LNV

I-2-S
REV. 1-1-63

INTEROFFICE COMMUNICATION

DKP
EDG
F

Westlake, Louisiana
December 3, 1970

TO: M. J. Thomaes, Saddle Brook

SUBJECT: Standard Heel Allowances -- Procedure

Please refer to your letter of November 20, 1970, which requested the details of the procedure used at the VCM Plant in granting heel allowances to customers. The procedure is as follows:

1. As each car is loaded, the total volume in the car is determined by calculation. The calculated weight is used on the Bill of Lading as the shipping weight. Freight costs are based on this weight.

2. When invoicing a customer, the Bill of Lading weight, less a standard heel allowance (net weight) is used as the "invoicing" weight. (See Invoice No. 387-701 attached.) Our standard heel allowances are based on 12 pounds pressure at 60° and are as follows:

   1470 lbs for 38,000 gal cars
   1190 lbs for 30,000 gal cars
   800 lbs for 20,000 gal cars and 22,000 gal cars.

3. The heel on all empty cars coming into the plant is calculated. If the car was last loaded at our plant, we determine who the customer was and then compare the returning heel against the standard heel to determine if the customer left a heel greater or less than the one they were allowed. If they left a greater heel, they are credited for the volume above the heel allowance. If they left a lesser heel, they are charged. All charges or credits are made at the contract price. (See Invoice No. 387-707 attached.)

We are aware of some of the other methods used to grant a heel allowance and could switch to any one of them; however, no method is as accurate and fair to both the shipper and customer as the method we employ. We can see why a customer who receives heel allowances by two systems would raise a question, but do not understand why the different methods create internal accounting problems.

Other than the pumper/loaders who take the pressure and temperature off the incoming cars, Bill Howell prepares all the documents involved in the product and heel calculations and the invoices.

Should any other information on this matter be required, please advise.

J. J. Weidner

JJW-MC
Att
cc: LNV
WCB
JFP
WRH

D-U-N-S 00-494-8196

Conoco Petrochemicals

INVOICE No. [redacted]
387-701

REMIT TO
Continental Oil Company
P. O. Box 5282 Church Street Station
New York, New York 10008

INVOICE DATE 11/30/70

SHIP XX From
Continental VCM Plant
Westlake, Louisiana

SOLD TO
Diamond Shamrock Corporation
Accounts Payable
300 Union Commerce
Cleveland, Ohio 44115

SHIPPER'S NO.
[redacted]

ROUTE: Shipped to: Deer Park Plant; Houston, Texas

▷ ORIGIN F.O.B. DEST. ◁ | ▷ COLLECT PREPAID ◁ | ▷ MFA.

CUSTOMER ORDER NO.	TERMS	FREIGHT EQUALIZED WITH
GB5552-11DP	15 Days Net	

ITEM NO.	PROD. CODE	PRODUCT NAME AND DESCRIPTION	PRICE/UNIT	UNIT	BILLING QUANTITY	AMOUNT OF CHARGES
1		5 T/C Vinyl Chloride			1,111,231	
2		Less Permanent Vapor Heel				
3		Allowance of 1190 lbs./car			5,950	
DESCRIPTION OF CHARGES		Invoicing Lbs.	4.5¢/lb.		1,105,281	$ 49,737.65
		5 T/C Freight Prepaid	$35.96 Per Car			179.80
					PLEASE REMIT THIS AMOUNT TO THE ABOVE ADDRESS →	$ 49,917.45

GOODS COVERED BY THIS INVOICE WERE PRODUCED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED.

CAR NUMBER	RELEASE NO. OR B/L NO.	SHIPPING DATE MO.	DA.	YR.	GROSS AS/IS GALLONS/LBS.	G OR P	NET 100% ACTIVE GALLONS/LBS.	TEMP.

COMMENTS

See attached summary for dates shipped.

