



Public Works Department
Administration Division

ITEM 27

MEMORANDUM

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COUNCIL MEETING OF:
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OFFICE OF THE CITY CLERK
CITY OF BERKELEY

DATE: November 18, 2003
TO: CORPORATION YARD NEIGHBORS
FROM: RENE CARDINAUX, Director of Public Works
SUBJECT: Corporation Yard Noise Monitoring- Results

From September 30, 2003 to October 7, 2003, six sites at the Corporation Yard were surveyed for noise levels. The Public Works Electrical Division mounted the noise meters on telephone poles, and the readings were taken at five (5) minute intervals. Please be advised this was an informal unscientific study. Other factors can affect the ambient levels when mounted on light poles and power-lines, like wattage, heat, and telephone line vibrations. There were a lot of uncontrolled variables in this study, such as trees, wind, through traffic, and speeding cars. However, we would have had to spend much more money for a more professional study, with more sophisticated results.

The sound level in decibels as measured on a sound level meter is designated dBA. Ambient noise level is the composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location, minus the source subject of enforcement. The Corporation Yard is located in a R-1 and R-2 residential zone where the day/night noise standards are 55dBA and 45dBA. The survey results showed that the Corporation Yard night time ambient did not meet the R-2 noise standards of 45dBA, but fell below the 55dBA of Residential/Commercial zones.

EXTERIOR NOISE LIMITS

<u>Zone</u>	<u>Time Period</u>	<u>Noise Level (dBA)</u>
R-1, R-2	7 a.m. - 10 p.m.	55
	10 p.m. - 7 a.m.	45
R-3 Mixed-use Residential/Commercial	7 a.m. - 10 p.m.	60
	10 p.m.- 7 a.m.	55
Commercial	7 a.m.- 10 p.m.	65
	10 p.m.- 7 a.m.	60
Industrial	Anytime	70

The results of our study indicated the noise levels at the Corporation Yard from 7 a.m. to 8 a.m. exceeded the average daytime ambient of 50 dBA, but for a brief period of time, and in 20 to 30 minute intervals only. This is slightly high for residential areas, and is borderline acceptable in mixed-use areas. However, the Corporation Yard slightly exceeds the average nighttime ambient of 50dBA after 10 p.m.

CORPORATION YARD NOISE SURVEY

<u>Time</u>	<u>Site 1</u>	<u>Site 2</u>	<u>Site 3</u>	<u>Site 4</u>	<u>Site 5</u>	<u>Site 6</u>
10 p.m. to 11 p.m.	54	55	55	55	54	55
5 a.m. to 7 a.m.	52	54	53	52	53	51
7 a.m. to 8 a.m.	63	65	62	65	59	56
10 p.m. to 7 a.m.	50	52	51	51	52	53

The noisiest time period at the Corporation Yard is from 7 a.m. to 8 a.m., this is most likely the time Public Works field operations crews are preparing to begin their shift. Public Works Corporation Yard management energies will be targeted towards the development of a noise reduction strategy to address early morning work preparation activities.

Additional studies will be needed to determine more detailed analysis of noise sources and what can be done to stay within standards.