

WV-0220#32

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

PLAINTIFF'S EXHIBIT

UC-3537

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on 3/26/87. His exposure averaged <0.0022 fibers/cc during a sampling period of 57 minutes, 10:27 to 11:24, while patching exposed insulation on T-3 methyl chloride tank in Monomers. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore disposable coveralls, gloves, and an airline respirator.


T. L. Galtie

TLG/le✓
5611A
cc: Medical

G. W. Wulfert
Sample No. Z-9132

UCC 007245

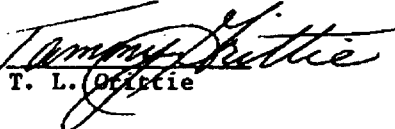
UV-0720 #33

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on 4/24/87. His exposure averaged < 0.004 f/cc during a sampling period of 56 minutes, 9:54 to 10:50, while operating K-57. His exposure was less than the PEL of 0.133 f/cc, TWA 12 hours, for asbestos. wore disposable coveralls and a half facepiece HEPA filter dual cartridge respirator.


T. L. Driftie

TLG/le ✓
5620A

cc: Medical
IH
D. L. Mullins

Sample: Z-9207

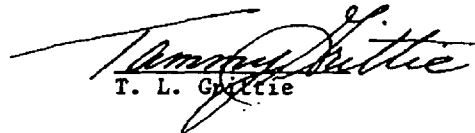
WV-0220 #34

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on 3/26/87. His exposure averaged 0.03 fibers/cc during a sampling period of 54 minutes, 10:30 to 11:24, while patching exposed insulation on T-3 methyl chloride tank in Monomers. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore disposable coveralls, gloves and an airline respirator.


T. L. Gattie

TLG/le
5612A
cc: Medical
IH

G. W. Wulfert

Sample: Z-9133

WV-0220 #35

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

, was monitored for exposure to asbestos on 3/26/87. His exposure averaged < 0.02 fibers/cc during a sampling period of 56 minutes, 10:28 to 11:24, while patching exposed insulation on T-3 methyl chloride tank in Monomers. His exposure was less than the PEL of 0.20 f/cc, TWA 8 hours, for asbestos. wore disposable coveralls, gloves, and an airline respirator.


T. L. Grittie

TLG/16
5613A

cc: Medical
IH

G. W. Wulfert
Sample: Z-9134

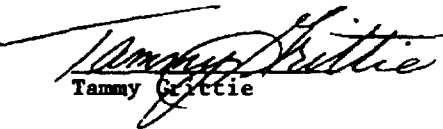
UCC 007248

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #56
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 2/13/87. His exposure averaged 0.22 fibers/cc during a sampling period of 182 minutes, 9:50 to 12:52, while stripping asbestos insulation from piping associated with Polymers I tanks behind the 8" mill area. His exposure was 0.22 fibers/cc of air which is above the 8 hour time weighted average permissible exposure limit of 0.2 fibers/cc of air. The glove bag method of removal was utilized as well as wet methods within the bag wore protective clothing and a half facepiece respirator with dual HEPA filter cartridges.


Tammy Gruttie

TLC/le✓
5595A
cc:

M. Patel
S. Walker
380 IH

Sample Z-8969

UCC 007249

WV-0220 #37

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on 2/13/87. His exposure averaged 0.09 fibers/cc during a sampling period of 180 minutes, 9:52 to 12:52, while stripping asbestos insulation from piping associated with Poly I tanks behind the 8" mill area. His exposure was less than the PEL of 0.2 fibers/cc, TWA 8 hours, for asbestos. The glove bag method of removal was utilized as well as wet methods within the bag.

wore protective clothing and a half face piece respirator with dual HEPA filter cartridges.


Tammy Grittie

TLG/le✓
5597A
cc:

M. Patel
S. Walker
380 IH

Sample Z-8970

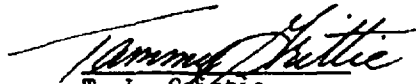
WV-0220 #38

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on
4/23/87. His exposure averaged 0.10 fibers/cc during a sampling period of 300
minutes, 13:00 to 18:00, while cleaning up asbestos-containing debris in the
Poly II kettlehouse in the K-57 area. His exposure was less than the PEL of
0.20 fibers/cc, TWA 8 hours, for asbestos wore disposable coveralls
and an airline respirator.


T. L. Giffie

TLG/le✓
5621A
cc: Medical
IH

G. W. Wulfert
Sample: Z-9220

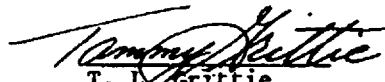
WV-0220 #39

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

, was monitored for exposure to asbestos on 4/30/87. His exposure averaged 0.14 fibers/cc during a sampling period of 40 minutes, 12:54 to 13:34, while stripping insulation from T-111 in Silanes Tank Farm 4. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore disposable protective clothing and an airline respirator. A glove bag was being used.


