



January 29, 1992

To: Distribution

From: Bob Adams - RFH

Subject: VCM Monitoring Methods

The recommended method for personnel monitoring of vinyl chloride monomer (VCM) is NIOSH Method #1007 which utilizes a charcoal tube and pump. This method is applicable for both short-term and long-term sampling (STELs and TWAs). Passive dosimeters of the usual kind (3M or SKC, etc.) are not recommended for vinyl chloride sampling. Several of our plants are using or have used the REAL™ passive dosimeter, made and sold by Dr. Kenneth Reiszner. This badge has been found to give essentially equivalent results to the charcoal tube, and hence is satisfactory for measuring TWAs. Badges, however, cannot be used for STELs because of their relatively low sampling rates.

The REAL™ badge uses a relatively large amount of charcoal which allows it to capture VCM effectively, whereas other badges do not. Another advantage of the REAL™ badge is that it is reusable. The charcoal must be emptied into a vial, sealed with a septum and sent to NATLSCO for analysis. The badge must be recharged with fresh carbon for subsequent sampling. Periodically, the badge must be sent back to the supplier for re-calibration of the membrane.

Either method (jumbo charcoal tube or REAL™ Badge) is acceptable for area or personnel monitoring of VCM.

Please let me have your questions and comments by calling 713-623-7586.

cc: Steve Kemp
Mike Jones
Mark Rohr

