



Interoffice Communication

To G. G. Draper
From Tom Roche
Date November 21, 1974
Subject Revision to Vent System at VCM Loading Dock.
Design No. 15-700-1174-TPR

Attached is the design for a piping modification to the vent system at the VCM loading dock. This design is being issued as final unless further comments are received.

Venting from the ship increases the back pressure on the vacuum eductors on the dock and on the hydroquinone addition system. This reduces the eductor efficiency to the point where adequate vacuum can not be produced. Eductor design information indicates a 2 psig back pressure reduces the amount of vacuum produced by 30%. As a result it becomes necessary to stop the venting from the ship during hold sampling and hydroquinone addition so that these eductors will function properly. Consequently, ship loading is stopped or reduced during hydroquinone addition and hold sampling.

This design proposes to route the discharge lines from the two eductors directly to the knock-out pot located prior to the vent stack. This will reduce the back pressure effect now encountered when ship venting is in progress. Currently the discharge lines from the eductors combine with the ship vent line immediately after the vent recovery system. Back pressure as a result of the pressure drop in the 3" combined vent line to the stack will be avoided by piping the eductor discharge gases to the knock-out pot separately. Approximately 150 ft. of 2" pipe will be needed.

A 2" flange connection will be needed on the KO pot to connect the new line. It should be located at approximately the same elevation as the present vent line connection to the KO pot.

If there are any suggestions or revisions to this design please return them immediately to Douglas Michels.

Thomas P. Roche

T. Roche

Approved

Douglas Michels

bw

CC:

