTLAND, OREGON FOR TOOL SHED PDX**

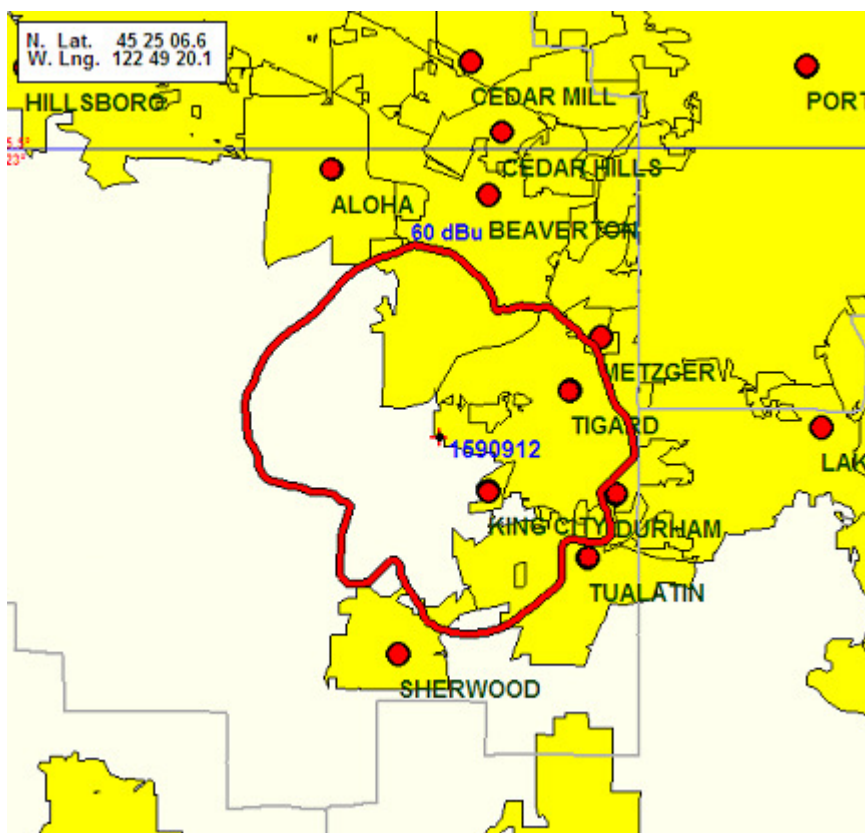
File No. BNPL-20131114BUU - Fac. ID No. 195722

The applicants Cascade Community Radio and Tool Shed PDX ("Applicants") are the parties that make up LPFM MX Group 295, channel 268, propose simultaneously-filed amendments to permit the granting of two singletons (see Exhibit 1, Section I of this application).

The new coordinates include:

| | |
|---------|----------------------------|
| NAD 83 | 45 25 06.0 N 122 49 24.5 W |
| NAD 27 | 45 24 06.6 N 122 49 20.1 W |
| GROUND | 216 m |
| AGL | 10 m |
| AMSL | 226 m |
| HAAT | 131.7 m |
| WATTS | 5 |
| CHANNEL | 268 |

