



Wey Thanks -
GLW
INTERNAL CORRESPONDENCE

23
(a)

SILICONES & URETHANE INTERMEDIATES

P. O. BOX 8361, SOUTH CHARLESTON, WEST VIRGINIA 25303

To (Name)	B. H. Avashia, M.D.	Date	March 30, 1983
Division	R. E. Crum	Originating Dept.	Safety & Health
Location	C. E. Fry	Subject	<u>Asbestos-Related Medical Issues</u>
	R. W. Holland, M.D.		
	A. A. Lang, M.D.		
	H. C. Lewinsohn, M.D.		
	L. E. McClure		
	J. B. Mickey		
	F. M. Plechaty, R.N.		
	G. L. Wharton		

Copies:

- R. N. Bates
- A. W. Boyd
- L. F. Doyle
- T. E. Lawrence
- T. A. Lincoln, M.D.
- R. G. Link
- D. G. Moshier

This is an attempt to summarize the results of our South Charleston meeting on March 29th to discuss asbestos-related medical issues.

- Following an excellent review of the health effects of exposure to asbestos by Dr. Lewinsohn, Dr. Holland reviewed South Charleston's process of chest X-ray review and asbestos-related abnormality reporting (copy attached). It was concluded that the steps taken therein were adequate and proper. It was suggested that initial recording of asbestos-related abnormalities on the OSHA 200 Log should take place within five days of the initial diagnosis plus evidence of work exposure, rather than waiting for confirmatory diagnosis. The log could be subsequently changed if further diagnosis did not confirm the initial findings.
- Sistersville will consider using the same radiology service employed by South Charleston and the other KV locations.
- Dr. Lewinsohn agreed to furnish both locations with recommended diagnostic terminology for discussion and U/A with the contract radiology service. Dr. Holland will be the contact to convey this information to the service.
- There was agreement that asbestos-related abnormalities should not be generalized on the OSHA 200 Log as "asbestosis" unless the diagnosis was specifically asbestosis. Other manifestations of asbestos exposure are to be logged as diagnosed together with an appropriate reference to asbestos as the causative factor.

UCC 013273

March 30, 1983

- South Charleston will review its recorded cases of "asbestosis" and revise the OSHA 200 Log as appropriate to reflect the specific diagnoses involved.
- John Cornell will review the results of the meeting with the S/H Managers of the other petrochemical divisions for their consideration and action as they deem appropriate.

I wish to thank all the meeting attendees for their active participation, particularly Dr. Lang and Lewinsohn for their technical advice and service.

Very truly yours,


J. S. Cornell

JSC:ke
Ext. 2618

Attachment

SOUTH CHARLESTON CHEST RADIOGRAPH PROTOCOL

- ① X-RAY OF CHEST
- ② X-RAY READ BY RADIOLOGY SERVICE. IF ABNORMALITIES SUGGESTIVE OF ASBESTOS EXPOSURE ARE REPORTED, X-RAY SENT BACK FOR EVALUATION BY "B READER".
- ③ IF "B READER" CONCURS THAT ABNORMALITIES APPEAR TO BE ASBESTOS EXPOSURE-RELATED, EMPLOYEE IS INTERVIEWED TO OBTAIN EXPOSURE HISTORY.
- ④ IF HISTORY OF ASBESTOS EXPOSURE IS OBTAINED, X-RAY IS SENT TO INTERNAL MEDICINE SPECIALIST IN THE FIELD OF PULMONARY DISEASES.
- ⑤ IF INTERNAL MEDICINE SPECIALIST CONCURS IN DIAGNOSIS OF ASBESTOS-RELATED ABNORMALITIES:
 - EMPLOYEE IS INFORMED OF MEDICAL DIAGNOSIS
 - INJURY REPORT IS FILED AND BROUGHT TO MANAGEMENT ATTENTION FOR RECORDING OF ILLNESS
- ⑥ RECORDING OF ILLNESS TAKES PLACE ONLY IF:
 - B READER AND PULMONARY DISEASE SPECIALIST CONCUR ON DIAGNOSIS, AND
 - EMPLOYEE HAS HISTORY OF ASBESTOS EXPOSURE

23(b)

**UNION
CARBIDE**

INTERNAL CORRESPONDENCE

SILICONES & URETHANE INTERMEDIATES

P. O. BOX 8361, SOUTH CHARLESTON, WEST VIRGINIA 25303

To (Name) C. E. Fry
 Division R. W. Holland, M.D.
 Location A. A. Lang, M.D.
 H. C. Lewinsohn, M.D.
 L. E. McClure
 J. B. Mickey
 A. G. Olds *Art Olds*
 F. M. Plechaty, R.N.

Date March 17, 1983

Originating Dept. Safety & Health

Subject Asbestos-Related Medical Issues

Copies: R. N. Bates
 A. W. Boyd
 L. F. Doyle
 T. E. Lawrence
 T. A. Lincoln, M.D.
 R. G. Link
 D. G. Moshier

I would like to convene a meeting of the addressees at South Charleston, Building 3005-228 at 10:00 a.m. on Tuesday, March 29th for the purpose of discussing asbestos-related medical issues. I hope that Art Olds' replacement will be able to attend, as well as Sistersville's contract physician, Dr. Boone.

It is my expectation that together, with technical assistance from Drs. Lewinsohn and Lang, we can develop agreement on procedures to be followed at our Division's two major plants with respect to the diagnosis and reporting of asbestos-related illnesses. Such procedures may then be reviewed by Location and Divisional management for their approval and adoption at all S&UI facilities.

Dr. Holland at South Charleston has developed and has been following certain practices with respect to the diagnosis of asbestos-related disorders which seem to be adequate and appropriate. I would like to have us review these practices and assess their applicability to Sistersville and other S&UI locations.

Our discussion should include the following elements:

1. Review by Dr. Holland of current diagnostic practices at South Charleston. What is normal course of X-Ray reviews, what resources are employed, what decision-making process is followed in determining that an asbestos-related illness is to be reported?
2. Are South Charleston's diagnostic practices and resource employment appropriate for use at Sistersville and other S&UI locations? What amendments, if any, can be suggested?
3. What terminology is presently used in reporting asbestos-related disorders? What terminology should be employed to be medically accurate as well as supportable from an ER viewpoint? Dr. Lewinsohn will propose standardized reporting terminology for our consideration.
4. In conclusion, what practices or procedures related to the diagnosis and reporting of asbestos-related illnesses should be presented to our management for review and approval for general use within the Division?

UCC 013276

Bill -
 Have you been
 following asbestos?
 Do you see any need
 for you to attend?
 Charlie

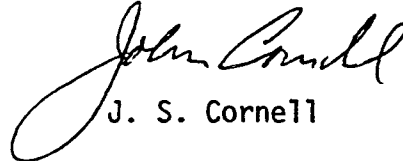
CKW) both
 CEF) attended

Yes/No
 Issues appear to be
 Medical - ER related. Those
 aspects for which I am responsible
 (hazards/handling/regulations) are not being considered
 in the meeting
 way

Asbestos, its hazards, and the variety of regulatory requirements attending the handling of this material are a very large and complex set of issues for discussion. Covering all the issues related to asbestos is beyond the scope of the proposed meeting. My hope is that we can deal effectively with the manner in which we should diagnose and report asbestos-related illnesses, leaving other asbestos issues to be dealt with separately.

