

AGENDA

Eau Claire County

- LOCAL EMERGENCY PLANNING COMMITTEE •

Date: Thursday, September 16, 2021

Time: 4:00 p.m.

In-Person OR Remote Access

In-Person

Township Fire Station 1, 1607 S 50th Avenue, Eau Claire, Wisconsin 54703

Remote Access

*Event link below can be used to connect to meeting and interact (by the chair) from computer or through the WebEx Meeting smartphone app.

Join WebEx Meeting: <https://eauclairecounty.webex.com> Meeting ID: **145 919 2856** Password: **mK94cbAGGs4**

*Meeting audio can be listened to using this Audio conference dial in information.

Audio conference: 1-415-655-0001 Access Code: **1459192856##**

For those wishing to make public comment, you must e-mail Sam Simmons at Samuel.Simmons@co.eau-claire.wi.us at least 30 minutes prior to the start of the meeting. You will be called on during the public comment period to make your comments.

**Please mute personal devices upon entry*

1. Call to Order and confirmation of meeting notice
2. Roll Call
3. Public Comment **(15 minute maximum)**
4. Review – Approval of the May 13, 2021 Minutes / Discussion – Action **PAGES 2 - 4**
5. Review - Approval of Off-Site Response Plans / Discussion – Action
 - a. Central Storage & Warehouse **PAGES 5 - 30**
 - b. Indianhead Foodservice **PAGES 31 - 65**
 - c. Xcel Energy **PAGES 66 - 86**
 - d. Schuman Cheese **PAGES 87 -116**
 - e. Menard, Inc. **PAGES 117 - 136**
6. Emergency Management Updates / Discussion
7. Local Hazardous Materials Spill Response Team Report / Discussion
8. Proposed Business items for Next Meeting / Discussion
9. Adjourn

Prepared by: Samuel Simmons, Program Assistant, Eau Claire County Emergency Management

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MINUTES

Eau Claire County

• LOCAL EMERGENCY PLANNING COMMITTEE •

Date: Thursday, May 13, 2021

Time: 4:00 p.m.

In-Person OR Remote Access

In-Person (COVID-19 safety protocols will be in place)

Washington Town Hall
5750 Old Town Hall Road
Eau Claire, Wisconsin 54701

Remote Access

*Event link below can be used to connect to meeting and interact (by the chair) from computer or through the WebEx Meeting smartphone app.

Join WebEx Meeting: <https://eauclairecounty.webex.com> Meeting ID: **145 435 7828** Password: **zpFXJtKD474**

*Meeting audio can be listened to using this Audio conference dial in information.

Audio conference: 1-415-655-0001 Access Code: **1454357828##**

For those wishing to make public comment, you must e-mail Sam Simmons at Samuel.Simmons@co.eau-claire.wi.us at least 30 minutes prior to the start of the meeting. You will be called on during the public comment period to make your comments.

**Please mute personal devices upon entry*

Members Present: Robin Leary, Darrell Christy, Jason Knecht, Jack Running, Jamie Burkhardt, Marisa Stanley, Robert King, Frank Neibauer, Diane Hunter, Thomas Lochner, James Hager

Members Absent: Ray Henning, Benjamin Frederick, Don Henning, Steve Vargo

Staff Present: Tyler Esh, Sam Simmons

1. Call to Order and confirmation of meeting notice

Chairman Darrell Christy called the meeting to order at 4:00 p.m. and confirmed the meeting was noticed.

2. Public Comment (**15 minute maximum**)

None.

3. Review – Approval of the February 11, 2021 Minutes / Discussion – Action

The Committee reviewed the February 11, 2021 Minutes.

ACTION: Motion by Jack Running to approve the February 11, 2021 Minutes as presented. Jason Knecht seconded. Motion carried by unanimous consent.

