APPENDIX K NOISE ANALYSIS

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November 19, 2010

Ms. Kathy Pease, AICP Planning & Redevelopment City of Roseville 311 Vernon Street Roseville, CA 95678 KPease@roseville.ca.us

Subject:

Noise Monitoring of the Roseville Energy Park (REP) on the Undeveloped Creekview Specific Plan, West Roseville Specific Plan, and Fiddyment Ranch Specific Plan Byenerties

Specific Plan Properties

Dear Ms. Pease:

j.c. brennan & associates, Inc. has completed continuous noise monitoring of the Roseville Energy Park at the above-referenced locations. This letter contains a summary of our noise monitoring methodology, results, and predicted noise contours for typical REP noise operations.

Noise Monitoring Locations and Results:

j.c. brennan & associates, Inc. conducted a total of five continuous noise monitoring sites. The noise monitors were setup on Monday October 18, 2010 and taken down on Thursday, October 21, 2010. Figure 1 shows the locations of the noise monitoring sites.

The approximate GPS coordinates for each location are as follows:

Table 1 REP Noise Monitoring Locations							
Site #	Location	Latitude	Latitude Longitude				
LT-1	Creekview (MDR C-30)	38° 47.719'N	121°23.253'W	1835'			
LT-2	Creekview (LDR C-9)	38° 47.756'N	121°23.812'W	1300'			
LT-3	WRSP (LDR-5.5)	38° 47.545'N	121°23.294'W	1760°			
LT-4	WRSP (HDR-17.6)	38° 47.263'N	121°23.308W	2580'			
LT-5	Fiddyment (LDR-2.3)	38° 47.785'N	121°23.563'W	2180'			
Source: j.c. brennan & associates, Inc. 2010.							

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4). The results of the ambient noise survey are shown below in Table 2. Appendix A provides the complete results and a graphic summary of the ambient noise monitoring for each site.

Table 2 REP Noise Monitoring Results									
Site #:	LT-1	LT-2	LT-3	LT-4	LT-5				
Measured Noise Levels, Nighttime — Loudest Hours (90 th Percentile), Leq/L50									
Noise Level:	48 dB	50 dB	49 dB	49 dB *	43 dB				
* j.c. brennan & associates, Inc. observed that the City of Roseville Pleasant Grove WWTP was audible and may have contributed to measured noise levels at this location.									

Source: j.c. brennan & associates, Inc. 2010.

Noise Contours:

Based upon the results of the ambient noise monitoring presented in Table 2, j.c. brennan & associates, Inc. calculated the distances to the typical nighttime 45 dB Leq and 50 dB Leq REP noise contours. Specifically, j.c. brennan & associates, Inc. calculated the average noise contour distances based upon the noise monitoring results conducted at the three noise monitoring sites located less than 2,000 feet from the REP. This was done to minimize the affect of the WWTP or other background noises on the estimated noise contours.

The predicted noise contour distances for the REP are as follows:

45 dB noise contour: 2,614 feet 50 dB noise contour: 1,470 feet

The noise contours are measured from the approximate center of the REP. Figure 2 shows the predicted typical nighttime REP noise contours.

It should be noted that REP noise levels at the distances discussed in this report are affected by variations in atmospheric conditions. Therefore, the noise levels and associated noise contour distances in this report will fluctuate based upon atmospheric conditions. Additionally, fluctuations in the operating load of the REP, including peak firings, may affect the noise contours shown in this report.

If you have any questions or comments, please contact me at (530) 823-0960 or lsaxelby@jcbrennanassoc.com.

Sincerely,

j.c. brennan & associates, Inc.

Luke Saxelby, INCE

Senior Consultant

Member, Institute of Noise Control Engineering

Figure 1

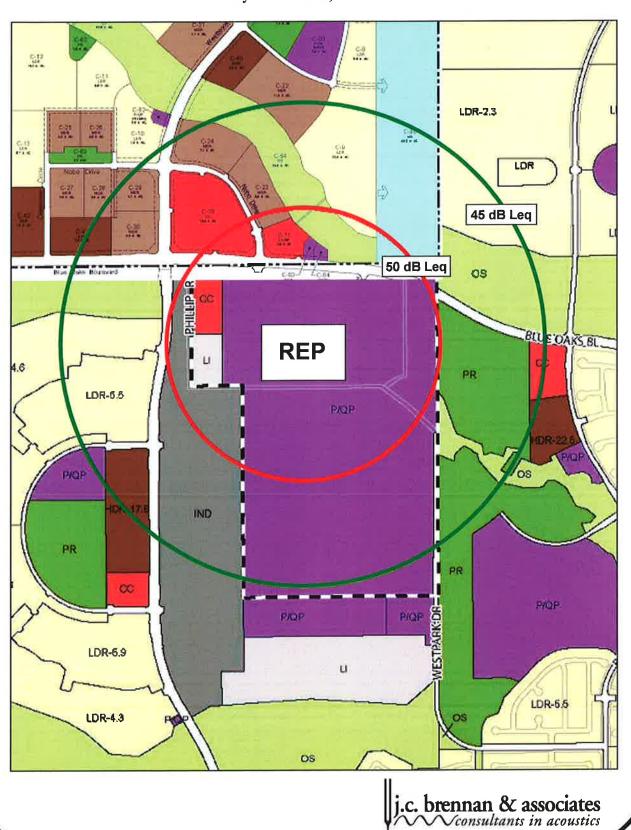
REP Noise Monitoring Sites – City of Roseville, California
Noise Measurement Sites



