



Prier, Jeff <jeff.prier@dnr.iowa.gov>

P.B. Leiner Spill

Fwd: NRC#1181127

1 message

ER Fax, DNR <dnr.erfax@dnr.iowa.gov>

Wed, Jun 14, 2017 at 10:55 AM

To: DNR FO6_Everyone <FO6_Everyone.FO6.Washington@dnr.iowa.gov>

For the person on spill duty.



----- Forwarded message -----
From: <HQS-PF-fldr-NRC@uscg.mil>
Date: Wed, Jun 14, 2017 at 10:30 AM
Subject: NRC#1181127
To: dnr.erfax@dnr.iowa.gov

NATIONAL RESPONSE CENTER 1-800-424-8802
GOVERNMENT USE ONLYGOVERNMENT USE ONLY***
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applicable federal and/or state Freedom of Information and Privacy Laws

Incident Report # 1181127

INCIDENT DESCRIPTION

*Report taken by: MST2 MICHELLE PRESS at 11:20 on 14-JUN-17
Incident Type: STORAGE TANK
Incident Cause: EQUIPMENT FAILURE
Affected Area:
Incident was discovered on 14-JUN-17 at 10:15 local incident time.
Affected Medium: AIR ATMOSPHERE

REPORTING PARTY

Name: ANDREW MURDOCK
Organization: P.B. LEINER
Address: 7001 NORTH BRADY
DAVENPORT, IA 52806
Email Address: andy.murdock@pbleiner.com

PRIMARY Phone: (563)3868040
Type of Organization: PRIVATE ENTERPRISE

SUSPECTED RESPONSIBLE PARTY

Name: ANDREW MURDOCK
Organization: P.B. LEINER
Address: 7001 NORTH BRADY
DAVENPORT, IA 52806
PRIMARY Phone: (563)3868040
Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

7001 NORTH BRADY County: SCOTT
City: DAVENPORT State: IA Zip: 52806

RELEASED MATERIAL(S)

CHRIS Code: AMA Official Material Name: AMMONIA, ANHYDROUS
Also Known As:

Qty Released: 0 UNKNOWN AMOUNT

DESCRIPTION OF INCIDENT

THE CALLER IS REPORTING THAT A RELIEF VALVE ON A TANK OVER PRESSURIZED CAUSING THE RELEASE OF ANHYDROUS AMMONIA INTO AIR.

SENSITIVE INFORMATION

INCIDENT DETAILS

Description of Tank: 3 FEET TALL, 1.5 FOOT DIAMETER
Tank Above/Below Ground: ABOVE
Transportable Container: NO
Tank Regulated: YES
Tank Regulated By:
Tank ID: 133TK206
Capacity of Tank:
Actual Amount:

IMPACT

Fire Involved: NO Fire Extinguished: UNKNOWN

INJURIES: NO Hospitalized: Empl/Crew: Passenger:
FATALITIES: NO Empl/Crew: Passenger: Occupant:
EVACUATIONS:NO Who Evacuated: Radius/Area:

Damages: NO

| Closure Type | Description of Closure | Hours | Direction of | |
|--------------|------------------------|-------|--------------|----------|
| | | | Closed | Closure |
| N | | | | |
| Air: | | | | |
| Road: | | | Major | Artery:N |
| Waterway: | | | | |
| Track: | | | | |

Environmental Impact: NO
Media Interest: UNKNOWN Community Impact due to Material:

REMEDIAL ACTIONS

AN INVESTIGATION ON THE CAUSE OF THE LEAK IS UNDERWAY. THE PRODUCT IS DISSIPATING NATURALLY.
Release Secured: NO
Release Rate:
Estimated Release Duration:

WEATHER

Weather: SUNNY, 85°F Wind speed: 4 MPH Wind direction: N

ADDITIONAL AGENCIES NOTIFIED

Federal:
State/Local:
State/Local On Scene:
State Agency Number:

NOTIFICATIONS BY NRC

CENTERS FOR DISEASE CONTROL (GRASP)
14-JUN-17 11:29 (770)4887100
CLINTON COUNTY EMERGENCY MGMT (EM COORDINATOR)

Section 10. Stability and Reactivity

REACTIVITY:

Anhydrous ammonia has potentially explosive reactions with strong oxidizers. Anhydrous ammonia forms explosive mixtures in air with hydrocarbons, chlorine, fluorine and silver nitrate. Anhydrous ammonia reacts to form explosive products, mixtures or compounds with mercury, gold, silver, iodine, bromine, silver oxide and silver chloride.

CHEMICAL STABILITY:

Stable under normal ambient conditions of temperature and pressure. Heating a closed container causes vapor pressure to increase. Will not polymerize.

POSSIBILITY OF HAZARDOUS REACTIONS:

Will react exothermically with acids and water.

CONDITIONS TO AVOID:

Avoid anhydrous ammonia contact with chlorine, which forms a chloramine gas, which is a primary skin irritant and sensitizer. Avoid contact with galvanized surfaces, copper, brass, bronze, mercury, gold and silver. A corrosive reaction will occur.

