

UNION
CARBIDE

INTERNAL CORRESPONDENCE

Jim Kunkle

CHEMICALS AND PLASTICS

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TO (NAME) SVR Chief Operators/Operators
COMPANY SVR Shift Prod. Supervs.
LOCATION ~~SVR 511133~~
Texas City Plant

DATE . December 10, 1976

COPY TO Mr. J. B. Leverton
Mr. F. S. Provenzano

SUBJECT Watchful Eyes For VCM Plants

Attached is an article from The Houston Post of November 19, 1976. Be advised that of the 48,000 pounds of VCM released at Texas City, only 1,000 pounds came from the Solvent Vinyl Resins Unit.

HOWEVER: This article does indicate that VCM releases will "make the papers" and will result in increased attention from regulatory agencies.

Your continued efforts and vigilance is requested to ensure that the SVR Unit maintains its good record regarding massive releases of VCM.

Thank you,

W. A. Mazzolini
W. A. Mazzolini

WAM/st
Attachment

UCC 093764

Houston Post
11/19/76

Board seeks to cut vinyl chloride spills

By HAROLD SCARLETT
Post Environment Writer

The Texas Air Control Board is looking for ways to reduce plant upsets that, over the past 18 months, spilled an estimated 234,000 pounds of cancer-linked vinyl chloride into the air around the Houston area.

A tabulation by the air board's regional office in Houston showed 83 accidental releases of vinyl chloride (VC) were reported by the companies responsible between May 31, 1975, and Nov. 5.

By far the largest single "unscheduled release" was an estimated 100,000 pounds of VC from the Oyster Creek plant of the Dow Chemical Co. It occurred in a 15-minute period on July 17, 1975. The plant is near Freeport.

The next largest VC releases -- both from the Union Carbide Corp. plant at Texas City -- were 22,000 pounds last July 16 and 25,000 pounds on Sept. 14.

All three plant breakdowns resulted from power failures, the companies reported.

Lloyd Stewart, air board regional supervisor, said the accidental releases are not considered any real threat to public health.

"I think there would have to be something much larger than anything we've seen yet to merit a public warning," he said.

To put the 18-month accidental releases of 234,000 pounds into perspective, VC specialist Jim Tarr of the air board staff pointed out that VC emissions during normal plant operations in the Houston area in 1974 totaled an estimated 26,340,000 pounds.

Nevertheless, Stewart said, the air board regional office is working on corrective measures to cut down on accidental releases.

He said these efforts center on preventing upsets before they happen and, if

they do occur, on developing systems of trapping or destroying the leaking VC gas before it escapes from a plant.

Such controls could include scrubbers, incineration flares or channeling of the escaping VC into holding tanks.

The air board staffers said Union Carbide is now working on a holding tank, while Dow has improved its electrical system to reduce the chances of future power failures.

Tarr pointed out that a new Ship Channel VC plant, recently licensed for construction by the Diamond Shamrock Corp., will have a complete standby power system.

A basic raw material for plastics production, VC has caused fatal liver cancers in plant workers exposed to comparatively high levels of VC for many years.

Recently adopted federal regulations now limit VC exposure among plant

workers to an average 1 part per million (PPM) over an eight-hour period.

However, the minimum safe exposure to VC is still somewhat in dispute, and some inconclusive studies have indicated the gas may cause birth defects and genetic damage in surrounding populations.

At the Diamond Shamrock permit hearing, one medical specialist for the company said he believes the danger threshold for prolonged exposure is about 36 PPM. He added that he would not be concerned about brief population exposures up to 500 PPM.

No downwind sampling was conducted during the three large releases at Union Carbide and Dow.

However, Tarr estimated through computer modeling that the maximum public exposure from the Dow upset was 20 or 30 PPM for a period of 10 to 15 minutes.

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