

Non-Interference Compliance

Regarding Facility id 138678

Channel 255

Description of Exhibit 12 Contents

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

The Quadrangle shows a building south of the tower which is solely for the purpose of housing communications equipment and is not habited and therefore lack of population is demonstrated.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

The aerial photo shows the presence of three buildings near the tower site which are used for communication purposes only and are not habited and therefore lack of population is demonstrated.

Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application_id	File Number	Call sign	Contour at Tower	Min. Contour
994809	BMLH20031230ABO	KABG	74.4	74.3
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				74.3

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **74.3 dBμ**, this makes the proposed translator's worst-case interfering contour **114.3 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **42.8 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population"). Hence, in accordance with 47 C.F.R. § 74.1204(d) and the clarification provided by the FCC in the decision *Re: Living Way Ministries* (FCC 02-244), a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.

Antenna Manufacturer:	OMB
Antenna Model:	MP-1
CORAGL:	30 m
Maximum ERP:	0.01 kW
Interfering Contour:	114.3 dBμ
Max Int. Contour Distance:	42.8 m

Adjacent Channel Study **For Station K255AU, Facility_id: 138678**

Co-channel through third adjacent:

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
289848	11231	BLH	7798	KMGA		C	ALBUQUERQUE	NM	LIC	19.5	3278	258	3	0.6	0.0597
994809	44000	BMLH	20031230ABO	KABG	AGM NEVADA, LLC	C	LOS ALAMOS	NM	LIC	100	3061	253	2	63	0.0597
1124600	133409	BLL	20060404ABF	KBNM-LP	JOHN ARAGON	L1	BELEN	NM	LIC	0	1494	254	1	67.7	0
681139	154440	BNPFT	20030825ADE	K256AO	EDGEWATER BROADCASTING, INC.	D	SOCORRO	NM	CP	0.01	2231	256	1	135.7	0
1037597	18421	BXPH	20050103ACV	KXMT	DMC BROADCASTING	A	TAOS	NM	CP	1.5	2145	256	1	151.9	0
1031330	18421	BLH	20041126AAC	KXMT	DMC BROADCASTING	C	TAOS	NM	LIC	60	3237	256	1	186.9	0
206760	60596	BLH	19950223KB	KGLX	KGLX/KFMQ/KFXR L.L.C.	C1	GALLUP	NM	LIC	51	2441	256	1	207	0



