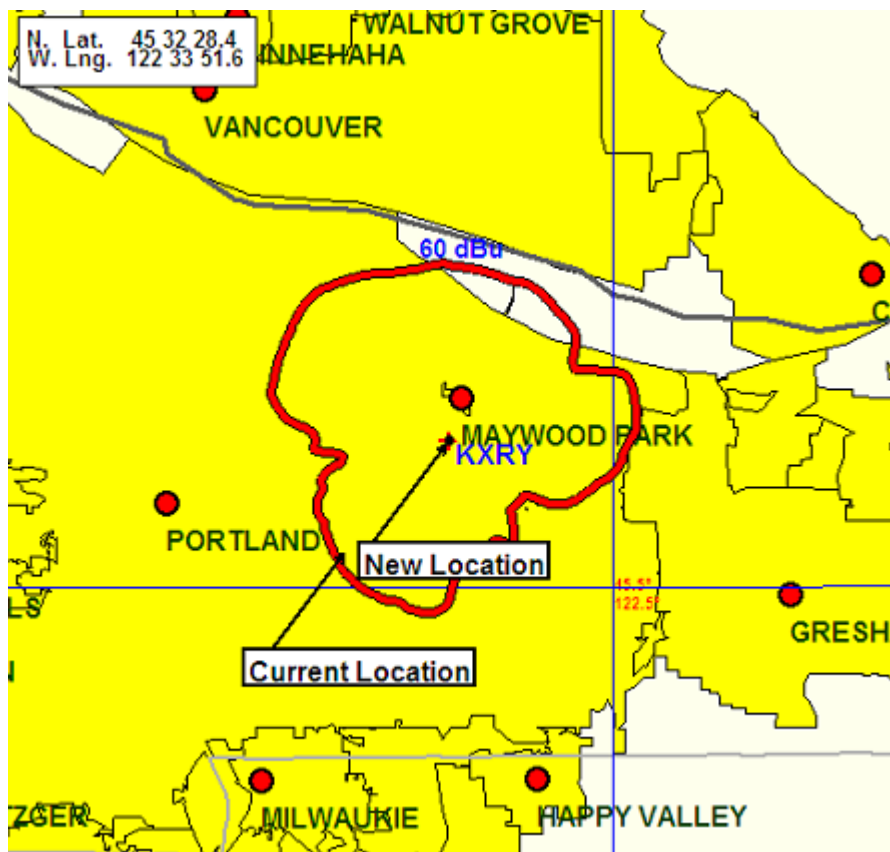


PROPOSED MINOR MODIFICATION OF FACILITY KXRY

Proposed is a minor modification to move KXRY 91.1 FM 4.7 km from its current licensed location to a new broadcast location

COOR:	45 32 20.4 N 122 33 51.6 W(NAD 27)
GROUND	162 m
TOWER	14
ASR	NA
AGL	9 m
HAAT	86.7 m
WATTS	7
CHANNEL	216



Proposed 60 dBu

- (1) Proposed location continues to serve Portland, Ore; the proposed location has overlapping 1 mv/m contour with previous location.
- (2) Per revision to Class D facility rules, Class D facilities are limited in broadcast

coverage smaller than the minimum Class A facility.¹ KXRY proposes 7 watts at 86.7 m HAAT which the FCC's online "FM and TV Curves Calculation" program validates is under 5.6 km.

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

Channel study is included on next page.

¹ Per revision of the rules, Class D facilities may not surpass minimum Class A facilities (100 watts at 30 meters; examples: KGSP Parkville, Mo (99 watts), WGTE Chicago, IL (73 watts), WGUR Milledgeville, GA (85 watts), KPTS (16 watts at 141 m HAAT), WVAC-FM (87 watts))

Common Frequency, Inc.											
REFERENCE	CH# 216D - 91.1 MHz, Pwr= 0.007 kW, HAAT= 86.7 M, COR= 171 M								DISPLAY DATES		
45 32 28.4 N.	Average Protected F(50-50)= 5.0 km								DATA 12-22-13		
122 33 51.6 W.	Omni-directional								SEARCH 01-18-14		