We should be done with our meeting by lunchtime or early afternoon. I will arrange to have lunch brought in so that we can conclude our discussion as early as is possible.

Very truly yours,



J. S. Cornell

JSC:ke
Ext. 2618

Thickening
pleural plaques must be reported to OSHA
if they can be asbestos related.

History of adequate exposure.
OSHA log 200.

Progressive - X-ray will show progressive.
No matter how you find out, you have to
report abnormality. If later you rule out
asbestos, you can draw line thru you entry
in OSHA log 200.

Asbestosis: ^{membrane} pleura on lung
affects lung - not pleura. pulmonary fibrosis.

A disappearing disease due to much improved
handling method and reduced use of asbestos.

Asbestos still used in some vehicle brake
linings and clutches.

Latent period ¹⁰⁻²⁰ ~~30-40~~ years: What is overexposed to
retired workers. Follow up going on periodic basis.

Lung cancer ^{15-30 years} - increase risk. Not a specific cancer.

Smoking greatly increase the risk.

Mesothelioma - very rare - not only cause.

25 years +

UCC 013278

Dr. Holland describes 514. Advised to go to another

Dr. & get confirmatory X-ray at employer expense.

Do over 514 procedures

Work history - reconstruct work history

Progressive

Decreasing lung function

"At risk group" by law is to be followed annually.

We should get terminology straight and correct the present records.

We ⁵¹⁴ now call this thing "asbestosis"

Should call much of it "plural plaques - suspect asbestos related." Of course if it's really "asbestosis,"

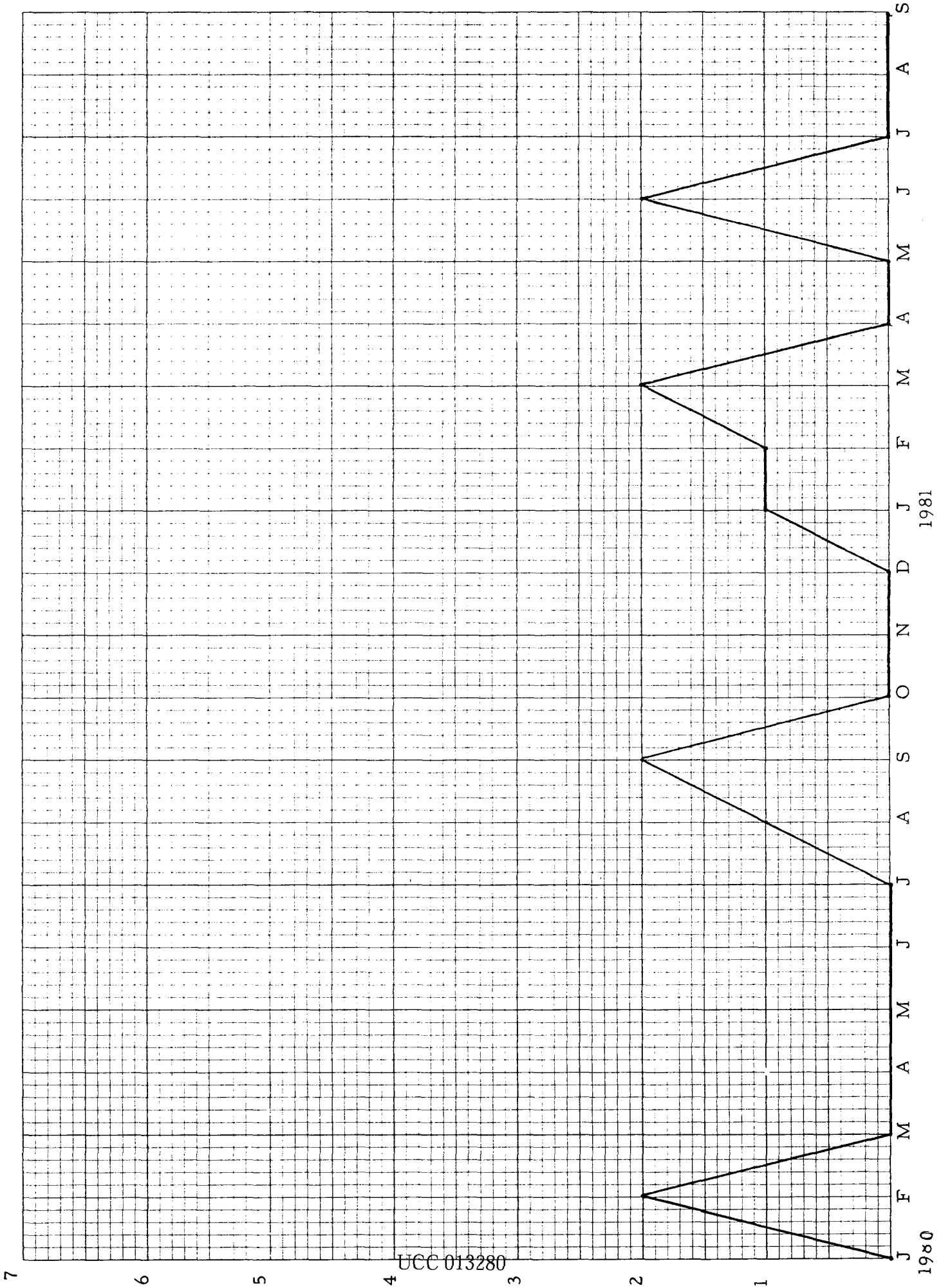
say so.

Remember any medical report which uses these words or others relating x-ray change & asbestos stimulates the inclusion of the case on the OSHA-200 form.

Both Sistersville + 380 will use same local radiologist group. ~~PTO~~ Tarrytown?

EDH - Will get set of rating scales of x-rays from Levinson & will work with local radiol to get their agreement to evaluate this way.

