

Babcock & Wilcox

To E. O. HOOKER - PLANT MANAGER, WILMINGTON

From R. E. MOORE - CORPORATE SAFETY & HEALTH - BARBERTON

Subj. INDUSTRIAL HYGIENE SURVEY RESULTS

File No. LW.12
or Ref. LW.13

Date May 21, 1981

During the week of March 16, 1981, the Industrial Hygiene portion of the 1980 Safety & Health Audit was conducted. This report summarizes the results of the employee exposure monitoring that was done at that time.

The employees sampled and the types of contaminants sampled for are listed below.

Employees Sampled

Contaminant Sampled

Welders (4)

- a) Total Suspended Particulate (TSPM)
- b) Iron Oxide (Fe_2O_3)

Painters (2)

- a) Paint Particulate (TSPM)
- b) Lead (Pb)
- c) Chromium (Cr)
- d) Mineral Spirits

The employees sampled wore personal sampling equipment that measured the concentration of air contaminants in their breathing zone as they performed their scheduled work routines. These employees were selected as being representative of the typical type of exposure that painters and welders would have at the Wilmington Works.

Results (See Enclosed Data Sheets)

The sample results indicate that on the day of the sampling none of the employees sampled were exposed to contaminant concentrations that exceed OSHA's permissible exposure limits or any other generally recognized safe exposure limits.

This, I believe, is representative of the degree of exposure that the majority of welders and painters have at Wilmington. The exception would be welding or painting within confined spaces which could cause a substantial increase in employee exposure. This confined space problem can be adequately controlled by using air movers and work practices that reduce the employees exposure within the confined spaces.

These results must be kept on file in accordance with OSHA 1910.20.

If you have any further questions, please contact me.

Richard E. Moore

R. E. Moore
Corporate Industrial Hygienist

REM:jhm

Encl.

cc: B. G. Wombel
L. G. Johnson

PLANT	WILMINGTON WORKS
DIVISION	INDUSTRIAL AND MARINE
LOCATION	WILMINGTON, N.C.

LOCATION WILMINGTON, N.C.				RESULTS			
SAMPLE NUMBER	SAMPLE DATE	EMPLOYEE NAME/NUMBER	JOB TITLE	WORK STATION LOCATION	TYPE OF SAMPLE	SAMPLE DURATION	Air Contaminant Concentration (Mg/M ³)
Applicable	Health Standards						TSPM Fe ₂ O ₃ Pb Cr
OSHA	Permissible Exposure Limits (1910.1000)						15 10 0.05 0.5
<u>WELDERS</u>							
AA-029-25	3/19/81	Bass, J. R.	Panel Welder Automatic Sub Arc Welder B MMA	Bay 4 Panel Weld Drum Shop	Area	390 Min.	1.5 0.55 - -
AA-029-38	3/18/81	Piner, Ronald 2667			BZ-UH	333 Min.	2.0 0.85 - -
AA-029-40	3/18/81	Whitman, Howard 1688	Welder MMA	Bay 3 Header Area	BZ-UH	370 Min.	0.75 0.12 - -
AA-029-22	3/18/81	Simmons, Ronald 3008	Welder MIG	Bay 3-22 Header Area	BZ-UH	360 Min.	2.6 0.60 - -
<u>PAINTER</u>							
AA-029-12	3/19/81	Yeoman, William 2954	Painter	Outside Bays	BZ	375 Min.	0.74 - <0.003 <0.00
NOTE - Results are reported in terms of a Time Weighted Average time weighted over the indicated sample duration.							
BZ-UH - Breathing Zone - Under Hood							
BZ - Breathing Zone							
TSPM - Total Suspended Particulate Matter							
REM 5/81							