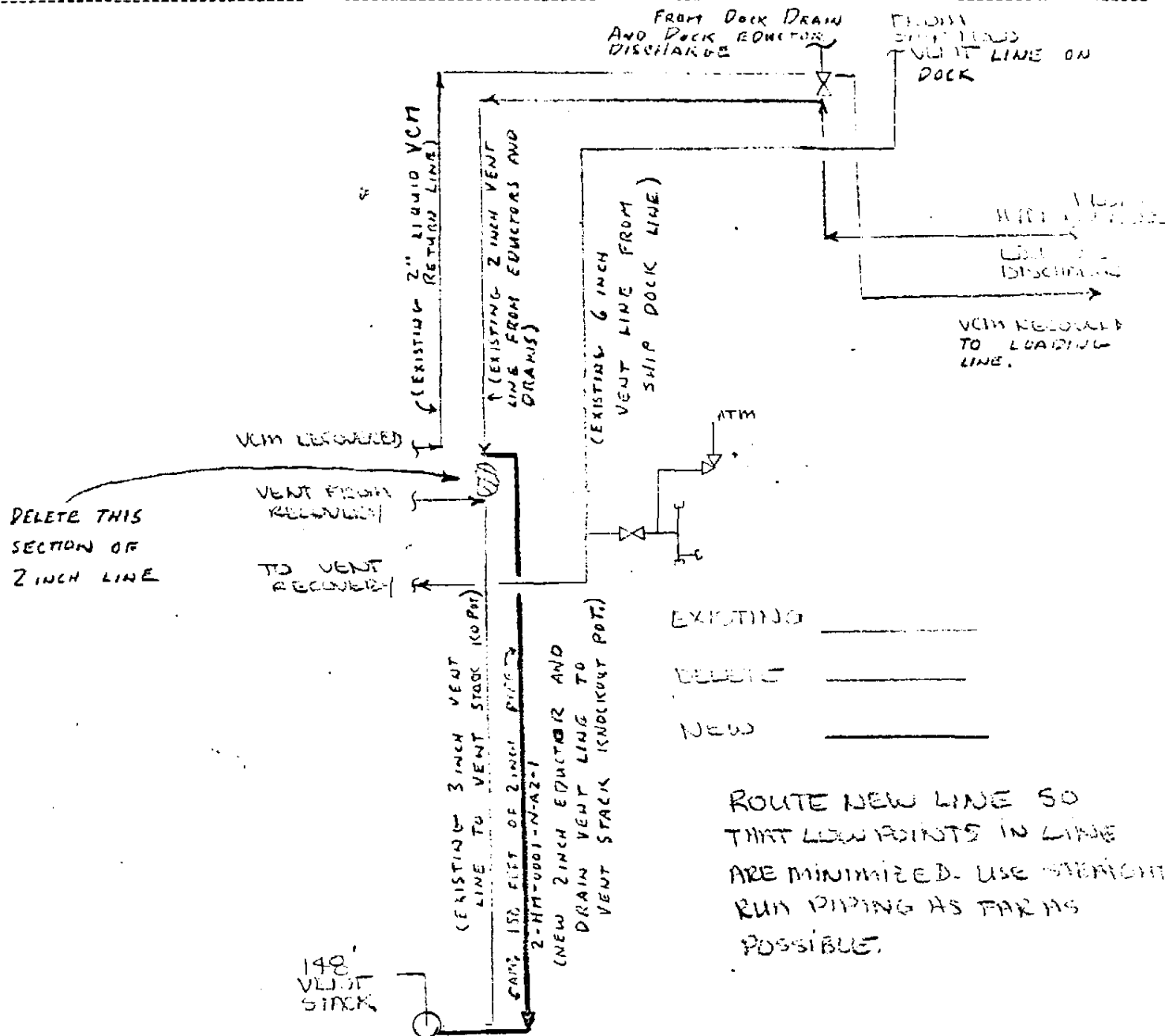
JAD-JHM-GGD(5)-JRH(4)-CEG-JSR-JCL-PLF

VVC 000010288

BY _____ DATE _____
 CHKD. BY _____ DATE _____

SUBJECT _____

SHEET NO. _____ OF _____
 JOB NO. _____



NOTE: A NEW 2 INCH NOZZLE WILL BE REQUIRED AT THE INLET TO THE VENT K.O. POT. THE LOCATION OF THIS NOZZLE IS NOT CRITICAL BUT IT SHOULD BE AT LEAST 3 FEET ABOVE THE BOTTOM TANGENT LINE OF THE K.O. POT.

FIGURE 1

REVISION TO DOCK VENT SYSTEM

TPR

11-20-74

VVC 000010289

Ambient Air Meeting
VCM Plant

10-18-74

Company position - will meet the standards
as presently presented. 1 ppm & 10 on
5 ppm for 15 minutes.

Aberdeen & Okla City - Steam ~~Spur~~ Stripping.

- A. Caustic & Sulfite Bed - Vinyl Exposure Problem
Test Run - Aberdeen test run - Bypass
both sulfite & caustic for vinyl chloride
- B. Fresh air intake must be protected -
Ponca City has been assigned this
job.
- C. Aberdeen
- D. Check over Corbin Compressor
- E. CBS October 19 on Vinyl 9:00-10:00
PM
- F. Monitoring Fixed Point at Rock
70 to 90 days
- G. Review our work load on vinyl exposure
by Hire 3 engineers by Dec 1
- H. Help from PED & CED on pump seals
- group will visit a packaging plant.

I Weiss will check with OSHA on
actual requirements on sampling

J Each Plant

Sign & label work
Define regulated area -
Write emergency procedures

K Needs to put together a list of questions on
monitoring.

* L. Fixed point monitoring.
Lab, Maintenance & Control

Check on sampling system for
lab instrument -

M. Dick Weiss will ~~put in~~ get a statement
of accuracy from Honeywell for their accuracy
of analysis

N. Alarm system: Fix on alarm
system.

O. Signs for containers

P Question on ^{who} keeps the medical record

R Plant keeps the data results (monitoring)

5. Exposure forms - notification
T. Plant Plan for vinyl emission
reduction.



EARL Gemillion - UCM

F41

Henry M. M. M.

PLF

BNA Week of 10-3-74

Current Report

Vinyl Chloride**FINAL OSHA VC RULE WILL PERMIT
25 PPM EXPOSURE WITHOUT RESPIRATORS**

Until January 1, 1976, employees in polymerization plants exposed to concentrations of vinyl chloride less than 25 parts per million may decline to wear respirators, according to the final VC standard adopted by the Occupational Safety and Health Administration.

Assistant Labor Secretary John H. Stender told the National Safety Congress on October 1 that the permanent standard would be issued on October 4. Exposure to VC was limited to 50 ppm under an emergency temporary standard issued by OSHA (Current Report, April 11, p. 1411). The permanent standard proposed by OSHA would have prescribed a "no detectable level" (Current Report, May 9, p. 1539).

