



INTERNAL  
CORRESPONDENCE

UNION CARBIDE CORPORATION TECHNICAL CENTER  
P.O. BOX 80151, SOUTH CHARLESTON, WV 26031

To: H. E. Rucker  
From: 512/2009

Date: September 28, 1987

Originating Dept: EM&TS - HS&EA

Area: Industrial Hygiene

Subject: Asbestos Exposure Monitoring

Copy to: B. H. Avashia, M.D. - 512/23  
J. W. Barna - 2009/6  
W. L. Browning - 2009  
R. E. Coyner - 2009  
C. P. Maxwell - 701/2  
B. R. McMakin - 2009

Attached are the results of the nine days asbestos monitoring on insulators at the Institute Plant while removing asbestos from approx. 715 feet of pipe at the Cellosize Unit, Building 79 piperack. The area was barricaded and amended water was used throughout the abatement process. An enclosure was not used. The reasons for not enclosing the job were documented and subsequently reviewed by the UCC Law Department and Industrial Hygiene Department in Danbury, CT.

Only one of the 21 personal samples exceeded the 0.2 fiber/cc permissible exposure level of OSHA standard 29CFR 1926.58. Six of the 21 personal samples exceeded the 0.1 fiber/cc action level of the same standard. None of the four area samples collected outside the barricade exceeded the action level of 0.1 fiber/cc of this standard.

Employees wore no street clothes, two pair of coveralls, headcovers, boots, gloves and AO R57-A HEPA half-face cartridge respirators.

Please inform \_\_\_\_\_ of the monitoring results as soon as possible. Have them sign and date this report and return to M. A. Patel at 511/701-330.

Asbestos Monitoring - cont.

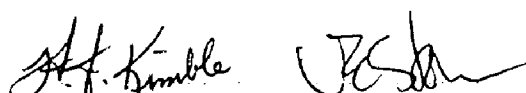
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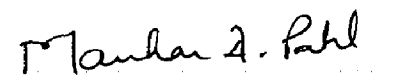
September 28, 1987

If you have any questions or we can be of further assistance please call us on extension 3750 or 6485.

WORK BY:

APPROVED BY:

  
H. U. Kimble & V. E. Stover

  
Manhar A. Patel

Attachment

VES:MAP:rab  
2717P

Comp. Ref. W2299  
W2300 W2301  
W2302 W2303  
W2304 W2305  
W2306 W2307

ASBESTOS EXPOSURE MONITORING

| <u>Date</u> | <u>Sample Type/<br/>Employee Name</u> | <u>Sampling<br/>Time</u> | <u>Air Conc.<br/>fibers/cc</u> | <u>TWAg<br/>fibers/cc</u> | <u>COMMENTS</u>                                                                           |
|-------------|---------------------------------------|--------------------------|--------------------------------|---------------------------|-------------------------------------------------------------------------------------------|
| 6-30-87     |                                       | 421 min.                 | 0.053                          | 0.046                     | Stripped approx. 100 feet of 1-inch steam line at Building 79, Cellosize piperack.        |
| 6-30-87     |                                       | 422 min.                 | 0.134                          | 0.118                     | Stripped approx. 100 feet of 1-inch steam line at Building 79, Cellosize piperack.        |
| 6-30-87     |                                       | 422 min.                 | 0.074                          | 0.065                     | Stripped approx. 100 feet of 1-inch steam line at Building 79, Cellosize piperack.        |
| 7-1-87      |                                       | 428 min.                 | 0.058                          | 0.052                     | Stripped approx. 60 feet of 1/2 and 1-inch steam line at Building 79, Cellosize piperack. |
| 7-1-87      |                                       | 428 min.                 | 0.083                          | 0.074                     | Stripped approx. 60 feet of 1/2 and 1-inch steam line at Building 79, Cellosize piperack. |
| 7-2-87      |                                       | 428 min.                 | 0.025                          | 0.022                     | Stripped approx. 100 feet of 1/2 and 1-inch steam line at Bldg. 79, Cellosize piperack.   |
| 7-2-87      |                                       | 427 min.                 | 0.025                          | 0.022                     | Stripped approx. 100 feet of 1/2 and 1-inch steam line at Bldg. 79, Cellosize piperack.   |
| 7-2-87      |                                       | 426 min.                 | 0.072                          | 0.064                     | Stripped approx. 100 feet of 1/2 and 1-inch steam line at Bldg. 79, Cellosize piperack.   |
| 7-6-87      |                                       | 420 min.                 | 0.056                          | 0.049                     | Stripped approx. 85 feet of 1/2 and 1-inch steam line at Building 79, Cellosize piperack. |
| 7-6-87      |                                       | 422 min.                 | 0.083                          | 0.073                     | Stripped approx. 85 feet of 1/2 and 1-inch steam line at Building 79, Cellosize piperack. |

