



Interoffice Communication

To C. E. Gremillion
From Jim Hall
Date May 20, 1975
Subject Results of VCM Personnel Monitoring System Calibration

The OSHA Standard for "Exposure to Vinyl Chloride" contains the following requirement:

"The method of monitoring and measurement shall have an accuracy (with a confidence level of 95 percent) of not less than plus or minus 50 percent from 0.25 through 0.5 ppm, plus or minus 35 percent from over 0.5 ppm through 1.0 ppm, and plus or minus 25 percent over 1.0 ppm."

Compliance with these requirements has necessitated calibration of our VCM personnel monitoring system. The laboratory has conducted a systematic calibration using three purchased standard gas cylinders containing known VCM concentrations of 2.0 ppm, 0.8 ppm, and 0.25 ppm respectively. A schematic of the calibration set up is attached.

The calibration data has been used to determine the upper and lower 95 percent confidence limits for the monitoring system at the three known concentrations listed above. At all three levels, the accuracy of our system, at the 95 percent confidence level, exceeds the OSHA accuracy requirements. (See attachment calculation sheet).

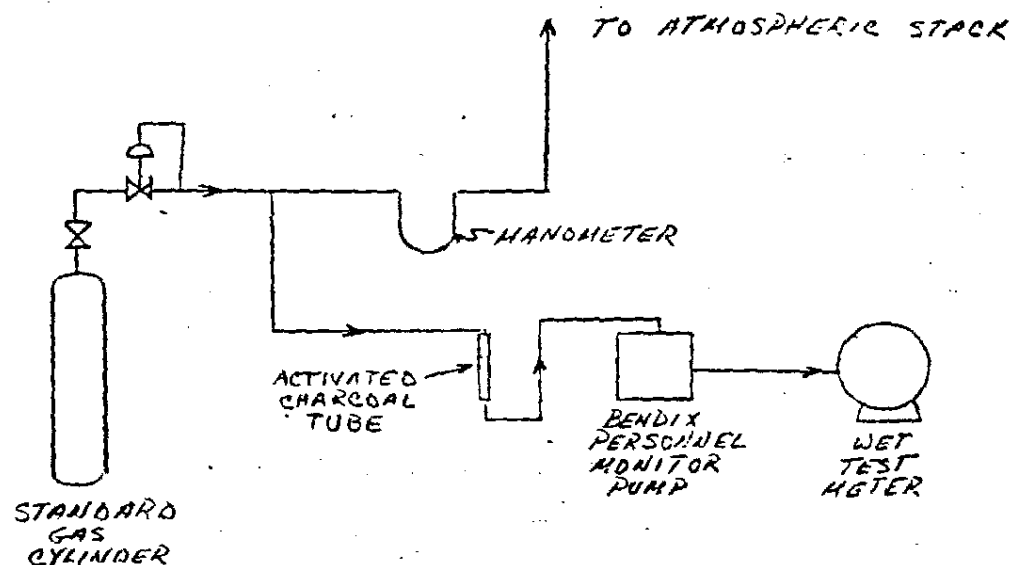

Jim Hall

bc

VVC 000020614

BY _____ DATE _____ SUBJECT _____ SHEET NO. _____ OF _____
 CHKD. BY _____ DATE _____ JOB NO. _____

VCM PERSONNEL MONITORING SYSTEM
 — CALIBRATION SCHEMATIC —



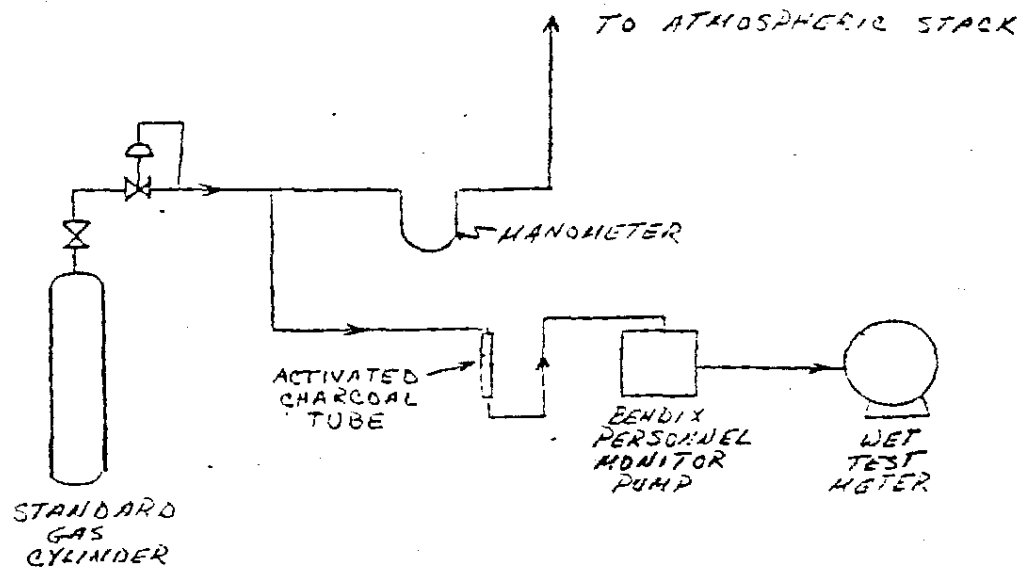
NOTES:

1. STANDARD GAS CYLINDERS OF 1 PPM, 0.8 PPM, AND 0.25 PPM WERE USED.
2. FLOWRATE FROM STANDARD GAS CYLINDER WAS SET BY OBSERVING OVERFLOW THROUGH MANOMETER

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BY _____ DATE _____ SUBJECT _____ SHEET NO. _____
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VCM PERSONNEL MONITORING SYSTEM
 - CALIBRATION SCHEMATIC -



NOTES:

1. STANDARD GAS CYLINDERS OF 1 PPM, 0.8 PPM, AND 0.25 PPM WERE USED.
2. FLOWRATE FROM STANDARD GAS CYLINDER WAS SET BY OBSERVING OVERFLOW THROUGH HANDMETER

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