

UNION CARBIDE CORPORATION
CHEMICALS AND PLASTICS

P.O. BOX 8004, SOUTH CHARLESTON, W. VA. 25303

SOUTH CHARLESTON PLANT

DRAFT

August 3, 1978

Mr. Peter Schaul
U. S. Environmental Protection Agency
Region III
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

Subject: Evaluation of Leak
Detection Program,
UCC, South Charleston, W.Va.
CDS No. 50-0760-10001

Dear Mr. Schaul:

The requested information which was not readily available during your inspection of our facilities is hereby submitted.

1. Secondary control device burner residence time is 3.1 seconds.
2. Total flue gas throughput of secondary control device burner is 2.19×10^6 CFH at 2000 F. Gas flow rate range at SVR Unit, ducted to the secondary control device is 400 - 600 SCFH. VCM range is 16 - 26 lb/hr. (4 grab samples/flow measurements)
3. Concentration of VCM after the secondary control device is 0.13 ppmv / *continuous monitor*, (geometric mean, 10 - 8 hr. shifts which includes all normal operating conditions, e.g., receiving VCM from storage).

UCC 104312

Mr. Peter Schaul
August 3, 1978
Page 2

4. Gas standards (cylinders) used for calibration of our continuous monitoring system are prepared from certified vinyl chloride purchased from our suppliers. Before use each standard is analyzed in our laboratory by comparison to a calibration curve freshly prepared from three gas mixture standards (5 , 10, and 50 ppm vinyl chloride in nitrogen cylinders, certified by the gas manufacturer).
5. Continuous monitor sampling point locations in relation to floor level and equipment in vinyl chloride service are illustrated in the enclosed drawings.
6. A series of three (3) GC columns are used in our Model 1200 VFA continuous monitor:
 - a. 20% Igepal CO-880 on Chromosorb P
AW DMCS (60/80 mesh) 1/8 in. O.D.
SS x 18 in.
 - b. Same as (a) except for length, i.e.,
4½ ft.
 - c. 20% Octoil "S" on Chromosorb P
AW DMCS (60/80 mesh), 1/8 in. O.D.
SS x 3 ft.

UCC 104313

Mr. Peter Schaul
August 3, 1978
Page 3

Please let us know if there are further questions.

Very truly yours,

William C. Young

WCY/pl

Enclosure

cc: Mr. William Battye
GCA/Technology Division
Burlington Road
Bedford, Massachusetts 01730

UCC 104314