T. D. Grittie

TLG/lel✓
5614A
cc: Medical
IH

G. W. Wulfert
Sample: Z-9225

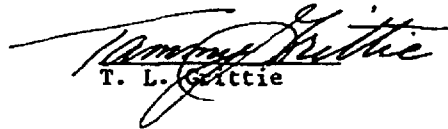
UV-0220 #40

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on
4/30/87. His exposure averaged <0.03 fibers/cc during a sampling period of
37 minutes, 12:57 to 13:34, while stripping insulation from T-111 in Silanes
Tank Farm 4. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for
asbestos wore disposable protective clothing and an airline
respirator. A glove bag was being used.


T. L. Gattie

TLG/le✓
5615A
cc: Medical
IH

G. W. Wulfert
Sample: Z-9226

UCC 007253

UV-0220 #41

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 2/15/87. His exposure averaged <0.02 fibers/cc during a sampling period of 65 minutes, 13:15 to 14:20, while removing insulation using a glove bag in the Emulsion Building. His exposure was less than the PEL of 0.2 fibers/cc, TWA 8 hours, for asbestos wore disposable protective clothing and an airline respirator.


T. L. Griffee

TLG/le✓
5604A
cc: Medical
IH

G. W. Wulfert
Sample Z-9050

UCC 007254

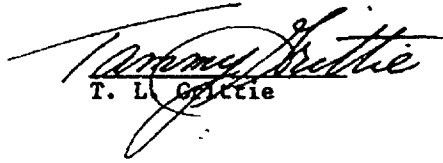
WV-0220#42

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on 2/15/87. His exposure averaged 0.09 fibers/cc during a sampling period of 63 minutes, 13:17 to 14:20, while removing insulation in the Emulsion Building using a glove bag. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore disposable protective clothing and an airline respirator.


T. L. Galtie

TLG/le
5603A ✓
cc: Medical
IH

G. W. Wulfert
Sample: Z-9051

UCC 007255

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

UV-0220#45

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 2/17/87. His exposure averaged 0.68 fibers/cc during a sampling period of 60 minutes, 10:30 to 11:30, while removing insulation within a negative pressure enclosure erected in the emulsion building. His exposure was greater than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. He wore disposable protective clothing and an airline respirator. The fiber concentration during the sampling period is well within the limitations of an airline respirator.


T. L. Wittie

TLG/le ✓
5602A
cc: Medical
IH

G. W. Wulfert
Sample: Z-9052

WV-0220#44

UNION CARBIDE CORPORATION

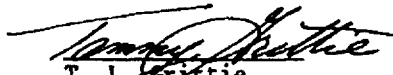
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE PLANT

was monitored for exposure to asbestos on 4/21/87. His exposure averaged <0.05 fibers/cc during a sampling period of 23 minutes, 11:07 to 11:30, while stripping asbestos using a glove bag on the 2nd level of the Rectification Tower in Silanes.

His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore disposable coveralls and an airline respirator.


T. L. Grittie

TLG/le✓

5606A

cc: Medical

IH

G. W. Wulfert

Sample: Z-9208

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0720#85
Sistersville Plant

MEMORANDUM TO: C. A. Correll
K. B. Purinton
G. W. Wulfert
Mechanic Foremen
Pipefitter Foremen

FROM: T. L. Grittie

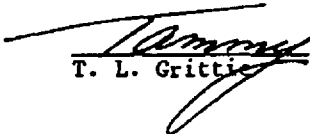
DATE: May 5, 1987.

SUBJECT: Monitoring Asbestos Exposure During Gasket Removal

COPY TO: D. A. Boggs
E. L. Doerflein
C. R. McMillan

To comply with the new asbestos standard, it is necessary to monitor all employees who could potentially be exposed to asbestos. An exposure potential exists for those craftsmen who remove asbestos gaskets. From the small amount of historical I.H. data that we have, exposure should be inconsequential. Our data base is, however, not large enough to statistically support this premise. Therefore I must ask that you or your craftsman notify I.H. when asbestos gaskets are being removed. Please provide as much lead time as possible so that we will have monitoring equipment available and won't cause any delay in the work. Please call either myself (ext. 521) or Chuck McMillan (ext. 475).

Thank you for your cooperation.


T. L. Grittie

TLG/le
5523A

UCC 007258

UNION CARBIDE CORPORATION
Specialty Chemicals

UW-0720 #86
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 2/11/87. His exposure averaged <0.005 f/cc during a sampling period of 332 minutes, 9:15 to 15:37, while removing roofing (part transite) from the Polymers I Kettle House. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore full body covering and a Comfo II respirator with HEPA filters.