CWH 000005443

DIRECT

CONTINENTAL OIL COMPANY
PETROCHEMICAL DEPARTMENT

386 EDC ____ 387 VCM ✓

CONTINENTAL VCM PLANT
SCHEDULE OF SALES

November 1970

Customer I
P. O. # 6n

Gósi	Date Shipped	Car Description	Gross Weight	Net Weight	Freight Rate	Freight Amount	Remc
7027	11-18-70	CONX-9009	311,573	223,673	291 CwT @ 224 cwt/lbs.	$649.60	
7028	"	" 9012	312,557	222,457	" "	649.60	
7031	11-19-70	" 9018	312,454	223,254	" "	649.60	
7032	"	" 9020	312,255	221,855	" "	649.60	
7033	"	" 9026	312,192	221,992	" "	649.60	
			Total	1,111,231		$3,348.00	
					Freight Charged - $35.96 Per Car	$179.80	[illegible]

CWH 000005444

D-U-N-S 00-494-8196

Conoco Petrochemicals

INVOICE No. [redacted]
387-707

REMIT TO: Continental Oil Company
P. O. Box 5282 Church Street Station
New York, New York 10008

INVOICE DATE 11 / 30 / 70

SHIP XXX FROM: Continental VCM Plant
Westlake, Louisiana

SOLD TO: Diamond Shamrock Corporation
Accounts Payable
300 Union Commerce
Cleveland, Ohio 44115

SHIPPER'S NO.
[redacted]0

ROUTE: Shipped to: Reybold, Delaware

ORIGIN F.O.B. DEST. | COLLECT PREPAID | AFA.

CUSTOMER ORDER NO.	TERMS	FREIGHT EQUALIZED WITH
	15 Days Net	

ITEM NO.	PROD. CODE	PRODUCT NAME AND DESCRIPTION	PRICE/UNIT	UNIT	BILLING QUANTITY	AMOUNT OF CHARGES
1		To Charge your account for heels				
2		removed in excess of allowance	4.5¢/lb.		2,709	$ 121.91
3						

DESCRIPTION OF CHARGES

PLEASE REMIT THIS AMOUNT TO THE ABOVE ADDRESS → $ 121.91

GOODS COVERED BY THIS INVOICE WERE PRODUCED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED.

CAR NUMBER	RELEASE NO. OR B/L NO.	SHIPPING DATE MO.	DA.	YR.	GROSS AS/IS GALLONS/LBS.	G OR P	NET 100% ACTIVE GALLONS/LBS.	TEMP.
					, ,		, ,	
					, ,		, ,	
					, ,		, ,	

COMMENTS

See attached summary for dates shipped.

CWH 000005445

DIRECT INQUIRIES TO: CONTINENTAL OIL COMPANY
PETROCHEMICAL DEPARTMENT
PARK - 80 PLAZA EAST
SADDLE BROOK, NEW JERSEY 07662

ORIGINAL INVOICE

UNIT: G = GALLONS
P = POUNDS
T = TONS

CONTINENTAL VCM PLANT

RETURNING HEEL STATEMENT

November 1970

CUSTOMER Diamond (Reybold)

Date Shipped	Car Number	Date Returned	Returning Heel
9-24-70	GATX- 98229	11-4-70	1622
9-26-70	ACFX- 17452	11-2-70	1145
11	GATX- 98204	11	1310
11	11 98217	11	1350
10-1-70	11 98203	11-6-70	1352
11	11 98237	11	1501
10-5-70	11 98233	11	1118
10-12-70	11 98236	11-13-70	1462
10-13-70	11 98224	11	1199
10-14-70	11 98205	11-16-70	1427
11	11 98222	11-23-70	1083
10-15-70	ACFX- 17490	11-12-70	1297
10-19-70	11 17491	11	1030
10-20-70	GATX- 98207	11-13-70	1314
10-21-70	11 98225	11-19-70	1199
10-23-70	11 98202	11-16-70	1197
10-24-70	11 98235	11-25-70	1739
10-30-70	11 98208	11-27-70	1602
11-3-70	ACFX- 17452	11-25-70	1374
		Total Heel Returned	25,221
	Total Heel	Total Heel Allowed	22,930
		Removed IN excess of Allowance	2,709 charge

