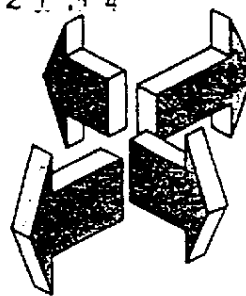


MCA NEWS

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File - Vinyl Chloride
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Study Shows Death Rate Average for VC Workers

The findings of a survey contracted by MCA show that vinyl chloride workers, in the aggregate, experience death rates from all causes that compare favorably with other U.S. male industrial workers. This, in spite of the now well-recognized risk of angiosarcoma of the liver among such workers. The only statistically significant differences in their specific mortality rates appeared where reported death rates were lower than that of the general population.

Although the total number of cases was

small, there did appear to be suggestive dose-related increases in the incidence of cancers of the urinary organs and the brain in the longer-exposed workers, as compared with their counterparts who, at the time of death, had worked for shorter periods in jobs exposing them to vinyl chloride.

Employees Identified

These results were reported May 10th by Dr. Irving R. Tabershaw to a meeting held under the auspices of the New York Academy of Sciences. In the course of the

study, the firm of Tabershaw-Cooper Associates Inc. had identified 8,384 past and present employees of the VC/PVC industry, and had determined the vital status of 7,128. Among these individuals, 352 deaths had occurred during the period under study and, of these, death certificates had been obtained on 328.

Release of subsequently acquired data is planned in a supplementary report.

Earlier, MCA had announced preliminary indications that vinyl chloride exposure has produced angiosarcoma in mice at several exposure levels.

Industrial Bio-Test Laboratories, Inc., which is conducting the MCA-administered vinyl chloride animal exposure study, informed MCA that its work—although very preliminary at this point—tends to confirm the findings of Professor Cesare Maltoni, an Italian scientist who found that vinyl chloride exposure caused cancer in rats.

MCA immediately notified the Occupational Safety and Health Administration, the National Institute for Occupational Safety and Health and the Environmental Protection Agency of the preliminary test results.

Mice Affected

In the MCA-administered study, rats, hamsters and mice are being exposed seven hours a day, five days a week, to 2,500 parts per million (ppm), 200 ppm and 50 ppm. After seven months of exposure, angiosarcoma has been observed in mice at all levels, but not in rats or hamsters.

Professor Maltoni reported at the OSHA hearings on vinyl chloride February 15 that he had observed the liver cancer in rats exposed four hours a day, five days a week, to 250 ppm for up to 12 months. However, he did not find the cancer in testing at the 50 ppm level.

The animal exposure study is continuing, and further vinyl chloride testing is under consideration.

Former Commerce Head Peterson To Speak at June Annual Meeting

Peter G. Peterson, chairman of Lehman Brothers Inc. and former secretary of commerce, will be the main speaker at MCA's 102nd Annual Meeting at The Greenbrier, White Sulphur Springs, W. Va., June 6-8.



Peter G. Peterson

More than 900 persons have registered for the meeting, at which six of the nation's outstanding chemistry teachers will be honored along with four companies that will receive the

Lammot du Pont Safety Award for having made the greatest improvement in industrial safety during the past five years.

Agendas for the business session June 6 will be mailed around May 15 to executive contacts.

Joins Investment Firm

Just prior to joining Lehman, an international investment banking firm, Mr. Peterson served as ambassador and personal representative abroad for President Nixon.

He joined the firm as vice chairman and board member in June 1973 and was elected to his present post in August of that year.

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Appeals Court Finds Economics Can Enter Into OSHA Rulings

A decision that could have a substantial bearing on the shape of occupational health standards to be administered by the Occupational Safety and Health Administration was handed down by the U.S. Court of Appeals for the District of Columbia on April 15.

The court's decision was reached on a petition of the Industrial Union Department, AFL-CIO, for a review of the secretary of labor's Standard for Exposure to Asbestos Dust under the Occupational Safety and Health Act.

Briefly, the court denied the petition to review the asbestos standard, except for

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MCA Firms Told of Suits Trying To Protect Right of Rules Review

MCA is advising member companies of certain lawsuits undertaken by several major chemical companies to protect their legal rights to judicial review of wastewater guidelines and standards issued by the Environmental Protection Agency. The regulations cover effluent guidelines and new plant standards for inorganic chemicals, plastics and synthetics and organic chemicals under the 1972 Water Pollution Control Act.

The principal petitions are before the U.S. Court of Appeals for the Fourth Circuit in Richmond. Related proceedings have been filed in other courts. MCA has filed a motion to join the petitioners challenging the effluent guidelines on inorganic chemicals in the Fourth Circuit because the major legal questions involved concern all the Association's members. Those issues are:

- Whether judicial review of effluent guidelines *must* be sought in the Court of Appeals within 90 days of their issuance, and
- Whether EPA is not required to fix guidelines flexibly.