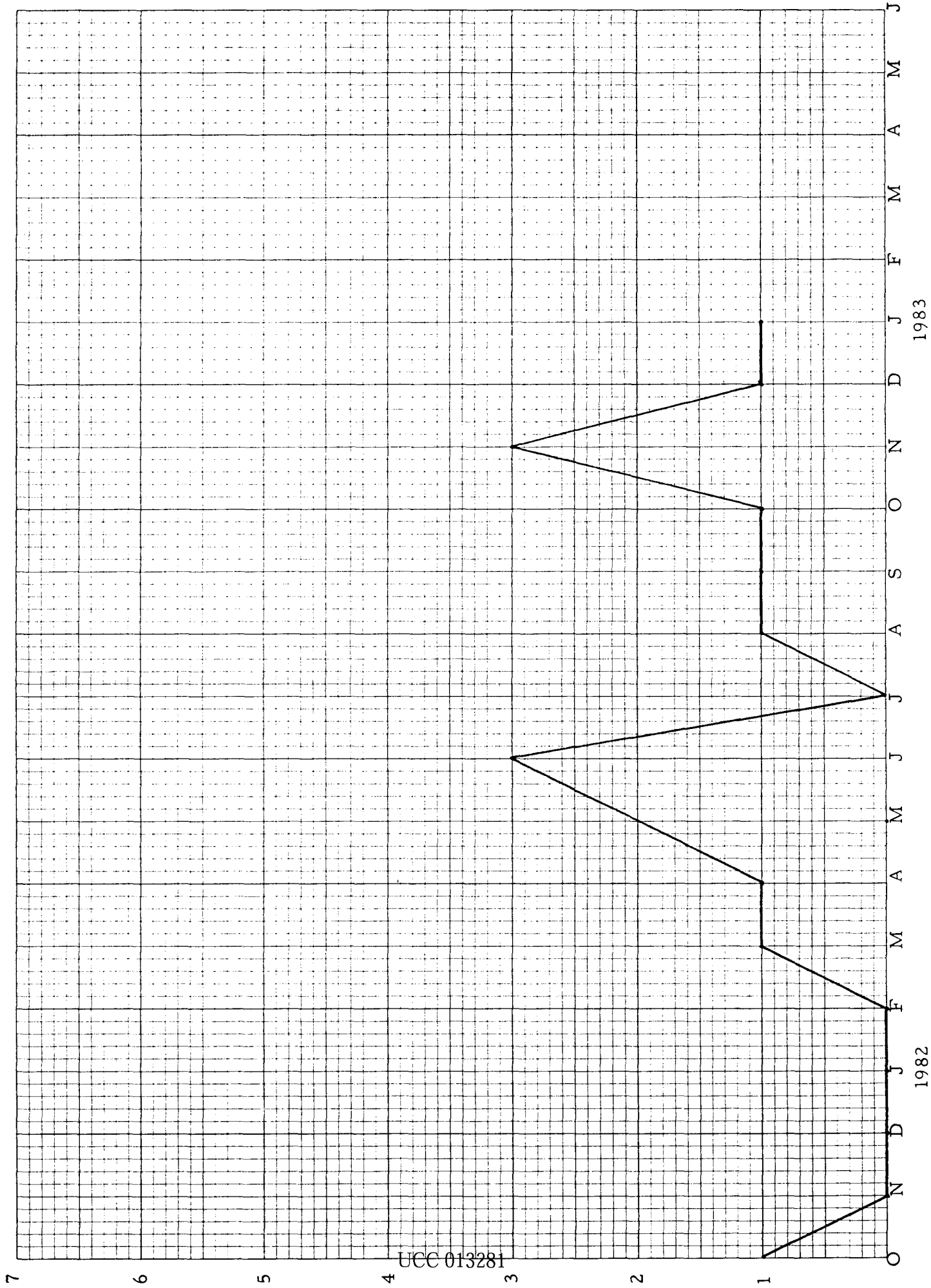
of Asbestosis Cases / Month



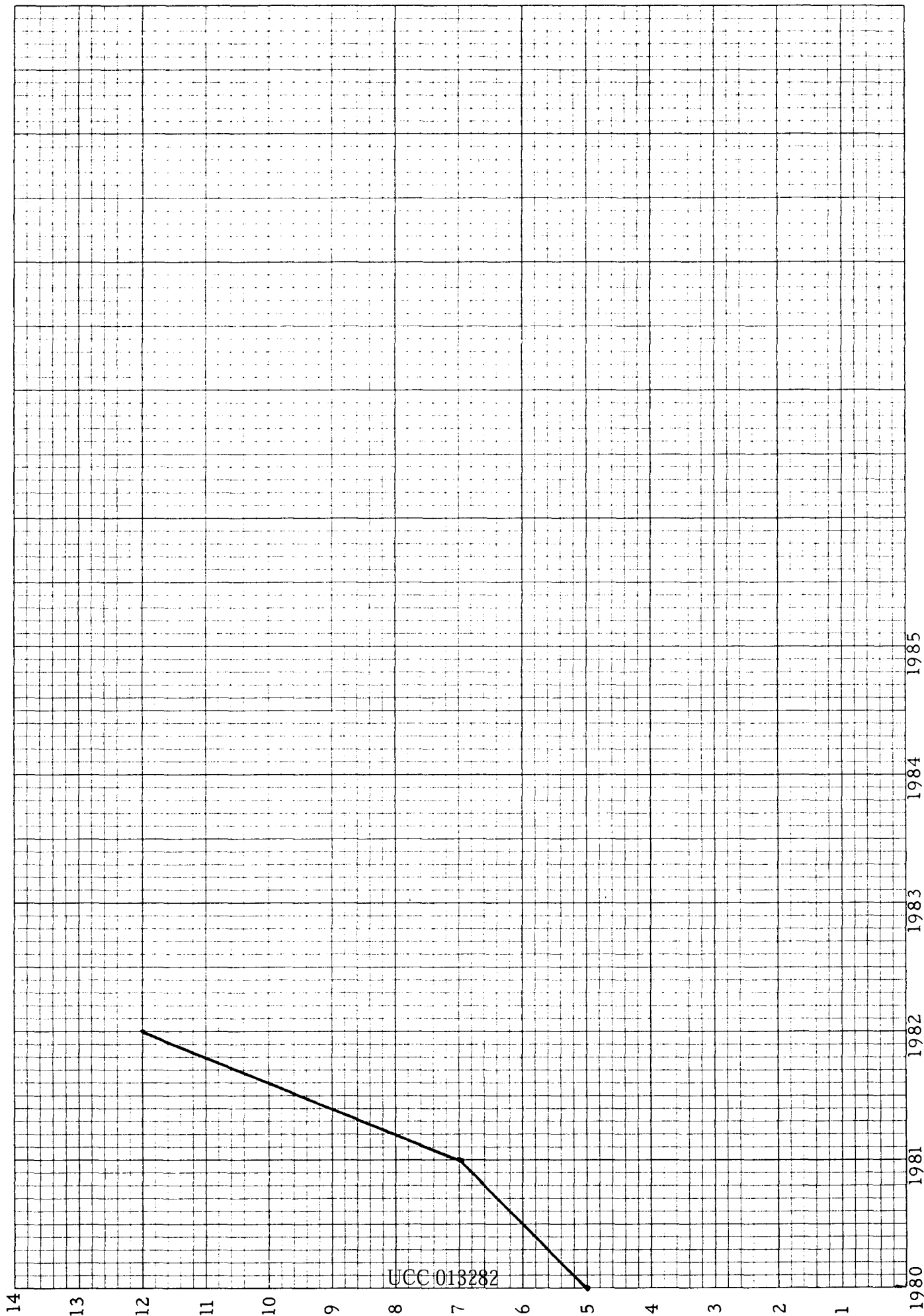
DIETZGEN CORPORATION
MADE IN U.S.A.

