

UNION
CARBIDE

INTERNAL CORRESPONDENCE

CC: RWS
KER
RLF
DLG

XEROX Transmission Run + ADS

UC 149-2

CHEMICALS AND PLASTICS

P. O. BOX 471, TEXAS CITY, TEXAS 77590

TO (NAME) Mr. R. W. Martin
COMPANY Bldg. 2000-4418
LOCATION TECHNICAL CENTER

DATE October 31, 1974

Dr. A. B. Steele
28th Floor
NEW YORK OFFICE

SUBJECT

The list below covers, as well as we can anticipate at this time, the needs of the Texas City Plant as it attempts to lower employee exposure to VCM. There is absolutely no guarantee that if these projects are implemented in the production units that a 1 PPM 8-hour TWA maximum will be realized. At this time in the Suspension/Non-Solvent area based on data from the area VFA monitors, the average 8-hour TWA is 5-7 PPM and in solvent it is 3-6 PPM. As you know the tank car unloading facilities are shared by both P.C. 282 and 381. Have not attempted to place dollar amount on General Facilities since your guess will be as good as mine in terms of capital and increased operating cost. Also suggest adding another \$500 M for Distribution area projects for ventilating bagging rooms, hopper cars, van boxes, waste collection, dust collection, etc. If the Standard finally is promulgated at 1 PPM TWA, then probably anything we put down here is conservative. Remember we have had very little time to analyze the problem and develop solutions. We have only had an instrument at Texas City that would detect leaks and that was truly portable for one month. The study is premature but faced with the necessity of evolving some sort of plan, here it is.

Vinyl Chloride Unloading Facilities

	<u>Cost - M\$</u>
1. Vinyl chloride vapor reheater to improve tank car unloading capability	50
2. Purging facilities for recovering VCM when removing tank cars for maintenance	150
3. Install pipe line to Oyster Creek (40 miles) plus storage sphere at Texas City	-

Suspension/Non-Solvent Area

1. Improved vacuum stripping of resin slurry	700
2. Improved monomer recovery system including gas holder and MEK absorber for vents	1,500
3. Prover tanks for improving reliability of process	1,000

UCC 090940

October 31, 1974

	<u>Cost - M\$</u>
4. Miscellaneous installation of mechanical seals in pumps, new valves, improved ventilation systems, etc.	500
5. Additional area VCM analyzers and data logging equipment	100
6. Contingencies	<u>500</u>
Total	3,400

Solvent Resins Area

1. Autoclave mechanical seals, Dynatrols	350
2. Retray existing stripping stills	100
3. Additional area VCM analyzers and data logging equipment	100
4. Route existing vents to flare	100
5. Purchase new pumps, install mechanical seals on existing pumps, new valves, etc.	500
6. Vent collection system and compressor for losses such as autoclave sampling, compressor packing leaks, sample analysis vent hoods, etc.	200
May need a new distillation column to separate VCM from recovered acetone	-

General Facilities

1. Increased Industrial Hygiene personnel and facilities.
2. New lunch and locker rooms for support groups such as maintenance personnel.
3. Increased medical personnel and outside expenses for examinations.
4. Increased record keeping personnel, storage area for records, and computerized data logging.
5. Solid waste disposal facilities such as an incinerator to prevent having to make other sections of plant a regulated area.

M. E. Eisenhour

UCC 090941