Comments for Inc ,nt: 93 000752 Exposure: 00 Date: 1' 4/93

DEPT. DISPATCHED TO ABOVE ADDRESS ON AN AMONIA LEAK IN REFRIDGERATION SYSTOM, APON ARRIVAL FOUND REFRIDGERATION PUMP ROOM FULL OF ANHYDRUS AMONIA VAPERS, POSITIVE PRESSUR VENTILATION WAS STARTED AND VALVE SHUT DOWN PROCEDURES STARTED, IT WAS LEARNED FROM MAINT. MAN THAT SYSTOM HAS A 1500 LB. CAPACITY ALL VALVES WERE CLOSED EXCEPT MAIN FEED VALVE WICH WAS ICED OVER IT WAS NECESSARY TO CHIP ICE FROM PIPE RUN IN ORDER TO CLOSE VALVE, THIS PROCEDURE WAS HAMPERED DUE TO AMONIA VAPERS PENITRATING FIREFIGHTERS BUNKER GEAR CAUSING SEVERE BURNING SENSATION. WORK WAS DONE IN TWO TO THREE MIN. SHIFTS BY SIX FIREFIGHTERS WHO LATER WERE TRANSPORTED TO E.R. REFRIDGERATION TECK. RON EXLINE OF REFRIDGERATION SYSTOMS INC. COLS. OHIO ARRIVED AND CHECKED UNIT AFTER LEAK WAS STOPED AND STATED HE WOULD NOT KNOW THE AMOUNT OF PRODUCT THAT WAS LOST UNTIL HE GETS SYSTON BACK ON LINE BUT ESTAMATED 200 TO 300 LBS.HE SEAD HE WOULD FORWARD ACCURATE ASSESMENT TO F.P. OFFICE LATER FIREFIGHTERS TRANSPORTED TO E.R. --- LT. A. BEVINGER TREATED FOR RESPIRATORY AND EXPOSURE TO VAPERS, LT. H. SMITH, LT. M. LEHMAN, FFP. R. HOFFMAN F.F. H. BARRERA , M. DAWSON TREATED FOR EXPOSURE TO VAPERS ALL LATER RELEASED.

NOTE: JUDY FARMER CALLED LESS THAN 100 LBS. RELEASED.

505 West Fair Avenue
FARMER BROWN'S FINER FOODS
Lancaster, OH 43130

"For People Who Prefer Our Very Best"

Home of Finer Foods

SALADS • MEATS • EGGS • QUALITY POULTRY PRODUCTS

Distributed by: Lancaster Poultry, Inc.

Phones

Lancaster Area: 653-1052 Columbus Area: 224-8716 Other Areas: 1-800-282-5052

OCTOBER 19, 1993

MR. DAN BOLGER
FAIRFIELD COUNTY LEPC
BOX 626
LANCASTER, OHIO 43130

DEAR DAN,

ENCLOSED IS A COPY OF THE SERVICE REPORT FROM REFRIGERATION SYSTEMS FOR THE AMMONIA LEAK ON THURSDAY, OCTOBER 14, 1993. THE ESTIMATED QUANTITY OF LOSS WAS LESS THAN 100 LB.

SINCERELY YOURS,

Julia Farmer

JULIA FARMER
PRESIDENT

ENCLOSURE

# Refrigeration Systems Company

1770 Genessee Avenue – Columbus, Ohio 43211

Ph. (614) 263-0913 Fax (614) 263-6660

- ☐ CINCINNATI OFFICE (513) 793-4463
- ☐ CLEVELAND OFFICE (216) 562-8074
- ☐ EASTON, PA OFFICE (215) 252-6990

**SERVICE REPORT NO** 52994

| SERVICE OR DELIVERY LOCATION | BILLING ADDRESS - IF DIFFERENT |
|---|---|
| NAME Lancaster Poultry | NAME |
| STREET | STREET |
| CITY STATE ZIP | CITY STATE ZIP |

CUST. ORDER NO.

| DATE RECEIVED | DATE OF WORK | TECHNICIAN | CONTACT NAME | CONTACT PHONE NO. | EMERGENCY |
|---|---|---|---|---|---|
| | 10-15-93 | Ron Taylor | | | ☑ YES ☐ NO |

☐ PARTS ONLY ☐ SERVICE CONTRACT ☐ TIME AND MATERIAL ☒ SERVICE ☐ A JOB _____

WORK TO BE DONE: NH3 leak in comp

MODEL: SERIAL NUMBER:

DESCRIPTION OF WORK PERFORMED

The 3/8 line on large NH3 pump was leaking liq. ammonia. The Fire Dept. had pump valved off by the time I got here. I double checked valves, put purge hose on pump & purged into water bucket. Restarted system & checked for proper operation.