PROPOSED FCC 60 DBU



PROPOSED SPACING

Tool Shed Pdx

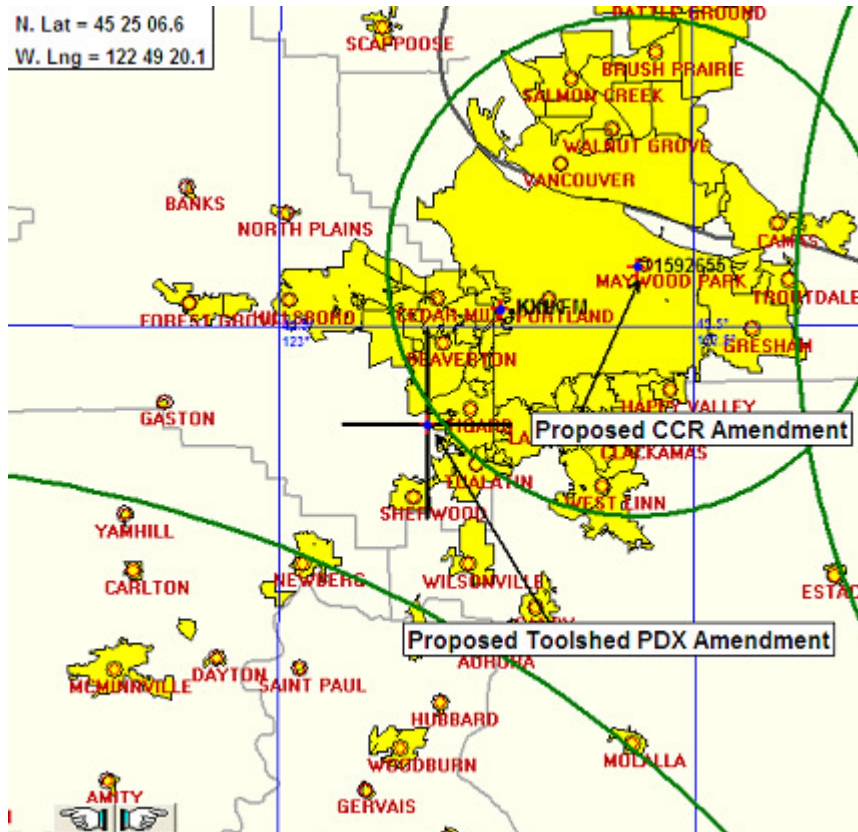
| | | |
|----------------|------------------------------|-----------------|
| REFERENCE | CLASS = L1 Int = L1 | DISPLAY DATES |
| 45 25 06.6 N. | Current Spacings to 2nd Adj. | DATA 12-22-13 |
| 122 49 20.1 W. | Channel 268 - 101.5 MHz | SEARCH 12-27-13 |

| Call | Channel | Location | Azi | Dist | FCC | Margin | | |
|----------|---------|----------|------------------|------|-------|--------|-------|-------|
| *KXL-FM | LIC | 266C | Portland | OR | 32.6 | 12.89 | 92.5 | -79.6 |
| *KINK | LIC-N | 270C | Portland | OR | 32.6 | 12.91 | 92.5 | -79.6 |
| *1592655 | APP | 268L1 | Portland | OR | 53.2 | 24.73 | 23.5 | 1.2 |
| KFLY | LIC | 268C0 | Corvallis | OR | 204.5 | 137.47 | 121.5 | 16.0 |
| KDOA | CP -Z | 268C3 | The Dalles | OR | 84.1 | 112.84 | 77.5 | 35.3 |
| K268BN | LIC-D | 268D | Eufaula/longview | WA | 358.3 | 82.91 | 38.5 | 44.4 |

Reference station has protected zone issue:
All separation margins include rounding

NOTES:

- * SEE SECOND ADJACENT WAIVER REQUEST BELOW
- ** SIMULTANEOUSLY SUBMITTED AMENDMENT FOR CASCADE COMMUNITY RADIO APPLICATION BNPL-20131114BUM



SECOND ADJACENT WAIVER REQUEST

Using U/D methodology, the proposed relocation will provide zero-population interference overlap areas with both second-adjacent channels:

| Call | COL | Chan |
|------|-------------|------|
| KINK | PORTLAND OR | 270 |
| KXL | PORTLAND OR | 268 |

KINK: At the proposed location signal strength of KINK is 99.6 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 139.6 dBu contour (at 5 watts). The distance to this contour, using free space method, is:

