

## **EXHIBIT 22.1**

### **COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES**

The potential for human exposure to non-ionizing radiofrequency radiation at the proposed transmitter site has been evaluated. In addition to the proposed FM operation of KYFP(FM) on Channel 206C1, the transmitter site will also be shared with one (1) other FM facility. There are no other known broadcast facilities within 315 meters of the shared transmitter site.

The proposed KYFP(FM) facility will operate on Channel 206C1 with a maximum effective radiated power (ERP) of 100.0 kW (H)&(V). The antenna will be an SWR FM10/4 DA four (4) bay antenna mounted 146 meters AGL. The antenna will use EPA type 2 inverted "V" elements as defined from FCC program FM Model Version 2.10b

KYYK(FM), Palistine, TX operates on FM Channel 252C2 with a maximum effective radiated power (ERP) of 50.0 kW circular polarization with an antenna mounted 147 meters AGL. The antenna has been assumed to be a one bay antenna employing a worst case EPA Type 1 element as defined from FCC program FM Model Version 2.10b

There are no other known broadcast facilities within 315 meters of the shared transmitter site.

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 each 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. FM programs use formulas were originally published in OST Bulletin No. 65, 1985.

The results of the evaluations for all stations are shown at the end of this report. The tabulation lists the portion of the tabular output for each station showing the region of maximum radiofrequency radiation. The locations of maximum predicted power density have been highlight.

To evaluate the total exposure to non-ionizing radio-frequency radiation it is necessary to sum the individual contributions as a decimal fraction of the maximum permissible limit. If the resulting sum is less than or equal to 100%, the exposure is concluded to be within the guidelines of OET Bulletin No. 65 (Edition 97-01). To simplify the calculations and produce a "worst case" study, the maximum exposure level produced by each station has been selected without regard to the location of that exposure. The following table is based on the uncontrolled limits set forth in OET Bulletin No. 65 (Edition 97-01).

## COMPLIANCE WITH RADIOFREQUENCY RADIATION GUIDELINES

The "Dist to COR" value shown on the all tabulations represents the height of the antenna center of radiation above an observer on the ground who is assumed to be 2 meters in height.

<u>Contributing Station</u>	<u>Maximum Contribution</u>	<u>Uncontrolled Limit</u>	<u>% of Limit</u>
KYFP(FM) proposed	42.889 $\mu\text{W}/\text{cm}^2$	200 $\mu\text{W}/\text{cm}^2$	21.14%
KYYK(FM)	95.633 $\mu\text{W}/\text{cm}^2$	200 $\mu\text{W}/\text{cm}^2$	47.97%
		<b>Total % of Limit</b>	<b>69.11%</b>

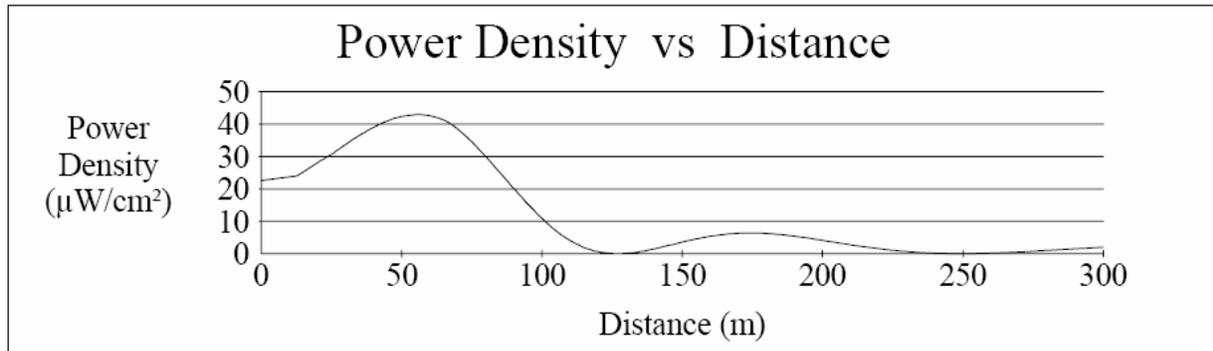
With the implementation of OET Bulletin No. 65 (Edition 97-01) and the accompanying Supplement A (Edition 97-01), the Commission set forth new guidelines for human exposure to radiofrequency radiation that employ a two-tiered system. The more lenient set of guidelines are for the "controlled environments", which are defined as "locations where there is exposure that may be incurred by persons who are aware of the potential for exposure as a concomitant of employment, by other cognizant persons, or as the incidental result of transient passage through areas where analysis shows the exposure levels may be above..." the more restrictive guidelines but below the more lenient guidelines. The second, more restrictive, set of guidelines is to be applied to "uncontrolled environments" which are defined as "locations where there is the exposure of individuals who have no knowledge or control of their exposure." The table above sets forth an evaluation of the transmitter site based on the standards for "uncontrolled environments."