CWH 000005446

Enclosure (1) to COI Public Notice 6-69 dtd 1 NOV 69

A dangerous cargo considered to involve a particular hazard, when transported in bulk quantities on board vessels, or when handled in bulk quantities on waterfront facilities, is any commodity which by virtue of its properties would create an unusual hazard if released. The commodities subject to this section are:

ACETALDEHYDE

ACETONE CYANOHYDRIN

ACETONITRILE

ACRYLONITRILE

ALLYL ALCOHOL

ALLYL CHLORIDE

AMMONIA, ANHYDROUS

ANILINE

BUTADIENE

CARBOLIC OIL

CARBON DISULFIDE

CHLORINE

CHLOROHYDRINS, CRUDE

CROTONALDHYDE

1,2 - DICHLOROPROPANE

DICHLOPOPROPENE

EPICHLOROHYDRIN

ETHYLENE

ETHYL ETHER

ETHYLENE OXIDE

HYDROCHLORIC ACID

METHANE

METHYL ACRYLATE

METHYL BROMIDE

METHYL CHLORIDE

METHYL METHACRYLATE (MONOMER)

NONYL PHENOL

OLEUM

PHENOL

PHOSPHORUS, ELEMENTAL

PROPANE

PROPYLENE

PROPYLENE OXIDE

SULFURIC ACID

SULFURIC ACID, SPENT

TETRAETHYL LEAD

TETRAETHYYLEAD MIXTURES

VINYL ACETATE

VINYLVINYL CHLORIDE (MONOMER)

VINYLIDENE CHLORIDE

e. Tankship's fire main shall be under pressure and at least two charged hoses shall be led out in the vicinity of loading.

f. Tankship's firemain shall be mated to shore fire system. (2)

g. Vessels shall furnish Coast Guard with a loading plan of chemical cargo on board upon arrival and that to be loaded. Proper chemical names will be used. Trade names will not be accepted.

5. Failure to comply with the above safety precautions may result in the operation being closed down until compliance is met.

A. B. ROSE
Commander, U. S. Coast Guard
Captain of the Port, Houston

CWH 000005448

g. Flange couplings ashore and shipboard used in the transfer of the subject cargo will be completely bolted.

h. The tank ship's fire main will be mated to the facility fire fighting system so that the vessel will maintain a firefighting capability even if fire pumps are inoperative. This process will generally require the utilization of a foreign vessel's International Shore Connection. The Bonding Hose shall never be charged unless in use during a fire.

i. Vessels transferring the subject cargoes should be electrically bonded to the shore ground prior to the connection of a cargo hose. The connection shall be maintained until the cargo hose has been disconnected and any spill has been removed. This connection shall be secure. (Alligator clamps are not acceptable - "C" clamps are recommended).

3. In summary, waterfront facilities handling products of unusual hazard as listed in Enclosure (1) shall assure that:

a. Hose connections are properly made with completely bolted flanges, properly gasketed - not leaking. (2g)

b. Proper electric bondings are made. (2i)

c. Vapor return lines are used when handling gases or poisons that would otherwise be considered atmospheric pollutants.

d. Adequate shoreside fire protection is provided depending upon the nature of the product. (2f)

e. Adequate guards and safety personnel are on watch. (2f)

f. A declaration of inspection, properly executed, has been received from the tank ship. (46 CFR 35.35-30)

g. Shore safety personnel are constantly within hailing distance of the vessel for emergency shore shutdown action.

h. Cargo hoses are tested annually according to manufacturer's recommendations.

i. Cargo hoses are clearly marked with manufacturer's guaranteed maximum pressure.

j. Notify COTP 24 hours before arrival of vessel loading or discharging commodities of particular hazard. (2a)

k. Insure that inhibitor information is furnished vessels as outlined in paragraph 2(b).