NO. 341-10 DIETZGEN GRAPH PAPER
10 X 10 PER INCH

of Asbestosis Cases/Month



of Asbestosis Cases/Year



UCC 013282

Asbestos

what is heavy exposure?
monitor for specific jobs
didn't had as much material

- ① Putting on metal covering
(on top of asbestos)
- ② Stripping ^{asbestos} covering (down to metal)
- ③ Stripping roofing paper off asbestos covering

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CARBIDE**

INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS

SOUTH CHARLESTON PLANT P. O. BOX 8004, SOUTH CHARLESTON, W. VA. 25303

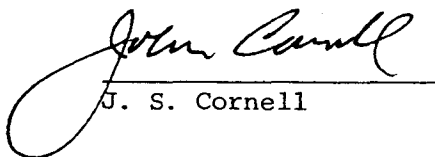
To (Name) MAILING LISTS: A-1 thru A-6 Date May 1, 1980
Division
Location
Original to Dept.
Anticipated letter date
Copy to Subject Main Steam Header
Reinsulation Project

The Maintenance Department has recently reorganized and strengthened the project crew which has been resinsulating the plant's main 30- and 180-pound steam headers. This important energy conservation project was initiated last year, and is scheduled for completion prior to the end of 1980.

Mr. W. B. Spurlock has been temporarily upgraded to Maintenance Supervisor to lead the insulation project crew, which is presently working in Maintenance Area 2. Bill is a 30-year veteran of the Insulation Craft, whose most recent assignment has been in Maintenance Area 3. He will report to Mr. S. W. Kornegay during the period in which the project crew remains in Area 2.

Also, two insulators have been drawn from each of the three Geographic Maintenance Areas to restaff the project crew, which has recently been reduced through attrition in several forms.

We are confident that these moves to provide the project team with full-time supervision and additional craft skills will assure the effective, timely completion of this key project in the plant's Energy Conservation Program.


J. S. Cornell

JSC:mb



INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS • SO. CHARLESTON PLANT • P. O. BOX 8004, SO. CHARLESTON, WEST VIRGINIA 25303

To (Name) J. S. Cornell

Date May 2, 1980

Division Building 309-2/514

Originating Dept.

Location

Answering letter date

Copy to Area Maintenance Superintendents

Subject Asbestos Screening Test

R. N. Bates

C. W. Carman

W. A. Garrett

R. W. Holland, Jr., M.D.

G. F. Hurley

L. R. Noble

L. W. Phair

R. A. Ream

L. A. Roebke

L. C. Stewart

W. B. Troutman

G. L. Wharton ✓

A test method published by NIOSH, Center for Disease Control, Cincinnati, Ohio, for determining probable presence of asbestos has been successfully performed on insulation samples by the Plant Laboratory.

The colorimetric test is applicable to detection of magnesium (II) and iron (II) found in asbestos. Acid/glycerine wash procedures are attempted in case of positive tests to eliminate possible, interfering, soluble contaminants not attributable to asbestos; e.g., iron oxide (rust).

The test method should prove to be a valuable tool here in the plant, even though it may be subject to occasional "false positive" indication. Because due to general uncertainty about old/existing insulation most of it must be treated as if it contains asbestos anyway. This is very costly and has perhaps contributed, to some degree, to employee discontent when insulation stripping work must be performed by either the Maintenance Department or by Design and Construction. Demolition work is another potential asbestos exposure source to be considered.

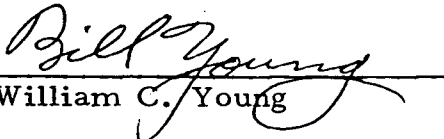
Incidentally, NIOSH reports no "false negative" tests among some 200-odd field samples tested.

The Plant Safety Department is now ready to provide "on-site," field testing service. In the event of negative test results (absence of asbestos), work may proceed immediately without need of following OSHA/Plant 514 asbestos-insulation handling procedures. Positive test results, on the other hand, indicate possible presence of asbestos and present two options:

- (1) proceed with work following mandatory procedures, or
- (2) await further screening of representative samples by the Plant Laboratory which subsequently may permit avoiding costly procedures, e.g., initial positive test due to interfering contaminant(s).

To avoid possible work delays, timely field testing requests will be necessary. For example, samples requiring further screening in the Laboratory may take 2-3 additional days time, depending upon Laboratory daily work loads, etc.

Please call me on x-2434 if there are any questions or to schedule field testing of insulation for the possible presence of asbestos.


William C. Young

WCY:bl



INTERNAL CORRESPONDENCE

CHEMICALS AND PLASTICS · SO. CHARLESTON PLANT · P. O. BOX 8004, SO. CHARLESTON, WEST VIRGINIA 25304

To (Name) Mailing List A-8

Date October 5, 1979

cc: J. C. Nelson
R. G. Harmon
R. E. McEldowney
D. A. Baehl
B. Y. Lette
K. O. Hopkins
W. V. Filipek
C. W. Carman
R. G. Hull, Jr.
R. A. Ream

Originating Dept.

Answering letter date

Subject Asbestos Handling

Within the last few years, asbestos has been recognized as a serious health hazard. One of the effects of breathing asbestos fibers is "asbestosis" which develops over a long period of time. Asbestos fibers become deposited in the lungs and produce scarring of the tissues so the lungs cannot perform their proper function. People who breathe dust containing asbestos fibers can develop lung cancer, which could take as long as 20 to 30 years to appear.

To ensure that plant employees are being properly protected, the Maintenance Department reviewed their procedures for handling of asbestos with the advice and service of the Safety and Environmental Protection Departments. As a result of the complete review, the attached procedure now exists that, when followed, should keep us in compliance with OSHA and environmental standards.

The plant's greatest problem with asbestos is when old asbestos is removed from lines or equipment. The Maintenance Department is not the only function operating within the plant that gets involved with the removal of old asbestos. UCC Construction and operating/distribution functions will from time to time remove asbestos. It is important that employees not be over-exposed, and that we have adequate exposure measurements to prove compliance with OSHA standards.

It is suggested that you read the attached procedure and call Mr. W. C. Young of the Safety Department if you have any questions concerning the procedure.

William B. Troutman
Safety Director

WBT:bl

Attachment

UCC 013287

XVIII. HEALTH AND SAFETY CONSIDERATIONS FOR ALL CRAFTSPERSONS
IN HANDLING MATERIAL THAT CONTAINS ASBESTOS

(With the intent of Covering every craftsperson
who might come in contact with asbestos)

Understanding a few facts and observing some common sense practices listed below will eliminate the Health Hazards associated with the use of asbestos and will insure the health of all crafts-
persons.

A. Major Concern for Asbestos Health Hazards

In those instances when asbestos fibers are present that are longer than five micrometers, the greatest health hazard exists. If these fibers are inhaled into the respiratory system, they collect in the lung sacs. If the quantities of these fibers are great enough to accumulate through years of continued inhalation, they take up substantial space normally used for air. The way in which asbestos fibers are more harmful than other foreign particles that enter the lung sacs is that they are not dissolved and absorbed into body waste streams to be carried away and discharged from the body as other particles are. They remain in the lung sacs. Membranes then grow around each fiber, resulting in a fibrosis of the lung sacs. Fiber by fiber over the years results in what we term "asbestosis."