Law Ambiguous

The 1972 law is not completely clear on the 90-day limit. If the limit does not apply to the guidelines at this stage, guidelines would be subject to challenge later in connection with discharge permits issued under them.

If the court rules the other way, a producer could be severely penalized by not taking legal action within 90 days from issuance dates. This could result because effluent guidelines requirements could be written into discharge permits after the 90-day period as non-negotiable requirements and might then be totally immune from court action.

EPA's effluent limitation guidelines and standards published March 12 for inorganic chemicals, April 5 for plastics and synthetics, and April 25 for organic chemicals, are *final* rules and regulations.

MCA is suggesting that member companies evaluate their environmental control programs and determine whether they can comply, and it also suggests that they may wish to consider filing a legal challenge. Although other companies have already

done so, the Association points out, suits may not cover the particular concerns of any individual company.

Filing Dates Given

Under the 1972 act, legal challenges to the standards for *new* plants *must* be filed within 90 days from March 12, April 5 or April 25 unless based solely on new data. If not challenged within 90 days, the standards *must* be met by new plants and there will be no variances.

MCA is *not* seeking to participate in litigation concerning guidelines on individual products in view of the Association's long-standing policy not to become involved in individual product problems of this nature. Its staff and general facilities are wholly inadequate for product-by-product considerations, and there is potential anti-trust sensitivity for MCA in activity of this sort.

The Association is asking that MCA President William J. Driver be advised of any legal actions a company takes on the EPA regulations.

What Is Business?

MCA NEWS reprints without comment the following editorial from Nation's Business.

The energy problem has brought attacks not just on oil companies but on business as a whole. Critics demand that business somehow be punished.

We wonder what they mean by "business."

All the businesses we know are owned by people—whether by one guy, a few partners, or thousands of stockholders.

Businesses buy from people, too—some big ones buy from thousands of suppliers.

Businesses give people jobs—a total of 90.5 million.

And businesses serve people—providing the goods and services all 212 million of us need and want.

Whom would it hurt to punish business?

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Brussels Tariff Hearings Planned For Chemicals

The United States Tariff Commission has begun public hearings on its staff's proposals to accomplish conversion of the Tariff Schedules of the United States to the Brussels Tariff Nomenclature (BTN).

The Commission has scheduled the hearings by groups of BTN chapters, which are, in effect, a division into industrial sectors. The principal coverage for chemicals is in BTN chapters 28 through 40, on which hearings are scheduled for August 12 in New York.

Members of the commission's chemical division staff are providing the industry the opportunity to make suggestions before the formal release of the draft chapters, 30 days before the hearings are to begin.

The hearings are the result of a study begun at the request of the President after an appeal to him by the Office of the Special Trade Representative, which anticipated international negotiations on such a tariff conversion.

To keep the new tariff structure within a reasonable size, a number of changes in U.S. import duties will be necessary, and it is these changes which will be the subject of the August hearings.

Trade Advisor Asks Help In Cutting Non-Tariff Bars

The cooperation of U.S. chemical manufacturers in an effort to reduce non-tariff barriers to trade is being requested by the Office of the Chemical Industry Trade Advisor.

The effort stems from the intention of the Office of the Special Trade Representative to negotiate actively on the reduction of such barriers on behalf of the U.S., regardless of whether or not Congress enacts a new trade bill this year. Accordingly, the special task forces formed to assist the trade advisor are now seeking to identify non-tariff barriers to U.S. chemical exports.

The success of the trade advisor in providing such information should enhance the U.S. negotiating position during the discussions.

MCA ANNOUNCES EARLY RESULTS OF VC STUDIES

MCA has announced preliminary indications that vinyl chloride exposure had produced angiosarcoma—a liver cancer—in mice at several exposure levels.

Industrial Bio-Test Laboratories, Inc., which is conducting the MCA-administered vinyl chloride animal exposure study, informed MCA that its work—although very preliminary at this point—tends to confirm the findings of Professor Cesare Maltoni, an Italian scientist who found that vinyl chloride exposure caused cancer in rats.

MCA immediately notified the Occupational Safety and Health Administration, the National Institute for Occupational Safety and Health and the Environmental Protection Agency of the preliminary test results.

In the MCA-administered study, rats, hamsters and mice are being exposed seven hours a day, five days a week, to 2500 parts per million (ppm), 200 ppm and 50 ppm. After seven months of exposure, angiosarcoma has been observed in mice at all levels, but not in rats or hamsters. The animal exposure study is continuing.

