



UNION CARBIDE CORPORATION
CHEMICALS AND PLASTICS

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

SOUTH CHARLESTON PLANT
REGISTERED MAIL

March 22, 1977

Mr. Abraham Ferdas
Environmental Protection Agency
Region III, Curtis Bldg., 2nd Floor
6th & Walnut Streets
Philadelphia, Pennsylvania 19106

Subject: Vinyl Chloride Regulations
Reactor Opening Loss, Initial
Emission Test

Ref: Letter, J. L. Worstell to
Abraham Ferdas, February 28,
1977

Dear Mr. Ferdas:

Compliance testing was conducted on B-1 Autoclave located in our Solvent Vinyl Resin Unit, Building 153, on March 14, 1977. Richard Beane and Fred Sizemore, Air Pollution Specialists with the West Virginia Air Pollution Control Commission, observed test procedures.

Average VCM concentration of three (3) samples collected from the reactor was 1095 PPMV, as determined by EPA Method 106. Using this value (C_p) in the equation provided in the Standard, Section 61.67 Emission tests, and 4.82×10^5 pounds product (Z), dry solids basis, shows the resultant reactor opening loss to be 4.93×10^{-7} Kg VCM/Kg product. This is well within the maximum permissible emission limit of 2×10^{-5} Kg VCM/Kg product.

Analytical results were provided by our plant laboratory within twenty-four (24) hours after sample collection. Final test results and calculations were completed as of March 21.

We trust that this satisfies the requirements of Sections 61.64 and 61.67 of the Standard with regard to reactor opening losses.

Very truly yours,

J. L. Worstell
J. L. Worstell
Environmental Protection
Coordinator

JLW/pl

Attachment

cc: Mr. Carl G. Beard

Mr. Richard A. Beane

UCC 101590

REACTOR OPENING LOSS - INITIAL EMISSION TEST
B-1 AUTOCLAVE, SOLVENT VINYL RESIN UNIT
BUILDING 153 - SOUTH CHARLESTON PLANT
March 14, 1977

Reactor Volume	37.9 M ³
Lbs. Product ⁽¹⁾	4.82 x 10 ⁵
Temperature near sampling bags	54°F
Barometric Pressure	749 mmHg

VCM CONCENTRATIONS, PPMV⁽²⁾

Six (6) inches from top of reactor	985
Middle of reactor	1109
Six (6) inches from bottom of reactor	1193

- (1) The Solvent Vinyl Resin process is continuous. Hence, the number of batches (Y) produced since the reactor was last opened is unity.
- (2) Dry basis.

WCY
3/21/77

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