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~~IV Lamb~~ 1 K-25 CEP
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Date of request 4/13/95 Expected receipt of document 4/28/95

Document number none Date of document

Title and author (if document is unnumbered)
Folder titled Medical, Health & Safety (KWB) Folder 3 - 7 documents

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Date request received 4/13/95

Date submitted to ADC 4/13/95

Date submitted to HSA Coordinator 4/13/95

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Date submitted to CICO 4/28/95

Date received from CICO 5/22/95

Date submitted to ChemRisk/Shonka and DOE 5/22/95

(This section to be completed by ChemRisk/Shonka Research Associates, Inc.)

Date document received

Signature

ChemRisk Document No. 1562

Extract to Thomp.

A8. Medical, Health &
Safety (KWB) Folder 3

Oak Ridge K-25 Site
Oak Ridge, Tennessee 37831-7314
managed by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the U.S. DEPARTMENT OF ENERGY
under Contract DE-AC05-84OR21400

INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS COMPANY LOCATION Post Office Box P OAK RIDGE, TENN.

TO Plant Engineering Division
LOCATION K-1034

DATE August 24, 1955

ANSWERING LETTER DATE

ATTENTION Mr. N. L. Isenhour
COPY TO Mr. A. P. Huber
Mr. J. C. Barton
Mr. R. M. Batch
Mr. E. C. Bollinger
Mr. E. J. Breeding
Mr. G. H. Dykes
Mr. J. Dykstra
Mr. G. A. Jamieson
Mr. T. Kwasnoski
Mr. F. A. Lehman
Mr. J. N. Loupe
Mr. R. R. Lowery
Dr. J. S. Lyon
Mr. J. R. Mahoney
Mr. J. A. Marshall
Mr. R. C. Olson
Mr. H. E. Owen
Mr. W. L. Richardson
Mr. R. W. Ulm
File

SUBJECT Building K-724
Beryllium Contamination

This letter in no way conflicts with the intent of my letter of January 26, 1955. It serves only to more specifically suggest ways and means of accomplishing the decontamination as per request.

It is evident from Works Laboratory Report SA-4364 that the beryllium contamination is not as widespread as first thought; however, some protective equipment will be necessary and information concerning the proper kind may be obtained from the Safety and Health Physics Department.

Severance of the exhaust ducts above ceiling level is highly desirable. This may be accomplished without undue scattering of the material within the ducts by enclosing each duct with a loose wrapping of clear plastic sheet which in effect forms a dry box.

After capping and welding the severed ducts, the immediate area of each job and that downstairs beneath it, will be cleaned up with special attention being given to room 16. This will be followed by resampling by the laboratory group to determine the efficacy of the clean up. Should these analyses fall within the agreed limits the work may proceed in a normal fashion with one exception, i.e., all cuts, abrasions, etc., will be treated immediately at the dispensary as though beryllium had been involved.

This document has been approved for release to the public by:

Arvin D. Zwick 5/18/95
Technical Information Officer Date
Oak Ridge K-25 Site

August 24, 1955

Building K-724
Beryllium Contamination.

The rooms formerly used as laboratories may be used as intermediate change houses. Maintenance men should carry a spare coverall to the K-724 building each day and change to it before leaving the area. Dirty coveralls, caps, gloves, shoe covers, etc. will be properly segregated for transporting to appropriate cleaning facility before leaving the K-724 building and will be appropriately tagged as to their source and probable contamination.

The portions of the smoke detector systems that it is necessary to take out for cleaning and inspection will be handled as though they were contaminated with beryllium.



D. L. Stoddard,
Industrial Hygienist.

DLS/pp
K-25RC Med. Dept.

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INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS COMPANY LOCATION Post Office Box P OAK RIDGE, TENN.