Professor Maltoni reported at the OSHA hearings on vinyl chloride February 15 that he had observed the liver cancer in rats exposed four hours a day, five days a week, to 250 ppm for up to 12 months. However, he did not find the cancer in testing at the 50 ppm level.

Another MCA-administered study on the chemical, documenting the health experience of present and former employees who have worked with the materials, is expected to be completed in the near future. Results also will be released.

NEW JERSEY EXTENDS SULFUR VARIANCES

Continuing shortages of low-sulfur fuel have forced the New Jersey Department of Environmental Protection to extend its temporary relaxation of the state's sulfur standards for another three-and-one-half months to July 1.

More than 800 variances have been granted to 232 power plants and other large sources. In making the announcement, the department noted that the variances have not threatened primary ambient air quality standards.

OSHA SETS EMERGENCY STANDARD OF 50 PPM FOR VINYL CHLORIDE

An emergency temporary health standard to protect workers exposed to vinyl chloride has been set by the Occupational Safety and Health Administration while it proceeds toward a permanent standard that could be much more stringent.

Assistant Secretary of Labor John H. Stender, head of OSHA, said the emergency standard reduces permissible exposure levels of workers from 500 parts per million in air to a 50 ppm ceiling. It also requires workplace monitoring. Personal protective measures and equipment are called for when exposure exceeds 50 ppm.

EPA PROBES VC WASTES

Vinyl chloride is being investigated by the Environmental Protection Agency for its overall environmental impact.

The agency says an internal task force is collecting and reviewing data on vinyl chloride, which is used principally for making polyvinyl chloride. PVC is used in plastics and other consumer products.

EPA says it is mainly interested in information on:

- Ambient emission and effluent levels of vinyl chloride in air and water from manufacturing operations;
- The environmental impact of all disposal methods for vinyl chloride and PVC wastes, including landfill, incineration, deep-well injection and ocean disposal, and
- Ecological effects of vinyl chloride in the environment.

The task force is expected to complete its initial assessment by June.

NOISE MANAGEMENT— CONFERENCES TELL HOW

How does noise affect you—your job performance—your health? Growing interest in this subject has prompted two conferences (August 5-7 and August 5-9) by the Institute on Noise Control in Dearborn, Mich.

The three-day course is intended for administrators of noise control programs—whether in industry or government. It explains noise laws, measurement, effects and legal consequences. It zeroes in on management of noise control programs.

Practical and specific methods of industrial and community noise control are featured in the five-day conference. Characteristics of commonly-encountered industrial noises will be explained along with control methods.

For more details, contact James H. Botsford, Institute on Noise Control, Inc., P.O. Box 3164, Bethlehem, Pa. 18017.

The move followed disclosure Goodrich Chemical Company plant in early this year by officials of The B. F. Louisville, Ky., of a possible connection between vinyl chloride exposure and the deaths of four employees of angiosarcoma—a rare form of liver cancer.

One additional death subsequently has been reported from Louisville, and one from Union Carbide Corporation's South Charleston, W. Va. plant. Three deaths occurred at Goodyear Tire and Rubber Company's plant at Niagara Falls, N.Y. In addition, two present employees at Goodrich's Louisville facility have been diagnosed to have angiosarcoma of the liver.

NIOSH's recommendation for a permanent standard could prohibit any occupational exposure to vinyl chloride. It could also establish methods for monitoring work areas, set work practices, institute a medical surveillance program for workers and require specific personal protective equipment.

The emergency standard, enforced since early April, will remain in effect until the permanent standard is adopted. Mr. Stender said that "theoretically, the permanent standard can be on the books as early as June."

Evidence presented at a recent OSHA hearing by Professor Cesare Maltoni, an Italian scientist, led to the emergency ceiling reduction. His studies showed that animals exposed to 250 ppm concentrations of vinyl chloride tended to contract cancer, while those exposed to 50 ppm showed no apparent effects.

In a related development, a medical research program on angiosarcoma and similar liver abnormalities is getting underway at the University of Louisville through a grant from The B.F. Goodrich Company.

Dr. Harold Boyer, a spokesman for the university, said the program's goal is "to provide medical information that can be applied practically in the detection and treatment of liver ailments that may have resulted from worker exposure to vinyl chloride."

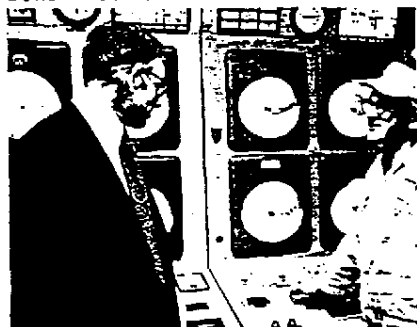
ABRACADABRA— WASTE IS ENERGY

Medieval alchemists never succeeded in turning lead into gold. But their modern counterparts have mastered a conversion process that could be just as profitable. It involves changing wastes into energy.

