

Assistant Secretary for Occupational Safety and Health
U.S. Department of Labor
Washington, D.C. 20210

Dear Sir:

Pursuant to Section 6(d) of the Williams-Steiger Occupational Safety and Health Act of 1970 (84 Stat. 1596: 29 USC .655), Conoco Chemicals respectfully requests a permanent variance from the requirements of 29 CFR 1910.93g, (g) (2)(4), concerning respiratory protection for work environments contaminated with Vinyl Chloride.

I. APPLICANT

CONOCO CHEMICALS AT THE FOLLOWING THREE CONSUMERS
PVC PLANT PVC PLANT PVC PLANT
P.O. Box 91 P.O. Box 605
Highway 25 Westlake, MS.
Aberdeen, MS 39730

II. PLACE OF EMPLOYMENT - Same as (I).

III. APPLICATION

Under the provisions of 29 CFR 1910.93g, as of April 1, 1976, we will be required to use a NIOSH-approved, full-face, air-purifying respiratory device, i.e. a full-face, canister "gas mask" to protect employees working in Vinyl Chloride concentrations between ^{1-10 ppm} ~~one part per million and ten parts per million~~. In the interests of the general welfare and safety of our employees, we hereby seek relief from this requirement by proposing a solution which we believe offers the ~~same~~ protection ~~that~~ ^{as that} provided for by the regulation. ~~for protection of workers in the 1-10 ppm range.~~ ~~(but not yet NIOSH-approved)~~

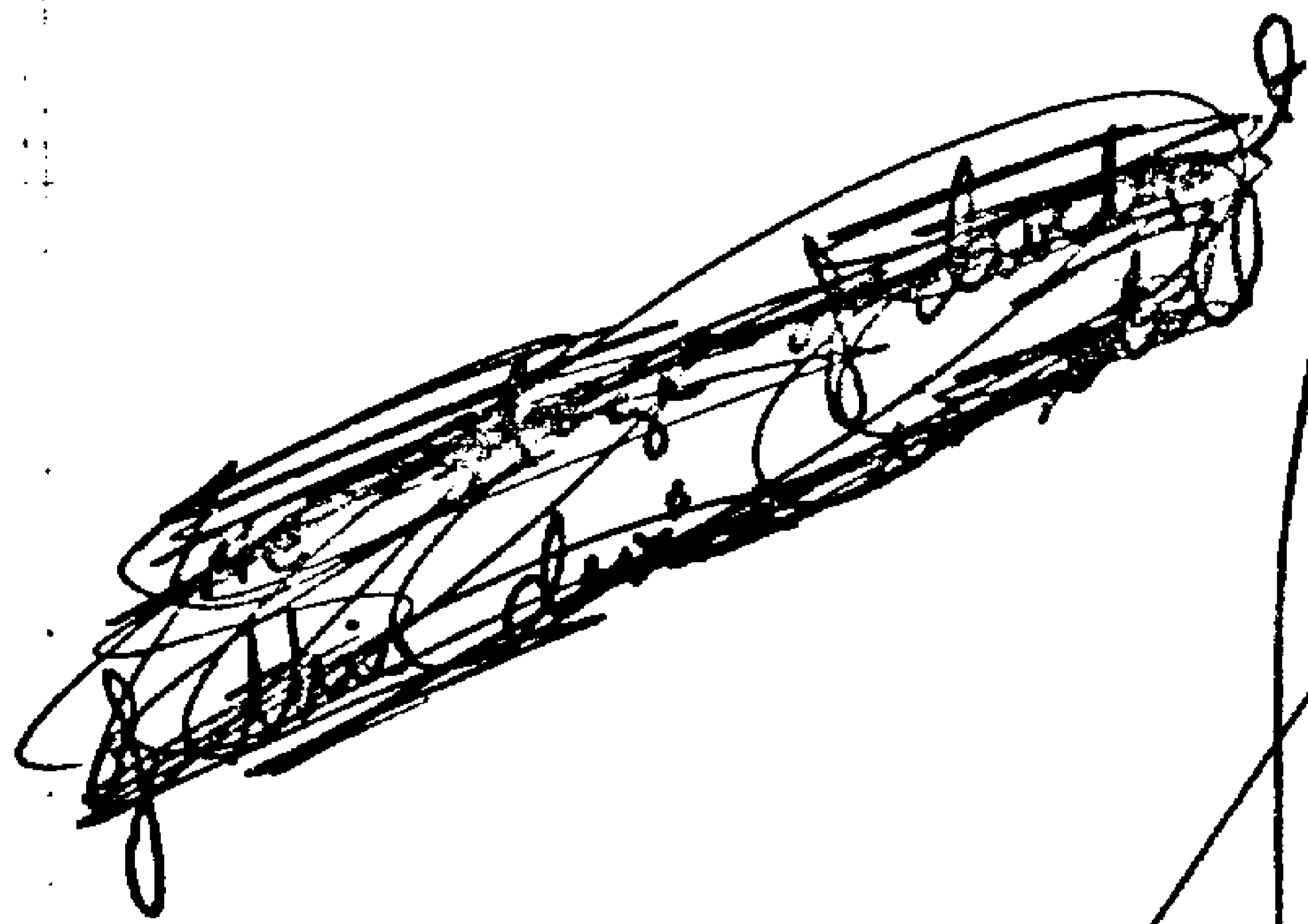
Our main concern is that requiring employees to wear full-face, air-purifying devices in the 1-10 ppm range, although unquestionably providing them with adequate protection against VCM inhalation, will unnecessarily subject them to other hazards, which, taken on the whole, ~~will~~ present a ~~not~~ substantial risk to the safety of the employee. Chief among these hazards are:

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A. Discomfort — The ~~excessive~~ sweating, skin irritation,
and other discomforts associated with the
use of a full facepiece ~~for~~ leads
us to believe that, particularly in
geographic areas of high humidity — conditions such
normally
as ours, on occasion, workers
may, in fact, ~~not~~ when not being
observed, elect to ~~remove~~ ^{not faithfully wear} the
full facepiece canister mask; for this
event, absolutely no respiratory protection
thereby subjecting themselves to work
without the benefit of any respiratory
protection.

We do, of course, accept and
intend to fully discharge our responsibility
to insure that the circumstances
referred to is kept to an absolute
minimum. However, we recognize
that our ability to do this is,
in the end result, limited by
the individual and his personal
motivation.

B. Eye Strain

To achieve adequate facial
needs ~~with~~ while using full-face
air-purifying devices, it is
necessary to provide prescription
eyeglass wearers ~~who have~~
~~severe eye problems~~ with
special prescription eyeglass
devices which are commercially
available, and which are
designed to not interfere
with facial needs. The



These devices are marginal
at best and most employees
complain that they can not
see well. We are fearful
that acceptance of these devices
will be limited ~~and~~ resulting
in employees working without
prescription eyeglasses resulting in
~~possible~~ eye damage with long term
use.

present state of this art,
while being pushed ~~by~~ forward
manufacturers, is still such
that the ~~arrangements~~
resulting arrangement are ^{with regard to protection}
at least marginal for persons
requiring severe or critical
eye correction. In the
case of those types of
employees, we are fearful
that acceptance will be
limited and that permanent
eye damage may ~~even~~ be done
with long-term use.

C. Restricted vision - We believe the use of the full-face piece canister mask greatly increases the likelihood of injuries during tasks that require a maximum amount of peripheral vision, such as working at elevated positions and operating industrial power vehicles.

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D. Dermatological Problems - In addition to the general discomfort problems mentioned in A above, we also believe the use of full-face piece air purifying devices can reasonably be expected to result in increased dermatological problems in the vicinity of the eyes, because of the extra sensitivity of the skin in that area. When this occurs, not only will the employee have been

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We agree that above 10 ppm, greater protection than that offered by a half-facepiece, air-purifying device is advisable. Because of this, our expectation that workplace exposure above 10 ppm will ~~soon~~ most typically occur during emergency situations or during performance of hazardous tasks, and to provide an extra margin of protection to workers working in 10-25 ppm atmospheres, we ~~propose~~ intend to require the use of a NIOSH-approved, ~~continuous-flow~~ half-facepiece, continuous-flow, air-line respirator between 10 ppm and 1,000 ppm, as permitted under the regulation. ~~Above 1,000 ppm or in~~ we will also require the use of this respirator while performing hazardous tasks, regardless of concentration, except that it will be limited to use below 1,000 ppm. ~~At~~ Above 1,000 ppm or in unknown concentrations, we will, of course, continue to provide and require the use of approved self-contained, pressure-demand, breathing apparatus.

Between 1 ppm and 10 ppm, however, we agree with the regulation, that believe that use of a half-facepiece air purifying device, supplied with a high efficiency filter is more appropriate, and indeed advisable for the reasons stated above. Our belief appears to be

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supported by the work done by Mr. Edwin C. Hyatt, a copy of whose ~~at~~ July 23, 1975 report is attached. Copies of other supportive work, which are ~~also~~ attached, include that by the Industrial Safety Equipment Association and that by the Death Aviation Company. These works, particularly the former two, make it clear that a half-mask, fitted to a high efficiency filter, can reasonably be expected to provide a "protection factor" of 10 for environments not immediately hazardous to life, i.e. such a device should ~~be~~ provide adequate protection in environments of no more than 10 ppm.

~~It is therefore recommended that we use the following:~~

We therefore propose to use, in environments of up to 10 ppm, a half mask air-purifying respirator which consists of the half mask frame, a NIOSH-approved continuous flow air-line respirator and a NIOSH-approved gas mask canister, which is specifically approved for use in environments of up to 25 ppm of vinyl chloride.