4. Review/Approval of Off-Site Response Plans / Discussion – Action

- a. AT&T PK0116 – Tabled from 02/11/2021

The Committee reviewed the AT&T PK0116 Off-Site Response Plan. Sam Simmons, Emergency Management Program Assistant, informed the Committee that concerns raised about the plan at the previous meeting have been addressed. **ACTION:** Motion by Jim Hager to approve the AT&T PK0116 Off-Site Response Plan as presented. Seconded by Robin Leary. Motion carried by unanimous consent.

b. AT&T PK0106 – Tabled from 02/11/2021

The Committee reviewed the AT&T PK0106 Off-Site Response Plan. Mr. Simmons again noted the concerns raised about this plan at the previous meeting have been addressed. Robert King raised a concern about the facility layout provided in the plan and its readability. Others on the Committee noted that is unlikely that a better layout can be provided, and that Eau Claire Fire is familiar with the facility in case of an incident. **ACTION:** Motion by Jack Running to approve the AT&T PK0106 Off-Site Response Plan as presented. Jason Knecht seconded. Motion carried by unanimous consent.

c. Cleghorn Micro-PK9608

Mr. Simmons informed the Committee that the Cleghorn Micro-PK9608 plan is simply a letter stating that the facility no longer has chemicals over the amount to deem it as a planning facility. The Committee is required to approve the letter acknowledging that it is no longer a planning facility for EPCRA purposes. **ACTION:** Motion by Jack Running to approve the Cleghorn Micro-PK9608 Off-Site Response Plan as presented. Seconded by Frank Neibauer. Motion carried by unanimous consent.

d. Great Lakes Coca-Cola

The Committee reviewed the Great Lakes Coca-Cola Off-Site Response Plan. Mr. Simmons informed the Committee that there were no changes to the plan since it was last brought before the LEPC. **ACTION:** Motion by Robert King to approve the Great Lakes Coca-Cola Off-Site Response Plan as presented. Seconded by Jim Hager. Motion carried by unanimous consent.

e. Hutchinson Technology, Inc.

The Committee reviewed the Hutchinson Technology, Inc. Off-Site Response Plan. Mr. Simmons noted that the changes to the plan were adding some new hazardous substances, removing Copper Sulfate has an Extremely Hazardous Substance, and minor amendments to the narrative. Thomas Lochner, Facility Coordinator for Hutchinson Technology, Inc., stated that the facility is still maintaining 24/7 operations and conducting proper trainings. Chairman Christy asked how many employees are employed at the facility. Mr. Lochner stated around 390. **ACTION:** Motion by Tom Lochner to approve the Hutchinson Technology, Inc. Off-Site Response Plan as presented. Seconded by Robert King. Motion carried by unanimous consent.

5. Emergency Management Overview and Updates / Discussion

Tyler Esh, Emergency Management Coordinator for Eau Claire County, provided the Committee with an overview of the Emergency Management program. The presentation included an overview on grants, response and planning efforts, and future opportunities for the program. Robin Leary asked if Emergency Management is involved with Farm Tech Days. Mr. Esh confirmed that he is working with Township Fire and law enforcement. There was also discussion on possibly using EPCRA grant dollars for outreach materials.

6. Local Hazardous Materials Spill Response Team Report / Discussion

Jamie Burkhardt, of Eau Claire Fire & Rescue, provided the Committee with the Local Hazardous Materials Spill Report since February. There have been 38 reported incidents. 17 of those incidents were CO related and 10 were flammable liquids. These numbers are about average for this time of year.

7. LEPC Appointments/Reappointments / Discussion

Mr. Esh informed the Committee that several reappointments to the Committee took place in April. There is one vacancy, media, on the Committee.

8. Proposed Business items for Next Meeting / Discussion

Mr. Esh noted that the State of Wisconsin requires the LEPC to conduct one facility tour per grant cycle. It was decided that the next LEPC meeting will be held in August at either the Schuman Cheese facility in Fall Creek or Hutchinson Technology in Eau Claire to observe an annual exercise.

9. Adjourn

ACTION: Motion by Jack Running to adjourn the meeting. Jim Hager seconded. Motion carried by unanimous consent. Meeting adjourned at 4:46 p.m.

Respectfully Submitted,

Samuel Simmons
Clerk, Local Emergency Planning Committee

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 198620

Facility Name: Central Storage & Warehouse Co.