The adopted standard specifies that no employee may be exposed to vinyl chloride at concentrations greater than one ppm over any eight-hour period or to more than five ppm for a 15-minute period. This exposure limit can be accomplished through use of personal protective equipment instead of control of the workplace.

However, according to OSHA, "While exposures in excess of the permissible level do constitute a hazard, we believe that it is necessary to mitigate some of the problems associated with implementing a program of respiratory protection while employees are being fitted and trained in respirator use, and while other adjustments which may be required are implemented."

The standard continues the current 50 ppm level until December 31, 1974, to assist employers in meeting the new levels.

Three-Phase Plan

The permanent standard will operate as a three-phase progression between October 4, 1974, and January 1, 1976. Reductions of exposures to these levels will be made through feasible engineering and work practice controls. Where the measures will not reduce levels enough, the standard will permit reductions to the lowest practicable level with employee respiratory protection to meet the one ppm and five ppm limits.

Beginning January 1, 1976, the wearing of respirators will be mandatory for workers exposed to the one and five ppm limits. Until the January date, the wearing of respirators is discretionary for exposures under 25 ppm.

Stender told a news conference at the congress that the delay in the effective date for mandatory use of respirators for exposure above one ppm is due to the shortage of equipment and the need for approval of new equipment.

Standard Provisions

Provisions of the new standard require that employers must:

- ▶ Set up areas where concentrations of VC exceed the one and five ppm limits with access limited to "authorized workers."
- ▶ Forbid contact by workers with VCM in liquid form.
- ▶ Initiate monitoring and measuring programs to learn whether exposure levels exceed 0.5 ppm.
- ▶ Require new measurements for any change that may alter exposure levels.
- ▶ Require a continuous monitoring and alarm system

where regular monitoring program shows excursion levels may exceed 25 ppm.

▶ Give workers and their representatives a "reasonable opportunity" to observe monitoring and measuring.

▶ Provide protective garments and respiratory protection to workers in hazardous situations, such as cleaning operations in PVC vessels.

▶ Prepare plans for emergency situations such as accidental release at high levels.

▶ Train workers on topics such as the nature of the hazard, protective measures, etc.

▶ Conduct proper medical surveillance. Medical programs must include complete initial examinations. Subsequent ones will be required every six months for workers who have worked with PVC for 10 or more years.

▶ Require signs or labels at entrances to regulated areas, hazardous operations, containers of PVC resin waste, PVC containers, and VCM containers.

▶ Require maintenance of medical records and rosters of authorized workers to be kept for specified time limits or sent to the National Institute for Occupational Safety and Health if an employer goes out of business before expiration of the retention period.

▶ Submit reports to the nearest OSHA area director not later than one month after establishing a "regulated area, and within 24 hours of any emergency exposure.

There are 36 polyvinyl chloride plants employing 5,600 workers, 14 monomer plants, employing 940 workers, and 7,500 fabrication plants employing 350,000 workers, according to Stender.

Federal Agencies**PRESIDENT FORD SIGNS NEW EXECUTIVE
ORDER ON FEDERAL WORKER SAFETY — HEALTH**

A revised Executive Order on federal-worker safety and health was signed by President Ford on September 28.

Executive Order 11807, "Occupational Safety and Health Programs for Federal Employees," was issued to strengthen the Government's commitment to provide "exemplary" working conditions for federal workers. It supersedes Executive Order 11612 issued in 1971.

Secretary of Labor Peter J. Brennan announced the signing of the NEW Executive Order at a speech given to the National Safety Congress' Federal Safety Conference on September 30 in Chicago, Ill.

"The new Executive Order has teeth in it. And it is clear-cut in its division of responsibilities," Brennan said.

Worker Guidelines

Brennan noted that issuance of the Executive Order is tied closely to guidelines for federal worker safety and health. The proposed guidelines originally appeared in the Federal Register last September (Current Report, October 4, p. 581).

Since issuance, the guidelines were revised to bring them into agreement with the new Executive Order. Brennan said that they will be issued soon and that "agency heads will be required to observe these and any future guidelines issued by the Labor Department."

According to Brennan, the guidelines cover five areas: (1) recording and reporting injuries, illnesses, and acci-