

**Compliance with 47 C.F.R. 73.525**

There are several considerations outlined in 47 C.F.R. 73.525 for TV Channel 6 protection. Outlined below are the various factors as they apply to the proposed operation and KVIE-TV.

**1) Distance between proposed operation and KVIE-TV**

47 C.F.R. 73.525(a)(1) requires a minimum separation of 132 km for a channel 218 operation. The distance between the proposed station and KVIE-TV is 21.14 km.

**2) Population Limitation**

When a proposed non-commercial station is not co-located with the channel 6 station question, the applicant is required to show that the interference area (as predicted by the procedures outlined in 47 C.F.R. 73.525(e)(1)) contains no more than 3,000 persons.

Per 47 C.F.R. 73.525(e)(4), if an applicant chooses to use mixed polarity, the permissible ERP is determined by the formula:  $[H + (V/A)]$  is not greater than P

Where: H = the horizontally polarized ERP in kilowatts for mixed polarity

V = the vertically polarized ERP in kilowatts for mixed polarity

A = 40 (if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more), or 10 (if it does not)

P = the maximum permitted horizontally polarized-only power in kilowatts.

Since the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more, the value of 40 was used for A, giving the result:

$$[0.05 + (0.05/40)] = 0.05125 \text{ kilowatts}$$

All population limits were calculated using the maximum permitted horizontally polarized-only power of 0.05125 kilowatts. The actual population figures are contained in Exhibit 18-B, and a map of the interference area is shown in Exhibit 18-C.

# River Delta Unified School District

410 S. 4<sup>th</sup> Street ♦ Rio Vista ♦ California ♦ 94571

**Exhibit 18-B**

**Rio Vista, CA**

## **73.525 Compliance**

Population in the predicted interference area was determined using the centroid method and the 2000 census. The predicted interference contour (of the theoretical horizontal component of 0.05125 kilowatts) is contained within the KVIE channel 6 90 dBu F(50,50) contour (see Exhibit 18-C).

The predicted interference contour is determined from 47 C.F.R. 73.599 for channel 218 to be 98.5 dBu. (See Exhibit 18-E for a tabulation of the KVIE protected contour values and the corresponding channel 218 interfering contours)

Exhibit 18-C shows the 90 dBu F(50,50) contour for KVIE. Also shown is the corresponding F(50,10) interfering contour for the proposed channel 218 facility. Additionally shown is a population scattergraph of the area of proposed operation. A population report of the area contained within interfering contour is included at Exhibit 18-D. The total population contained within the interfering contour is 1,228 persons.

Therefore, the proposed operation is within the limitations of 47 CFR 73.525(c).