Total loss of NH3 is less than 10 lb.

| QTY. | MATERIAL | UNIT PRICE | AMOUNT |
|---|---|---|---|
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |
| S P | | | |

| | HOURS | RATE | TOTAL |
|---|---|---|---|
| REGULAR HOURS JOURNEYMEN | | | |
| REGULAR HOURS APPRENTICE | | | |
| OVERTIME HOURS JOURNEYMEN | 4 | | |
| OVERTIME HOURS APPRENTICE | | | |

TOTAL MATERIAL

TOTAL LABOR

OTHER

SALES TAX

EXPENSES:

TRAVEL:

SHIPPING CHARGE:

I HEREBY ACKNOWLEDGE THE SATISFACTORY COMPLETION OF THE ABOVE DESCRIBED WORK.

X _____ CUSTOMER SIGNATURE _____ DATE

SERVICE REPORT

TOTAL CHARGE

OH FIRE INCIDENT REPORTING SYSTEM

# INCIDENT REPORT

Lancaster Fire Department

A

| FDID | INCIDENT NO. | EXP | DATE | DAY OF WEEK | | ALARM | ARRIVAL | IN SERVICE |
|---|---|---|---|---|---|---|---|---|
| 23011 | 000751 | 00 | 10/14/93 | Thursday | 5 | 21:16 | 21:18 | 24:00 |

B

SITUATION FOUND: Spill, Leak w/ No Ign — 41

ACTION TAKEN: Remove Hazard — 4

MUTUAL AID:

C

FIXED PROPERTY USE: Food, Sales Not Class — 519

IGNITION FACTOR: NOT A FIRE — 00

D

CORRECT ADDRESS: 505 W. FAIR AVE

ZIP CODE: 43130

CENSUS TRACT:

E

OCCUPANT NAME: [illegible]ALTRY LANCASTER

TELEPHONE: (614) 653-1052

ROOM OR APT.:

F

OWNER NAME: BROWN HELEN

ADDRESS:

TELEPHONE:

G

METHOD OF ALARM: Telephone (Direct) — 1

CO. INSPECTION DISTRICT: 2

SHIFT: 1

NO. ALARMS: 1

H

| NO. FIRE PERSONNEL RESPONDED | NO. ENGINES RESPONDED | NO. AERIAL APPARATUS RESPONDED | NO. OTHER VEHICLES RESPONDED |
|---|---|---|---|
| 15 | 2 | 1 | 2 |

I

| NUMBER OF INJURIES FIRE SERVICE | OTHER | NO. OF FATALITIES FIRE SERVICE | OTHERS |
|---|---|---|---|
| 6 | 0 | 0 | 0 |

J

COMPLEX:

MOBILE PROPERTY TYPE:

K

AREA OF FIRE ORIGIN:

EQUIPMENT INVOLVED IN IGNITION:

L

FORM OF HEAT IGNITION:

TYPE OF MATERIAL IGNITED:

FORM OF MATERIAL IGNITED:

M

METHOD OF EXTINGUISHMENT:

LEVEL OF FIRE ORIGIN:

ESTIMATED TOTAL DOLLAR LOSS: $1,500.00 — 0

N

NUMBER OF STORIES:

CONSTRUCTION TYPE:

O

EXTENT OF DAMAGE: Flame / Smoke

P

DETECTOR PERFORMANCE:

SPRINKLER PERFORMANCE:

Q

TYPE OF MATERIAL GENERATING MOST SMOKE:

AVENUE OF SMOKE TRAVEL:

R

FORM OF MATERIAL GENERATING MOST SMOKE:

S

| MOBILE PROPERTY | YEAR | MAKE | MODEL | SERIAL NO. | LICENSE NO. |
|---|---|---|---|---|---|
| EQUIP INVOLVED | | | | | |

T

MEMBER MAKING REPORT: DATE 00/00/00

U

OFFICER IN CHARGE (if different): LT. A. BEVINGER Lt. uppressio DATE 10/15/93

REMARKS

Comments for this incident have been printed on an additional comments page.

