

TO: Distribution

FROM: T. G. Grumbles

DATE: August 24, 1989

Interoffice
Communication

SUBJ: NIOSH INVESTIGATION AT THE LCVCM PLANT

VISTA

Attached are the employee letter regarding the subject and the NIOSH request sent today. We'll keep you informed on progress.

T. G. Grumbles

dlj
.739

Attachment

Distribution: T. H. Huffman, J. A. DeBernardi, R. D. Gamblin, M.
S. Reynolds, W. L. McClain-Houston
J. Friend-LCCP, J. Ware-LCLAB, R. W. Seymour-Aber,
H. D. Garrison-Okc

TO: VCM Plant Employees

FROM: R. A. Conrad

DATE: August 24, 1989

Interoffice
Communication

SUBJECT: Epidemiological Study - NIOSH

VISTA

In order to address your concerns over past illnesses and especially the two recent brain tumor occurrences, we have decided to request an independent third party assessment of the situation by the National Institute for Occupational Safety and Health (NIOSH).

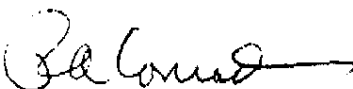
The National Institute for Occupational Safety and Health (NIOSH) is a federal agency that conducts research in the areas of occupational safety and health. In the health areas of research, NIOSH conducts Health Hazard Evaluations to investigate workplace health hazards or causes of occupational disease. They do have scientists that specialize in epidemiological studies, such as would be done to look at potential reasons for a specific health effect, such as brain tumors.

NIOSH has investigated the relationship between vinyl chloride and brain tumors before. In fact a copy of a study NIOSH completed in 1976 and a soon to be published update of that study are in the literature binder we now have at the plant.

Tom Grumbles will officially request a NIOSH Health Hazard Evaluation at our plant by early next week. Tom advises that the agency will normally provide feedback on such a request within two to three weeks. At that time they will advise as to their response and timing. We will keep you posted on the dates as they become firm.

The additional medical screening issue will be resolved and the results and action steps will be provided to you next week.

Thank you for your patience while we continue addressing this very difficult and complex matter.



R. A. Conrad

br(C)
Distribution
Dept. Heads
Supervisors
Bulletin Boards

Vista Chemical Company

900 Threadneedle
Houston, Texas 77079
(713) 588-3000

P.O. Box 19029
Houston, Texas 77224
Fax (713) 588-3236

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 24, 1989

VISTA

Hazard Evaluations and Technical
Assistance Branch
Division of Surveillance, Hazard
Evaluations and Field Studies
NIOSH
4676 Columbia Parkway
Cincinnati, Ohio 45226

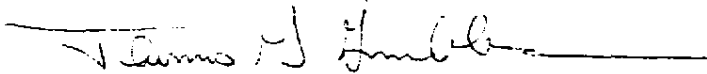
Dear Sirs:

Vista Chemical is requesting a NIOSH Health Hazard Evaluation at its Vinyl Chloride Monomer production facility in Westlake, Louisiana. This request is being made to investigate the incidence of cancer and particularly brain tumors at this manufacturing location. A plant profile is attached that describes the plant operation and provides details about the plant size and history.

The evaluation is being requested as a result of recent events in the current employee population. Two employees have recently been diagnosed as having cancerous brain tumors. According to the information available to us, one employee's tumor was a Glioblastoma Multiforme (astrocytoma) and one was an Adenocarcinoma (metastatic). Both employees have been employed at the plant for more than 15 years. Based on the facts available to us at this time, it appears the two tumors are of a different type and not related in any way. However, the occurrence of two brain tumors in a short time has raised employee concerns regarding the relationship between chemical exposures and brain tumors at the plant. For this reason, we believe an independent assessment of the situation would be beneficial.

Please contact the undersigned at 713-588-3445 if you have any questions concerning this matter and to provide information concerning the next step to be taken by NIOSH.

Sincerely,



Thomas G. Grumbles, C.I.H.
Environmental Quality Manager

dlj

Enclosures

VPA 000014095

Lake Charles VCM Plant

Vista Chemical Company
Box 605
VCM Plant Road
Westlake, Louisiana 70669

Telephones

VCM Plant Office 318/494-5030 (7 a.m. - 3:30 p.m. Monday - Friday)

VCM Control Room 318/494-5070 (Day or Night)

Employees

Approximately 120 employees.