Comp. Ref. W2299  
W2300 W2301  
W2302 W2303  
W2304 W2305  
W2306 W2307

ASBESTOS EXPOSURE MONITORING  
(continued)

| <u>Date</u> | <u>Sample Type/<br/>Employee Name</u> | <u>Sampling<br/>Time</u> | <u>Air Conc.<br/>fibers/cc</u> | <u>TWAg<br/>fibers/cc</u> | <u>COMMENTS</u>                                                                        |
|-------------|---------------------------------------|--------------------------|--------------------------------|---------------------------|----------------------------------------------------------------------------------------|
| 7-7-87      |                                       | 423 min.                 | 0.140                          | 0.125                     | Stripped approx. 100 feet of 6-inch line at Building 79, Cellosize piperack.           |
| 7-7-87      |                                       | 423 min.                 | 0.199                          | 0.176                     | Stripped approx. 100 feet of 6-inch line at Building 79, Cellosize piperack.           |
| 7-7-87      |                                       | 423 min.                 | 0.052                          | 0.046                     | Stripped approx. 100 feet of 6-inch line at Building 79, Cellosize piperack.           |
| 7-8-87      |                                       | 424 min.                 | 0.035                          | 0.031                     | Stripped approx. 100 feet of steam condensate line at Building 79, Cellosize piperack. |
| 7-8-87      |                                       | 422 min.                 | 0.263                          | 0.231                     | Stripped approx. 100 feet of steam condensate line at Building 79, Cellosize piperack. |
| 7-8-87      |                                       | 423 min.                 | 0.136                          | 0.119                     | Stripped approx. 100 feet of steam condensate line at Building 79, Cellosize piperack. |
| 7-13-87     |                                       | 410 min.                 | 0.163                          | 0.140                     | Stripped approx. 90 feet of steam condensate line at Building 79, Cellosize piperack.  |
| 7-13-87     | Area                                  | 409 min.                 | <0.007                         | -                         | Breathing zone level at west side of barricade 1-foot outside.                         |
| 7-13-87     | Area                                  | 408 min.                 | 0.010                          | -                         | Breathing zone level at east side of barricade 1-foot outside.                         |
| 7-14-87     |                                       | 425 min.                 | 0.026                          | 0.023                     | Stripped approx. 80 feet of 6-inch line at Building 79, Cellosize piperack.            |
| 7-14-87     |                                       | 425 min.                 | 0.053                          | 0.047                     | Stripped approx. 80 feet of 6-inch line at Building 79, Cellosize piperack.            |

Comp. Ref. W2299  
W2300 W2301  
W2302 W2303  
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ASBESTOS EXPOSURE MONITORING  
(continued)

| <u>Date</u> | <u>Sample Type/<br/>Employee Name</u> | <u>Sampling<br/>Time</u> | <u>Air Conc.<br/>fibers/cc</u> | <u>TWAg<br/>fibers/cc</u> | <u>COMMENTS</u>                                                              |
|-------------|---------------------------------------|--------------------------|--------------------------------|---------------------------|------------------------------------------------------------------------------|
| 7-14-87     | Area                                  | 428 min.                 | 0.013                          | -                         | At breathing zone level 1-foot west of barricade.                            |
| 7-15-87     |                                       | 427 min.                 | 0.218                          | 0.194                     | Stripped approx. 100 feet of 6-inch line at Building 79, Cellosize piperack. |
| 7-15-87     |                                       | 429 min.                 | 0.058                          | 0.051                     | Stripped approx. 100 feet of 6-inch line at Building 79, Cellosize piperack. |
| 7-15-87     | Area                                  | 430 min.                 | 0.063                          | -                         | At breathing zone level 1-foot east of barricade.                            |

WD-0098 VES  
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tion is a "reasonable construction" of the safety and health act.

None of the parties in the case challenge the validity of the OSHA air contaminant standards governing exposure to trichlorotrifluoroethane, the company argued. The appellate court's decision, it added, conflicts with positions taken by the secretary, the Occupational Safety and Health Review Commission, the administrative law judge who originally heard the challenge to the citation, the Auto Workers, General Dynamics, and "every court and review commission decision on this issue of general duty clause preemption."

The company also argued that the commission judge who heard the case properly considered and applied a 1983 commission decision in *Con Agra Inc.* (11 OSHC 1141), in finding that regulations at 29 CFR 1910.1000(a)(2) and (e) addressed the hazard at issue and preempted the general duty clause.