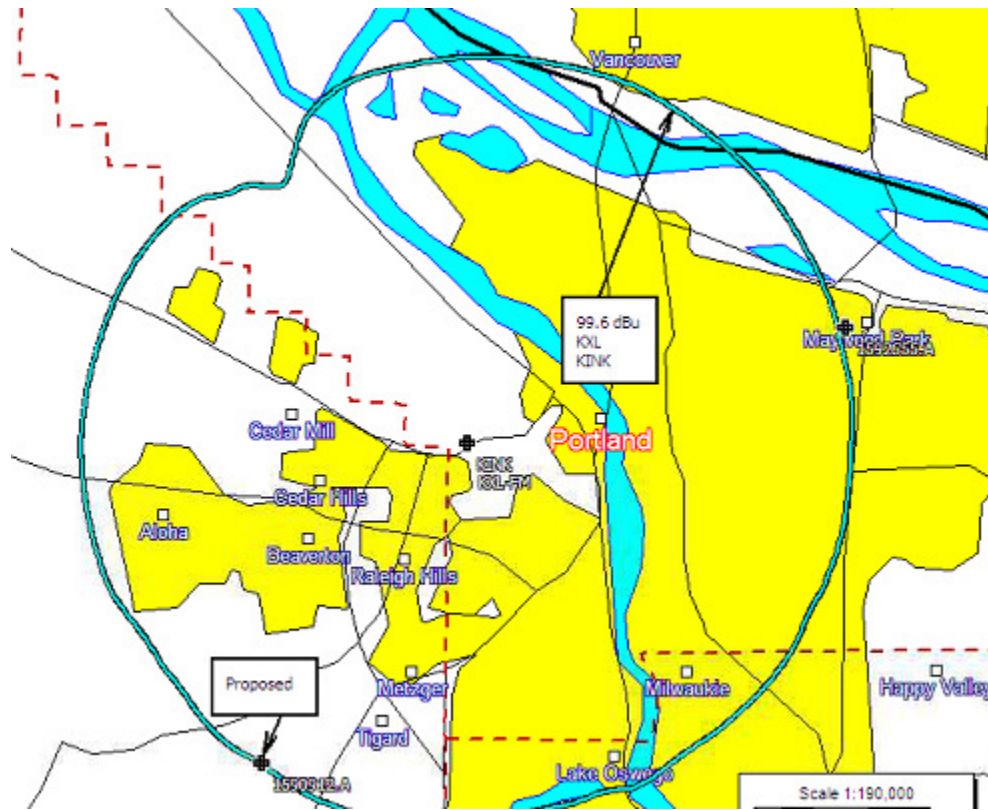
$D = (7.01 \cdot P^{1/2}) / E$, where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

D = 1.6 meters.

KXL: At the proposed location signal strength of KRLD is 99.6 dBu (see Map, next page). Interference will occur when the interfering signal exceeds the desired signal by 40 dbu. So the area of predicted interference would then be bounded by the 139.6 dBu contour (at 5 watts). The distance to this contour, using free space method, is:

D = 1.6 meters

The antenna is proposed to be 10 meters above ground. The antenna's interference radius is 1.6 meters. That means the interference area resides 8.4 meters above ground, far from any populated area.



KXL/KINK Field Strength at proposed transmitter site.

FAA COMPLIANCE

Facility antenna is proposed to be mounted on existing tower.

NON-IONIZING ELECTROMAGNETIC RADIATION (NEIR) ANALYSIS

The Effective Radiated Power for proposed will be 5 watts, mounted on a tower at 10 m AGL. The OET program *FM Model* for Windows, Version 2.10 Beta was used to determine the maximum predicted RF exposure. The settings used were:

Antenna: Phelps-Dodge "Ring Stub"

Vertical ERP (W): 5

Horizontal ERP (W): 5

Antenna Height (m): 10

Number of Elements: 1

Phelps-Dodge "Ring Stub" antenna was selected as a "worst case" emitter. Using these settings, the maximum predicted RF exposure for a human standing on the ground would be less than $3.1 \mu\text{W}/\text{cm}^2$ at 2.2 m. This represents less than 5% of the FCC Maximum Permissible Exposure (MPE) of $200 \mu\text{W}/\text{cm}^2$ for uncontrolled environments. 47 CFR 1.1307(b)(3) exempts applicants from preparing an Environmental Assessment when the predicted exposure levels when the predicted exposure levels would be less than 5% of the FCC limits.

Antenna is proposed adjacent to a water tower on a tower that is on fenced-in property. No other broadcast facility radiation is collocated at the vicinity. Facility is on private property. If work on tower is required facility will be temporarily powered down. Warning signs will be posted.