Facility Address: 2650 Fortune Drive, Eau Claire, Wisconsin 54703

STATEMENT OF PLANNING PROCESS

This plan has been prepared in accordance with state and local requirements and is ready to be made a part of the County Emergency Operations Plan (EOP) / Emergency Response Plan (ERP) upon Wisconsin Emergency Management (WEM) / State Emergency Response Commission (SERC) acceptance. This plan meets the facility off-site planning guidance as established by WEM / SERC. Acceptance of this plan is for planning purposes and does not verify facility compliance with the requirements of EPCRA.

FACILITY SIGNATURES:

I have reviewed the attached plan and to the best of my knowledge, all facility information is true, accurate, and complete. The plan is consistent with facility emergency plans and procedures.

Perrin Sanderson

Facility Coordinator

07/26/2021

Date

COUNTY SIGNATURES

I have reviewed the attached plan and to the best of my knowledge, all information is true, accurate, and complete.

County Local Emergency Planning Committee Chair

Date

County Emergency Management Director

Date

WEM / SERC ACCEPTANCE:

This plan has been reviewed and meets the off-site planning guidance as established by WEM / SERC.

WEM Regional Director

Date

NOTE: Facility Off-Site Plan Review Guide attached: Yes No

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 198620

Facility Name: Central Storage & Warehouse Co.

Facility Address: 2650 Fortune Drive, Eau Claire, Wisconsin 54703

FACILITY OFF-SITE PLAN REVIEW GUIDE

EPCRA Facility Off-Site Plan Elements

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2) Facility Coordinator / Alternate Coordinator	4
3) Extremely Hazardous Substances (EHS) chemicals Identified with CAS numbers and maximum amount	4 - 5
4) Primary emergency responders identified	5
5) Support and resources available from facility	5
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7) Hazard analysis summary	5 - 6
8) Special facilities affected	8 - 9
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10) Special considerations	7
11) Site Plan / Facility Layout	Appendix 1 (12)

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 198620

Facility Name: Central Storage & Warehouse Co.

Facility Address: 2650 Fortune Drive, Eau Claire, Wisconsin 54703

12) Distribution list:

Facility

Fire Department of jurisdiction

Wisconsin Emergency Management- Region Office

Designated Hazmat team

County Emergency Management Office

Adjacent County Emergency Management Office when impacted by vulnerability zone

13) Required Attachments

A. Vulnerability Zone map highlighting special facilities 10 - 11

B. Safety Data Sheet (SDS) for each EHS Appendix 2 (19 - 32)

C. Vulnerability Zone Calculations Appendix 3 (33 - 36)

D. Transportation route(s) map



Central Storage & Warehouse Co. Facility Off-Site Emergency Response Plan



Facility #198620
Central Storage & Warehouse Co.
2650 Fortune Drive
Eau Claire, Wisconsin 54703



Eau Claire County Emergency Management
721 Oxford Avenue, Suite 3344
Eau Claire, Wisconsin 54703

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APPENDICES

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RECORD OF CHANGES

Change	Date Changed	Change Made By
Updated	July 25, 2016	JA
Special facilities updated	July 19, 2017	JA
Updated	July 26, 2021	SS

SECTION 1: FACILITY INFORMATION

A. Address

Central Storage & Warehouse Co.
2650 Fortune Drive
Eau Claire, Wisconsin 54703 resource

B. Facility ID

198620

C. Map



D. Emergency Contacts

Primary:

Perrin Sanderson
Phone: 608-221-7600
24 Hour: 608-358-6209
psanderson@csw-wi.com

Secondary:

Jack Williams
Phone: 608-235-4539
24 Hour: 608-235-4539
jackw@csw-wi.com

E. Extremely Hazardous Substances

Anhydrous Ammonia Chemical ID: 395173 CAS: 7664417 ERG: Guide 125	Inventory: Max Daily Amount (lbs): 7400 Ave. Daily Amount (lbs): 7400 Number of days on site: 365	Storage: Container: Above ground tank Location: Receiver and accumulator located in Engine room, Westernmost portion of building
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Sulfuric Acid Chemical ID: 395174 CAS: 7664939 ERG: Guide 137	Inventory: Max Daily Amount (lbs): 1730 Ave. Daily Amount (lbs): 1730 Number of days on site: 365	Storage: Container: Batteries Location: Forklift batteries in forklifts and in battery charging area
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F. Hazardous Substances

Lead Chemical ID: 395172 CAS: 7439921 ERG: Guide 151	Inventory: Max Daily Amount (lbs): 13985 Ave. Daily Amount (lbs): 13985 Number of days on site: 365	Storage: Container: Batteries Location: Charging room and forklifts
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G. Resources/Support Available

There are detectors located in the Mechanical Room, fire alarm and ventilation systems, and alarm monitoring provided by True Lock.