B. Normally Asbestos is Not a Major Health Hazard

Under most conditions, asbestos is not normally in fiber form small enough to be airborne in a person's breathing zone and small enough to pass through the nasal filtering system of hair and mucous that filter out all but the very finest fibers. However, it is these small fibers longer than five micrometers entering the lungs that are considered to be the culprits that cause asbestosis.

C. Health Risks Associated with the Use of Asbestos Have Been Greatly Reduced

Risk of harm to craftspersons from the use of asbestos is slight because asbestos-free insulating materials are used exclusively now. Woven asbestos tape and sock has been replaced with woven fiber glass tape and sock in stores. No asbestos tape or sock is to be available from plant stores. Furthermore, previous personal sampling of the breathing zone air of employees indicates that allowable limits are seldom reached even when asbestos fibers are present in any type material or activity provided normal precautions are observed.

XVIII. HEALTH AND SAFETY CONSIDERATIONS FOR ALL CRAFTS-
PERSONS IN HANDLING MATERIAL THAT CONTAINS ASBESTOS

D. Our Concern - The Potential Harm from Existing Insulation
Materials in the South Charleston Plant

The potential harm to employees at the South Charleston plant lies almost exclusively in the removal, cleanup and disposal of existing insulation materials which were applied prior to 1972.

The exposure we are concerned with is the stripping, cleanup, and disposal of old insulation. On piping, any insulation with tar paper weather barrier will most probably contain asbestos fibers. A number of steam-traced lines were insulated with "Unibestos" (trade name) and some of these lines will have either cloth and mastic or metal weather barrier. This material (Unibestos) contains asbestos, is easily recognized and must be handled, stripped off, cleaned up, and disposed of, using full precautions.

Now, we have another concern. A number of our steam lines are in the process of extensive repairs to the weather barrier and replacement of damaged sections of insulation. These will tie into present asbestos contained in pipe covering and will cover existing asbestos contained in insulation. In the future, all this insulation will have to be considered to contain asbestos and precautions taken to eliminate hazards.

Tank covers installed prior to 1972 will be treated as though they also contain asbestos and all precautions will be taken during stripping, cleanup, and disposal.

Old steam trap lines, steam tracers, etc. will have asbestos sock or tape. Should you encounter any of these situations, consider the insulation to contain asbestos and take the necessary precautions.

If you aren't sure of the kind of material you are getting ready to remove, ask your area insulator supervisor or observe all precautions.

E. Protection from Potential is Assured

By following a few precautionary measures as required by OSHA regulation 1910.1001 and using sound judgment, each employee can perform his/her work in a perfectly safe and healthful manner.

XVIII. HEALTH AND SAFETY CONSIDERATIONS FOR ALL CRAFTS-
PERSONS IN HANDLING MATERIAL THAT CONTAINS ASBESTOS

E. Protection from Potential is Assured (continued)

Present OSHA Allowable Limit

During an eight-hour period, the time-weighted average shall not exceed two fibers longer than five micrometers, per cubic centimeter of air.

OSHA Ceiling Concentration

No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of ten fibers, longer than five micrometers, per cubic centimeter of air. Methods of measuring airborne concentrations are spelled out in the OSHA Register, regulation 1910.001 (e).

October 4, 1979

Attachment

MANDATORY PRECAUTIONS AND PROCEDURES TO BE FOLLOWED
WHEN HANDLING AND WORKING WITH MATERIALS CONTAINING ASBESTOS

CHECK LIST

1. Respirators

Shall be worn while removing and cleaning up all insulation, whether asbestos is present or not. Disposable types are allowed if they meet requirements. If upper limits are reached, supplied air respiratory equipment must be used.

2. Work Area Precautions

The work area will be roped off with yellow barricade tape during the removal and cleanup of asbestos-laden insulation. Warning signs to state: ASBESTOS -- AVOID BREATHING DUST -- WEAR PROTECTIVE EQUIPMENT -- DO NOT REMAIN IN AREA UNLESS YOUR WORK REQUIRES IT -- BREATHING ASBESTOS DUST MAY BE HAZARDOUS TO YOUR HEALTH -- must be posted outside each barricaded area to warn an employee desiring to enter the area so he/she can take the necessary protective steps. The barricade tape and warning signs are to remain in place until the job is complete.

If the work is being performed where areas cannot be swept, or above open grating, the work area shall be covered with plastic sheeting or tarpaulins to contain the asbestos-laden insulation. Over grating, this will prevent insulation from filtering through into other work areas and will protect other employees from the asbestos hazards. On slagged areas this will prevent mixing insulation in the slag, made for easier cleanup and not leave insulation residues on the ground.

3. Wet Cleanup

Insofar as practicable, insulation containing asbestos should be wet down before removal, cleanup and disposal to prevent the presence of airborne fibers. If this is not practicable, place plastic sheeting under the job being stripped and mist spray, with water, the removed insulation. Where possible, strip the insulation into labeled plastic bags on the job site (fiber-pacs can be used to support bags until bag is wired closed).

When wet removal, cleanup is impractical due to temperature - below 32°F - location and/or nature of the job, sweeping compound will be applied to the work area during cleanup.

All insulation will be stripped and bagged in the area in which it is removed.

CHECK LIST (continued)4. Disposal

All removed insulation containing asbestos will be placed in dust-proof polyethylene bags, the bags wired closed and caution label attached to caution personnel about the asbestos contents. Bags with caution label on the bag front are being used. Each area insulation caution label on the bag front are being used. Each area insulation supervisor has a supply of these bags. The bagged insulation must be disposed of in landfill. This means we will place the bags in open top dumpsters and deliver to Filmont only, for covering up. Large quantities may be placed wet in a dumpster bed, covered to prevent dust loss, warning labels attached, and delivered to Filmont only and covered with soil.

5. Clothing Storage

Work clothing used by insulators will be stored in separate lockers away from their street clothing. Coveralls will be supplied for jobs where insulation containing asbestos is being removed, cleaned up, and disposed of. Coveralls will be changed each day when the concentration of asbestos fibers may be heavily concentrated. Coveralls should be removed or vacuumed before entering eating facilities or where food is handled.

Vacuums may be used to remove dust from clothing. CAUTION -- at no time will compressed air be used for dusting off skin or clothing.

6. Laundrying

All protective coveralls used by insulators will be placed in dust-proof polyethylene bags, wired closed, and a caution label attached to each bag to alert the laundry employees of the possible asbestos contamination of the contents.

CAUTION -- Used bags are to be disposed of and coveralls returned in clean containers.

7. Monitoring

All jobs of significant size are to be monitored. Safety Department will monitor these jobs with designated equipment for air samples at the employees' breathing air zone. Results will be recorded. One day notice should be given to the Safety Department so equipment can be prepared for the job. Monitoring results will be administered in accordance with Safety/Health Procedure No. 16.

8. EPA Notification

Stripping jobs of insulation containing asbestos must be reported to the plant EP Department (John Soice) for all large-scale jobs. A large-scale job is one where more than 260 linear feet of pipe is to be stripped or a job where more than 160 square feet is to be stripped. Notification must be 20 days in advance so proper notification can be filed with EPA.