Since the Total % of the Limit is less than 100% of the more stringent uncontrolled environment guidelines, the proposed installation will comply with the current FCC guidelines.

In addition to the protection afforded by the proposed antenna heights 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  
 KYFP(FM) proposed – Palestine, TX  
 Using a 4-Bay EPA Type 2 Antenna Mounted 146 meters AGL**

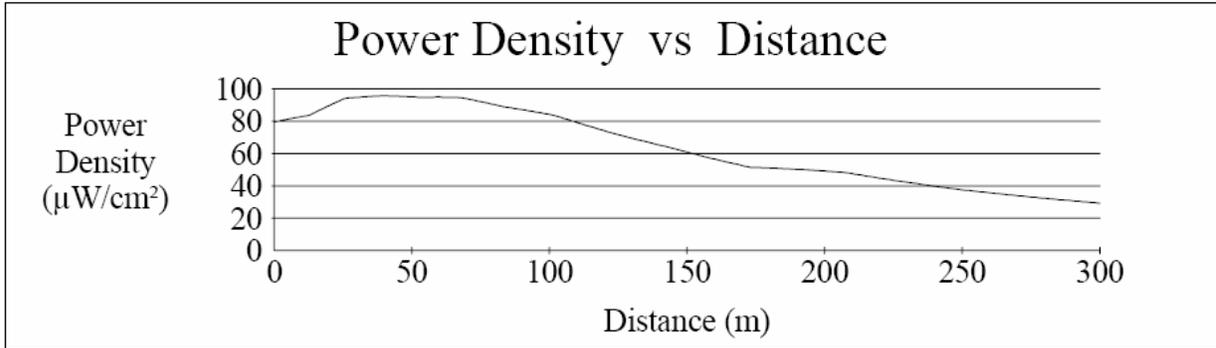


Distance (meters) = 300  
 Horizontal ERP (W) = 100000  
 Antenna Height (m) = 146  
 Number of Elements = 4  
 Y-axis (Linear) = -1

Vertical ERP (W) = 100000  
 Antenna EPA Type = 2  
 Element Spacing = 1  
 X-axis Setup = -1, 300

X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )
0	22.56050	34	35.99210	68	39.71956	102	9.265042
1	22.66587	35	36.53053	69	39.06925	103	8.493028
2	22.77278	36	37.05264	70	38.38265	104	7.753851
3	22.88116	37	37.55692	71	37.66116	105	7.048208
4	22.99093	38	38.04183	72	36.90632	106	6.376676
5	23.10199	39	38.52117	73	36.11981	107	5.739708
6	23.21420	40	39.00127	74	35.30336	108	5.137640
7	23.32743	41	39.45956	75	34.45885	109	4.570689
8	23.44151	42	39.89438	76	33.58824	110	4.038955
9	23.55627	43	40.30409	77	32.69356	111	3.542426
10	23.67149	44	40.68706	78	31.77692	112	3.080981
11	23.78697	45	41.04169	79	30.84052	113	2.654391
12	23.90246	46	41.36644	80	29.88658	114	2.262326
13	24.19233	47	41.65981	81	28.91742	115	1.904357
14	24.74307	48	41.92035	82	27.93535	116	1.579962
15	25.29451	49	42.14668	83	26.94274	117	1.288530
16	25.84603	50	42.33749	84	25.96547	118	1.029367
17	26.39700	51	42.49155	85	24.98436	119	.8016993
18	26.94673	52	42.60771	86	23.99782	120	.6046814
19	27.49451	53	42.71756	87	23.00821	121	.4376724
20	28.03959	54	42.81296	88	22.01787	122	.3001572
21	28.58116	55	42.87053	89	21.02912	123	.1895756
22	29.11842	<b>56</b>	<b>42.88910</b>	90	20.04426	124	.1051464
23	29.65049	57	42.86762	91	19.06556	125	.0046022
24	30.17647	58	42.80515	92	18.09523		
25	30.69544	59	42.70089	93	17.13546		
26	31.27364	60	42.55418	94	16.18834		
27	31.89026	61	42.36450	95	15.25592		
28	32.50192	62	42.13149	96	14.34016		
29	33.10732	63	41.85492	97	13.44294		
30	33.70511	64	41.53473	98	12.56603		
31	34.29391	65	41.17101	99	11.71114		
32	34.87231	66	40.76402	100	10.87986		
33	35.43886	67	40.31415	101	10.06907		

