

GREGORY BATESON BUILDING, 1600 9th Street, SACRAMENTO, CA

SUBJECT: SUMMARY OF AMBIENT INDOOR AIR QUALITY INVESTIGATION - MEASUREMENTS FOR TEMPERATURE, HUMIDITY, OXYGEN (O₂) & CARBON DIOXIDE (CO₂)

Temperature, relative humidity, oxygen and carbon dioxide measurements were obtained to determine comfort parameters and to help assess ventilation supply to the occupied spaces. Although there are no OSHA regulatory standards, the measurement results can be compared to the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) recommended criteria.

Temperature readings ranged from 72 °F - 77 °F and approach the ASHRAE recommended criteria of 68 °F - 76 °F.

78 F is the maximum cooling setting as established by the Governor's Executive Order D-15-00 and Management Memo 00-06, dated August 10, 2000.

Relative humidity levels range from 34% - 46% and are within the ASHRAE recommended criteria of 30% - 60%.

Carbon dioxide concentrations ranged from 611 parts per million (ppm) to 965 ppm and are well within the ASHRAE recommended criteria of less than 1,000 ppm.

Carbon dioxide has been shown to be a useful surrogate of outdoor air supply to occupied spaces if there is sufficient occupancy load within the spaces. Typically, at least five individuals per 1,000 square feet of occupied space are necessary to successfully use carbon dioxide as an indicator.

The source for this data is available in the Bateson Building Manager's office.

This analysis does not consider ventilation reduction associated with Stage 1, 2 or 3 alerts.

Detailed monitoring results follow:

DATE TIME	SAMPLE LOCATION	TEMPERATURE (°F)		RELATIVE HUMIDITY (%)		CARBON DIOXIDE (ppm)		% Oxygen
		Low	High	Low	High	Low	High	
12/01/1997 1400 Hours	BATESON BUILDING Room 300	72	73	N/A	N/A	N/A	N/A	N/A
01/20/2000 1150 Hours	BATESON BUILDING 4th Floor Perimeter Office	73	74	37	37	680 ppm	700 ppm	21.80%
03/29/2002 0900 Hours	BATESON BUILDING 1st Floor Entrance	77	77	34	34	965 ppm	965 ppm	21.80%
07/09/2002 1012 Hours	BATESON BUILDING Room 206	74	77	37	47	611 ppm	611 ppm	21.80%
07/09/2002 1015 Hours	Room 220 W	73	73	43	43	644 ppm	644 ppm	21.80%
	Room 220 E	72	72	40	40	582 ppm	582 ppm	21.80%
07/09/2002 1018 Hours	Room 240 Director's Office	72	72	43	43	655 ppm	655 ppm	21.80%
07/09/2002 1020 Hours	Room 470 - Conference	75	75	43	43	663 ppm	663 ppm	21.80%
07/09/2002 1010 Hours	Room 103 - Building Manager	74	74	46	46	730 ppm	730 ppm	21.80%