Remarks:

NOTE INJURED FIRE FIGHTERS were TREATED AND RELEASED FROM E.R. FOR RESPIRATORY TRouble AND/OR SKIN EXPOSURE TO ANHYDRAIS AMONIA VAPORS. DUE TO VAPERS PERMINATING BUNKER GEAR. DUE TO HEAVY CONCINTRATION

| Trucks: | Drivers: | #Men: |
|---|---|---|
| AP-1 | UhL | 3 |
| P-6 | D. SELLS | 3 |
| P-7 | MOYER | 3 |
| M-2 | BUSHEE | 3 |
| M-3 | G. MILLER | 3 |

# Ft. Hose: # Ft. Ladders: Extinguishers:

Approx. Gallons of Water Used:

Other Equipment Used:

GASOLINE EXHAUST FAN

Damage to Apparatus or Equipment:

| Assigned Personnel | On Duty | At Scene | Masks Worn | Injuries |
|---|---|---|---|---|
| Capt. D. Crozier | | | | |
| Lt. A. Bevinger | ✓ | ✓ | ✓ | ✓ |
| Lt. H. Smith | ✓ | ✓ | ✓ | ✓ |
| Lt. J. Kraner | | | | |
| Lt. M. Lehman | ✓ | ✓ | ✓ | ✓ |
| FFE. S. Uhl | ✓ | ✓ | | |
| FFP. G. Miller | ✓ | ✓ | | |
| FFP. N. Northrup | ✓ | ✓ | | |
| FFE. J. Beck | | | | |
| FF. M. Harris | | | | |
| FFE. P. Miller | | | | |
| FFP. R. Hoffman | ✓ | ✓ | ✓ | ✓ |
| FFE. D. Sells | ✓ | ✓ | | |
| FFP. B. Archer | ✓ | ✓ | | |
| FFP. M. Touvell | | | | |
| FF. H. Barrera | ✓ | ✓ | ✓ | ✓ |
| FFP. G. Bushee | ✓ | ✓ | | |
| FFE. C. Moyer | ✓ | ✓ | | |
| FF. B. Knisley | ✓ | ✓ | | |
| FFP. B. Squires | | | | |
| FFP. D. Comer | ✓ | ✓ | | |
| FF. M. Dawson | ✓ | ✓ | ✓ | ✓ |
| FF. R. Howdyshell | | | | |

Revised: 9/29/93

CHEMICAL: AMMONIA, [ANHYDROUS]

CAS #: 7664-41-7 NOAA #: 4860

UN #: 1005 STCC: 4904210 RTECS: BO0875000

FORMULA: H3N LABEL: POISON GAS

NFPA CODES: H3 F1 R0 S

CERCLA (Y/N): Y EHS (Y/N): Y 313 (Y/N): Y RCRA:
RQ: 100 TPQ: 500

LAST UPDATE:10/20/92

STATE at ambient temperature: [Gas, Liquid, Solid] (G/L/S): G

LEVEL OF CONCERN: 0.03500000 gm/m3

LIQUID AMBIENT FACTOR:

LIQUID BOILING FACTOR:

LIQUID MOLTEN FACTOR:

CAMEO Response Information
[NOAA, 7600 Sand Point Way NE, Seattle, WA 98115 (206) 526-6317

GENERAL DESCRIPTION:

