

COMMENTS ON THE MEDICAL SURVEILLANCE PROGRAM UNDER THE
NEW VINYL CHLORIDE STANDARD

A. Who must be examined and how often?

1. The standards require that all employees exposed above the action level, that is to say, 0.5 parts per million, be examined. Those who have worked for ten years or more must be examined every six months. Those who have worked less than ten years must be examined annually. I think this means that in practice, all employees in our PVC operations must be examined because, even though someone might spend a relatively short time in the area, he nonetheless could easily have a small excursion. It doesn't take much of an excursion to bring his exposure above the allowable 0.5 ppm TWA for an 8-hour day.
2. One very confusing thing in the regulation is that the action level which determines the need for physical examinations is 0.5, whereas the limit which determines a regulated area is 1.0. Therefore, it is conceivable that we could have a number of people who work outside the regulated PVC areas and nonetheless would be required to have examinations on the above schedule if the standard is adhered to rigorously.

B. What does the examination consist of?

1. A general physical examination by a physician.
2. A series of biochemical examinations which is not quite so extensive as the SMA 12 plus GGTP that we are now doing. Since there would be no economy in doing the lesser number of examinations, I would recommend that we continue with our current blood testing program.

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3. The body of the standard indicates that we must test for dysfunction of the kidney and for abnormality in the pulmonary system. It then refers the reader to Appendix A which is headed "Supplementary Medical Information". This appendix refers to additional tests which may be useful and then describes what can be done in the way of testing for kidney and lung problems. I find this very confusing in that it would seem to make examination of the kidney and lungs mandatory and then indicate that any studies of kidney or lung functions are only suggestions rather than requirements of the standard. In practice, I think that we should do our kidney testing by doing a simple urinalysis, checking for albumin and red blood cells and omit the exfoliative cytology which they suggest but which I think would be of very little value and which is quite expensive. As far as pulmonary testing is concerned, I think we might as well plan to do the basic pulmonary function which they recommend, which is a forced one second and total vital capacity with a chest X-ray.

C. What will be required in order to come into compliance?

1. Sufficient physician time to do the required examinations.
2. Access to a laboratory which can do the required blood testing. (I think we already have this pretty well in hand).
3. A pulmonary function testing machine where we do not already have one and someone who is trained to operate it. Any nurse can be readily trained to do this, so this should pose little problem.

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4. Either on-site X-ray facilities or access to X-ray facilities. I think the choice here should be dictated solely by economics. When one considers that the cost of an X-ray on the outside is approximately \$15.00, plus the time the employee loses going to and from the facility, it wouldn't take a very large number of employees to justify installing our own equipment.

D. Suggested plan of action for bringing our examination program into compliance with the new standard.

Suggested Responsibility

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| 1. Determine the number of physical examinations which would be required at each location annually. | Plant |
| 2. Arrange for sufficient physician time to perform these examinations. | Plant and Environmental Health Department |
| 3. Design the required forms for recording the examination and reporting the results to the employee. | Environmental Health Department |
| 4. Acquire adequate pulmonary function testing facilities at each location if we do not already have it. | Environmental Health Department to provide plants with recommendations on specific equipment |
| 5. Investigate the economics of installing in-house X-ray facilities vs. sending employees outside. | Plant and local physicians |
| 6. Examine the overall dispensary facilities at each location to see whether any physical expansion will be required in order to accommodate the new program. | Plant and local physicians plus Environmental Health Department |

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