INCOMPATIBLE MATERIALS:

Anhydrous ammonia is incompatible with acetaldehyde, acrolein, boron, chloric acid, chlorine monoxide, chlorites, nitrogen tetroxide, perchlorate, sulfur, tin and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

Anhydrous ammonia decomposes to hydrogen and nitrogen gases above 450 °C (842 °F). Decomposition temperatures may be lowered by contact with certain metals, such as iron, nickel and zinc and by catalytic surfaces such as porcelain and pumice.

Section 11. Toxicological Information

Potential health effects: Ammonia is an irritant and corrosive to the skin, eyes, respiratory tract and mucous membranes. Exposure to liquid or rapidly expanding gases may cause severe chemical burns and frostbite to the eyes, lungs and skin. Skin and respiratory related diseases could be aggravated by exposure. The extent of injury produced by exposure to ammonia depends on the duration of the exposure, the concentration of the liquid, gas or vapor and the depth of inhalation.

Exposure Routes:

Inhalation (vapors, gas), skin and/or eye contact (vapors, liquid, gas).

Symptoms of acute exposure:

Inhalation: Exposure may result in severe irritation and/or burns of the nose, throat and respiratory tract. May cause dyspnea (breathing difficulty), wheezing, chest pain, bronchospasm, pink frothy sputum, pulmonary edema or respiratory arrest. Extreme exposure may result in death from spasm, inflammation or edema. Respiratory injury may appear as a delayed phenomenon. Pulmonary edema may follow chemical bronchitis. Brief inhalation exposure to 5,000 ppm may be fatal.

Skin: Irritation, corrosive burns, blister formation (vesiculation) may result. Contact with liquid may produce freeze burns (frostbite) and caustic burns.

Eyes: Vapors may cause severe irritation. Tearing, eye burns, permanent eye damage or blindness may occur. Effects of direct contact may range from irritation and lacrimation to severe injury and blindness.

Ingestion: Ingestion is unlikely since the material is a gas under normal atmospheric conditions. If ingested, it may cause burns and corrosion, severe pain of the mouth, throat, esophagus and stomach or may be fatal

Chronic Exposure:

Repeated exposure to ammonia may cause chronic irritation of the eyes and respiratory tract.

Toxicity:

LC₅₀ - 5131 mg/m³ (7338 ppm) to 11,592 mg/m³ (16,600 ppm), 60 minute exposure, Rat.
LD₅₀ - 350 mg / kg (Oral / Rat).

Not listed in the National Toxicology Program (NTP).

Not recognized by OSHA as a carcinogen.

Not listed as a carcinogen by the International Agency for Research on Cancer (IARC monograph).

Germ cell mutagenicity information is not available. Reproductive toxicity information is not available.

Section 12. Ecological Information

Ammonia is harmful to aquatic life at very low concentrations. Notify local health and wildlife officials and operators of any nearby water intakes upon contamination of surface water.

Toxicity:

Terrestrial plants: LOEC = 3-250 ppm NH₃.

Aquatic plants: LOEC = 0.5-500 mg NH₃-N/L.

Acute toxicity to invertebrates: 48 h LC50 = 2.94 mg un-ionized NH₃-N/L.

Chronic toxicity to invertebrates: NOEC = 0.163- 0.42 mg un-ionized NH₃/L.

Acute toxicity to fish: 96-h: LC50 = 0.09 – 3.51 mg un-ionized NH₃/L.

Chronic toxicity to fish: NOEC = 0.025-1.2 mg un-ionized NH₃/L.

Environmental Fate Information: Ammonia dissipates relatively quickly in ambient air and rapidly returns to the soil via combination with sulfate ions or washout by rainfall. Ammonia strongly adsorbs to soil, sediment particles and colloids in water under aerobic conditions. Biodegradation of ammonia to nitrate occurs in water under aerobic conditions resulting in a biological oxygen demand (BOD).

Persistence/Degradability:

Biodegradable in soil. Ozonation in the air. Soluble in water.

Bioaccumulative Potential:

Not applicable.

Mobility in Soil:

No additional information available.

Other Adverse Effects:

No additional information available.

Section 13. Disposal Considerations

Dispose of unused contents/container in accordance with local/regional/national/international regulations as applicable.

Listed as hazardous substance under the Clean Water Act (CWA) (40 CFR 116.4 and 40 CFR 117.3).

Classified as hazardous waste under the Resource Conservation and Recovery Act (RCRA) (40 CFR 261.22 Corrosive #D002).

Comply with all regulations.

Suitably diluted product may be utilized as fertilizer on agricultural land.

For hazardous waste regulations information call the RCRA Hotline (800) 424-9346, or visit the US EPA website.

Section 14. Transport Information

US Department of Transportation

HAZARD CLASS:

(US Domestic): 2.2 (Non-Flammable Gas)
(International): 2.3 (Poison Gas), subsidiary 8 (Corrosive)

PROPER SHIPPING DESCRIPTION:

(US Domestic): UN1005, Ammonia, Anhydrous, 2.2, RQ, Inhalation Hazard
(International): UN1005, Ammonia, Anhydrous, 2.3, (8), RQ, Poison-Inhalation Hazard Zone "D"

LABEL / PLACARD:

(US Domestic): Non-Flammable Gas



(International): Poison Gas, Corrosive (Subsidiary)



IDENTIFICATION NUMBER:

UN 1005

ENVIRONMENTAL HAZARDS: