



INTER-ORGANIZATION MEMO

File

TO: ASHTABULA
ATTENTION: David Jenkins
FROM: C. G. Lopez
DATE: January 9, 1980
SUBJECT:

I noted in the latest BNA that your neighbor, Diamond Shamrock, received a five item willful citation with \$50,000 in penalties for the following:

1. 1910.1017 (c) (1) failure to ensure that employees were not over-exposed to vinyl chloride.
2. 1910.1017 (g) (4) for failure to provide respirators appropriate for protection from exposure to vinyl chloride.
3. 1910.1017 (g) (6) (ii) for failure to ensure that a monitoring system provided adequate indications of the concentrations of V.C.M.

They also got hit for lead exposure and improper floor guarding.

Since these people are so close to you it might be advisable to call them and discuss the exact details of the citations and establish if we have similar conditions.

C. Gary Lopez
C. G. Lopez

cal

GENC 19194

Ashtabula

A. D. Jeffrey

H. E. Jewett

January 11, 1980

Diamond Shamrock

*file
safety
Ashtabula*

RECEIVED

JAN 17 1980

R. W. Laundrie

Diamond Shamrock was fined \$52,000 by OSHA over violations at their Delaware City PVC facility.

The sequence of events were as follows:

1. A female OSHA inspector of child bearing age stopped at Stauffer PVC plant for a brief inspection and was turned away.
2. She had a complaint over lead dust to investigate at Diamond, so she went there next. They would not let her in. She became upset and said she would get the paperwork (court order?) to get in and left.
3. OSHA District Director called Diamond. Diamond said if she'd sign a release of responsibility, they would let her in. OSHA refused. Finally Diamond agreed to let her in under conditions of constant monitoring and respiratory protection.
4. After they entered the plant, the inspection went on and off for nine (9) months.
5. Three (3) days before OSHA's deadline to cite, she and District Chief came to Diamond and laid the following citations on them - three (3) serious citations and five (5) willful. (I am not sure which of these are serious and which willful except the first.)
 - a. Employees exposed to +1 ppm and/or +5 ppm for 15 minutes. Workers did wear respirators in all cases except one.
 - b. Arcas monitoring system:
 - (1) Alarm levels too high - set at 10, 25, & 100 ppm. Should be 1, 5 ppm per OSHA. (Ours are +1 & +5)
 - (2) Monitoring results not adequate to protect workers.
 - (3) Monitor points not located adequately.
 - (4) Alarm system did not prevent an employee from being exposed.

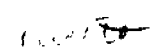
GENC 19195

- d. No beard policy and poor control of testing respirator fit.
Also training on respirators inadequate.
- e. Lead dust exposure.
- f. Gate on work platform not closed to prevent worker from falling.
Repeated open after warned by OSHA inspector.
- g. Breathing air system analysis and air processing (lack of carbon filter?) (We have one.)
- h. Not labeling PVC waste containers per Standard.
- i. Policy of Engineering compliance and getting to lowest possible level was not emphasized and current. Diamond's policy of complying with Standard and not doing Engineering is a violation of Standard. (This one tends to confuse me) I think really the citation was because they did not have a working engineering plan to reduce levels in work areas. I conclude levels in work areas have been increasing at Diamond which is what caused this problem. Ours is decreasing. Our engineering plan needs to be updated.

Interesting Sidelines:

- 1. Bingham told District to "get tough again on VC1."
- 2. Diamond did get all willful violations except #1 above reduced to serious, and fine reduced to approximately \$5,000.
- 3. Used plant records as proof of her findings.
- 4. Took word of workers on Company violations of Standard.
- 5. Obvious vendetta on her part to get Diamond because of their position.

Any questions, please call.


H. E. Jewett
Plant Manager

EEJ/ikb

cc: R. W. Laundrie ✓
Staff

GENC 19196



Microprocessor-based ambient air monitoring system provides rapid detection of VCM leaks

FRANK L. CONRAD

Technical Supervisor
CertainTeed Corporation
Pipe & Plastics Group
Sulphur, Louisiana

MARX ISAACS, Southwestern Editor

New Solutions to Plant Problems



View of CertainTeed's Sulphur, Louisiana plant

Ambient air sampling building



CP Staff photos

Problem: At the Sulphur, Louisiana plant of the CertainTeed Corporation, the raw material is vinyl chloride monomer (VCM); the product, polyvinyl chloride (PVC). Emissions into the atmosphere must be eliminated in order to comply with federal air pollution control regulations and to avoid loss of product.

Until September 1977, when a new system was installed, an infrared analyzer was used for monitoring the air leaving the VCM process. Inaccuracies were encountered due to drift and temperature sensitivity of the analyzer, and there were maintenance problems. An analysis required three minutes, so that if a VCM leak occurred, it was at least three minutes old before an operator could take the proper measures to correct the situation and stop the air pollution and loss of product.