Selected chemical wastes are being used to supplement commercial fuel oil at Union Carbide Corporation's chemicals and plastics plant in Bound Brook, N.J. The material is fed into boilers to generate steam for numerous manufacturing processes.

Tests conducted by Carbide last fall showed that certain liquid wastes could be burned in the company's boilers under carefully controlled conditions. Wastes are analyzed and mixed in exact proportions with regular fuel to insure proper combustion.

Storage tanks have been installed to hold the liquids to be burned. The project also called for special feed lines, control equipment and some boiler modifications.



Union Carbide personnel inspect monitoring devices which allow the plant to use chemical wastes to supplement fuel oil.

The program is paying dividends in several ways. Roy Sellers, head of the plant's energy department, says it not only conserves fuel oil, it also generates significant savings in fuel oil costs.

During a recent two-month period, some 178,000 gallons of liquid wastes were converted to energy. Savings in the cost of fuel that normally would have been used came to \$62,000.

Environmental benefits are equally significant. The conversion process lessens considerably the volume of waste materials destined for disposal in diminishing landfill sites.

Furthermore, the company finds a decided net improvement in air quality. The burned wastes contain less sulfur than conventional fuel, produce

LAND APPLICATION OF WASTEWATER IS VIABLE DISPOSAL METHOD—EPA

Land application of municipal and industrial wastewater is a viable disposal method, concludes an Environmental Protection Agency report based on a nationwide survey of existing facilities.

The study reveals that land application of effluent is already practiced successfully in the U.S. and many other countries.

Under proper conditions, land application offers a viable alternative to advanced or tertiary treatment processes, Russell Train, EPA administrator, says.

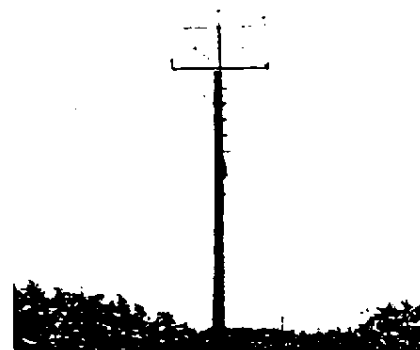
One deterrent to the development of large land systems which might be located some distance away from wastewater sources has been public prejudice against receiving someone else's waste.

However, the report finds that application systems can be operated without creating nuisances and—in examples taken from long-term studies—can actually improve the local ecology.

To encourage the use of such systems, EPA has recently issued grants to several communities for land treatment.

The agency states that further monitoring of the systems is necessary for conclusive data, but good results have been demonstrated with sound engineering, geological and farming expertise and proper construction and control procedures.

Survey of Facilities Using Land Application of Wastewater (EPA-430/9-73-006) is available for \$6.80 from the Government Printing Office, Washington, D.C. 20402.



A Minnesota cannery uses towers to apply its wastewater to corn and other crops.

NIOSH READIES CRITERIA DOCUMENTS

Criteria documents recommending safe occupational exposure to ten industrial materials will be issued by the end of June by the National Institute of Occupational Safety and Health.

Recommendations on inorganic arsenic and sulfur dioxide have already been sent to the Occupational Safety and Health Administration, which will set standards.

Documents on sulfuric acid, silica, benzene, carbon tetrachloride, cotton dust, nitric oxide, zinc chloride and cadmium are slated for completion by June 30.

Preparation of criteria documents on parathion and fibrous glass has been delayed because of lack of sci-

less fly ash and create no visible smoke plume.

Meanwhile, Carbide is seeking a way to efficiently burn solid plastic scrap. Tests have been carried out with selected scrap ground to the consistency of confectioner's sugar.

When this material is jetted into a furnace, the company says that it burns readily and generates heat without causing environmental damage.

tific data. NIOSH is planning for early summer a national symposium on the health effects of long-term exposure to fibrous glass.

Criteria documents for an extensive list of materials are planned for fiscal year 1975-76. They include ammonia, aniline, chlorine, chloroform, dioxane, ethylene dichloride, fluorides, fluorine, formaldehyde, hexavalent chromium compounds and hydrogen cyanide.

Also, hydrogen fluoride, methylene chloride, mineral wool, nitric acid, nitrogen dioxide, phenol, phosgene, phosphine, phosphoric acid, phosphorus, sodium cyanide, sodium hydroxide, tetrachloroethylene, 1,1,1-trichloroethane, xylene and zinc oxide.

Vernon Rose, assistant director of NIOSH, says some changes are in store for criteria documents. In new contracts to be let for preparation of additional documents, he says the Institute will ask that more emphasis be placed on work practices and technical feasibility.