

April 6, 1978

To: Mr. J. L. Worstell

cc: Mr. M. A. Aitken
Mr. T. D. Epps
Mr. C. E. Fry
Mr. W. T. Gray
Dr. R. W. Holland, Jr.
Mr. R. T. Kramer
Mr. D. C. Macauley
Mr. G. E. Mellen
Mr. J. R. Soice
~~Mr. J. R. Soice~~
Mr. H. L. Wise

RECEIVED
APR 12 1978
R. N. WHEELER, JR.

Data by: C. C. Armstead
H. C. Jackson
K. C. Price
F. B. Vaughn
L. O. Whitman

From: W. C. Young

Subject: Monthly Ambient Air Vinyl Chloride Monitoring

Among twenty six (26) samples collected on March 21, 1978, a positive analytical response was noted in five (5) sample analyses. Only one (1) of these (0.02 ppmv) represented a community air sample taken beyond our fence line and even then the determination is suspect. Three of the samples were collected down wind of the SVR Unit and the determined vinyl chloride concentrations are probably valid. (See attached plot plan) Wind velocities throughout the 6-7 hour sampling period ranged from SSW-18 MPH to SW-24 MPH. An in-plant sample located at the gasoline pumps (Bldg. 428) continues to show a presence of an interfering unknown compound. This particular sample site was up wind of any vinyl chloride source and, again, no response was noted in a sample located approximately 50 yards away.

/nm

Attachment

UCC
029680

AMBIENT AIR VCM MONITORING

1974 - 1977

<u>Sample Location</u> <u>Type Sample</u>	<u>Fence Line</u> <u>Grab (1) - CT (2)</u>	<u>Community</u> <u>Grab - CT</u>	<u>*Plant</u> <u>Grab - CT</u>
Total Samples	112 - 227	299 - 289	807 - 381
ND (None Detected)	103 - 152	285 - 192	671 - 210
> ND, < 0.1	33	51	81
≥ 0.1, < 0.5 ppmv	9 - 41	14 - 45	115 - 87
≥ 0.5, < 1.0 ppmv	1	1	9 - 1
≥ 1.0 ppmv	None	None	12 - 2

1978

Total Samples	16	22	31
ND (None Detected)	13	19	23
> ND, < 0.1 ppmv	3	3	8
≥ 0.1, < 0.5 ppmv	None	None	None
≥ 0.5, < 1.0 ppmv	None	None	None
≥ 1.0 ppmv	None	None	None

1. Grab samples discontinued.

2. CT is an abbreviation for charcoal tube. (Sample duration 4 - 6 hours).

*These samples are taken around the periphery of those units using VCM, i.e., roadways, etc.

None Detected = < Method sensitivity

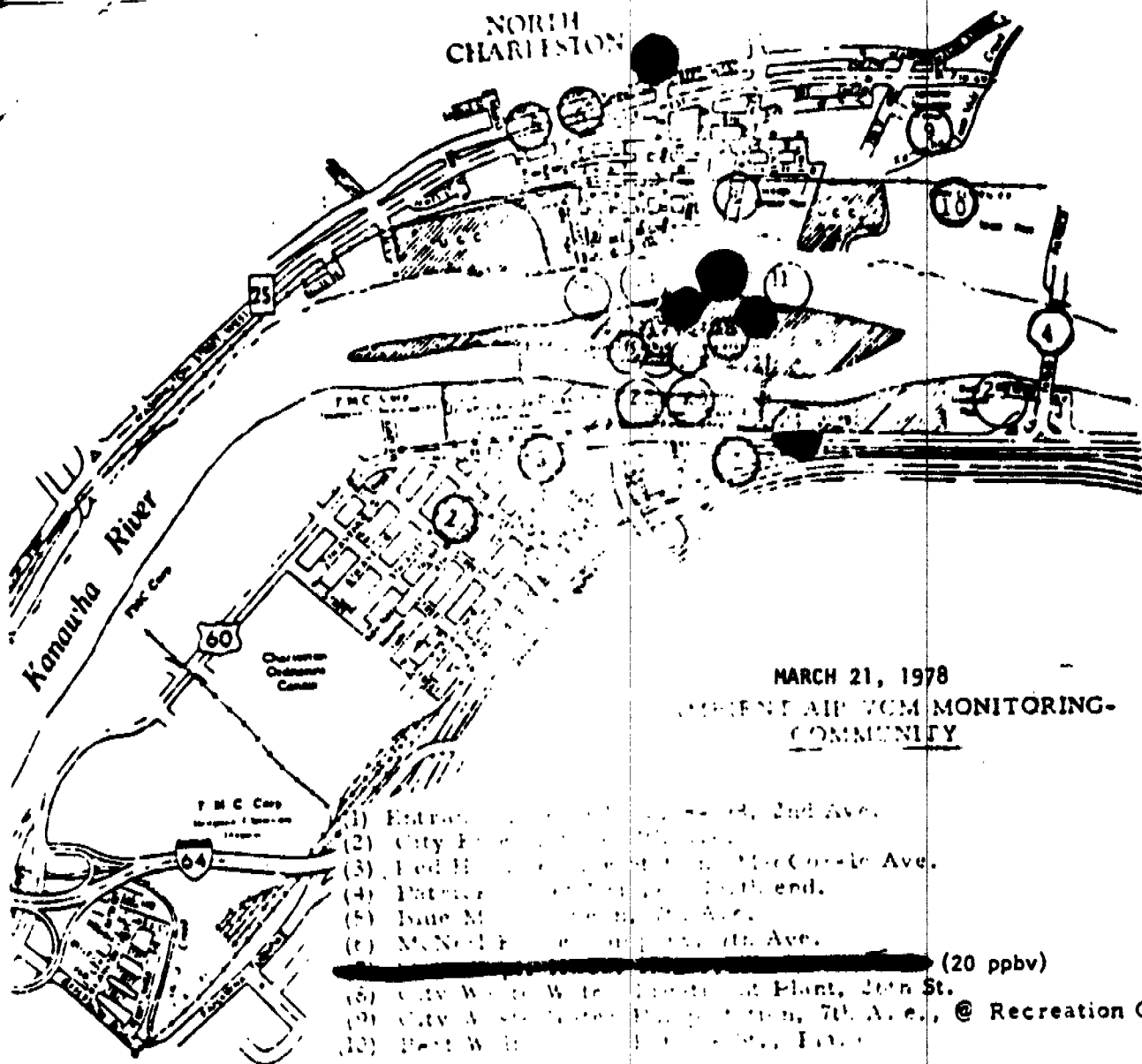
Grab sample method sensitivity = < 0.05 ppmv

Charcoal tube method sensitivity ≈ 5 ppbv (since March 1978)

WCY

3/31/78

UCC
029681



- (20 ppbv)
- (6) City of Charleston, 1st St. & 1st Ave.
 (9) City of Charleston, 1st St. & 1st Ave., @ Recreation Cen
 (10) City of Charleston, 1st St. & 1st Ave.

- (20 ppbv)
- (14) City of Charleston, 1st St.
 (15) City of Charleston, 1st St.
 (22) City of Charleston, 1st St.
 (23) City of Charleston, 1st St.
 (24) City of Charleston, 1st St.
 (25) City of Charleston, 1st St.

(30 ppbv)

(5 ppbv)

(102 ppbv)

UCC
029682