9. Medical Records

Will be maintained by the Medical Staff.

Respirators approved for use:

- a) Normal Dust Exposure - 3M Respirator No. 8710
Wilson Respirator No. 1400

Both of the above are of the single use, disposable type.

- b) Heavy Dust Exposure - Type "C" supplied air, continuous flow or pressure-demand type, supplied with full breathing air from breathing air cylinders.

WARNING SIGNS

To State: Asbestos
Dust Hazard
Avoid Breathing Dust
Wear Assigned Protective Equipment
Do Not Remain in Area Unless Your Work Require It
Breathing Asbestos Dust May be Hazardous to Your Health

Warning signs are located in each insulator building and must be used.

CAUTION LABELS

To State: CAUTION - Contains Asbestos Fibers
Avoid Breathing Dust
Breathing Asbestos Dust May Cause
Serious Bodily Harm

Caution tags for polyethylene bags containing discarded asbestos insulation materials and polyethylene bags containing coveralls used by insulators being sent to the laundry are stocked by each insulator supervisor in the three geographic areas. Bags with caution notices printed on the front are now being stocked and will be used.



ENVIRONMENTAL PROTECTION - SOUTH CHARLESTON PLANT

TO: J. R. Soice

DATE: July 6, 1987

cc: J. R. Dement
S. W. Drake
E. D. Southard
B. A. Toler
J. L. Worstell

SUBJECT: ALTERNATE ASBESTOS
DISPOSAL SITE

Seven companies have been solicited for bids for asbestos disposal. The following is a summary of each location:

Browning-Ferris Industries of Ohio, Inc.

Location: Marietta, Ohio
Disposal Price: \$50.00/cubic yard

No further contact has been made with BFI, as closer and less expensive disposal sites were being investigated.

E.R.O. Landfill

Location: Glennwood, West Virginia (Mason County)

A bid was not received from this landfill.

Don's Disposal - Craigs Branch Landfill

Location: Off Edens Fork Exit of I-77 (Kanawha County)
Disposal Price: \$9.38/cubic yard (+ \$125.00/month for each
40 yard bed - rental fee)

The landfill's NPDES permit has expired and DNR is indecisive as to what to do about it. The landfill consistently violated the NPDES permit -- BOD, phenolics, TSS, iron. The landfill's operating permit expires on June 10, 1988; at this time, there are no plans to repermit this site. According to B. S. Saluja of S & S Engineers, Don's Disposal is preparing a new site which should be permitted by June 10, 1988.

The Institute Plant has decided not to use Don's Disposal because of the NPDES permit problems.

Fleming Landfill, Inc.

Location: Mundy Hollow Road - off Route 21 (Kanawha County)
Disposal Price: \$20.00/cubic yard - \$50.00 minimum per load

This site is yet to be inspected. Inspection of this landfill is being coordinated with Lee Patton.

Humphreys Sanitary Landfill

Location: Peterstown, West Virginia (Monroe County)
Disposal Price: \$50.00/cubic yard

No further contact has been made with this company, as closer and less expensive disposal sites were being investigated.

Montgomery Landfill

Location: Montgomery, West Virginia (Fayette County)
Disposal Price: \$18.00/cubic yard

According to DNR inspectors, this landfill will very soon be filled to capacity and the City of Montgomery is already looking for a new site.

An inspection of this site is being coordinated with Lee Patton.

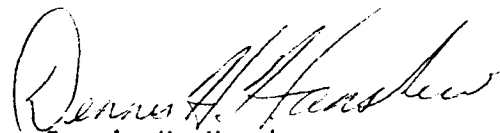
Northwestern Landfill

Location: Parkersburg, West Virginia (Wood County)
Disposal Price: \$5.50/cubic yard

This site was inspected on May 20, 1987, with Lee Patton. The owners, Ed and Tom Graham, are not willing to deposit asbestos wastes in a separate cell as required by DNR. An offer was made to reimburse the landfill for any costs incurred to designate an area of the landfill for asbestos only; however, the owners rejected the offer.

As the company will not follow DNR guidelines, this site cannot be used by UCC.

As of July 1, 1987, B. Toler has no other possible sites available for evaluation. I will inform you of the results of the site inspections for Montgomery and Fleming Landfills.


Dennis H. Hanshew

DHH/rls
0116H

SOUTH CHARLESTON PLANT



ENVIRONMENTAL
PROTECTION

UNION
CARBIDE

Bldg. 406 - 2nd. Floor
South Charleston, WV 25303

TO: S. W. Drake

DATE: April 1, 1987

COPY: J. R. Soice
J. L. Worstell

SUBJECT: ASBESTOS LANDFILLS

Concerning your question of whether asbestos wastes can be landfilled anywhere as long as it is marked with signs - it is EPD's opinion that this is not true.

The EPA regulation for asbestos, National Emission Standards for Hazardous Air Pollutants (NESHAPs) - Subpart M, states in part that to be an acceptable site for the disposal of asbestos containing wastes:

- access by the general public must be deterred by a natural barrier or by warning signs and fencing, or
- the asbestos wastes must be covered with at least 6 inches of non-asbestos containing material at least once every 24-hour period.

However, discussion with Mr. Mitch Barido, Solid Waste Division of DNR, revealed the following DNR requirements and guidelines:

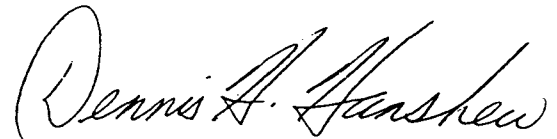
- Natural barriers or fencing is a permit requirement for all new landfills. Additionally, DNR is considering groundwater monitoring as a permit requirement.
- Asbestos wastes must be covered with soil immediately upon receipt.
- A map showing the exact location of the asbestos disposal area must be kept on site, as well as a copy forwarded to DNR.
- The amounts of asbestos wastes deposited must be documented and a record of the asbestos cell dimensions must be kept.

Those landfills permitted under the Department of Health are being required to reapply for a permit from the DNR. Thus, even the older landfills will most likely be required to have a barrier/fence and possibly groundwater monitoring.

The question of whether UCC could take a vacant lot inside the Plant fenceline and designate it as an asbestos-only disposal area was posed to Mr. Barido. Mr. Barido's response was that such a disposal site would still require a DNR permit, which would likely require groundwater monitoring.

Thus, based on the discussion with Mr. Barido, together with possible future liability concerns, it is the EPD's opinion that asbestos wastes can be buried only in landfills that meet the standards of and are approved by DNR. Especially, the asbestos landfill should have fences or natural barriers to deter access by the general public.

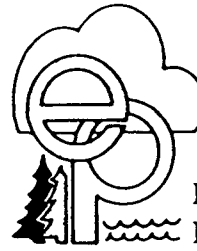
I hope that the above answers your question. Should you have additional questions or comments, please contact me.

A handwritten signature in cursive script, reading "Dennis H. Hanshew".