TO Mr. F. B. Eastman
LOCATION K-1029 Building

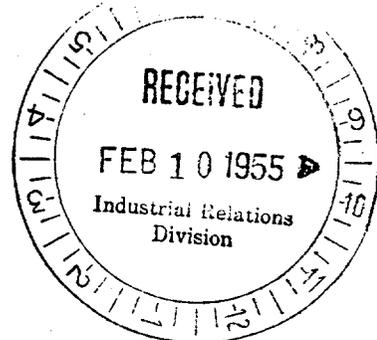
DATE February 9, 1955

ATTENTION
COPY TO

- Mr. R. M. Batch
- Mr. E. J. Breeding
- Mr. G. H. Dykes ✓
- Mr. N. L. Isenhour
- Mr. F. A. Lehmann
- Mr. R. R. Lowry
- Dr. J. Lyon
- Mr. R. C. Olson
- Mr. D. L. Stoddard
- Mr. D. E. Williams
- File

ANSWERING LETTER DATE

SUBJECT Beryllium Contamination
in Building F-08



Preliminary design on R. E. S. 6703 was discontinued pending an investigation of the F-08 Building in the S-50 area, relative to beryllium contamination and a cost estimate to decontaminate said facility.

Report #SA-3878 from the Works Laboratory Department indicated considerable beryllium contamination in several rooms in the building, but more especially in the attic area, the existing exhaust duct lines and the Buffalo air wash units.

Procedures for beryllium decontamination was obtained in a letter dated January 26, 1955 from Mr. D. L. Stoddard to Plant Engineering. In addition to the procedures, certain recommendations were made relative to the exhaust duct and the air washers which are self-explanatory in the above mentioned letter.

Drawings, decontamination procedures and other pertinent information were submitted to the Estimating Section for a cost estimate. The estimated cost of \$7,000 is necessary to decontaminate this facility and make it available for further construction. After careful review of the estimate and project, it was decided by Mr. R. R. Lowry that preliminary design should proceed.

A meeting was called of the General Engineering design representatives, at which time they were requested to proceed with preliminary design, which would furnish sufficient information to obtain a preliminary estimate.

This project has not been scheduled.

JNL:jms

J. N. Loupe
 J. N. Loupe
 Project Engineering Department

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This document has been approved for release to the public by: *Kevin L. Quinn* 5/18/85
 Technical Information Office
 Oak Ridge K-25 Site
Approved from authorized removal of ORO markings.

INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS COMPANY LOCATION Post Office Box P OAK RIDGE, TENN.

TO Plant Engineering Division
LOCATION K-1029

DATE January 26, 1955

ANSWERING LETTER DATE

ATTENTION F. B. Eastman
COPY TO A. P. Huber
R. M. Hatch
G. H. Dykes ✓
J. N. Loupe
R. R. Lowery
W. L. Richardson
D. E. Williams
File

RECEIVED

SUBJECT Beryllium Contamination in Building F-08.

JAN 27

INDUSTRIAL RELATIONS
DIVISION

The Works Laboratory Department report SA-3878 dated December 22, 1954 indicates that there is a deposit of beryllium containing dust in the exhaust system and some portions of the F-08 building great enough to be the source of an airborne concentration in excess of the maximum allowable concentration during the proposed conversion for use by the Plant Records Department. The whole exhaust system shall be considered as grossly contaminated with beryllium and the discussion of it and the building itself will specifically eliminate the fresh air ducts except for the discharge ports in the individual laboratory rooms.

Access to the buildings during any alterations, or until a clean-up program has been completed, should be limited to employees protected by respirators, coveralls, caps, safety glasses, shoe covers or rubber boots and rubber gloves. Female employees and employees with any open wounds, cuts, abrasions, etc., or any history of chronic respiratory complaints should be prohibited entry into this area until the clean-up is completed.

The exhaust system may be dismantled, the individual openings sealed with temporary covers and the parts removed from the building for decontamination and/or disposal. The branch lines only may be removed at a convenient flange or junction in the attic and treated in a similar manner. The remaining portion of the ducts should be sealed with leak proof metal covers and wire seals at all openings, then marked at frequent intervals with a stencil. The stencil should state that the system contains beryllium and refer to a file point, report or drawing containing sufficient information to acquaint anyone with the hazards of reopening the system.

When the alterations to the exhaust system have been completed a clean-up program should be carried out. All surfaces of the attic, the exhaust ports of the fresh air system and all walls and floors should be vacuum cleaned. All walls and floors should then be washed and painted. It may be advisable to complete the vacuum cleaning before disturbing the settled dust within the building.

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Technical Informator Officer Date

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-2-

January 26, 1955

Beryllium Contamination in
Building F-08.

The vacuum cleaner should be a heavy duty industrial type, placed outside the building while in use, and the exhaust to the particular machine chosen should be equipped with an Edgewood Arsenal Filter. Collected dust and the filter should be buried after completing the job and the cleaner washed to remove traces of beryllium.