Solution: An ambient air monitoring system was installed to replace the infrared analyzer. It consists of a sampling system, a process microcomputer (PMC) which controls the continuous operation of two chromatographs, each with a flame ionization detector (FID). The detector signals are sent back to the microcomputer for processing. Communication is done through two typewriters with printout. One is in the ambient air sampling building, the other in the technical supervisor's office. Ambient air samples are taken at 30 points, with 15 pumped to each of the two

Safety new literature

Safety supply catalog features a wide variety of products to assist in meeting OSHA regulations. Included are drench showers, goggles, face shields, protective clothing, hearing protection, burn stations, fire extinguishers and more. All products in the 64-pg catalog are described and illustrated in full detail. Safety supply cat — Interex Corp.

Circle 517 opposite last page

Garments of Tyvek spunbonded olefin are fully described in 12-pg bulletin. Workers are protected in a variety of hazardous or dirty jobs involving such materials as asbestos, PCBs, pesticides and lead dust. Barrier properties, liquid hold-out, chemical protection, toughness and durability, breathability/comfort and cost performance are all addressed in the illustrated brochure. Tyvek bro — Du Pont Co.

Circle 518 opposite last page

Plant identification products, including conduct and voltage markers, pipe marking products, aisle marking dots and tapes, visual barricading products,

complete systems for numbering and lettering, sign-making components, interior and exterior graphics systems, vehicle placards and safety signs are described in a 118-pg catalog. Catalog S-4 — W H Brady Co.

Circle 519 opposite last page



Over 100 disposable garments, including head gear, smocks, aprons, pants, shirts, coveralls, jumpsuits, shoe covers and other accessories, are discussed in catalog. Made of Tyvek, these garments are designed to meet most clean room and health hazard requirements and are strong enough to reuse many times. Disposable clothing cat — Melco, Inc.

Circle 520 opposite last page

Digital audible dosimeter with a range of 0-9999 mR is described in a bulletin. The instrument has LCD readout and presettable integrated alarms from 10-9999 mR and rate alarms from 100-9000 mR/hr. All alarms are inside the device so that they are inaccessible to the user after being preset by the radiation safety personnel. SuperDAD bul 1888 — Dosimeter Corporation of America.

Circle 521 opposite last page

Protective footwear and clothing catalog analyzes each boot and protective suit by the way they perform at specific hazardous job sites. Line has been organized so that customer can select products by materials, construction and price. Protective clothing cat — Uniroyal, Inc.

Circle 522 opposite last page

For more information circle corresponding numbers on Reader Service Card opposite back cover

THERE IS NO EQUAL

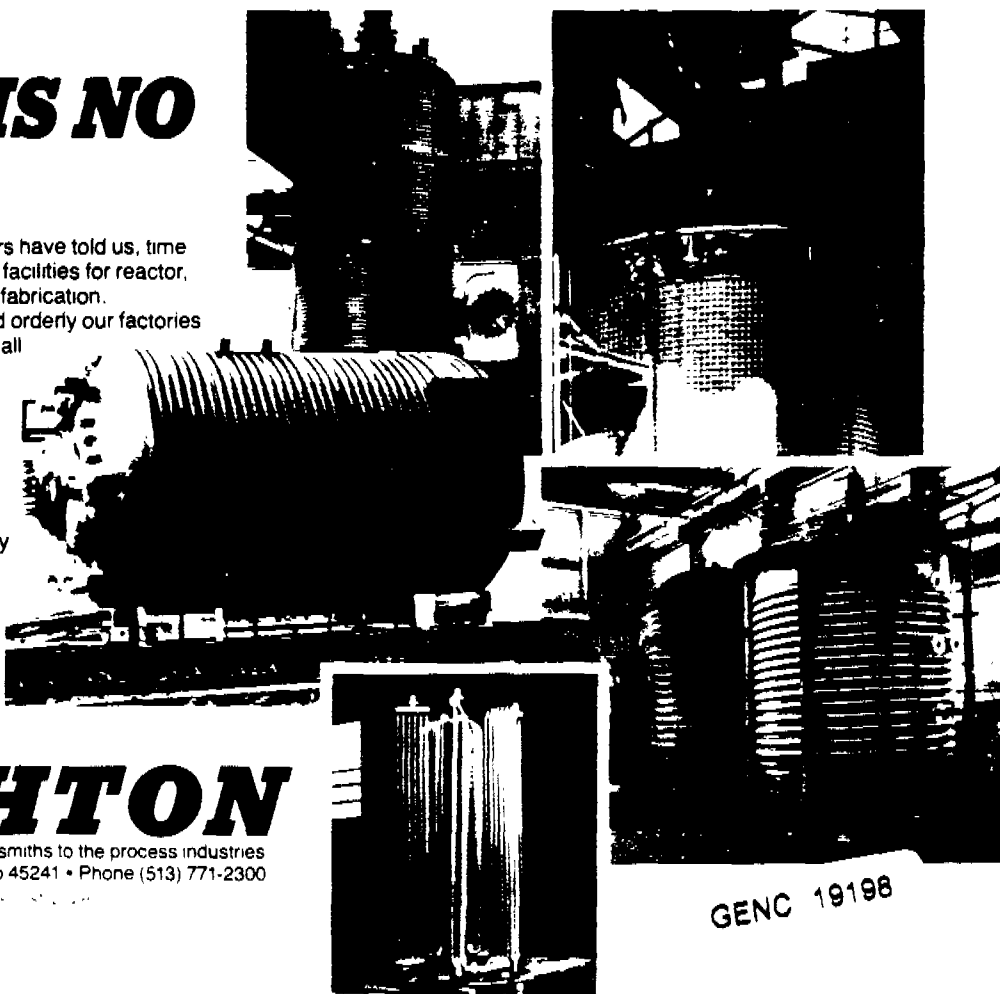
Down through the years, customers have told us, time and again, there is no equal to our facilities for reactor, tank, column and pressure vessel fabrication.

