

Discussion Group D, Laboratory Safety and Health

Don Gaines, who had spoken to the entire meeting on the active safety program at Wisconsin, began the session by sharing a bit more of his experience with the 30 participants present. He talked in part about safety glasses and goggles. Wisconsin requires safety glasses in their undergraduate laboratories. Gaines felt that frontal protection was crucial but that full goggles as a requirement did not make sense due to the loss of peripheral vision. The Wisconsin health service provides safety glasses for \$5.00. He felt a local optician might provide them for \$10.00. He also stated that a student who may be perspiring and who has little peripheral vision is not a safe student in the laboratory. To the question, "will regular glasses do?", Gaines stated, not so, unless they were industrial quality glass. There was some discussion on sources of safety glasses at a reasonable cost. Dick Bayer said that interested people could write to him for information on the purchase of both glasses and laboratory coats. To the question, "can't we have a common standard for eyeglasses?", Gaines said that the law is a bit ambiguous. His predilection is for industrial quality safety glasses with side shields for chemistry majors.

Richard Bayer then talked at some length about Carroll College's experience with the disposal of chemicals. He recounted the accident at Marquette University which resulted while a graduate student was cleaning a refrigerator of samples that had been stored there for some time. A box of assorted samples was sitting on a laboratory bench. One of them detonated, the floor became filled with fumes, the respirator nearby had empty air tanks and 550 people were forced to evacuate the building. Firemen came with respirators and the building was sealed. Twenty people were taken to the hospital for treatment.

At Carroll College the cost of hazardous waste disposal has been approximately \$6.00 per kilogram. The disposal service which they hired took their wastes to a site approved by the state of Alabama. Bayer showed slides of chemicals in various states of storage, some of which had been in their department for many years. He stated that 80% of bottle caps on all new bottles will be loose within ten years. There was discussion of OSHA's new regulations due in March 1980 and EPA rules. The state of Wisconsin has a division of chemical hazards which will interpret these regulations for users. In Illinois the waste generator is responsible for the disposal. Bayer

stated that all of our departments need to be concerned with the evaluation of storage facilities, the cost of disposal, and the regulations under which we must live.

Incineration services are available but there are problems with shipping and federal regulations. Bayer stated that we need to have contact with legislatures on the practical aspects of laws. One way in which we can work together on this is to establish a safety and health committee of MACTLAC. All thirty people in the audience agreed that we should have such a committee; nine said that they would be interested in serving on it. Bayer went on to talk about the dangers of old samples, even those as commonplace as isobutyl alcohol; a sample of this, given as an unknown at Carroll, exploded upon distillation. He also talked about estimating safety factors in the experiments that we do in our courses and suggested that anyone who wants to get current safety information should place his name on the NIOSH mailing list.

Jerry R. Mohrig