All protective equipment and other materials used in the clean-up should be washed separately from other routine batches, with full knowledge of what is being handled passed on to the supervision responsible for this phase of the clean-up.

Removal of masonry partitions and breaking of concrete should be accompanied by a generous use of water.

The frame section of the F-08 building on the southeast end should be sealed off completely until a decision for its disposal has been made. Disposal of this portion of the building should be in line with the fact that it also contains a beryllium contaminated exhaust system in the attic.

Any employee suffering an abrasion, cut or puncture wound while working in the F-08 building should report to the dispensary without undue delay.

D. L. Stoddard
D. L. Stoddard,
Industrial Hygienist.

Approved

J. S. Lyon
J. S. Lyon, M. D.
Medical Director.

DLS/pp
K-25RC Med. Dept.

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INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS COMPANY LOCATION Post Office Box P OAK RIDGE, TENN.

TO Mr. D. L. Stoddard
LOCATION Industrial Hygiene Department

DATE January 10, 1955

ATTENTION
COPY TO Mr. R. M. Batch
Mr. G. H. Dykes ✓
Mr. J. N. Loupe
Mr. R. R. Lowry
Dr. J. Lyon
Mr. D. E. Williams
File

ANSWERING LETTER DATE

SUBJECT Beryllium Contamination
In Building F-08

Conversion of the F-08 Building to a Plant Record Storage Facility is contemplated as indicated in RES 6703 submitted by the Manufacturing Office. Attached to the RES was a letter from Mr. L. J. LaFrance to Mr. G. H. Dykes, reporting the results of a survey of various buildings in the S-50 area relative to the existing degree of beryllium contamination.

We made a request of the Works Laboratory Department for a more detailed contamination survey of this facility placing special emphasis on the existing exhaust duct in the attic, as considerable cost can be saved on this project if the system can be reused.

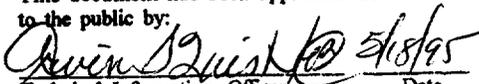
Attached for your information is the analysis report of this survey.

In order to obtain a complete cost estimate for the modification and decontamination of this facility, it is necessary to obtain information concerning the beryllium decontamination procedure which I understand you have available. Furthermore, we will welcome any constructive comments or recommendations which you wish to make.


F. B. Eastman
Project Engineering Department

FBEastman
JTW:JNL:jms

This document has been approved for release to the public by:


Technical Information Officer Date 5/8/95

Oak Ridge K-25 Site

In forstom authorized removal of OAO marking.

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WORKS LABORATORY DEPARTMENT

Special Analysis Section

ANALYSIS REPORT

SAMPLE Beryllium SEQUENCE NO. SA 3878
DATE REC'D 12/22/54 REQUEST NO. 2834

RESULTS

The following results were obtained on wipe samples taken for beryllium in the F-08 building. Each analysis represents the amount of contaminant found on one square foot of the surface monitored.

Location	Total micrograms Beryllium
Attic - inside exhaust duct	Not found
Attic - top of stairs	Not found
Attic - Room 24 duct	Not found
Attic - Over room 24	Not found
Room 24 pit	1
Room 16 fume hood duct	50
Room 14 inside hood duct	5
Attic on top of duct line	2
Room 22 floor	1

REMARKS

SUBMITTED BY J. N. Loure LOCATION K-1029
RESULTS APPROVED BY [Signature] DATE 1/4/55

Health Physics and Ind. Hygiene

FABRICATION AND MAINTENANCE DIVISION

<u>Bldg. & Location</u>	<u>Have Any Surveys Been Made</u>	<u>Report File Location</u>	<u>Remarks</u>
K-303-1 Seal Shop	No	C. L. Gritzner, K-1401	Sampling equipment on order.
K-1401 Cleaning Area	No.	C. L. Gritzner, K-1401	Sampling Equipment on order.
K-1035 Printed Circuit & Cleaning Area	No	Unknown	Communication breakdown. No clear understanding of responsibility, etc.
K-1404 Garage	Yes	Garage Office	Have been borrowing Health and Safety equipment. Equipment on order. Use suggested report forms.
K-1400 Maint. Shop	Yes	Shop Office	Use own radiation survey instruments. Use suggested report forms.