Customers tell us how clean and orderly our factories and offices are. They tell us about all the help they get from friendly, willing people—from highly-qualified engineering specialists, salesmen who follow right through to on-time shipment, production personnel who keep up to date on scheduling, inspection and quality control people who look after every minute detail. Customers always note the pride of our craftsmen.

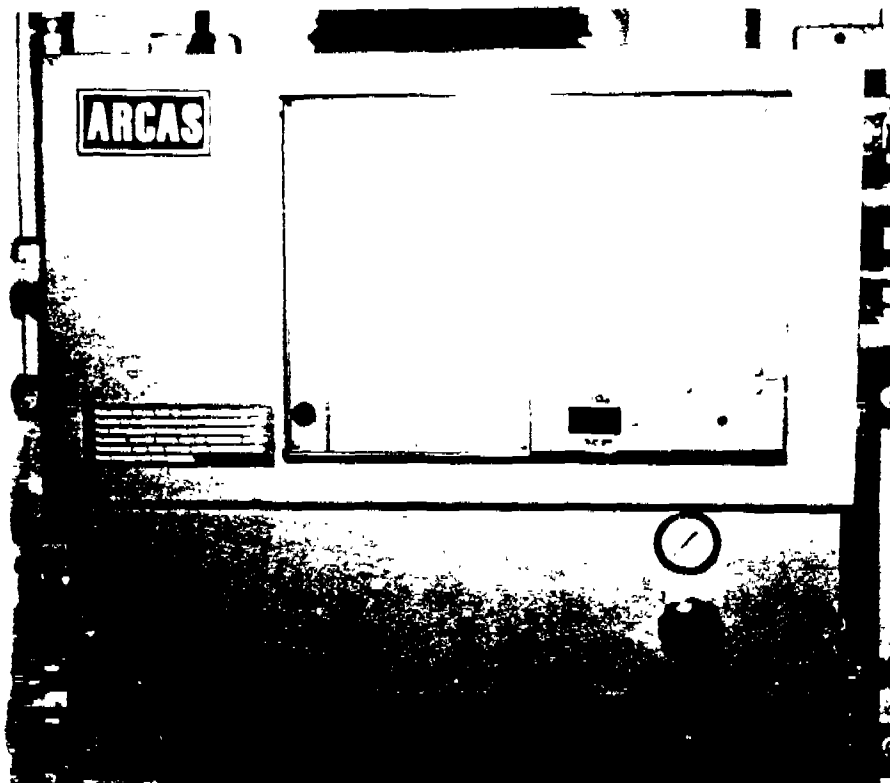
Everything we do is precisely calculated to please our customers, because they are the most important part of our business. For full details, write for Bulletin BF-21

BRIGHTON

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11861 Mosteller Road, Cincinnati, Ohio 45241 • Phone (513) 771-2300



GENC 19198



Chromatographic detector housing in ambient air sampling building

Air sampling point on an overhead line



analyzers. A 16th stream to each is used for calibration, done once each shift, or three times every 24 hours.

Ninety-six analyses are made in 24 hours for each sampling point, each requiring 60 seconds, with continuous typewriter printouts showing VCM in parts per million and location and exact time of each sample. Gas chromatography is the method recognized by OSHA for monitoring levels of vinyl chloride and other hydrocarbons. The tolerance is a maximum of 10 ppm VCM from any control device. An alarm registers immediately on the printouts if VCM reaches 5 ppm at any sampling point, indicating a leak; the alarm continues to register until the VCM level is reduced.