Anhydrous ammonia is a clear colorless gas with a characteristic odor. It is used as a fertilizer, as a refrigerant, and in the manufacture of other chemicals. Although it is classed as a nonflammable gas, it will burn within certain vapor concentration limits, and the fire hazard will increase in the presence of oil or other combustible materials. Its "combustibility" is definitely not a common problem in the event of leakage. It is shipped as a liquid under pressure. Contact with the liquid can cause frostbite. It is soluble in water forming a corrosive liquid. Although ammonia is lighter than air, the vapors from a leak initially hug the ground. It weighs 6 lbs/gallon. Long term exposure to low concentrations or short term exposure to high concentrations can result in adverse health effects from inhalation. ((c) AAR, 1991).≟¶If not breathing, provide artificial respiration. If breathing is labored, administer oxygen or other respiratory support.\2. DO NOT induce vomiting or attempt to

neutralize! \3. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.\4. Activated charcoal does not strongly bind ammonia, and therefore is of little or no value.\5. Give the victims water or milk: children up to 1 year old, 125 mL (4 oz or 1/2 cup); children 1 to 12 years old, 200 mL (6 oz or 3/4 cup); adults, 250 mL (8 oz or 1 cup). Water or milk should be given only if victims are conscious and alert.\6. Transport to a health care facility. (EPA, 1990)

FIRE & EXPLOSIVE HAZARD:

Mixing of ammonia with several chemicals can cause severe fire hazards and/or explosions. Ammonia in container may explode in heat of fire. Incompatible with many materials including silver and gold salts, halogens, alkali metals, nitrogen trichloride, potassium chlorate, chromyl chloride, oxygen halides, acid vapors, azides, ethylene oxide, picric acid and many other chemicals. Mixing with other chemicals and water. Hazardous polymerization may not occur.
(EPA, 1990)N╟☻

FIRE FIGHTING:

Wear positive pressure breathing apparatus and full protective clothing.
Small fires: dry chemical or carbon dioxide. Large fires: water spray, fog or foam. Apply water gently to thesurface. Do not get water inside container. Move container from fire area if you can do it without risk. Stay away from ends of tanks. Cool containers that are exposed to flames with water from the side until well after fire is out. Isolate area until gas has dispersed. (EPA, 1990)₧≤

PROTECTIVE CLOTHING AND SUIT MATERIAL COMPATIBILITY (ACGIN 1985:)

For emergency situations, wear a positive pressure, pressure-demand, full facepiece self-contained breathing apparatus (SCBA) or pressure-demand supplied air respirator with escape SCBA and a fully-encapsulating, chemical resistant suit. (EPA, 1990)

MATERIAL RATINGS

| | | |
|---|---|---|
| BARRICADE | | |
| | FABRIC | 1-3 hours |
| BUTYL | | |
| | FABRIC | GT 3 hours |
| | GLOVES | GT 3 hours |
| BUTYL/NEOP | | |
| | FABRIC | GT 3 hours |
| CHECKMATE | | |
| | FABRIC | GT 3 hours |
| CHEMREL | | |
| | FABRIC | LT 1 hour |

CHEMREL MAX
FABRIC GT 3 hours

CPE
FABRIC 1-3 hours

CPF III
FABRIC LT 1 hour

FEP TEFLON
FACESHIELD GT 3 hours

INTERCEPTOR
FABRIC GT 3 hours

NAT RUB
FABRIC LT 1 hour

NEOP
FABRIC 1-3 hours
GLOVES GT 3 hours
BOOTS GT 3 hours

NEOP/BUTYL
GLOVES GT 3 hours

NIT+POLYURETHANE+PVC
BOOTS GT 3 hours

NITRILE
GLOVES GT 3 hours

PE
FABRIC LT 1 hour

POLYURETHANE
FABRIC LT 1 hour

PTFE TEFLON
FABRIC LT 1 hour

PVC
FABRIC LT 1 hour

RESPONDER
FABRIC GT 3 hours

SARANEX23P
FABRIC LT 1 hour

VITON
FABRIC LT 1 hour

VITON/NEOP
FABRIC GT 3 hours
╟♦PRINTER

NONFIRE RESPONSE:

Keep material out of water sources and sewers. Attempt to stop leak if without undue personnel hazard. Use water spray to knock-down vapors. Vapor knockdown water is corrosive or toxic and should be diked for containment. Land spill: Dig a pit, pond, lagoon, holding area to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash or cement powder. Neutralize with vinegar or other dilute acid. Water spill: Neutralize with dilute acid. Use mechanical dredges or lifts to remove immobilized masses of pollutants and precipitates. ((c) AAR, 1991)rC●Keep material out of water sources and sewers. Attempt to stop leak

