(kettle men) and still operators are subject to possible exposures to the two monomers. Because both vinyl chloride and vinylidene chloride are toxic to the liver and kidneys there is a definite need to evaluate the operator's exposure and to control them to within acceptable limits.

The Environmental Research Laboratory began making surveys with portable air sampling equipment in 1950 with subsequ nt surveys in 1951, 53 and 55. Results of these surveys prompted supervision to install a continuous monitoring system for detecting and recording concentrations of vinyl chloride/vinylidene chloride in the general work areas for the operators.

The monitoring system installed consists of an analyzer and recorder located in a separate room outside the main plant with twelve air sampling lines running out from the analyzer to the operating areas. The analyzer has a combustion furnace to decompose the halogenated hydrocarbon, scrubbing absorbers to mix water with the free hydrogen chloride and/or chlorine formed by that decomposition and two six-point Dynalog recorders to record the conductivity of the solution formed. Arrangements were made for the Instrument Systems Research group to be responsible for weekly maintenance of the analyzer and for the Environmental Research Laboratory to check the calibration of the analyzer approximately every six months. This has been done since 1958.