

D R A F T

June 3, 1974

Ms. Joanne Goodell

Attention: Docket OSH-36

1726 M Street, N.W., Room 200

U. S. Department of Labor

Washington, D. C. 20210

Dear Ms. Goodell:

Olin Corporation, Chemical Group, 120 Long Ridge Road, Stamford, Connecticut, 06904, wishes to object to the "Proposed Standard for Vinyl Chloride (29CFR Part 1910) (Docket OSH-36)" on the basis that portions of the proposed standard are unnecessarily restrictive, and that under present market conditions, it would be economically infeasible to redesign and reconstruct our facilities to accomplish VCM emissions below the detectable level.

Specific objections are as follows:

1. 1910.93_q (b)(9) "Exposure" means actual contact with vinyl chloride when unprotected by required personal protective equipment and clothing.

We need measurable limits of time and content of VCM that constitute an exposure.

OLI 2854

2. 1910.93_q (e)(2) The monitoring shall assure that any exposure may be determined for each authorized employee with a confidence level of 95 percent.

It is questionable whether equipment and methods are sophisticated enough to provide a level of confidence in the 95 percent range.

3. 1910.93_q (e)(3) Employees or their designated representatives shall be afforded an opportunity to observe monitoring and measuring required by this paragraph.

Restrictions as to number of observers, and who may qualify as observers are necessary in order to preserve plant proprietary information.

Handwritten:
1910.93_q
limited

4. 1910.93_q (e)(4)(f)(i)(ii)(iii)(iv) Accurate and complete records of all required monitoring shall be made and maintained for not less than 20 years. Such a record shall (i) state the date of such monitoring and the levels determined; and (ii) identify the instruments and methods used.

(f) Engineering controls and work-practice methods. (1) Where detectable levels of vinyl chloride are measured, immediate protection shall be provided against exposure to vinyl chloride by the use of engineering controls, work practice methods, and respirators as follows:

4. continued

(i) Feasible engineering controls and work practice methods shall immediately be used to reduce airborne concentrations of vinyl chloride below the detectable level:

(ii) Wherever feasible engineering controls and work practice methods which can be instituted immediately are not sufficient to reduce concentrations of vinyl chloride below the detectable level, they shall nonetheless be used to reduce the concentrations to the lowest practicable level, and shall be supplemented by means of respirators in accordance with paragraph (g) of this section:

(iii) Wherever no feasible engineering control or work practice method can be instituted immediately, immediate respiratory protection shall be provided in accordance with paragraph (g) of this section: and

(iv) In any case covered by paragraph (f)(i)(ii) or (iii) of this section, the employer shall also undertake as soon as practicable a program to reduce airborne concentrations of vinyl chloride below the detectable level, or to the greatest extent feasible, solely by means of engineering controls and work practice methods and as soon as feasible.

4. continued...

As stated in the opening paragraph, it would be economically infeasible to meet the proposed maximum of 1 ppm of VCM therefore, employees would be required to ~~wear impervious clothing, shoe covers, gloves, and~~ respirators at all times while in the plant. This is objectionable on the basis that safety and health would not be enhanced but rather would encumber the operator in his job function.

*By inspecting
equipment
work
practice*

5. 1910.93_q (h) Protective Clothing. (1) Employees entering regulated areas shall be provided fullbody protective clothing, footwear or shoe covers, and gloves at no cost to them, and required to wear it while in the regulated areas.

(2) Where polyvinyl chloride powder containing detectable levels of vinyl chloride is handled, employees shall also be:

- (i) Provided and required to wear headcoverings;
- (ii) Required to remove all protective clothing at each exit from the regulated area; and
- (iii) Required to shower after the last exit of the day.

5. continued.

- (i) Need a definition of "head covering". Also question the ability to wear hard hats or other types of head covering in conjunction with a full-face piece respirator.
- (ii) Should be deleted. Such a rule is unnecessary with the inclusion of paragraph (h)(3). Also, in most plants logically regulated areas are contiguous to one another so passing from one to another should not require the change of clothes. If this rule is maintained, one would be tempted to declare the plant, offices excepted, one large regulated area ~~thus~~ ~~by passing the rule.~~

6. 1910.93_q (h)(3)(i) Hygiene facilities and practices. (1) Where employees are required by this section to wear protective clothing and equipment, change rooms shall be provided in accordance with 1910.141(e).