4. In summary, vessels handling products of unusual hazard as listed in Enclosure (1) shall assure that:

a. 24 hour advanced notice required in 33 CFR 124 is complied with.

b. Bunkering is only accomplished as outlined in paragraph 2(c) while loading or discharging subject cargoes.

c. Discharging and loading shall be in accordance with paragraph 2(d),(e).

d. All piping used for subject cargoes shall contain all bolts in flanges and a functional gasket. All connections shall be without a leak.2(g)

CWH 00005449

1 November 1969

COTP PUBLIC NOTICE 6-69

Subj: Captain of the Port Policy Concerning Vessels Loading or Discharging "Cargoes of Particular Hazard"

Ref: (a) COTP Public Notice 2-69

1. Reference is hereby cancelled.

2. Due to the particular and severe hazards which exist during the transfer of cargoes listed in 33 CFR 124.14(b)(1), (See enclosure(1)), it will be my policy to order safety precautions listed in the following paragraphs when any tank ship or barge is transferring or has aboard such cargoes in the Port of Houston:

a. At least 24 hours in advance, the waterfront facility where the cargo of particular hazard is to be transferred, will notify the COTP of the anticipated date, time, vessel, cargo and amount to be transferred. This notification may be accomplished by letter or telephone, (672-2142).

b. Acrylonitrile, methyl acrylate, butadiene, methyl methacrylate, ethylene oxide, vinyl chloride, vinylidene chloride and vinyl acetate must be inhibited or stabilized. The master of a vessel or the tankerman of a barge into which these commodities are loaded will be provided with a statement as to the type of inhibitor used, the estimated time the inhibitor is expected to remain in effect, and what conditions will diminish the effect of the inhibitor.

c. Vessels shall not bunker or load stores from shoreside by vehicle or from waterside while loading or discharging any of the subject cargoes.

d. While discharging or loading any of the subject cargoes to or from a facility, a vessel shall not transfer any of the subject cargoes or any other cargo to or from any vessel alongside.

e. Tank vessels may transfer any of the subject cargoes to or from a vessel alongside only if transfer operations to or from the facility are not conducted at the same time. While engaged in such operations, sufficient personnel shall be on watch in such positions that they can immediately secure the operation if a hazardous situation develops.

f. While discharging or loading any of the subject commodities, waterfront facilities shall provide adequate physical security, including a guard force to allow only those persons who have an official need for presence on the facility during the operation.

UNITED STATES COAST GUARD

Captain of the Port,
Houston
U. S. Coast Guard
P. O. Box 448
Galena Park, Texas 77547

1 November 1969

From: Captain of the Port, Houston
To: All Marine Interests

Subj: Captain of the Port Public Notice 6-69

1. Enclosed is COTP Public Notice 6-69. The provisions of this notice are effective beginning 1 November 1969.

2. Public Notice 6-69 was released in early October, 1969, to gauge industry response. The response has been favorable, and the notice is hereby released with certain errors in the original release corrected.

A. B. ROSS
Commander, U. S. Coast Guard
Captain of the Port, Houston

CWH 000005451

GOOD SAFETY PRACTICES WHEN HAULING

VINYL CHLORIDE

Vinyl chloride is a hazardous material whose fumes can make the crew dizzy and cause unconsciousness. It is very flammable and can catch on fire by static electricity when leaking from a tank.

The following practices are recommended when tanker ships are carrying vinyl chloride:

LOADING:

Before loading vinyl chloride, the tanks must be free of oxygen to prevent an explosive mixture being present or a reaction of the oxygen with the vinyl chloride. The ship should have it's own method of analyzing empty tanks for oxygen. The tanks must also be clear of the previous cargo to prevent contamination of the vinyl chloride and the possibility of a reaction between the last cargo and the vinyl chloride.

MIXING WITH OTHER CARGOES:

In loading and transferring vinyl chloride, all piping must be clean of previous cargoes, otherwise a reaction might start in the pipe.