TECHNICAL DIVISION

K-1004-A, Rms. 59-63	No	K-1004-D, Room 19 Phys. Meas. Office	Aware of responsibility but had not gone ahead.
K-1004-A, Rms. 19, 20 Storage Area	No	Isotope Analysis Dept. Office	Aware of responsibility but had not gone ahead.
K-1004-B, Rms. 101, 103, 104, 105, 107, 108, 109, 113, 116, 118	No		Rooms being remodeled. Will review necessity for survey after new occupancy.
K-1004-C, Rms. 207, 214, 215	Yes	Isotope Analysis Dept. Office	Do not use suggested forms. Forms used are adequate.
K-1004-C, Rms. 217, 219, 220, 223	No	Isotope Analysis Dept. Office	Aware of responsibility but had not gone ahead.
K-1004-E, Rms. 102, 100, 108	Yes	Dept. Office Room 17	Do not use suggested form. Forms used are adequate.
K-1006 Utility Chase N&S	Yes	Dr. Bernhardt's Office	Do not use suggested form. Forms used are adequate.
K-1413 Office, Lunch, and Work Area	No	K-1413, Room 113	Communication breakdown. No clear understanding of responsibility.

Union Carbide Nuclear Company, Oak Ridge Gaseous Diffusion Plant, Operating Contractor for the U.S. Atomic Energy Commission.

This document has been approved for release to the public by:

Technical Information Officer
Oak Ridge K-25 Site

Date

David M. ...
3/22/65

PRODUCTION DIVISION

<u>Blk. & Location</u>	<u>Have Any Surveys Been Made</u>	<u>Report File Location</u>	<u>Remarks</u>
K-1037	Yes	K-1037 Area Office	Excellent Program
K-1420 All Areas IH & HP Surveys	Yes	K-1037 Area Office	Excellent Program
K-27-29 (K-631, K-415, K-811-1, K-1131, K-29)	Yes	K-29 Area Office	Excellent Program
Oxid Chemicals - K-301, K-302-3, K-1073, Voult 1A	Yes	H. J. Gilbert, K-303-3	Excellent Program
K-31-33 All Areas	Yes	K-33 Area Office	Excellent Program

August 1, 1966

Mr. Bahler - Dr. Lyon
Mr. Flack - Dr. Sullivan
Mr. Ramsey - Dr. Lincoln
Mr. Cain - Dr. Ward

CORPORATION

COPY FORWARDED BY

December 18, 1958

- Mr. N. H. Meyer
- Mr. J. F. Graham
- Mr. A. M. Morgan
- Mr. S. Vermilye
- Mr. W. D. Nichols
- Mr. R. Wiesendanger
- Mr. C. C. Scharf
- Mr. H. Taylor
- Mr. S. W. Pickering, II
- Mr. A. D. Stackpole
- Mr. T. E. Lane
- Mr. K. A. Housman

IND. REL. DIV.
K. W. SAHLER

1 KWB
2 JSE
3 KWB

1958 DEC 23 AM 10:30

Gentlemen:

The attached report of industrial hygiene activities within the various units of the corporation is indicative of the high caliber of work being performed in this field. The volume of work reported is given added significance when one considers that this summary covers only a six-month period. The amount of work done also reflects the number of problems with which we are faced and an intense awareness of the significance of these problems.

It will be readily recognized that the contributions to this report come from three companies. The routine services provided at the plant level are not shown. For example, industrial hygiene services for Linde, National Carbon, Electro Metallurgical, Haynes Stellite, Bakelite, Visking, and the mines and mills of the Nuclear Company are provided by the Industrial Medicine and Toxicology Department of the corporation but are not listed here. A measure of the service thus provided is the fact that in the first nine months of this year a total of 64 visitations were made by our industrial hygienists to plants in the companies previously listed. The visits were concerned with study of the hazards in the work environment and recommendations for their control. The pressure of this volume of routine industrial hygiene work does not allow much time for planning or executing new methods of detection and control. Still, the detection and control of many existing hazards, and hazards yet to come, will depend in a large measure on new approaches and methods which will need to be tailored by our personnel to meet our specific problems.

This document has been approved for release to the public by:

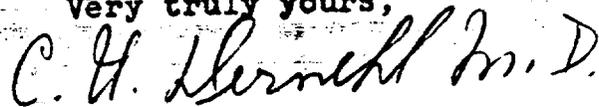
Quinn D. Smith 5/18/95
Technical Information Officer Date
Oak Ridge K-25 Site

Many units of the corporation are venturing into new fields in some of which they are on unfamiliar ground. These excursions into new territory will increase the need for industrial hygiene activities if the job is to be done safely. As presently staffed, our industrial hygiene group will find it increasingly difficult to maintain the necessary routine services and also to cope with new problems. It is not realistic to consider further expansion of U.C.C. personnel in this field. Rather, the larger companies which now require the greater share of the time of our industrial hygienists should consider hiring their own industrial hygiene engineers.

In the event this is done, and we feel definitely that it should be given serious consideration, then the routine work can be covered by company personnel and the people in our New York office will be available to consult on problems and help in developing new approaches and solutions. Professional direction would be provided by our consultants while administrative control would be the responsibility of management. When and if a company medical director is appointed, the industrial hygienist could immediately become a member of his staff. We should anticipate better industrial hygiene coverage and better techniques resulting from more time available for development work such as that in Mr. McDaniel's summary report.

We urge those of you concerned to give some thought to this development. Our excursions into the fields of radioactive materials, chemistry and physics by companies never before seriously involved makes the day for decision on this proposal ever more imminent.

Very truly yours,



ASSISTANT MEDICAL DIRECTOR

Carl U. Dernehl, M. D.

rsb

attachment

Dr. H. F. Smyth, Jr.
Mr. U. C. Pozzani
Mr. C. S. Weil
Dr. C. P. Carpenter
Mr. N. H. Ketcham
Mr. V. T. Stack, Jr.
Mr. N. E. Bolton
Mr. J. F. Morehead, Jr.
Mr. D. L. Stoddard
Mr. T. C. Whitson
Mr. E. G. Brown
Mr. R. C. Baker
Mr. T. J. Burnett
Mr. H. H. Abee
Mr. J. H. Clarke

November 10, 1958

Industrial Hygiene
Summaries

Gentlemen:

The following is a brief report of activities in the field of industrial hygiene and toxicology by various groups within the Corporation. These items have been forwarded by the various members since the last meeting in April at Atlantic City. If more information is desired, the reader should contact the person or persons concerned directly.

From Mr. E. G. Brown, Union Carbide Nuclear Company, Paducah, Kentucky:

Studies to determine the efficiencies of MSA respirator cartridges, number CR-10340 and CM-76884, for removing trichlorethylene and/or hydrofluoric acid vapors from inhaled air have been completed. Indications are that there is little difference between the two cartridges removal efficiencies for the above contaminants and that MSA's verbal estimates may have been on the conservative side.

Carbon tetrachloride has been replaced by a kerosene-type solvent for the cleaning of electric motors. The motor cleaning is being done in a building specifically designed and equipped for the operation. To date efficient cleaning has been achieved as well as a reduction of a toxicity problem.

This document has been approved for release
to the public by:

Quinn Smith 5/18/95
Technical Information Officer Date

Oak Ridge K-25 Site

* Excluding pages 5,
6, and 7.

For further information please contact:

Mr. E. G. Brown
Health Physics and Hygiene Department
Union Carbide Nuclear Company
P. O. Box 748
Paducah, Kentucky

From Mr. J. F. Morehead, Jr., Y-12 Plant, Union Carbide Nuclear Company, Oak Ridge, Tennessee:

Current work is proceeding on a spectrographic type instrument, developed by the British, to continuously monitor air-borne beryllium. The instrument will utilize a cycle-type sampling period followed by read out and repeat. The spark chamber will be glass or plastic with copper electrodes powered by a B and L spark generator. A Jarrell-Ash 8200 monochromator will be used for dispersion and a digital voltmeter and printer will read out a stored charge on the capacitor. Standardization of the instrument is in progress.

For further information please contact:

Mr. James F. Morehead, Jr.
Industrial Hygienist
Union Carbide Nuclear Company
Y-12 Plant, P. O. Box Y
Oak Ridge, Tennessee

From Mr. John H. Clarke, Visking Company, Chicago, Illinois:

The following are comments on the design of industrial exhaust fans for reliable operation:

1. The forward curved blade (multiblade) type fan as is usually provided for utility sets should never be used for industrial exhaust. Dirt accumulations on the blading will reduce the fan capacity as much as 30%. One cleaning of such a fan will pay the additional cost of a suitable industrial fan which will never require cleaning except in very unusual circumstances. In some cases of light duty a utility set may be suitable. Such sets with backwardly inclined blades are available from American Blower Company.
2. Industrial type fans with suitable radial or backwardly inclined blading are available in pressure type or volume cast iron, steel plate, or heavy duty slow speed fans having capacities ranging from 175 - 90,000 cfm. at the pressures and outlet velocities normally encountered in industrial work.