Major Materials Produced

Vinyl chloride monomer (VCM)
Ethylene dichloride (EDC)

Process Capacity

700 million pounds per year.

Product Facts

VCM is produced from ethylene fed to the plant from Vista Chemical's ethylene unit (part of the Lake Charles Chemical Plant), located in the same chemical complex. Vista's VCM is utilized in the production of Vista Polymers' PVC resins, compounds and dryblends and is also sold into the merchant market. When VCM is processed into PVC, the resulting resin can be manufactured into such products as siding, pipe, furniture, apparel and packaging.

VCM is a colorless gas at atmospheric pressure and is the basic raw material for making polyvinyl chloride (PVC) plastic resin.

Ethylene dichloride (EDC), the other basic ingredient for the manufacture of VCM, is produced on site as part of the VCM manufacturing process. After it is made, it is held in tanks until needed. EDC, a colorless, oily liquid, is not routinely shipped outside the plant.

VCM from this facility is transported to Vista's PVC plants in Aberdeen, Mississippi, and Oklahoma City, Oklahoma, and is also sold to other companies.

Facility Description

The Lake Charles VCM Plant is located adjacent to the Lake Charles Chemical Plant on an 80-acre tract, of which 25 acres are utilized. It contains rail and trucking facilities, with access to water transport facilities.

Facility History

- 1967 - Constructed from a Stauffer Chemical Company design.
- 1968 - Brought on-stream. The plant was the largest single-train VCM plant in the world.
- 1981 - The plant completed a major modernization project in 1983.
- 1984 - Vista Chemical assumes operations of the plant after the company purchased assets of Conoco Chemicals.

Lake Charles VCM Plant
Page 2

Incoming Supplies (Feedstocks, Raw Materials)

Chlorine	Transported to the plant in gaseous form by pipeline from the nearby PPG Industries Plant and limited quantities in liquid form by tank car from other chlorine manufacturers in the southeast. Only on-site storage of feedstock is for liquid chlorine. High concentrations of chlorine gas cause severe damage to the respiratory tract. With long exposure, death may result. Gas or liquid contact can burn skin and permanently damage eye tissue.
Ethylene	Transferred to the plant via pipeline from LCCP. Ethylene is a flammable gas which has an anesthetic effect on humans.
HCl Gas (Hydrogen Chloride Anhydrous)	Transferred to the plant as gas by pipeline. It is a colorless, nonflammable gas. Eyes and respiratory tract are susceptible to irritation if inhaled. Tissue damage may occur with exposure to high concentrations.

Handling of Outgoing Materials

Vinyl Chloride Monomer (VCM)	The major product from this facility is VCM, totaling 700 million pounds capacity per year. On-site tank farm capacity is 27 million pounds maximum. VCM is shipped from the plant by railcar, ship and pipeline. VCM is a colorless gas and a liquid under pressure. Vapors can form flammable mixtures in air. Burning VCM generates hydrogen chloride gas. VCM is a recognized human carcinogen. High levels of exposure over long periods of time can cause cancer in humans.
Ethylene Dichloride (EDC)	EDC is used on site and is not routinely shipped outside the plant. EDC is a clear liquid with a sweet, chloroform-like odor. EDC vapors can form flammable mixtures in air. Burning EDC generates hydrogen chloride gas. EDC is classified as a suspected carcinogen. High levels of exposure over long periods of time can cause adverse effects on the liver and kidneys.

Regulated Waste Substances as a Result of Manufacturing Operations

Heavy Ends	Generated from the VCM process and is sent off-site to PPG Industries for recycling.
Light Ends	Generated from the VCM process and is normally sold in the market as a product.
Muriatic Acid	Generated from the VCM process and is either sold as product or neutralized in tanks to be rendered non-hazardous.

To: Distribution

From: Chris Bozman, Public Relations
Date: August 24, 1989

VISTA

Interoffice
Communication

Subject: IF-NEEDED STATEMENT: BRAIN TUMORS
FINAL

Attached is the final version of the if-needed statement concerning the occurrence of brain tumors at the VCM Plant.