The PMC controls the timing of sample taking and holds analyses in memory until 12:01 AM each morning, then takes about 20 minutes to print out all readings and averages in a 24-hour report. Appropriate programming can provide averages for any desired time periods, e.g., by the

hour or shift. Data can be transferred to a minicomputer with greater storage capacity.

Results: The ambient air monitoring system has functioned smoothly and there have been no maintenance problems to date. The alarm feature is considered one of the greatest advantages over the former system of analysis. VCM leaks, which occur infrequently, are rapidly detected and stopped, saving an estimated 100 manhours per month, minimizing product losses due to leaks, and complying with federal control regulations for VCM content of air emissions. ■

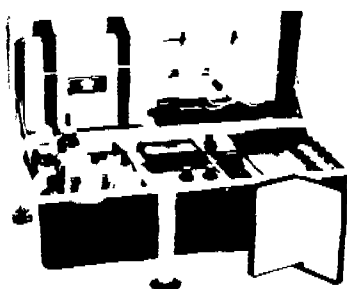
Information on the Arcas Model 505 Analyzer and Model 2000 Process Micro Computer is given in Bulletins 300-0179 and PMC-0578 from Foxboro Analytical, a division of The Foxboro Co., Arcas Chromatography Center, 10707 Haddington St., Houston, TX 77043.

Circle 524 opposite last page



Continuous air analysis printout in supervisor's office

GENC 19199



Pollution detection lab monitors 300 substances

Hazardous materials detection kit is a complete, portable laboratory which provides a rapid means for determining the extent and severity of toxic substance contamination. The kit uses 15 general test methods to monitor over 300 hazardous materials. Portable carrying case contains a spectrophotometer, pH meter, conductivity meter and all required reagents and apparatus. Tests are

rapid and easy to run. Many use premeasured reagents and precalibrated meter scales producing quick results which allow prompt remedial action.

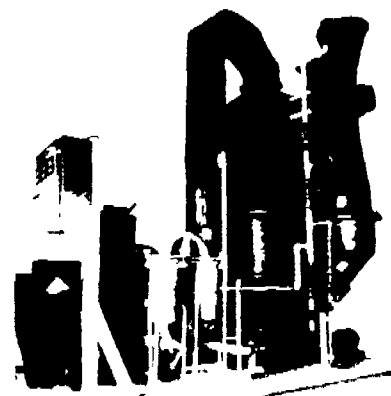
(HMDK portable laboratory — Hach Chemical Co., Box 389, Loveland, CO 80537)

Circle 525 opposite last page

Packaged scrubber system mounted on skid

Complete "packaged" scrubber system is pre-assembled and mounted on a skid for in-plant installation. System consists of a scrubber and separator vessel in addition to a liquid storage tank, recycling pump, piping, level controls, pressure blower, pressure cartridge filter, flue dampers and annunciator panel. All electrical and mechanical engineering is completed before shipping.

The unit meets all OSHA and EPA compliance standards. Energy requirements are minimized through the



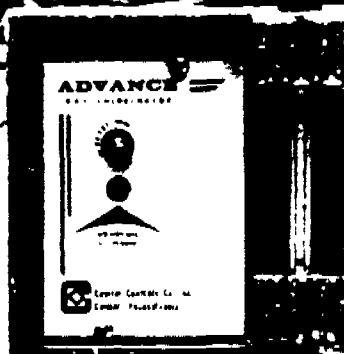
selection of high-efficiency fan and pump systems. System can treat 6000 acfm and lower gas flow rates with a variable throat control. Skid mounted units can also be designed with flow rates up to 70,000 cfm.

(Packaged scrubber system — Air Pollution Control Equipment Div., Croll-Reynolds Co., Inc., 751 Central Ave., Westfield, NJ 07091)

Circle 526 opposite last page

Back to Basics with ADVANCE Gas Feeders

ADVANCE Gas Feeders are the best and most economical means of treating water and wastes. The ADVANCE gas feed system is simple, requires very little operator attention and it is safe. The entire system operates under vacuum. Any interruption of water flow, gas supply



or power supply instantly and automatically shuts down the system.

ADVANCE Series 200 Gas Feeders are available for direct cylinder, direct ton container and manifold mounting in maximum gas feed rates up to 500 PPD. Automatic Switch-over and remote and multiple metering are also available.

Write for Bulletin 4200.

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AIR POLLUTION CONTROL DIVISION
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Circle 527 opposite last page

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Page 3

SIGNIFICANT DATES AND DEADLINES FOR EPA

VINYL CHLORIDE STANDARD

<u>Section</u>	<u>Item</u>	<u>Date</u>
-	Promulgation Date	October 21, 1976
	Effective Date	
61.66	Equivalent equipment and procedures	November 20, 1976
61.65(b)(8)	Formal leak detection program	December 5, 1976
-	Enforcement Date	January 19, 1977
-	Request for Waivers	January 19, 1977 but for real consideration December 5, 1976
61.67	Emission Tests (no waiver)	January 19, 1977
61.67	Emission Tests (if waiver requested)	January 19, 1979
61.69(b)(1)	Initial Report (no waiver) for existing sources and new sources with startup before effective date	January 19, 1977
	Initial Report (with waiver)	as scheduled by Administrator
	Initial Report - startup after effective date (October 21, 1976)	90 days after startup date
61.70(a)	Semi-Annual Report	<u>First</u> - January 19, 1977 <u>Continuing</u> - on March 15 and September 15
61.64(a)(3)	Emergency Manual Vent Valve Discharges	10 days after occurrence to Administrator
61.65(a)	Relief Valve Discharges	10 days after occurrence to Administrator

EXPANDED INDEX TO PARAPHRASED EPA VINYL CHLORIDE STANDARD

<u>Page</u>	<u>Section</u>	<u>Title</u>
46564	61.60	<u>Applicability</u> (a)(1) ethylene dichloride (EDC) (a)(2) vinyl chloride (VC) (a)(3) polymers of vinyl chloride (PVC) <u>Non-Applicability</u> (b) R&D reactors up to 50 gallon capacity <u>Partial Applicability</u> (c) For R&D reactors between 50 gallons and 1100 gallons, <u>only</u> sections 61.64(a)(1), 61.64(b), 61.64(c) and 61.64(d) apply. 61.64(a)(1) - exhaust gases from such <u>reactors</u> cannot exceed 10 ppm of VC except that reactor opening loss [(61.64(a)(2))] and relief valve discharge clause [61.65(a)] are fully applicable. 61.64(b) - exhaust gases from <u>strippers</u> cannot exceed 10 ppm of VC except that the relief valve discharge clause 61.65(a) is fully applicable. 61.64(c) - exhaust gases from <u>mixing, weighing and holding</u> containers cannot exceed 10 ppm of VC except that the relief valve discharge clause [61.65(a)] is fully applicable.
46564	61.61	<u>DEFINITIONS</u> (a) Ethylene dichloride plant (b) Vinyl Chloride plant (c) Polyvinyl chloride plant (d) Slip gauge (e) Type of resin (f) Grade of resin (g) Dispersion resin (h) Latex resin (i) Bulk rein (j) In-Process water waste (k) Waste water treatment process (l) In vinyl chloride service (m) Standard operating procedure (n) Run (o) Ethylene dichloride purification (p) Vinyl chloride purification (q) Reactor (r) Reactor opening loss (s) Stripper

<u>Page</u>	<u>Section</u>	<u>Title</u>
46565	61.62	<u>EMISSION STANDARD FOR ETHYLENE DICHLORIDE PLANTS</u> (a) <u>Ethylene dichloride purification</u> : exhaust gases cannot exceed 10 ppm of VC except that relief valve discharge section [61.65(a)] is fully applicable. (b) <u>Oxychlorination reactor</u> : exhaust gases cannot exceed 0.2g VC/kg (200 ppm) of ethylene dichloride. Again, relief valve discharge clause [61.65(a)] is fully applicable.
46565	61.63	<u>EMISSION STANDARD FOR VINYL CHLORIDE PLANTS</u> (a) <u>Vinyl chloride formation and purification</u> : exhaust gases cannot exceed 10 ppm of VC. Again, relief valve discharge clause [61.65(a)] is fully applicable.
46565	61.64	<u>EMISSION STANDARD FOR POLYVINYL CHLORIDE PLANTS</u> (a)(1) <u>Reactor</u> : exhaust gases cannot exceed 10 ppm of VC except that reactor opening [61.64(a)(2)] and relief valve discharge [61.65(a)] clauses are fully applicable. (a)(2) <u>Reactor opening loss</u> : cannot exceed 0.02g VC/Kg PVC (20 ppm) (0.00002 lb. VC/lb PVC). For bulk type resin, same number applies to combined losses of PREPOL and POLY REACTORS. (a)(3) <u>Manual vent valve discharge</u> : No discharge to atmosphere permitted except in a bona fide emergency. Discharges must be reported in writing to Regional Administrator within 10 days showing: 1) source 2) nature 3) cause 4) date and time 5) amount of VC loss 6) method for calculating loss 7) prevention measures taken 8) remedial measures planned (b) <u>Stripper</u> : exhaust gases to atmosphere cannot exceed 10 ppm of VC except that relief valve discharge clause [61.65(a)] is fully applicable. (c) <u>Mixing, weighing and holding</u> containers in VC service: exhaust gases to atmosphere cannot exceed 10 ppm of VC except that relief valve discharge clause [61.65(a)] is fully applicable. (d) <u>Monomer recovery system</u> : exhaust gases to atmosphere cannot exceed 10 ppm of VC except that relief valve discharge clause [61.65(a)] is applicable.

<u>Page</u>	<u>Section</u>	<u>Title</u>
46565	61.64	(e)(1) <u>Sources following stripper(s):</u> <u>Strippers Used</u> (e)(1)(i) for dispersion type resins, 2000 ppm (e)(1)(ii) for suspension, latex, bulk and solution type resins, 400 ppm <u>Strippers Not Used</u> (e)(2)(i) for dispersion type resins, 2000 ppm (e)(2)(ii) for suspension, latex, bulk and solution type resins, 400 ppm
46565	61.65	<u>EMISSION STANDARD FOR EDC, VC AND PVC PLANTS</u> (a) <u>Relief valve discharge:</u> permitted only in an emergency. Emergency discharge defined as discharge that could not have been prevented. Such discharges must be reported within 10 days to Regional Administrator (see 61.64(a)(3) above for details of report).
46566	61.65	<u>FUGITIVE EMISSION SOURCES</u> (b)(1) <u>Loading and unloading lines:</u> emissions of VC must be minimized by: (i) prior to breaking line open to atmosphere, VC content must be reduced to 0.0038 m^3 (0.13 ft^3) at STP. (ii) VC must be removed to primary control device that exhausts less than 10 ppm of VC (or equivalent under 61.66). (b)(2) <u>Slip Gauges:</u> must be exhausted to primary control device that exhaust less than 10 ppm of VC (or equivalent under 61.66). (b)(3) <u>Leakage from pump, compressor or agitator seals:</u> (i) <u>Rotating pumps</u> in VC service: must use double mechanical seals, sealless pumps or equivalent under 61.66. Leaks must be directed into pump or into primary control device that emits less than 10 ppm of VC (or equivalent under 61.66). (ii) <u>Reciprocating pumps</u> in VC service: must use double outboard seals (or equivalent under 61.66). Leakage must be directed into pump or into primary control device that emits less than 10 ppm of VC (or equivalent under 61.66). (iii) <u>Rotating compressors</u> in VC service: must use double mechanical seals (or equivalent under 61.66). Leaks must be directed into compressor or to primary control device that emits less than 10 ppm of VC (or equivalent under 61.66).

<u>Page</u>	<u>Section</u>	<u>Title</u>
46566	61.65	(iv) <u>Reciprocating compressors in VC service</u>: must use double outboard seals (or equivalent under 61.66). Leaks are to be directed into compressor or to primary control device that emits less than 10 ppm of VC (or equivalent under 61.66). (v) <u>Agitators in VC service</u>: must use double mechanical seals (or equivalent under 61.66). Leak must be directed into agitated vessel or into primary control device that emits less than 10 ppm of VC (or equivalent under 61.66). (b)(4) <u>Leakage from relief valves in VC service</u>: Must use rupture disk before valve or direct leaks into process line or direct leaks into primary control device - recovery (or equivalent under 61.66). (b)(5) <u>Manual venting of gases from vessels in VC service</u>: Must be directed into primary control device that emits less than 10 ppm of VC (or equivalent under 61.66) except in bona fide emergency shown in 61.64(a)(3). Actions conducive to obviating emergency manual discharges include: A) Up-to-date written operating instructions B) Proper operator training and retraining C) Proper maintenance of equipment D) Discharge to control devices E) Emergency electrical generators F) Emergency refrigeration capacity G) Stopping reactions (b)(6) <u>Opening of equipment</u>: Emissions must be minimized by: (i) reducing volume of VC to 2.0 percent or less or 0.0950 m³ (25 gallons), whichever is larger. (ii) removed VC must be directed to primary control device that emits less than 10 ppm of VC (or equivalent under 61.66). (b)(7) <u>Samples</u>: that were taken from equipment in VC service must be directed into closed process system. (b)(8) <u>Leak detection and elimination</u>: requires <u>formal</u> leak detection and elimination program (last date to comply is 12/5/76 unless waiver is requested in which case regional administrator will set date) for all equipment in VC service.

Such programs must include:

- (i) reliable and accurate system of monitoring for MAJOR leaks on a continuous sequential basis (can be IR or GC measurements or equivalent).

<u>Page</u>	<u>Section</u>	<u>Title</u>
46566	61.65	(ii) Reliable and accurate <u>portable</u> detectors (sensitivity of 10 ppm HC). (iii) Acceptable calibration and maintenance schedules. Daily span check required for monitor-concentration defined by definition chosen for leak in 61.65(b)(8)(VI). Calibration may be done with: A) Mixtures prepared from 99.9+% VC and a calibrated VC-N₂ mixture traceable to NBS or to a gravimetrically calibrated VC permeation tube, or B) A calibrated VC-N₂ mixture traceable to NBS or to a gravimetrically calibrated permeation tube.
46567	61.65	(iv) Frequency and number of points and locations for monitoring are dependent on plant size and physical layout. (v) Plan for affirmative action is clear and convincing. (vi) An acceptable definition of leak. Give in terms of "over background level". (b)(9) <u>In-Process Wastewater:</u> (i) Streams containing over 10 ppm of VC must be stripped to less than 10 ppm of VC before being mixed with streams containing <u>less</u> than 10 ppm of VC, before being exposed to the atmosphere, before being discharged to a waste water treatment plant or before being discharged untreated as a wastewater. Above <u>does</u> apply to water used for gas displacement [sections 61.65(b)(6) and 61.64(a)(2)] of equipment in VC service but <u>does not</u> apply to wash water used in vessels already opened to atmosphere. (ii) Any VC stripped from such wastewaters must be directed to primary control device that emits less than 10 ppm of VC (or equivalent under 61.66).
46567	61.65	(c) The requirements of: 61.65(b)(1) - Loading and Unloading lines 61.65(b)(2) - Slip gauges 61.65(b)(5) - Manual venting 61.65(b)(6) - Opening of equipment 61.65(b)(7) - Samples 61.65(b)(8) - Leak detection and elimination are to be incorporated into SOP that is available to EPA upon request.

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<u>Page</u>	<u>Section</u>	<u>Title</u>
46567	61.65	Additionally, SOP must include provisions for measuring VC in equipment over 1250 gallons for which an emission limit is set in 61.65(b)(6) - Opening of Equipment - <u>prior</u> to the actual opening. Measurement can be made by using: A) Method 106 B) Portable Detector C) Alternative or equivalent means
46567	61.66	<u>Equivalent equipment and procedures:</u> Request must be in writing directed to Regional Administrator. Last date to request is November 20, 1976 for <u>existing</u> sources. For <u>new</u> sources, requests must accompany the application for approval of construction or modification.
46567	61.67	<u>Emission Tests</u> Unless a waiver of tests has been granted: (a)(1) Emission tests must be made starting January 19, 1977 for <u>existing</u> sources or <u>new</u> sources started up before January 19, 1977. (a)(2) For a <u>new</u> source, tests must be run within 90 days of startup date. (b) You must notify Regional Administrator 30 days before emission test in case he wants to send an observer. (c) Emission tests must be run at maximum production rate at which equipment can reasonably be expected to operate in foreseeable near term (90 days) future. (d) Emission tests consist of three (3) runs on a time weighted basis. (e) Samples for emission tests must be analyzed within 24 hours. VC emissions must be determined within 30 days after emission test and be reported to Regional Administrator via registered letter posted no later than next <u>business</u> day. (f) Emission test data must be retained for <u>two years</u> on <u>plant site</u>. (g) Test methods 106 and 107 must be used unless equivalent or alternative method has been approved by Administrator. Reference method prevails if there is a dispute. (g)(1) Test Method 106 is used for the following: 61.62(a) - EDC purification 61.62(b) - Oxychlorination 61.63(c) - VC purification 61.64(a)(1) - Reactor releases 61.64(b) - Stripper releases 61.64(c) - Mixing, weighing, holding releases

<u>Page</u>	<u>Section</u>	<u>Title</u>
46567	61.67	61.64(d) - Monomer recovery releases 61.64(a)(2) - Reactor opening loss 61.65(b)(1)(ii) - Unloading line releases 61.65(b)(2) - Slip gauge releases 61.65(b)(5) - Agitator seal releases 61.65(b)(6)(ii) - Relief valve releases 61.65(b)(9)(ii) - Water stripper releases (g)(2) Test method 107 is to be used for the <u>in-process wastewaters streams</u> that have emission limits (see 61.65(b)(9)(i)). (g)(3) Test method 107 is to be used for all <u>resin slurry samples</u> where stripping technology is used for emission compliance (see 61.64(e)). (i) <u>number of strippers and types and grades of resin</u> to be sampled are to be determined by administrator at time of emission test. (ii) Slurry samples are to be taken after stripping operation is complete. (iii) Production per stripper on a dry solids basis must be approved by Administrator (historical material balances will suffice). (iv) Duplicate samples are required only if Administrator asks for them. (g)(4) Where <u>add-on devices</u> or a combination of <u>stripping plus add-on devices</u> are used for control (i) Test method 106 is used for atmospheric emissions and (ii) Test method 107 is used for in-process waste water streams covered by 61.64(e). (g)(5) Reactor opening loss will be determined as part of emission limit prescribed in 61.64(a)(2).

46568 61.68

EMISSION MONITORING

- (a) Continuous sequential monitoring is required for:
- 61.62(a) EDC purification
 - 61.62(b) Oxychlorination reactor
 - 61.63(a) VC formation and purification
 - 61.64(a)(1) Reactor exhaust gases
 - 61.64(b) Stripper exhaust streams
 - 61.64(c) Mixing, weighing & holding exhaust streams
 - 61.64(d) Recovery exhaust streams and all exhausts from primary and secondary control devices.
- (b) Continuous sequential monitors can be GC, IR, FID or an equivalent or alternative method.

<u>Page</u>	<u>Section</u>	<u>Title</u>
46568	61.68	(c) <u>Daily Span Check</u> is to be run with VC concentration of 10 ppm for tests in 61.68(a) (except for 61.62(b) - oxychlorination vent). For <u>61.62(b) oxychlorination vent</u> , the span check should conform to a VC concentration based on emission limit set in 61.67
46568	61.69	<u>INITIAL REPORTS</u>
		(a) Statement must be submitted in <u>writing</u> that following equipment and procedures are being implemented:
		61.65(b)(1) - Loading Lines
		61.65(b)(2) - Slip Gauges
		61.65(b)(3) - Compressed reactor seals & leakage from pumps
		61.65(b)(4) - Leakage from relief valves
		61.65(b)(5) - Manual venting
		61.65(b)(6) - Opening of equipment
		61.65(b)(7) - Samples
		61.65(b)(8) - Leak detection and elimination
		(b)(1) <u>Due dates for initial report</u>
		No waiver - January 19, 1977
		With waiver - as scheduled by the Administrator.
		Applies to <u>existing</u> sources and <u>new</u> source with startup before effective date (October 21, 1976).
		(b)(2) For new sources (startup after October 21, 1976), initial report is due 90 days after startup date.
		(c) Statement must include:
		1) List of equipment installed for compliance
		2) Physical and functional characteristics of <u>each</u> piece of equipment
		3) Methods in SOP for measuring and calculating emissions in
		61.65(b)(1)(i) - loading and unloading lines losses
		61.65(b)(6)(i) - opening of equipment losses
		4) Statement that such equipment and procedures are <u>actually</u> being used.
46568	61.70	<u>SEMI-ANNUAL REPORTS</u>
46569	61.70	<u>DUE DATES</u> - Semi-Annually

<u>Page</u>	<u>Section</u>	<u>Title</u>
46569	61.70	(b)(1) If no waiver is granted, for <u>existing sources</u> or <u>new sources</u> with startup dated <u>before</u> October 21, 1976 on January 19, 1977. If waiver is granted, first report date will be set by Administrator.
		(b)(2) For <u>new source</u> with startup date after October 21, 1976, the <u>first</u> semi-annual is due 180 days after such date.
		(c) <u>Contents of Semi-Annual Reports</u> (Reference analytical methods prevail when there is a difference between equivalent, alternative and reference methods).
		(c)(1) Report emissions that exceed standard for averaged one hour time in following areas: 61.62(a) - EDC purification 61.62(b) - Oxychlorination vent 61.63(a) - VC formation and purification 61.64(a)(1) - reactor releases 61.64(b) - stripper releases 61.64(c) - Mixing, weighing and holding tank releases 61.64(d) - recovery system releases and all other primary and secondary control devices
		(c)(2) Where stripping is used for control, submit VC content of PVC resins (slurries, latices, solutions, bulk).

SAMPLE FREQUENCY

- (c)(2)(i) Batch stripping - each batch of each grade
- (c)(2)(ii) Continuous stripping - every 8 hours for each grade
- (c)(2)(iii) Quantity of Products - dry solids basis
- (c)(2)(iv) Duplicate Samples - only upon request of Administrator
- (c)(2)(v) Summary - by type for each 24 hour period and weighted by quantity of each grade
- (c)(2)(vi) Data developed in (c)(2)(v) must be retained for 2 years
- (c)(3) Semi-annual report must also show reactor opening losses

46569 61.70

RECORD KEEPING (2 Years)

- (a)(1) Leak monitoring results collected from continuous sequential monitoring system
- (a)(2) Leaks detected by portable analyser and action taken
- (a)(3) Daily operating record for each reactor

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<u>Page</u>	<u>Section</u>	<u>Title</u>
46569		Test Method 106
46571		Test Method 107

RWL/mls
11/5/76


R. W. Laundrie

GENC 19211

Ly

*file
ashtabula
safety*

February 15, 1980

RECEIVED

FEB 18 1980

R. W. Laundrie

Area Director
Occupational Safety & Health Adm.
1240 E. 9th Street
Cleveland, Ohio 44114

Dear Sirs:

Attached is The General Tire & Rubber Company's report to U.S. EPA on an emergency relief and venting of vinyl chloride that occurred in our facility in Ashtabula, Ohio.

There were no documented exposures of employees to over the OSHA Standard for vinyl chloride. Several employees were required to wear respirators, and several operations were suspended during this time.

Respectfully Submitted,

G. E. Brumbaugh
Technical Superintendent

GEB:sm
attach.

cc: A. D. Jeffrey
~~R. W. Laundrie~~
H. E. Jewett

GENC 19212