COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES

The RF Compliance Study for K224BY.p, Centerville, UT, has been evaluated for human exposure to non-ionizing radiofrequency radiation at the transmitter site. The site will house multiple transmitters. The potential for human exposure to non-ionizing radiofrequency radiation at the proposed transmitter site has been evaluated with regards to §1.1307(b)(3) concerning the five percent (5%) contribution rule for multiple transmitter sites.

The proposed facility will operate on 92.1 MHz with a maximum effective radiated power (ERP) of 0.135 kW vertical only polarization. The facility will operate with a one element antenna mounted 32 meters above ground level (AGL). The proposed antenna will be a PSI FML-1-DA. A worst case EPA type 1 element as defined from FCC program FM Model Version 2.10b has been employed.

This site has been evaluated for compliance with the FCC guidelines concerning human exposure to radiofrequency radiation. The standards employed are detailed in OET Bulletin No. 65 (Edition 97-01). Software packages were used to determine the individual contribution of the station. FM radiofrequency radiation levels were predicted using both the array pattern, the calculations of which are based on the number of bays in the antenna and wavelength spacing between the bays, and the element pattern. The element pattern is determined by using measured element data prepared by the EPA and published in "An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM and TV Services," by Paul C. Gailey and Richard Tell - April 1985, U.S. Environmental Protection Agency, Las Vegas, NV. The programs use formulas that were originally published in OST Bulletin No. 65, 1985.

The result of the evaluations for the station is shown in both graphical and tabular forms at the end of this report. The tabulation lists the portion of the tabular output for the station showing the region of maximum radiofrequency radiation. The locations of maximum predicted power density have been highlighted using ***bold italic*** type. The FM graphical display has been scaled to show the best definition of the data curve.

To evaluate the total exposure to non-ionizing radio-frequency radiation with regards to the five percent contribution exclusion rule, it is necessary to express the individual contribution as a decimal fraction of the maximum permissible limit. If the resulting contribution is less than or equal to 5.0%, the exposure is concluded to be within the guidelines of OET Bulletin No. 65 (Edition 97-01) and §1.1307(b)(3). Protection of the more restrictive uncontrolled limit implies protection of the controlled limit.

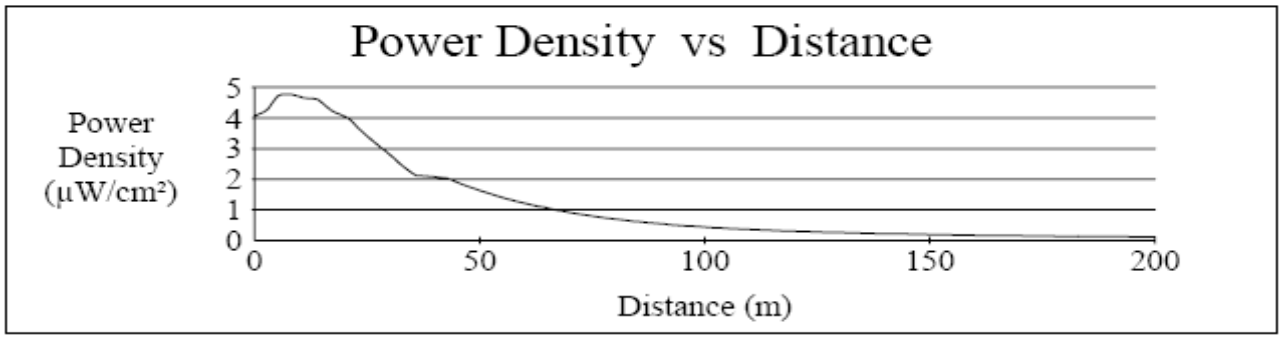
Contributing Station	**Maximum Contribution**	**Uncontrolled Environment Limit**	**Decimal Fraction of Limit**
K224BY.p	4.7764 µW/cm²	200.00 µW/cm²	0.02389
	Total Contribution Percent		**2.389%**

Since the maximum contribution for the uncontrolled environments is less than the 0.05 (5.0%) as set for by §1.1307(b)(3), the facility is in compliance with FCC guidelines. §1.1307(b)(3) states that facilities contributing less than five percent of the exposure limit at locations with multiple transmitters are categorically excluded from responsibility for taking any corrective action in the areas where its contribution is less than five percent. Since this instant application meets the five percent exclusion test at all ground level areas, the impact of the proposed facility may be considered independently from other facilities operating at or nearby this site. It is believed the impact of the proposed operation should not be considered to be a factor at ground level as defined under §1.1307(b)(3).

In addition to the protection afforded by the proposed antenna height above ground, the facility is properly marked with signs, and entry to the facility is restricted by means of fencing with locked doors and/or gates. Any other means that may be required to protect employees and the general public will be employed.

In the event work is required in proximity to the antenna(s) such that the person or persons working in the area will be potentially exposed to fields in excess of the current guidelines, an agreement signed by all broadcast parties at the site will be in effect for the offending transmitter(s) to reduce power, or cease operation during the critical period.

PLOT OF TOTAL POWER DENSITY
K224BY.P – Centerville, UT
Using a 1-Bay EPA Type 1 Antenna Mounted 32 meters AGL



Distance (meters) = 200
Horizontal ERP (W) = 0
Antenna Height (m) = 32
Number of Elements = 1
Y-axis (Linear) = -1

Vertical ERP (W) = 135
Antenna EPA Type = 1
Element Spacing = 1
X-axis Setup = -1, 200

X (m)	Y (μW/cm²)	X (m)	Y (μW/cm²)	X (m)	Y (μW/cm²)	X (m)	Y (μW/cm²)	X (m)	Y (μW/cm²)
0	4.0592	41	2.0589	82	.66347	123	.28557	164	.16250
1	4.1308	42	2.0428	83	.64703	124	.28112	165	.16056
2	4.1934	43	2.0182	84	.63093	125	.27676	166	.15865
3	4.3067	44	1.9563	85	.61539	126	.27251	167	.15678
4	4.5117	45	1.8968	86	.60039	127	.26835	168	.15494
5	4.7078	46	1.8395	87	.58591	128	.26429	169	.15313
6	4.7722	47	1.7845	88	.57192	129	.26032	170	.15135
7	***4.7764***	48	1.7316	89	.55841	130	.25643	171	.14964
8	4.7701	49	1.6807	90	.54536	131	.25263	172	.14795
9	4.7366	50	1.6318	91	.53273	132	.24891	173	.14630
10	4.6934	51	1.5847	92	.52053	133	.24527	174	.14467
11	4.6467	52	1.5393	93	.50872	134	.24171	175	.14307
12	4.6441	53	1.4922	94	.49730	135	.23822	176	.14149
13	4.6316	54	1.4471	95	.48624	136	.23481	177	.13994
14	4.6090	55	1.4038	96	.47553	137	.23147	178	.13842
15	4.4902	56	1.3623	97	.46516	138	.22820	179	.13692
16	4.3698	57	1.3224	98	.45511	139	.22499	180	.13544
17	4.2485	58	1.2841	99	.44537	140	.22186	181	.13399
18	4.1692	59	1.2474	100	.43594	141	.21879	182	.13256
19	4.1061	60	1.2120	101	.42678	142	.21578	183	.13115
20	4.0390	61	1.1781	102	.41791	143	.21283	184	.12977
21	3.9686	62	1.1454	103	.40930	144	.20994	185	.12840
22	3.8210	63	1.1140	104	.40094	145	.20710	186	.12706
23	3.6775	64	1.0838	105	.39283	146	.20433	187	.12574
24	3.5387	65	1.0527	106	.38496	147	.20161	188	.12444
25	3.4047	66	1.0219	107	.37731	148	.19894	189	.12316
26	3.2754	67	.99233	108	.36988	149	.19632	190	.12190
27	3.1510	68	.96393	109	.36266	150	.19376	191	.12065
28	3.0313	69	.93665	110	.35565	151	.19124	192	.11943
29	2.9165	70	.91046	111	.34883	152	.18877	193	.11822
30	2.8064	71	.88528	112	.34222	153	.18635	194	.11704
31	2.6680	72	.86108	113	.33642	154	.18397	195	.11587
32	2.5377	73	.83781	114	.33076	155	.18164	196	.11471
33	2.4149	74	.81541	115	.32524	156	.17935	197	.11358
34	2.2991	75	.79386	116	.31985	157	.17711	198	.11246
35	2.1901	76	.77311	117	.31460	158	.17491	199	.11136
36	2.1111	77	.75312	118	.30947	159	.17274	200	.11027
37	2.1052	78	.73386	119	.30446	160	.17062		
38	2.0968	79	.71530	120	.29957	161	.16853		
39	2.0861	80	.69740	121	.29479	162	.16648		
40	2.0734	81	.68013	122	.29013	163	.16447		

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