The first rule requires compliance with time-weighted exposure limits for trichlorotrifluoroethane and other air contaminants listed under Table Z-1 of 1910.1000, and the second requires the use of feasible controls to reduce employee exposures.

In its ruling, the appeals court found that hazard cited by OSHA dealt primarily with a risks posed by a short-term exposure to the solvent in a confined space, a hazard "clearly distinct" from that addressed by the specific standards.

## Asbestos

### NEARLY 1,000 ALLEGED VIOLATIONS OF STANDARDS CITED IN FIRST YEAR

In the first year after certain provisions of the Occupational Safety and Health Administration's revised asbestos standards went into effect, employers were cited for nearly 1,000 alleged violations of the standards, according to enforcement data obtained from the agency.

Between July 1, 1986, and June 30, 1987, OSHA inspectors cited 534 alleged violations of the standard for general industry and 427 alleged violations of the standard for the construction industry, agency statistics revealed.

Penalties proposed by OSHA over the year-long period totaled \$115,540, according to the data.

Most frequently cited under the general industry standard were alleged violations of 29 CFR 1910.1001(f)(1), which requires that employers institute engineering controls to reduce or maintain employee exposure at or below the permissible exposure limit. Inspectors cited 88 alleged violations of that particular section of the standard.

Under the construction industry standard, OSHA inspectors cited alleged violations of 1926.58(f)(2)(i) most frequently — 48 times. That provision requires employers covered by the construction standard to perform initial monitoring at the beginning of each job to determine airborne concentrations of asbestos.

OSHA announced its revised standards in June 1986, setting more stringent requirements for general industry and new duties for the construction industry (Reference File, 31:3116; 31:8121). Both standards set a permissible exposure limit of 0.2 fibers per square meter of air over an eight-hour time period. They also include an action level, above which employers must comply with medical surveillance, exposure monitoring, and other provisions of the standard.

#### Citation Categories

Of the citations issued by the agency in the first year of the standards, most were for alleged serious violations. Under the general industry standard, 185 serious violations

were alleged. A similar number of alleged serious violations, 199, was cited under the construction standard.

The agency issued only two citations for alleged willful violations and 15 citations for alleged repeat violations of the general industry standard. Alleged other-than-serious violations numbered 332 under that standard, according to the data.

OSHA cited 12 alleged willful violations and five alleged repeat violations of the construction standard. The agency also cited 211 alleged other-than-serious violations of that standard.

Slightly more than 400 alleged violations were cited as the result of an employee complaint, the data indicated. As of June 30, 350 of those citations had been contested by the employer.

#### Frequently Cited Provisions

Other provisions of the general industry standard that employers are having trouble complying with, based on the number of alleged violations cited by the agency, include:

- ▶ 1910.1001(d)(2)(i), requiring employers to perform initial monitoring of employees likely to be exposed to airborne concentrations of asbestos at or above the action level (51 alleged violations).

- ▶ 1910.1001(k)(1), requiring employers to keep all surfaces as clear as possible of accumulations of asbestos-containing dust and waste (30 alleged violations).

- ▶ 1910.1001(h)(1), requiring employers to provide appropriate protective clothing to exposed workers (27 alleged violations).

Employers also failed to comply with certain provisions of the construction standard more frequently than others, including:

- ▶ 1926.58(l)(2), requiring employers to dispose of asbestos-contaminated waste in sealed, labeled, impermeable bags or similar containers (18 alleged violations).

- ▶ 1926.58(h)(3)(i), requiring employers to institute a respirator program where respiratory protection is used (14 alleged violations).

- ▶ 1926.58(f)(3), requiring employers to conduct daily monitoring representative of employee exposures within regulated areas (13 alleged violations).

Although they are first-year enforcement figures, the citations may not fully reflect compliance problems with the standards because start-up dates for particular provisions were staggered throughout the year.

## Litigation

### COMPANY SEEKS SUPREME COURT REVIEW IN 'UNFORESEEABLE EMPLOYEE MISCONDUCT' CASE

L.E. Myers Co. asked the U.S. Supreme Court to review a federal court ruling that the company has the burden of proving its defense of "unforeseeable employee misconduct" in an Occupational Safety and Health Administration enforcement action.

The company filed its petition for certiorari in *L.E. Myers Co. v. Brock* (No. 87-246) on Aug. 11.

The case involved a worker's fatal electrocution after a fall from a ladder. Last May, the U.S. Court of Appeals for the Sixth Circuit rejected Myers' claim that it did not violate the standard requiring the use of personal protective equipment because it had a safety rule requiring employees to use safety belts while working at elevated locations, and that workers' failure to use belts was unforeseeable (Current Report, May 27, p. 1453; 13 OSHC 1289).