T. L. Grittie

TLG/le
5474A
cc:

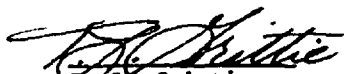
J. Boley
IH
Medical

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220#47
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 2/11/87. His exposure averaged 0.05 fibers/cc during a sampling period of 333 minutes, 9:13 to 15:36, while removing roofing (part transite) from the Polymers I Kettlehouse. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore full body covering and a Comfo II respirator with HEPA filters.


T. L. Grittie

TLG/le
5473A
cc:

J. Boley
IH
Medical

UCC 007260

100-00000 #48

INDUSTRIAL HYGIENE RESULTS

DATE: April 7, 1987.

PROJECT: Monitor contractors for exposure to asbestos while working on roof, part of which was transite. Polymers I, Kettlehouse roof.

DATE OF SAMPLES: 2/11/87

<u>SAMPLE</u>	<u>TYPE</u>	<u>TIME START</u>	<u>TIME STOP</u>	<u>RESPIRATOR?</u>	<u>LOCATION</u>	<u>RESULTS</u>
Z-8965	A	8:41	10:38	N/A	Top of T-234	< 0.001 f/cc
Z-8966	BZ	9:13	15:36	Comfo II HEPA filter	Poly I Kettle- house roof	0.05 f/cc
Z-8967	BZ	9:15	15:37	Comfo II HEPA filter	Poly Kettle- house roof	< 0.005 f/cc
Z-8968	A	8:32	15:39	N/A	Kettle- house roof	< 0.003 f/cc

A = Area
BZ = Breathing Zone

DISCUSSION: All samples were below the OSHA PEL TWA₈ of 0.2 fibers/cc as well as below the action level of 0.1 fibers/cc.

RECOMMENDATIONS: Share this information with both contractor and area personnel. Request I.H. monitoring when working with transite.

METHOD OF ANALYSIS: Microscopy

DATA AND REPORT BY: C. R. McMillan/T. L. Grittie

ANALYSIS BY: JHM Labs

COPY TO: D. G. Beddow, D. A. Boggs, J. E. Boley, E. L. Doerflein, T. K. Ioannou, F. M. Plechaty, L. P. Smith, W. V. Summers, G. W. Wulfert


T. L. Grittie

TLG/le
5472A

UCC 007261

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #49
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on
2/4/87. Her exposure averaged 40.008 f/cc during a sampling period of 159
minutes, 13:33 to 16:12, while operating in the emulsion building. Her
exposure was less than the PEL of 0.133 f/cc, TWA 12 hours, for asbestos.


T. L. Grittie

TLG/le
5466A

cc:

R. Lechlitter
IH
Medical

UCC 007262

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #50
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/29/87. His exposure averaged 0.021 f/cc during a sampling period of 54 minutes, 14:36 to 15:30, while de-insulating R-6 in the Reactor Tower in Silanes. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. He wore full body, disposable coveralls and an airline respirator. A negative pressure enclosure was built around the reactor during the de-insulation.


T. L. Grittie

TLG/le
5462A
cc:

G. W. Wulfert
IH
Medical

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #51
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONNEL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on
2/10/87. His exposure averaged 0.52 f/cc during a sampling period of 53
minutes, 10:32 to 11:21, while deinsulating R-2 in the Reactor Tower of
Silanes. This concentration is above the OSHA PEL TWAg of 0.2 f/cc. Full
body covering and airline respiratory protection were worn by


T. K. Crittice

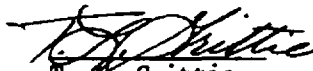
TLG/le
5469A
cc:

G. W. Wulfert
IH
Medical

UCC 007264

INDUSTRIAL HYGIENE
PERSONNEL MONITORING REPORT
UCC, SISTERSVILLE

-----, was monitored for exposure to asbestos on 2/10/87. His exposure averaged 0.31 f/cc during a sampling period of 57 minutes, 10:30 to 11:23, while deinsulating R-2 in the Reactor Tower of Silanes. His exposure was higher than the OSHA PEL of 0.2 f/cc during the 57 minute monitoring period. It is not, however expected that this concentration would be maintained over the full 8-hour day. ----- wore full body covering and an airline respirator.


T. E. Grittie

TLG/le
5470A
cc:

G. W. Wulfert
Medical
IH

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #53
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on
1/20/87. His exposure averaged 0.074 fibers/cc during a sampling period of 65
minutes, 14:38 to 15:43, while removing transite from the roof of Polymers I
Kettlehouse. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for
asbestos. wore disposable coveralls and a Comfo II respirator with
HEPA filters.


F. D. Grittie

TLG/le
cc:

J. Boley
IH
Medical

5456A

WV-0270 #54

UNION CARBIDE CORPORATION
Specialty Chemicals

Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/16/87. His exposure averaged 0.035 fiber/cc during a sampling period of 64 minutes, 14:25 to 15:29, while removing asbestos gaskets. His exposure was less than the PEL of 0.20 f/cc, TWA 8 hours, for asbestos.


