

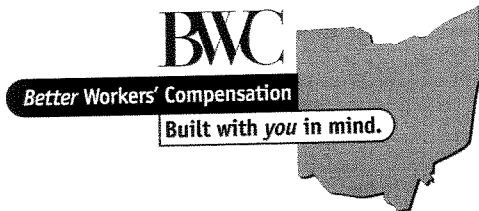
2005 FEB -9 P 4: 07
OFFICE OF
ADMINISTRATIVE SERVICES

INDOOR AIR QUALITY SURVEY

prepared
for

**OHIO DEPARTMENT OF NATURAL RESOURCES
1930 BELCHER DRIVE, D1
COLUMBUS, OHIO 43224-1387**

**MS. LINDA SUTHERLAND
HUMAN RELATIONS MANAGER**



Bob Taft
Governor

James Conrad
Administrator/CEO

**The Ohio Bureau of Workers' Compensation
Employer Service Department
30 W. Spring Street, L-12
Columbus, Ohio 43215-2256**

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February 7, 2005

Ms. Linda Sutherland
Ohio Department of Natural Resources
Human Resources Manager
1930 Belcher Drive, D1
Columbus, OH 43224-1387

Dear Ms. Sutherland:

Enclosed is a report resulting from an indoor air quality survey performed at your facility on February 1, 2005. Building A was selected for analysis on this date.

SCOPE AND OBJECTIVE

The purpose of this survey was to measure the general air quality in building A. It was reported that associates have experienced repeated symptoms of headache, sinus irritation, and respiratory related issues.

On the survey, sampling units were used that periodically monitor the carbon dioxide, carbon monoxide, temperature, and relative humidity level. I will report this data and explain relevance to indoor quality.

The scope of the investigation was limited to building A. Services related to biological monitoring are not included in the scope of this investigation.

Comments

- A ceiling tile in Deb Green's office appeared painted over, possibly due to water damage. I also noticed a water stained ceiling tile in Deb Nnadi's office. Replace water damaged tile since they can be a source of mold growth.

The information that follows in this report documents the instrument readings obtained during our survey. I encourage you to share the contents of the entire report with your employees.

It was a pleasure to meet with your associates. The courtesy extended to me during my visit to the Ohio Department of Natural Resources was greatly appreciated. If you have any questions regarding this report or need additional assistance, please do not hesitate to contact me at 614-562-5573.

Sincerely,

A handwritten signature in black ink that reads "Jim Scholl/CIH". The signature is written in a cursive, flowing style.

Jim Scholl, CIH
Certified Industrial Hygienist

Date Of Determination: February 1, 2005
 Surveyor: James F. Scholl, Certified Industrial Hygienist

Methodology: Readings were taken with a Q-Track Plus Model 8554 instrument. This unit was calibrated prior to performing the survey.

AIR SAMPLING RESULTS

SITE SAMPLED	TIME SAMPLED	DEGREES FAHRENHEIT	CARBON DIOXIDE CONCENTRATION IN PARTS PER MILLION	CARBON MONOXIDE CONCENTRATION IN PARTS PER MILLION	PERCENT RELATIVE HUMIDITY
Outside Air	7:50 AM	No Reading	350	0	No Reading
	12:45 PM	No Reading	420	1	No Reading
A-1 Registration/Title	9:20 AM	74	828	2	23
	10:30 AM	72	860	2	23
	12:48 PM	76	860	0	22
	2:05 PM	74	843	1	25
A-2 Watercraft	3:35 PM	74	925	1	26
	9:10 AM	70	750	2	22
	10:26 AM	71	703	2	24
	12:39 PM	73	654	2	22
	2:03 PM	73	741	1	24
	3:30 PM	73	786	1	24
A-3 Center	9:03 AM	70	650	2	22
	10:20 AM	70	677	2	24
	12:30 PM	73	654	2	22
	1:59 PM	74	734	2	22
	3:25 PM	74	780	1	23

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) publishes a criteria document (ASHRAE 62-1999) titled Ventilation for Acceptable Indoor Air Quality. In this document they state that comfort criteria with respect to human bioeffluents are likely to be satisfied if the ventilation results in indoor carbon dioxide concentrations less than 700 parts per million (ppm) above the outdoor air concentration. This document includes Table 1 documenting outdoor air standards set by the EPA. Carbon monoxide levels should never exceed 35 ppm when averaged over a 1 hour period. The ASHRAE document states that relative humidity levels should be maintained between 30 and 60 percent.

The CO2 sensor has an accuracy of +/- 3% of the reading plus 50 ppm at 25 degrees Centigrade. The carbon dioxide sensor has an accuracy of +/- 3% of the reading or 3 ppm whichever is greater. The instrument was calibrated prior to performing the survey.