S : Noise Measurement Site

j.c. brennan & associates

Figure 2
REP Noise Contours
City of Roseville, California



		oring Results Measured Noise Level, dB L50						
		LT1	LT2	LT3	LT4	LT5	Day/Night	
Tuesday, October 19, 2010	0:00:00	49	48	49	51	36	Night	
Tuesday, October 19, 2010		47	48	48	49	39	Night	
Tuesday, October 19, 2010	2:00:00	44	48	47	48	.38	Night	
Tuesday, October 19, 2010		45	48	47	49	40	Night	
Tuesday, October 19, 2010	4:00:00	47	49	48	50	41	Night	
Tuesday, October 19, 2010	5:00:00	47	47	48	48	41	Night	
Tuesday, October 19, 2010	6:00:00	45	47	46	47	42	Night	
Tuesday, October 19, 2010	7:00:00	47	46	48	49	41	Day	
Tuesday, October 19, 2010	8:00:00	46	42	50	50	42	Day	
Tuesday, October 19, 2010	9:00:00	39	40	39	45	37	Day	
Tuesday, October 19, 2010	10:00:00	40	39	38	46	37	Day	
Tuesday, October 19, 2010	11:00:00	39	41	38	45	38	Day	
Tuesday, October 19, 2010	12:00:00	37	40	36	44	38	Day	
Tuesday, October 19, 2010	13:00:00	37	40	36	41	38	Day	
Tuesday, October 19, 2010	14:00:00	35	40	35	41	35	Day	
Tuesday, October 19, 2010	15:00:00	36	40	36	41	36	Day	
Tuesday, October 19, 2010	16:00:00	37	39	36	40	33	Day	
Tuesday, October 19, 2010	17:00:00	38	44	36	39	41	Day	
Tuesday, October 19, 2010	18:00:00	42	48	42	43	42	Day	
Tuesday, October 19, 2010	19:00:00	46	50	46	45	44	Day	
Tuesday, October 19, 2010	20:00:00	48	52	47	46	44	Day	
Tuesday, October 19, 2010	21:00:00	47	51	47	47	42	Day	
Tuesday, October 19, 2010	22:00:00	47	51	49	49	41	Night	
Tuesday, October 19, 2010	23:00:00	47	51	49	49	40	Night	
Wednesday, October 20, 2010	0:00:00	47	50	49	48	41	Night	
Wednesday, October 20, 2010	1:00:00	47	50	49	48	40	Night	
Wednesday, October 20, 2010	2:00:00	48	50	49	48	40	Night	
Wednesday, October 20, 2010	3:00:00	47	50	49	48	41	Night	
Wednesday, October 20, 2010	4:00:00	47	49	48	47	39	Night	
Wednesday, October 20, 2010	5:00:00	47	50	51	48	42	Night	
Wednesday, October 20, 2010	6:00:00	45	48	49	49	45	Night	
Wednesday, October 20, 2010	7:00:00	42	46	43	47	47	Day	
Wednesday, October 20, 2010	8:00:00	43	44	43	48	47	Day	
Wednesday, October 20, 2010	9:00:00	41	42	41	47	42	Day	
Wednesday, October 20, 2010	10:00:00	39	40	38	45	38	Day	
Wednesday, October 20, 2010	11:00:00	39	41	37	43	38	Day	
Wednesday, October 20, 2010	12:00:00	39	41	37	41	38	Day	
Wednesday, October 20, 2010	13:00:00	37	41	36	39	39	Day	
Wednesday, October 20, 2010	14:00:00	38	43	36	39	41	Day	
Wednesday, October 20, 2010		37	43	35	38	42	Day	
Wednesday, October 20, 2010	16:00:00	38	43	34	39	42	Day	
Wednesday, October 20, 2010	17:00:00	36	46	33	38	43	Day	
Wednesday, October 20, 2010	18:00:00	35	46	35	39	42	Day	
Wednesday, October 20, 2010	19:00:00	42	48	39	41	43	Day	



Appendix A-1 - Ambient Noise Monitoring Results Wednesday, October 20, 2010 20:00:00 Wednesday, October 20, 2010 21:00:00 Wednesday, October 20, 2010 22:00:00 47 42 41 44 Day 46 40 40 44 Day 44 Night 47 Wednesday, October 20, 2010 23:00:00 44 Night 45

Night, L50, 90th	6 47	49	48	48	41		
Distance from center of REP,	ft 1835	1300	1760	2580	2180	Average (night)	
45 dB Contour distance	e 2494	2437	2911			2,614	45 dB Contour
50 dB Contour distance	e 1402	1371	1637			1,470	50 dB Contour
Site	# 1	2	3	4	5		