T. L. Grittie

TLG/le
5455A
cc:

G. W. Wulfert
IH
Medical

UCC 007267

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220#55
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/20/87. His exposure averaged 0.160 f/cc during a sampling period of 62 minutes, 14:40 to 15:42, while removing transite from the roof of the Polymers I kettlehouse. His exposure was less than the PEL of 0.20 PPM, TWA 8 hours, for asbestos. wore disposable coveralls and a Comfo II respirator with HEPA filters.


T. L. Grittie

TLG/le
5457A
cc:

J. E. Boley
IH
Medical

UNION CARBIDE CORPORATION
Specialty Chemicals

WU-0270#56
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/22/87. His exposure averaged <0.003 f/cc during a sampling period of 375 minutes, 8:45 to 15:00, while operating K-40. His exposure was less than the PEL of 0.133 f/cc, TWA 12 hours, for asbestos.


T. L. Critt

TLG/le
5460A
cc:

J. E. Boley
IH
Medical

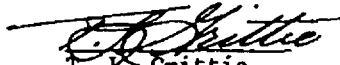
UCC 007269

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0220 #57
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on 1/29/87. His exposure averaged 0.109 f/cc during a sampling period of 67 minutes, 14:35 to 15:42, while deinsulating R-6 in the Reactor Tower in Silanes. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore full body, disposable clothing and an airline respirator. A negative pressure enclosure was built around the reactor during the deinsulation.


T. E. Critt

TLG/le
5463A
cc:

G. W. Wulfert
IH
Medical

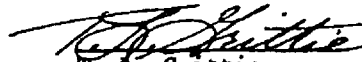
UCC 007270

UNION CARBIDE CORPORATION
Specialty Chemicals

WV 0220758
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/30/87. His exposure averaged 0.129 f/cc during a sampling period of 47 minutes, 12:53 to 13:40, while deinsulating R-6 in the Reactor Tower of Silanes. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore full body, disposable coveralls and an airline respirator. A negative pressure enclosure was built around the reactor during the deinsulation.


T. D. Grittie

TLG/le
5464A

cc: ..
G. W. Wulfert
IH
Medical

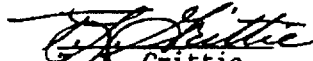
UCC 007271

UNION CARBIDE CORPORATION
Specialty Chemicals

11-0220-59
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

was monitored for exposure to asbestos on 1/30/87. His exposure averaged 0.026 f/cc during a sampling period of 43 minutes, 12:57 to 13:40, while deinsulating R-6 of the Reactor Tower of Silanes. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. wore full body, disposable coveralls and an airline respirator. A negative pressure enclosure was built around the reactor during the deinsulation.


R. K. Critt

TLG/le
5465A
cc:

G. W. Wulfert
IH
Medical

UNION CARBIDE CORPORATION
Specialty Chemicals

11/10/87 10:00
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONNEL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on
1/20/87. His exposure averaged <0.032 f/cc during a sampling period of 34
minutes, 10:33 to 11:01, while removing asbestos from a heater in the fluids
lab. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for
asbestos.


T. L. Grittie

TLG/le
5453A

cc:

G. W. Wulfert
IH
Medical

UCC 007273

UNION CARBIDE CORPORATION
Specialty Chemicals

111-07220 #61
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on 1/16/87. His exposure averaged 0.158 f/cc during a sampling period of 56 minutes, 10:34 to 11:30, while removing asbestos from K-36 system using a glove bag. His exposure was less than the PEL of 0.2 f/cc, TWA 8 hours, for asbestos. If this exposure level were maintained over the entire 8-hour day the results would be above the action level. Airline respirators were worn by all of the insulators.


T. L. Grittie

TLG/le
5445A
cc: Medical
IH

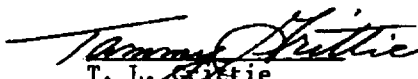
G. W. Wulfert

UNION CARBIDE CORPORATION
Specialty Chemicals

WV-0270#62
Sistersville Plant

INDUSTRIAL HYGIENE
PERSONAL MONITORING REPORT
UCC, SISTERSVILLE

, was monitored for exposure to asbestos on 1/16/87. His exposure averaged 0.272 f/cc during a sampling period of 58 minutes, 14:31 to 15:29, while removing asbestos from K-36 system using a glove bag. If this exposure level were maintained over the entire 8-hour day the results would be above the OSHA PEL, TWA 8 hours. An airline respirator was worn during the entire 58 minute monitoring period.


T. L. Gietie

TLG/le

5448A

cc: Medical
IH

G. W. Wulfert