No media inquiries on the situation have been received to date; however, it's possible the press might find out about our request for the NIOSH study.

Distribution:

Jim DeBernardi
Tom Huffman
Dick Conrad
John Friend
Joe Ware
Norm Frost
Tom Grumbles
Bill McClain
Jack Drumwright
Mike Reynolds
Gretchen Weis

Michael S. Reynolds

VISTA

to ~~/~~ Dick Conrad
Tom Huffman 3496
~~/~~ Jim DeBernardi
~~/~~ Norm Frost 3280 OK
~~/~~ Bill McClain
~~/~~ Tom Grumbles
~~/~~ Jack Drumwright
~~/~~ Chris Bozman
~~/~~ Gretchen Weis

Date 8/15/89

Attached is a redraft of our "if-needed" statement regarding the VCM plant. Because the letter to employees regarding NIOSH could go out as early as Friday, we need to have our statement ready by then. Please return your comments or approval to me by Thursday, 8/17/89.

no
press
pgt

If call me
will on
vacation -
send to
Grumbles

Chris--updated
version is
on your machine

Havent heard from
those not marked.
Please, hold from here
Mike

VPA 000014099

Michael S. Reynolds

VISTA

To Dick Conrad
Tom Huffman
Jim DeBernardi
Norm Frost
Bill McClain
Tom Grumbles
Jack Drumwright
Chris Bozman
Gretchen Weis

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VPA 000014100

If-Needed Statement

**Brain tumors
VCM Plant, Westlake, Louisiana**

8/15/89

An employee at our Vinyl Chloride Monomer (VCM) Plant underwent surgery to remove a brain tumor several months ago. This tumor was a fairly common type of brain tumor, and one which is not confirmed to be directly associated with employee populations working with vinyl chloride. This employee is currently recuperating from surgery.

A second employee at our plant underwent surgery July 11 to have a brain mass removed. Information we have received to date indicates the tumor was not of the same type as the first employee, and not of a type associated with exposure to VCM.

We recognize and understand the concern felt by our employees and their families. We are working to provide information to our employees to deal with those concerns. While we don't believe the tumors are related to worker exposure to chemicals at our plant, the occurrence of two brain tumors in a short time has raised employee concerns regarding the relationship. For this reason, we believe an independent assessment of the situation would be beneficial. Therefore, Vista Chemical has requested that the National Institute for Occupational Safety and Health (NIOSH) independently investigate the recent tumor occurrences.

Our reading of the scientific literature shows conflicting evidence in regard to the association of brain tumors and vinyl chloride monomer. Some studies have indicated a possible association between brain tumors and VCM. Others have shown no association at all.

In the studies which indicate a possible association, the number of tumors occurring in workers was compared to the number of cases known to occur in the general population. While the number of tumors among the workers was higher than those occurring among the population at large, the difference was small and not considered statistically significant by the study group.

We will continue to evaluate the situation to determine any further actions which might be needed and will keep employees informed as the NIOSH investigation progresses.

1

August 14, 1989

Hazard Evaluations and Technical
Assistance Branch
Division of Surveillance, Hazard
Evaluations and Field Studies
NIOSH
4676 Columbia Parkway
Cincinnati, Ohio 45226

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Environmental Quality Manager

dlj

Enclosures

*cc: RLF, Chris Boyman***TO:** VCM Plant Employees**FROM:** R. A. Conrad
DATE: August 24, 1989Interoffice
Communication**SUBJECT:** Epidemiological Study - NIOSH**VISTA**

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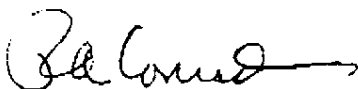
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We will continue to evaluate the situation to determine any further actions that might be needed and will keep employees informed as the NIOSH investigation progresses.

To be used only if asked:

Q. Isn't it true that you've had four or five (a number of) people come down with cancer at your plant?

A. We've had approximately 175 employees at the VCM plant since we began operations in 1968. We are aware of seven present or previous employees who have had various forms of cancer over the last 17 years, none of which have been confirmed to be directly associated with employee populations working with vinyl chloride.