(2) Where employees are required by this section to shower, shower facilities shall be provided in accordance with 1910.141 (d)(3).

Vinyl chloride is a gas at room temperature and dissipates by its evaporation. It is not known that a shower will accomplish any useful protection of an employee against VC exposure. Other than normal personal hygiene, the requirement for showering appears to be academic and unnecessarily restrictive. If the intent of a

6. continued.....

shower is to remove any particulate PVC resin from an employee's skin, and thereby eliminate potential migration of VC out of the resin particles and into the employee's skin, blood stream, breathing air, etc., the potential exposure of VC is so miniscule that it would probably be immeasurable.

7. 1910.93_q (j) Emergency situations. (1) A written operational plan for emergency situations shall be developed for each regulated area.

"Emergency Situation" as it pertains to VC exposure needs to be defined.

8. 1910.93_q (j)(2)(iii) Where an employee has a known contact with liquid vinyl chloride, such employee shall be required to shower as soon as possible, unless contraindicated by physical injuries.

We have already commented on showering requirements; see 1910.93_q (3)(i) above.

9. 1910.93_q (1) Maintenance and decontamination.

1. Emphasis shall be placed upon immediate clean up of spills, periodic inspection, prompt repair of equipment and leaks, and proper handling, storage and disposal or decontamination of materials to prevent airborne contamination and accidental skin contact with vinyl chloride. Waste materials, equipment, and other sources of vinyl chloride in closed containers, may not be placed in areas of excessive temperature or sunlight since buildup of internal pressure may result in rupture of the container, fire or explosion.

(1)(1) "Contamination" needs definition. The reference in this part to use of closed containers for wastes and possible container pressure rise implies that the containers are sealed. This entire paragraph suggests that this waste material practice is inherently hazardous. The part of this paragraph beginning with Waste Materials and all of (1)(2) should be stricken from the standard. We suggest the following substitution:

Any waste materials which are contaminated (this word needs definition) must be handled and disposed of in a manner which will prevent personnel exposure to VC. It is recognized that handling and disposal will vary with such things as waste from and VC concentration, existing recovery facilities, etc.

10. 1910.93_Q (1)(4) In maintenance or repair operations on contaminated systems or equipment, including vessel entry, employees engaged in such operations shall be (i) provided with and required to wear and use a whole-body air-supplied suit impervious to vinyl chloride, and a respirator in accordance with paragraph (g) of this section; and (ii) required to shower after removing protective equipment.

Our operations require approximately seventy (70) entries into reactors for cleaning in a twenty-four (24) hour period. Entry is through an eighteen (18) inch manway at the top of each reactor. It would not be possible for an employee to enter the reactor wearing the above required gear. The reactors are glass-lined and it would require a major revision to enlarge the manways. It is felt that disposable clothing plus an air supplied respirator is sufficient for this work. Also, until "contamination" has been defined, we cannot agree to the need for impervious clothing during maintenance or repair operations on contaminated systems.

The need for a shower immediately after removing protective equipment is questioned since the purpose of the protective equipment is to prevent exposure. We do not question the need for a shower at the end of a work day.

11. 1910.93_q (m)(3) Employees engaged in transfer operations shall be provided with and required to wear respirators in accordance with paragraph (g) of this section.

The requirement to wear respirators unless the atmospheric exposure is above the standard, seems to be too restrictive and has no purpose. Respirators should, however, be carried on the person during the entire hook-up and loading or unloading operation.

12. 1910.93_q (q)(2) Incidents which result in the release of vinyl chloride into any area where employees may be exposed shall be reported in accordance with this paragraph.

"Incident" and "release of VC" need to be defined.

13. 1910.93_q (q)(3) Upon completion of any monitoring and measuring which discloses that any employee has actually been exposed to detectable levels of vinyl chloride, each such employee shall be individually notified in writing.

"Exposed to detectable levels" needs definitions as to time and amount.

Olin respectively requests an opportunity to raise the above questions at an informal hearing. Cost estimates for approaching the requirements of the proposed standard are:

1. Process equipment designed to assure emissions less than 1 ppm _____
2. Waste handling and disposal equipment _____
3. Building ventilation and exhausting equipment _____
4. New change room and shower facilities _____
5. Redesign of reactors to permit entry with safety gear _____
6. Installation of reactor washing facilities _____

Estimated Total _____

Very truly yours,

OLIN CORPORATION

Director Safety & Loss Prevention

:jaa

OLI 2863