D. H. Hanshew

DHH/rls
0083H

SOUTH CHARLESTON PLANT



ENVIRONMENTAL
PROTECTION

UNION
CARBIDE

Bldg. 406 - 2nd. Floor
South Charleston, WV 25303

TO: J. K. Corrie

DATE: April 1, 1987

COPY: J. R. Soice
J. L. Worstell

SUBJECT: PROCEDURE REVIEW -
MAINTENANCE SAFETY
PROCEDURE XVIII -
ASBESTOS HANDLING

As discussed with you earlier today, EPD has reviewed the Asbestos Handling Procedure and has the following comments:

- ° On Page 16, in the first paragraph, the first sentence which states in part:

"....forms are to be approved and signed by the Environmental Protection Coordinator"

please delete "and signed" from said sentence.

- ° Include a requirement that an estimate of the total amount of asbestos wastes in units of cubic yards be given, in addition to square feet and linear feet. Estimates in terms of square feet and linear feet are required for the notification form (Appendix II, Page 17.) However, EPD is requiring an additional estimate in terms of total cubic yards of asbestos wastes for informational purposes for landfills.

Thank you for the review opportunity.


Dennis H. Hanshew

DHH/rls
0085H

UCC 013298

SOUTH CHARLESTON PLANT



ENVIRONMENTAL
PROTECTION

4
UNION
CARBIDE

Bldg. 406 - 2nd. Floor
South Charleston, WV 25303

TO: J. L. Worstell

DATE: March 27, 1987

COPY: ~~J. R. Solice~~

SUBJECT: Possibility of Using
Sistersville Plant for
Asbestos Disposal

I telephoned Bob Newberger, EP staff member at the Sistersville facility, to inquire about the possibility of using said facility as a disposal site for waste asbestos. A summary of the telephone conversation follows:

- Engle Southard has telephoned both Mr. Newberger and Fred Dailey (EP Dept. Head) and asked if the #2 surface impoundment could accept asbestos wastes. The response was that, yes asbestos wastes can be deposited in the impoundment; however asbestos wastes are not presently deposited in the impoundment.
- The Sistersville facility presently deposits their asbestos wastes in trenches, which are dug outside the facility (both the plant and surface impoundment) fenceline. The asbestos waste is then deposited and covered, within the day. Warning signs are posted around this asbestos burial site, however no fence or "natural barrier" exists.
- Based on discussions with Mr. Dailey, it is Mr. Newberger's opinion that the Sistersville facility would not be willing to accept any asbestos wastes from other UCC locations for deposit in either the #2 surface impoundment or the presently used asbestos burial site. Mr. Newberger also commented that plant management (L. W. Phair) was not eager to enter into such an arrangement. Mr. Newberger went further to express that the Sistersville facility would be unwilling to accept asbestos wastes even on a limited basis (such as one truck load per quarter).

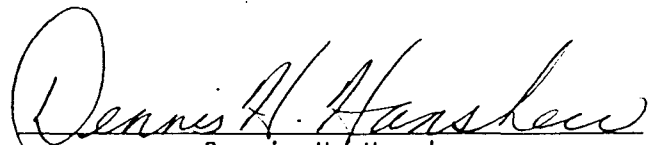
After these telephone conversations took place, J. L. Worstell discussed the possibility of UCC-514 using the Sistersville plant for a asbestos disposal site with F. Dailey. Mr. Dailey commented that the Sistersville facility would be willing to accept asbestos wastes from UCC-514 on a limited basis. However, such a disposal arrangement would have to be initiated and agreed upon by the corresponding Plant Managers. Mr. Dailey emphasized that the Sistersville facility would not be willing to accept UCC-514's entire asbestos waste load; acceptance of asbestos wastes would be on a limited basis.

Thus, if an asbestos waste disposal arrangement were made by the Plant Managers, the Sistersville facility would accept a limited amount of such wastes from UCC-514.

Discussion with Mitch Barido, of the DNR, indicated that newly permitted asbestos landfills must have some provision to deter access by the general public (i.e. a natural barrier or fencing). In addition, the DNR is considering ground water monitoring as a permit requirement. Those landfills permitted under the Department of Health (DOH) are being required to reapply for a permit from the DNR. Thus, even the older landfills will most likely be required to have a barrier/fence and possibly ground water monitoring.

As mentioned above, the Sistersville asbestos burial site has no barrier/fence to deter access by the general public. According to EPA regulations, the Sistersville asbestos burial site is adequate (based solely on discussions - no site inspection has been conducted). According to DNR regulations and guidelines the Sistersville asbestos burial site is in a gray area. If the site is permitted under the DOH, the DNR may require that a fence be constructed. If the site is not currently permitted, it most likely will have to apply for a permit from DNR.

In the event that the Sistersville facility becomes an asbestos disposal site for UCC-514, I would suggest that the disposal site be inspected to insure that it is operated and maintained in accordance with all applicable Federal and State rules, regulations, and general requirements.


Dennis H. Hanshew

DHH/kr1
0080H



UNION CARBIDE CORPORATION

P. O. BOX 8004, SOUTH CHARLESTON, WV 25303

Specialty Chemicals

(5)

January 9, 1987

Regional Administrator
U. S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Dear Sir:

SUBJECT: Notice of Renovation Activities
Asbestos Removal and Disposal

This letter constitutes notification, as required by 40 CFR - §61.146, that Union Carbide Corporation, Old Ridgebury Road, Danbury, Connecticut 06817, plans to engage in renovation activities as described below:

The facilities to be renovated are located at 437 MacCorkle Avenue SW, South Charleston, West Virginia 25303. The facilities consist of various buildings, equipment, and piping used in the manufacture and distribution of organic chemicals and plastics, some of which are over fifty-five years old. The amount of friable asbestos material present is unknown at this time.

Renovation is scheduled to begin January 1, 1987, and to be completed by December 31, 1987. The work consists of on-going routine miscellaneous maintenance of the manufacturing facilities which may involve the removal of asbestos insulation. All friable asbestos material will be thoroughly wetted prior to removal and will be placed in properly labeled plastic bags for disposal. The amount of asbestos to be disposed of cannot be predicted at this time, but should be modest.

Asbestos removal associated with more substantial projects of a more specific nature will be reported by separate notification as may be appropriate and in accordance with the regulations.

All asbestos material will be disposed of at the Goff Mountain Landfill, Union Carbide Corporation, Route 25, Institute, West Virginia 25112, or other approved landfills.

Very truly yours,

D. H. Hanshaw
Environmental Engineer

DHH/rls
0057H

cc: C. G. Beard, II - WVAPCC

cc: Michael Bush, WVAPCC

cc: J. L. Horstall, UCC

UCC 013301

D I S T R I B U T I O N

J. R. Dement

J. F. Dodd

S. W. Drake

R. L. Foster

R. B. Nickles

J. R. Soice

EPD Staff (Circulate)

NOTE:

This notice is only for small, miscellaneous asbestos renovations (less than 260 linear feet and/or 160 feet²) that will occur during 1987 as part of routine maintenance. Projects involving more than these limits will require a separate notification to the governmental agencies.