HEALTH HAZARDS:

Vapors cause irritation of eyes and respiratory tract. Liquid will burn skin and eyes. Poisonous; may be fatal if inhaled. Contact may cause burns to skin and eyes. Contact with liquid may cause frostbite. (EPA, 1990)oI

FIRST AID:

Warning: Ammonia is extremely corrosive to the skin, eyes, and mucous membranes. Contact with the liquified gas may cause frostbite. Caution is advised.
Signs and Symptoms of AcuteAmmonia Exposure: Inhalation of ammonia may cause irritation and burns of the respiratory tract, laryngitis, dyspnea (shortness of breath), stridor (high-pitched respirations), and chest pain. Pulmonary edema and pneumonia may also result from inhalation. A pink frothy sputum, convulsions, and coma are often seen following exposure to high concentrations. When ammonia is ingested, nausea and vomiting may result; oral, esophageal, and stomach burns are common. If ammonia has contacted the eyes, irritation, pain, conjunctivitis (red, inflamed eyes), lacrimation (tearing), and corneal erosion may occur. Loss of vision is possible. Dermal exposure may result in severe burns and pain.
Emergency Life-Support Procedures: Acute exposure to ammonia may require decontamination and life support for the victims. Emergency personnel should wear protective clothing appropriate to the type and degree of contamination. Air-purifying or supplied-air respiratory equipment should also be worn, as necessary.
Inhalation Exposure:
1. Move victims to fresh air. Emergency personnel should avoid self-exposure to ammonia.
2. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulse is detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer oxygen or other respiratory support.
3. Obtain authorization and/or further instructions from the local

hospital for administration of an antidote or performance of other invasive procedures.
4. Transport to a health care facility.
Dermal/Eye Exposure:
1. Remove victims from exposure. Emergency personnel should avoid self- exposure to ammonia.
2. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulse is detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer oxygen or other respiratory support.
Warning: Do not attempt to neutralize with an acid wash; excessive liberation of heat may result.
3. If eye exposure has occurred, eyes must IMMEDIATELY be flushed with lukewarm water for at least 15 minutes.
4. Remove contaminated clothing as soon as possible.
5. Wash exposed skin areas THOROUGHLY with soap and water.
6. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
7. Transport to a health care facility.
Ingestion Exposure:
1. Evaluate vital signs including pulse and respiratory rate, and note any trauma. If no pulseis detected, provide CPR. If not breathing, provide artificial respiration. If breathing is labored, administer oxygen or other respiratory support.
2. DO NOT induce vomiting or attempt to neutralize!
3. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
4. Activated charcoal does not strongly bind ammonia, and therefore is of little or no value.
5. Give the victims water or milk: children up to 1 year old, 125 mL (4 oz or 1/2 cup); children 1 to 12 years old, 200 mL (6 oz or 3/4 cup); adults, 250 mL (8 oz or 1 cup). Water or milk should be given only if victims are conscious and alert.
6. Transport to a health care facility. (EPA, 1990)╔I#♦

CHEMICAL PROPERTIES:

Flash Point: Not Applicable. Not flammable under conditions likely to be encountered. (USCG, 1991)
Lower Exp Limit: 16 % (EPA, 1990)
Upper Exp Limit: 25 % (EPA, 1990)
Auto IgtnTemp: 1204 F (USCG, 1991)
Melting Point: -107.9 F (EPA, 1990)
Vapor Pressure: 400 mm at -49.72 F (EPA, 1990)
Vapor Density (air = 1): 0.6 (EPA, 1990)
Specific Gravity, Liquid: 0.6818 at -28.03 F (EPA, 1990)
Boiling Point: -28.03 F at 760 mm (EPA, 1990)
Molecular Weight: 17.03 (EPA, 1990)
IDLH: 500 ppm (NIOSH, 1990)
TLV TWA: 25 ppm ((c)ACGIH, 1991)
TLV STEL: 35 ppm ((c)ACGIH, 1991)moà

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