**PLOT OF TOTAL POWER DENSITY**  
**KYYK(FM) – Palestine, TX**  
**Using a 1-Bay EPA Type 1 Worst Case Antenna Mounted 147 meters AGL**



Distance (meters) = 300  
 Horizontal ERP (W) = 50000  
 Antenna Height (m) = 147  
 Number of Elements = 1  
 Y-axis (Linear) = -1

Vertical ERP (W) = 50000  
 Antenna EPA Type = 1  
 Element Spacing = 1  
 X-axis Setup = -1, 300

X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )	X(m)	Y(μW/cm <sup>2</sup> )
0	79.45326	32	94.99893	64	94.82671	96	85.39655
1	79.82122	33	95.11900	65	94.78377	97	85.09700
2	80.18246	34	95.22970	66	94.73260	98	84.79451
3	80.53684	35	95.33102	67	94.67331	99	84.48917
4	80.88423	36	95.42300	68	94.50331	100	84.18110
5	81.22451	37	95.50565	69	94.16432	101	83.87042
6	81.55755	38	95.57902	70	93.82141	102	83.44906
7	81.88323	<b>39</b>	<b>95.63301</b>	71	93.47473	103	82.90648
8	82.20143	40	95.61952	72	93.12438	104	82.36594
9	82.51204	41	95.59738	73	92.77051	105	81.82750
10	82.81495	42	95.56664	74	92.41324	106	81.29122
11	83.11007	43	95.52739	75	92.05269	107	80.75714
12	83.39729	44	95.47971	76	91.68899	108	80.22532
13	83.85744	45	95.42367	77	91.32226	109	79.69581
14	84.70603	46	95.35935	78	90.95262	110	79.16865
15	85.54855	47	95.28685	79	90.58019	111	78.64388
16	86.38469	48	95.20626	80	90.20510	112	78.12156
17	87.21412	49	95.11767	81	89.82745	113	77.60172
18	88.03654	50	95.02118	82	89.44737	114	77.08440
19	88.85164	51	94.91689	83	89.06497	115	76.56963
20	89.65911	52	94.80490	84	88.71827	116	76.05746
		53	94.72624	85	88.46337	117	75.54792
21	90.45866	54	94.78047	86	88.20406	118	75.04103
22	91.25000	55	94.82543	87	87.94049	119	74.53683
23	92.03284	56	94.86120	88	87.67277	120	74.03534
24	92.80690	57	94.88784			121	73.53660
25	93.57192	58	94.90546	89	87.40104	122	73.05316
26	94.08110	59	94.91413	90	87.12540	123	72.59750
27	94.25754	60	94.91396	91	86.84600	124	72.14406
28	94.42461	61	94.90503	92	86.56294	125	71.69286
29	94.58229	62	94.88744	93	86.27634		
30	94.73057	63	94.86130	94	85.98634		
31	94.86945			95	85.69303		

**MUNN-REESE, INC.**  
Broadcast Engineering Consultants  
Coldwater, MI 49036