ENVIRONMENTAL
PROTECTION

RECEIVED

OCT 23 1986

J. L. WORSTELL

(6)

UNION
CARBIDE

SOUTH CHARLESTON PLANT

JLW

10/22

Bldg. 406 - 2nd. Floor
South Charleston, WV 25303

- ① How will ban on spent solvent affect us?
- ② Do we need to visit Parkersburg contractor site also?
- ③ Any idea what impact will be on plant costs?

CHH

TO: J. K. Corrie

DATE: October 20, 1986

COPY: J. C. Cogar
J. R. Dement
C. H. Hancock
F. A. Sanchez
J. L. Worstell
EPD Staff (Circulate)

SUBJECT: ASBESTOS

Attached are letters we received from the Institute's EP Department. Goff Mountain is very close to banning asbestos disposal. A landfill in Parkersburg is the best alternative for asbestos disposal once the Goff ban begins.

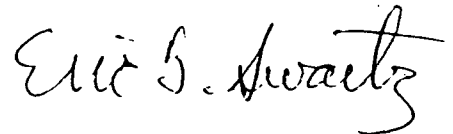
Though more inconvenient than disposal at Goff Mountain, contract disposal of asbestos can be a smooth operation as long as all aspects of it are closely followed. A few aspects that need to be followed in order to avoid any problems include:

1. Good communication between maintenance and the Parkersburg landfill so asbestos shipments are received during normal working hours. - i.e. There are logistic type activities to be watched after.
2. Good communication between Maintenance and the contract transporter (if this is the case) so no disposal delays will occur.
3. Asbestos disposal regulations must be closely followed in order to avoid any non-compliances.
4. Proper manifesting of all asbestos shipment.

If these aspects are followed, EPD believes that contract disposal of asbestos will present minimal problems.

I will keep you informed of this situation.

Very truly yours,

A handwritten signature in cursive script, reading "Eric T. Swartz". The signature is written in dark ink and is positioned above the printed name.

Eric T. Swartz

ETS/jk
0023C



INTERNAL
CORRESPONDENCE

RECEIVED

OCT 1 1986

UNION CARBIDE CORPORATION
AGRICULTURAL PRODUCTS COMPANY, INC. 100 WORSTELL BLVD. NEW YORK, NY 10030

To (Name)	J. L. Worstell	Date	September 11, 1986
Division	R. J. Romagnoli	Originating Dept.	Environmental Protection
Location			
Area			
Copy to	F. L. Boggs	Subject	Asbestos & Spent Solvents
	L. H. DuPuy		

Jack & Ron:

The title of this letter should be, "What do asbestos and spent solvents have in common? Answer - They are both very close to being banned from Goff Mountain Landfill.

The asbestos problem you are aware of because of previous communications. To update you further, we are close to banning not only asbestos, but all bulk shipments of insulation from disposal at Goff. We will not take this step without first having a fully implemented disposal alternative. If you will please refer to the attached E. L. Patton letter you will see that there is a viable disposal alternative in Parkersburg, and at \$5.50/yd³ it is a bargain. We are currently exploring transportation and short term storage options with Barbara Toler. Please note that we will continue to take small quantities of chemically contaminated asbestos. However, if this load becomes unmanageable it too will have to go offsite at a cost much higher than the one shown above.

The spent solvent ban hammer, as you know, becomes effective on November 8, 1986. Also, as you know, there are no implementing regulations in place to guide us. In the absence of these regulations and under the direction of legal council the Institute Plant is taking the following position with regards to the land disposal question.

0066E

UCC 013305

Effective November 8, 1986 Goff Mountain Landfill will no longer accept for disposal any spent solvents as defined by 40 CFR, Part 261, the spill residue from the cleanup of any spent solvents, lab packs containing spent solvents and any other mixtures containing the aforementioned waste. Also be aware that the original solvent ban proposal by the EPA bans the commercial chemical compound solvents as well. Should the EPA follow this same trend when the solvent ban regulations are promulgated (probably on or around November 8), you must be prepared to eliminate those commercial chemical compounds and associated waste from disposal at Goff Mountain as well.

If this creates a problem for you we need to talk now; time is very short. Unfortunately Goff Landfill is no longer the panacea that it once was.

Very truly yours,



Mark E. Tapp

/jr

Attachment

0066E/2



INTERNAL
CORRESPONDENCE

UNION CARBIDE CORPORATION
ALLEGHENY CHEMICAL PRODUCTS COMPANY, INC. 100 UNIVERSITY DRIVE
P.O. BOX 1170 NEW VA. 26040

To (Name) F. L. Boggs Date September 18, 1986
Division M. E. Tapp
Location
Area
Originating Dept Environmental Protection
Area
Copy to Barbara Toler Subject Visit to Northwestern Landfill
Parkersburg, West Virginia

The facility is bounded by peripheral drains. Water which falls on the property is collected in lagoons and recycled to the fill. The landfill has a clay liner and has groundwater monitoring wells.

The company has nineteen (19) employees, and provides garbage and trash pick-up for Vienna, West Virginia, using its own trucks. They also accept wastes from other haulers and from individuals.

I visited the site on September 5, 1986. I toured the active area and observed that the wastes were spread thinly for covering. A heavy bulldozer was on hand, and a large supply of clean cover dirt was at the site.

I discussed Northwestern with Mitch Barido of the WVDNR. He said they were "one of the better landfills in the state", that they were "a step ahead of the game" (groundwater monitoring, leachate collection), and that they (DNR) had no problem with them.

The facility is insured by Nationwide, Wm. Morton, Charleston and Ripley, agent.

The purpose for my visit was to evaluate the facility as a site for disposing waste asbestos insulation from the Institute Plant. It is estimated that 3000 cu. yds of waste asbestos insulation will be generated at Institute in the next fifteen (15) months. According to an estimate by Dan Hardisty (letter to F. L. Boggs, et al. April 3, 1985) the life of Goff Landfill is 8.5 yrs (now 7 yrs). Since the capacity of Goff Landfill is rapidly being filled, an alternative site for disposal of certain non-hazardous materials is desirable. In addition, Northwestern charges \$5.50/yd compared to \$55-100/yd at RCRA permitted landfills such as GSX or CECOS.

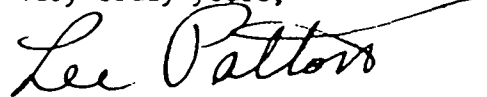
Contingent on input from the addressees, I recommend that Northwestern be used for disposal of clean, chemically uncontaminated waste asbestos insulation generated at the Institute Plant.

- 2 -

I discussed our desire to use Northwestern for waste asbestos disposal with Bob Matthews. He said there were no legal problems with it, and he has no "overriding concerns" beyond the normal concern of UCC putting anything in a landfill i.e. we could conceivably have some liability in the future if problems develop at the site.

Please provide your input so that, if your response is favorable, I can ask Barbara Toler to proceed with contract activities.

Very truly yours,

A handwritten signature in cursive script that reads "Lee Patton". The signature is written in dark ink and is positioned above the printed name.

E. L. Patton

/jr
0075E