- 3
3. Impeller position is not too critical on industrial fans but should always be checked. It is particularly important on standard forward curved or backwardly inclined fan blades. If excessive clearance exists, the fan capacity may drop 50% or more. It is not uncommon for the fans to come in from the manufacturer with the impeller loose on the shaft. Very few millwrights are aware of the proper clearances which are required between the impellers and the inlet cones.
 4. Great care should be used in providing good inlets and outlets for the fans. In particular, a poor inlet (double elbow) may reduce fan capacity 20 - 30%. Six diameters of straight inlet, minimum, should be provided. Where this is not possible other measures must be taken to assure design volume.
 5. The fan drive arrangement from the standpoint of good service, maintenance, and safety should be Arrangement No. 1 or 9 for belt drives and Arrangement 8 for direct drive. The direct drive Arrangement 4 (impeller overhang on motor bearings) generally gives poor bearing life and excessive vibration.
Note: These arrangements referred to are those from the National Association of Fan Manufacturers, Inc., "Standards, Definitions, Terms and Test Codes for Centrifugal, Axial and Propeller Fans."
 6. Where PVC (polyvinyl chloride) coated steel fans are provided for fume corrosion protection, we are convinced by experience with four different vendors that it is not possible to apply a second spray coat over the first in order to build up thickness. It is not possible to get adhesion of the second coat to the first coat. In order to get the proper thickness (and abrasion resistance of not less than 30 mils and preferably 50 - 60 mils, the fans should be dip coated. This is particularly important for the impellers. The same remarks apply to duct work.

For further information please contact:

Mr. John H. Clarke
General Engineering Department
Visking Company
6733 West 65th Street
Chicago 38, Illinois

From Mr. D. L. Stoddard, Union Carbide Nuclear Company, ORGDP, Oak Ridge, Tennessee:

1. A survey of the air pollution aspects of plant environment has been started.

2. A method for estimating downwind concentrations of nitrogen oxides from field observation of stack plumes was developed with the assistance of the U. S. Weather Bureau.
3. A semi-quantitative method for making field determinations of hydrogen fluoride has been tried out. The field results may later be confirmed in the laboratory.
4. Timed-to-run, elapsed-time control valves and programed-reset relays have been developed in small sturdy containers for application as single, multiple or combination units to control air sampling in time segments varying from 3 minutes to 12 hours per individual unit. These units may be set to start as much as 24 hours later, operate through one or several sampling periods, then stop. These have been applied to a directional sampler used in the air pollution survey as well as routine sampling.
5. Several studies have been made in the field of environmental heat. The heat stress associated with some normal maintenance activities and the heat environment within an air cooled suit have been measured.
6. A battery powered aspirating shielded thermometer was constructed and used in making environmental heat study measurements.
7. The palladium chloride method of detecting carbon monoxide was applied to the determination of carboxyhemoglobin and a device for emergency application of the procedure was placed in the clinical laboratory.
8. A semi-quantitative method for detecting ozone is being tried out during welding indoctrination demonstrations.

For further information please contact:

Mr. D. L. Stoddard
Industrial Hygienist
Union Carbide Nuclear Company ORGDP
Oak Ridge, Tennessee

*Please note - Pages 5, 6, and 7 concerned
Union Carbide Chemicals Company, South Charleston,
West Virginia, and Mellon Institute and were
removed.*

8

From the Industrial Medicine and Toxicology Department,
Union Carbide Corporation:

The following activities may be of interest:

1. Methods of maintaining relatively constant air-flow through aspirators powered by freon cans during cold weather are being tried using various portable warming devices.
2. Uranium dusts collected on millipore filters are being analyzed by both the counting and fluorometric techniques for evaluation purposes.

For further information please contact the writer.

Very truly yours,

Paul W. McDaniel/rsb

Paul W. McDaniel
Industrial Hygiene Engineer

FWMcD/rsb

cc: Dr. T. W. Nale
Dr. C. U. Dernehl
Mr. L. J. LaFrance