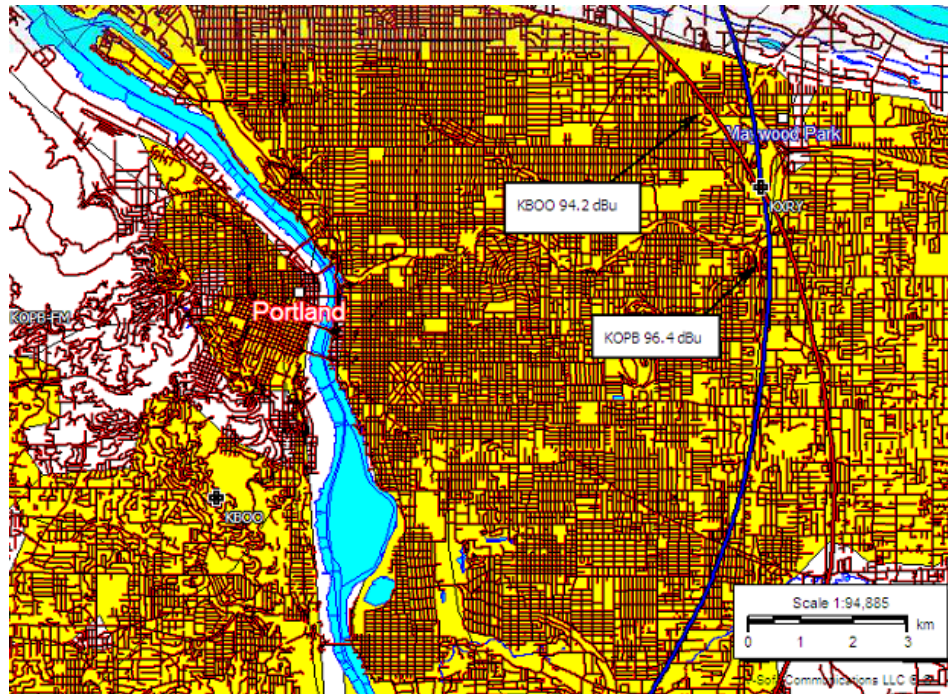
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
\$ 218C0 Portland	KOPB-FM	LIC	C OR	261.7 81.6	14.28 BLED20030213AAI	45 31 21.0 122 44 45.0	73.000 470	11.4 561	82.8 Oregon Public Broadcasting	-0.4	-70.1*
\$ 214C1 Portland	KBOO	LIC	CY OR	240.2 60.1	11.68 BLED19910909KC	45 29 20.0 122 41 40.0	26.500 386	7.8 480	66.5 The Kboo Foundation	-0.7	-56.4*
\$\$ 216C2 Kelso	KTJC	LIC	DEX WA	340.7 160.4	92.92 BLED20040302AAC	46 19 46.0 122 57 50.0	8.000 189	119.2 385	49.4 Calvary Chapel Of Twin Fal	-31.7*	25.6
\$\$ 216A Brightwood	KZME	LIC	CX OR	109.2 289.8	70.72 BLED20110505ABP	45 19 44.0 121 42 35.0	0.125 436	87.6 1771	29.2 Metro East Community Media	-21.5*	27.1
216D Portland	KXRY	LIC	HX OR	222.7 42.6	4.77 BLED20130204AAP	45 30 34.7 122 36 21.0	0.008 -15	9.6 74	3.0 Common Frequency, Inc.	-9.8*	-14.2
216L1 Wilsonville	1593156	APP	 OR	209.3 29.1	33.14 BNPL20131114BPE	45 16 51.4 122 46 16.9	0.100 30	 83	 Wilsonville Radio Project	9.3	10.3
216C1 Eugene	KWAX	LIC	EN OR	194.4 14.0	176.61 BLED19930308KB	44 00 04.0 123 06 45.0	21.500 370	152.0 562	65.3 Oregon St Board Of Higher	19.3	94.1
216A Tillamook	KIMK	LIC	CX OR	266.0 85.0	105.94 BLED20050728AMH	45 27 59.0 123 55 11.0	0.140 356	66.9 453	21.4 Oregon Public Broadcasting	35.0	71.7
06 D Eugene	1337136	AP	N OR	193.7 13.3	169.63 BNPDVL20091020AAK	44 03 28.0 123 04 02.0	0.300 31	0.2 146	10.2 Live Sports Radio, Inc.	132.5R	37.1M
216D Colton	K216EH	LIC	DV OR	154.8 335.0	50.34 BLFT201211129BCY	45 07 52.0 122 17 28.0	0.010 606	6.1 1309	0.7 Calvary Chapel Of Twin Fal	40.8	38.8
06 D Eugene	1328857	AP	D N OR	194.4 14.0	176.57 BNPDVL20090825ASQ	44 00 06.6 123 06 52.7	0.300 320	0.2 445	10.2 Mako Communications Llc	132.5R	44.1M
216C1 Yakima	KYPL	LIC	CX WA	56.3 237.9	198.91 BLED20100607AIV	46 30 48.0 120 24 03.0	26.000 242	146.8 627	62.5 Growing Christian Foundati	47.6	122.0

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in
KM
Contour distances are on direct line to and from reference station. Reference Zone= - Zone 2, Co to 3rd
adjacent.
All separation margins (if shown) include rounding
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E),
Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.
Reference station has protected zone issue:

NOTE:

\$ = Second Adjacent Waiver Request (see below)
\$\$ = No interference to 60 dBu protected contours

SECOND ADJACENT FACILITIES



The map above demonstrates the second adjacent facility's signal strengths (KBOO and KOPB) at the proposed transmitter location.

Concerning CH 214, KBOO (FM):

Using U/D methodology: At the proposed KXRY transmitter location KBOO has a signal strength of 94.2 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 134.2 dBu contour. The distance to this contour, using free space method:

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

$P = 7 \text{ w}$, $E = 134.2 \text{ dBu}$

$D = 3.6 \text{ meters}$

Conclusion: The area of interference resides 3.6 meters around the antenna; no population affected.

Concerning CH 218, KOPB-FM:

Using U/D methodology: At the proposed KXRY transmitter location KOPB has a signal strength of 96.4 dBu. 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 136.4 dBu contour. The distance to this contour, using free space method:

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

$P = 7\text{w}$, $E = 136.4 \text{ dBu}$

$D = 2.8 \text{ meters}$

Conclusion: The area of interference resides 2.8 meters around the antenna; no population affected.

Exhibit 22: Non-Ionizing Electromagnetic Radiation (NEIR) Analysis

The Effective Radiated Power for proposed will be 7 watts, mounted on a guyed pole. 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"
Horizontal ERP (W): 7
Vertical ERP (W): 7
Antenna Height (m): 9
Number of Elements: 1

The Phelps-Dodge Antenna (circular polarized) was selected in FM Model as an exaggerated "worst case" emitter. Using these settings, the maximum predicted RF exposure for a human standing on the ground would be $5.8 \mu\text{W}/\text{cm}^2$ at 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.