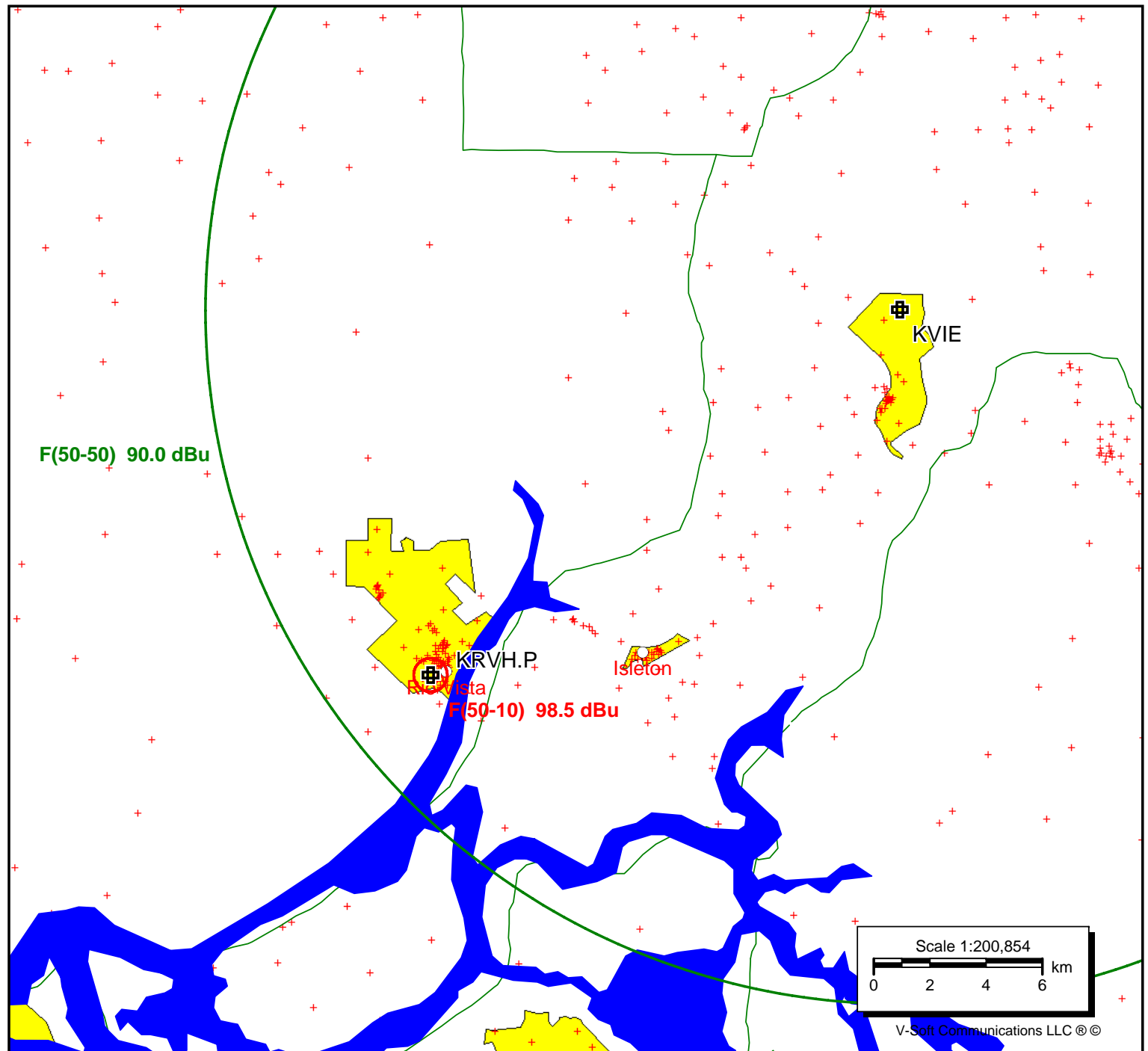
## Exhibit 18-C

### KRVH.P

BPED19970612ML  
Latitude: 38-09-17 N  
Longitude: 121-41-48 W  
ERP: 0.0513 kW  
Channel: 218  
Frequency: 91.5 MHz  
AMSL Height: 43.0 m  
Elevation: 21.0 m  
Horiz. Pattern: Omni  
Prop Model:

### KVIE

BLET20030328ANE  
Latitude: 38-16-18 N  
Longitude: 121-30-22 W  
ERP: 100.00 kW  
Channel: 06Z  
Frequency: 85.0 MHz  
AMSL Height: 553.0 m  
Elevation: 0.0 m  
Horiz. Pattern: Omni



## Exhibit 18-D

### V-Soft Communications Population Report

#### Contour Parameters:

Type: FCC Contour

F(50-10) FS: 98.50 dBu [360 Radials]

Population Database: 2000 US Census (SF1)

Primary Terrain: V-Soft 30 Second US Database

Secondary Terrain: V-Soft 3 Second US Terrain

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#### Transmitter Information:

Call Letters: KRVH.P

File Number: BPED19970612ML

Latitude: 38-09-17 N

Longitude: 121-41-48 W

ERP: 0.0513 kW

Channel: 218

Frequency: 91.5 MHz

AMSL Height: 43.0 m

Elevation: 21.0 m

Horiz. Antenna Pattern: Omni

Vert. Elevation Pattern: No

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Total Population Within Contour: 1,228

Total Housing Units Within Contour: 525

Total Area Within Contour: 1.12 sq. km

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Exhibit 18-E

Rio Vista, CA

## Channel 6 vs Channel 218

Channel 6 Contour	Value from 73.599	Channel 218 Contour	Adjusted 6 dB
47 (grade B)	32.5	79.5	85.5
48	31.2	79.2	85.2
49	29.8	78.8	84.8
50	28.5	78.5	84.5
51	27.3	78.3	84.3
52	26.0	78.0	84.0
53	24.8	77.8	83.8
54	23.6	77.6	83.6
55	22.5	77.5	83.5
56	21.3	77.3	83.3
57	20.3	77.3	83.3
58	19.3	77.3	83.3
59	18.3	77.3	83.3
60	17.5	77.5	83.5
61	16.6	77.6	83.6
62	15.8	77.8	83.8
63	15.0	78.0	84.0
64	14.3	78.3	84.3
65	13.5	78.5	84.5
66	13.1	79.1	85.1
67	12.6	79.6	85.6

Channel 6 Contour	Value from 73.599	Channel 218 Contour	Adjusted 6 dB
68 (grade A)	12.2	80.2	86.2
69	11.9	80.9	86.9
70	11.5	81.5	87.5
71	11.2	82.2	88.2
72	11.0	83.0	89.0
73	10.9	83.9	89.9
74	10.7	84.7	90.7
75	10.5	85.5	91.5
76	10.4	86.4	92.4
77	10.2	87.2	93.2
78	10.0	88.0	94.0
79	9.9	88.9	94.9
80	9.7	89.7	95.7
81	9.6	90.6	96.6
82	9.5	91.5	97.5
83	9.4	92.4	98.4
84	9.3	93.3	99.3
85	9.1	94.1	100.1
86	9.0	95.0	101.0
87	8.9	95.9	101.9
88	8.7	96.7	102.7
89	8.6	97.6	103.6
90	8.5	98.5	104.5