REACTIONS:

Vinyl chloride will react with the oxygen in the air. Care should be taken that no air enters the tanks through leaky packing on compressors or a leaking suction flange on the compressor.

Phenol or hydroquinone is added to the vinyl chloride at the time of loading. It's purpose is to prevent small amounts of air from reacting with the cargo. As long as no air enters the tanks, this inhibitor will be available. However, if more air enters the tanks than can be handled by the inhibitor, you will see a slow build-up in the temperature and pressure of the cargo. If this happens, a reaction is taking place within the tank. In this case, the cargo should be vented to maintain a safe pressure and a low temperature. When venting the cargo, the vapors are much heavier than air and will settle from the vent stack and can burn if they come in contact with dry heat of approximately 900F or open flame.

The attached graphs can be used to determine if changes in pressure are due to changes in temperature or not. The temperature and/or pressure of the tanks should be recorded so that you can be aware of any change in the condition of the cargo.

LEAKS:

Small leaks can usually be found by the odor of escaping vinyl chloride. They may also be found with an explosion meter. The fumes are twice as heavy as air and will collect in the bilge or any low part of the ship and form an explosive condition. The insulation on the tanks will usually allow leaking vinyl chloride to flow down the outside of the tank and into the bilge. This is a very dangerous condition.

In the event of a leak on a ship, all sources of ignition must be eliminated until the leak is stopped and the air is clear of any VCM vapors, especially below deck. Water fog can be used to absorb some vapor.

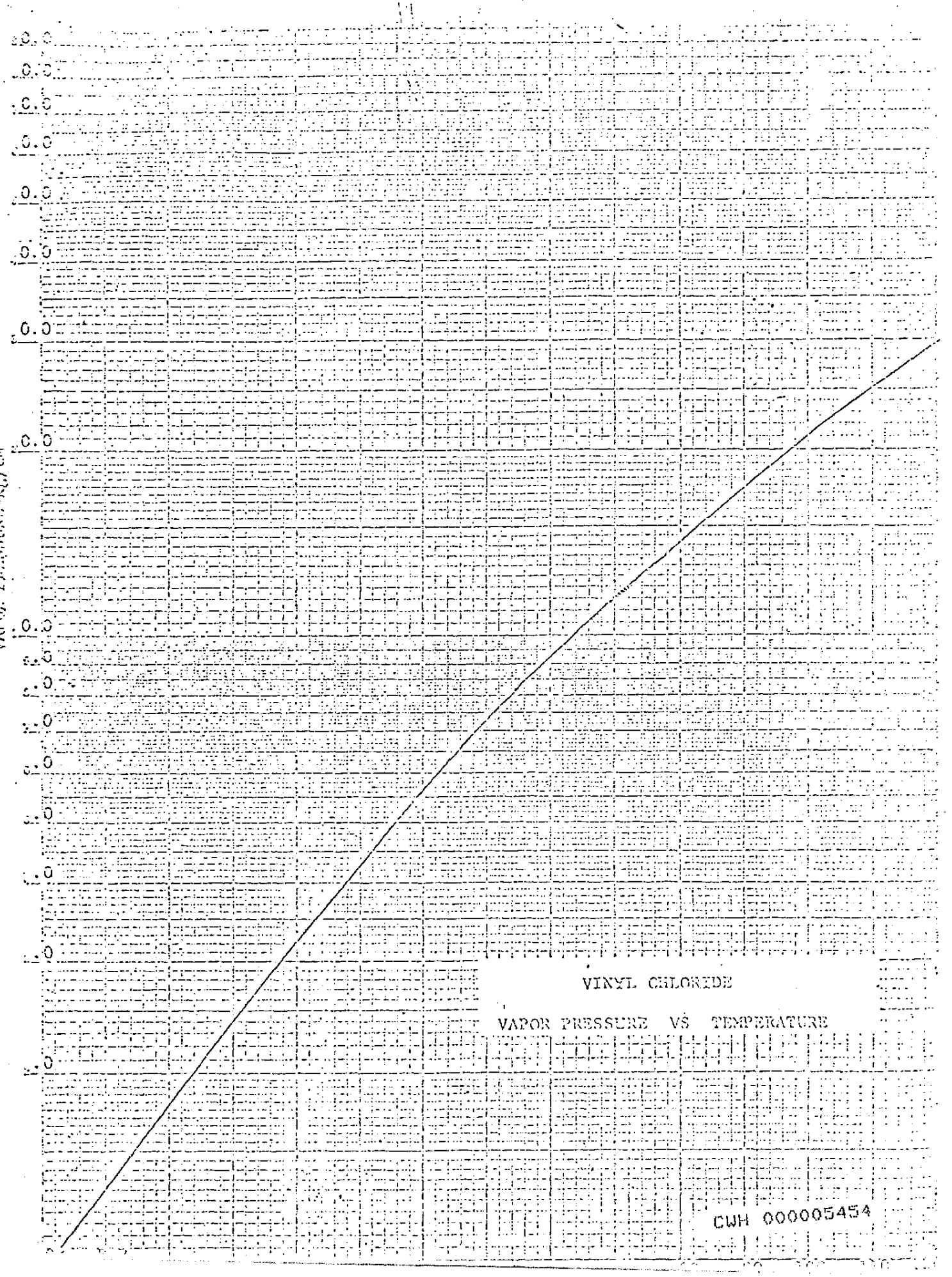
RUPTURE OF TANKS:

If the tanks containing vinyl chloride should rupture or develop a large leak, the vinyl chloride will escape. As it escapes, it will build static electricity which may ignite the vinyl chloride. Every effort must be made to stop leaks in the tank or piping without welding. If the leak cannot be stopped, the cargo will be cooled as it boils off. This will make the vinyl chloride escape slowly and will extend the possibility of fire or explosion.

BURNING:

Burning vinyl chloride gives off carbon monoxide which is a deadly poison and hydrogen chloride which is an acid and will burn the lungs. The crew should stay upwind of the fire. The hydrogen chloride will destroy any wet metal. A large stream of water should be used on the gases coming off of the fire. The fire should not be put out due to the possibility of flashback.

PMR/mr


VAPOR PRESSURE-kg/cm²
VINYL CHLORIDE
VAPOR PRESSURE VS TEMPERATURE
CWH 000005454

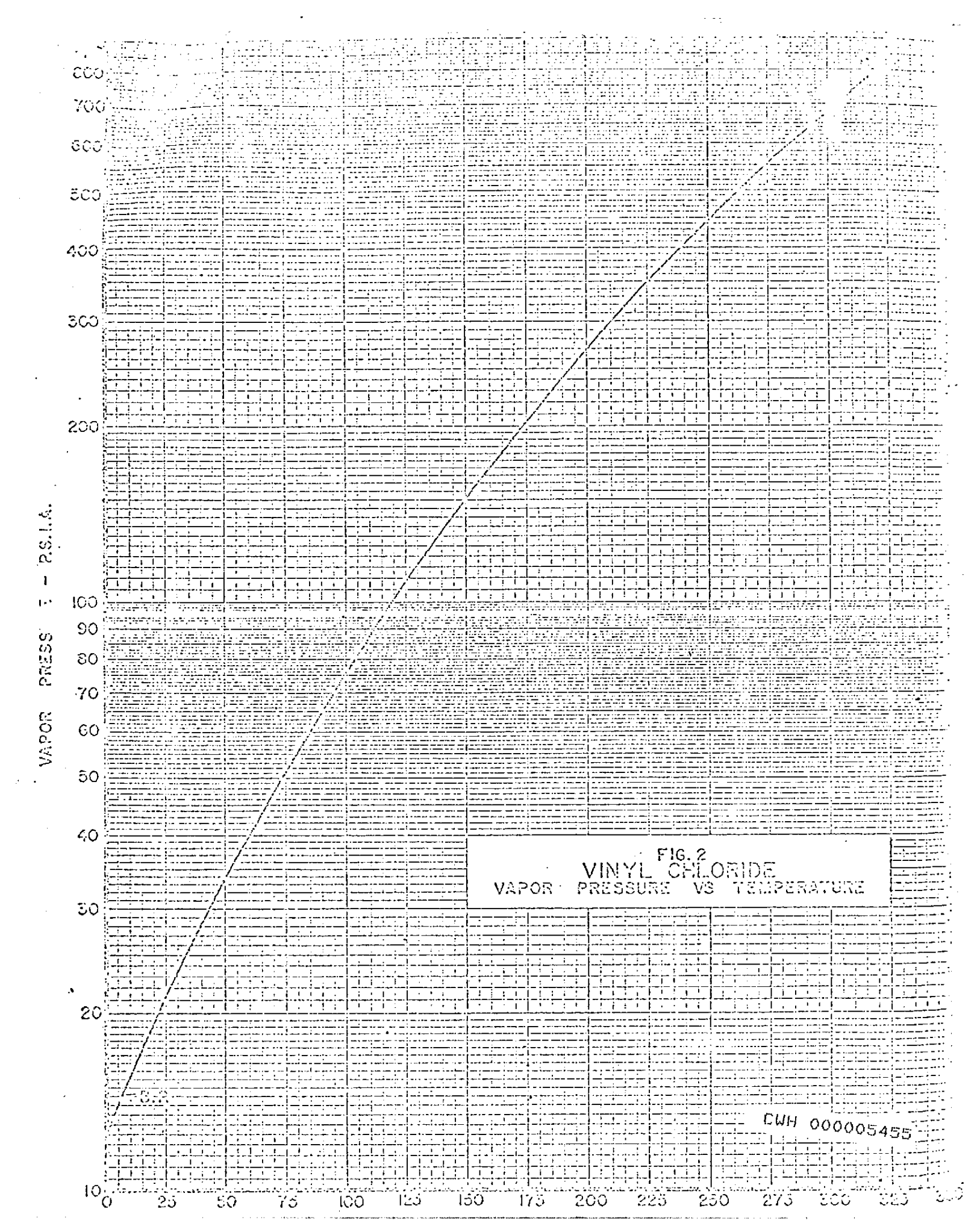


FIG. 2
VINYL CHLORIDE
VAPOR PRESSURE VS TEMPERATURE

INFORMATION CARD FOR WATER TRANSPORTATION

WTC-20
August 1968

VINYL CHLORIDE

A compressed liquefied gas; sweet odor. Liquid is clear, colorless. Gas is colorless and heavier than air.

CARGO TRANSFER—Use authorized personnel only, properly protected.

HAZARDS

FIRE *Extremely flammable. Ignited by heat, sparks or open flame. Burning releases irritating gas. Fire may cause violent rupture of tank. NO SMOKING OR OPEN LIGHTS.*

EXPOSURE *Vapor harmful. Liquid or cold gas may cause skin or eye injury similar to frostbite.*

IN CASE OF ACCIDENT

IF THIS HAPPENS	DO THIS
SPILL or LEAK	Shut off all ignition sources. Shut off leak if without risk. Wear self-contained breathing apparatus and protective clothing. Flush area with water spray. In case of major spill into waterway, notify fire, health and State water pollution agencies.
FIRE	Do not put out fire unless leak can be shut off immediately. On small fire use dry chemical or carbon dioxide. On large fire use water spray or foam. Wear self-contained breathing apparatus. Cool tank with water if exposed to fire.
EXPOSURE	Remove to fresh air. If unconscious, call a physician. If not breathing, apply artificial respiration, oxygen. In case of contact with liquid or cold gas, thaw frosted parts with water. In case of exposure to gas from fire, administer oxygen if breathing is difficult.

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