H. Hazard Analysis

Central Storage & Warehouse provides a cold storage environment for storage of food products. To the east and north are agricultural fields; to the west is undeveloped land. Other industrial facilities are located to the south. The parcel is located near the border of Eau Claire and Chippewa counties. An average of ten (10) employees are on site at all times. The size of the building is 66,000 square feet. The cooling system for the facility uses Anhydrous Ammonia. Sulfuric Acid is used in electrolyte of batteries. The total quantity of sulfuric acid electrolyte is 6,750 lbs. The portion of the solution that is sulfuric acid can range up to 2,026 lbs. In the same screening scenarios as stated for anhydrous ammonia below, the evacuation radius for sulfuric acid is less than 0.1 mile.

The hazard analysis determined this Anhydrous Ammonia to be the major chemical hazard present at the facility. It is used in the cooling system which conditions air for the cold storage. Piping for the Anhydrous Ammonia is located above the roof of the building and inside the building. A diffuser is located on the roof top to disperse any system release of Anhydrous Ammonia. A leak of Anhydrous Ammonia in the main containment area would be detected by equipment that is monitored by True Lock Security (24/7). If a leak were to be detected Tru Lock would alert company personnel so they could take appropriate action. On site, strobes and siren annunciate the detected release of a chemical. There are 7,400 pounds of Anhydrous Ammonia reported on site. The modeled evacuation area is based on worst case scenario for Anhydrous Ammonia (2,464 lbs.) ten minutes after a catastrophic failure of containment. The largest containment of Anhydrous Ammonia in the cooling system is the receiver. This is the amount of material used in the worst-case scenario.

The greatest potential for release would be the failure of “receiver units” which contain the greatest volume of material. Anhydrous Ammonia is delivered to the facility by truck. The maximum shipment is 2,500 pounds.

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The evacuation radius, as calculated by CAMEO software for a 2,464 pound Anhydrous Ammonia release, was determined to be 6.2 miles. It is estimated that 68,661 people may be affected by the release.

Reevaluation of a 2,464 pound release of Anhydrous Ammonia using more realistic variables in the CAMEO model yields an evacuation radius of seven miles.

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

10 minute release of maximum quantity of chemical in a single vessel

I. Access to Facility

There are two access points on Fortune Drive. Fortune Drive is accessible from Venture Drive and North Clairemont Avenue.

SECTION 2: OUTSIDE RESOURCES

A. Primary Response Agencies

Fire:	EMS:	Law:	Emergency Management:
City of Eau Claire Fire Station	City of Eau Claire Fire Station	City of Eau Claire Police 721 Oxford Avenue Eau Claire, WI 54703 Phone: 715-839-4972	Eau Claire Emergency Management 721 Oxford Avenue Suite 3344 Eau Claire, WI 54703 Phone: 715-839-4736
Eau Claire, WI 54703 Phone: 715-834-6868	Eau Claire, WI 54703 Phone: 715-834-6868		

B. Hazardous Materials Response Teams

Eau Claire County has a Level B hazardous materials response team. For Level B response, the local Fire Chief notifies the Level B team of a response needed through the Eau Claire County Emergency Communications Center. For Level A responses by the Type 1 Regional Hazardous Materials Response Team, requests shall be made through the WEM Duty officer by the county Emergency Management Director.

C. Other Outside Assistance

See the County-Wide Hazardous Materials Strategic Plan for a listing of resources.

SECTION 3: POPULATION/ENVIRONMENTAL PROTECTION

A. Shelter-In-Place

The lead time for a hazardous materials incident may be very short. As a result, there may not be time enough for safe evacuation, especially when extremely toxic chemical fumes are involved. An evacuation under these considerations may expose the population to dangerous toxic chemicals and the decision may be made to shelter-in-place. Preferred areas for protective sheltering would be interior hallways, rooms without windows or exterior doors, enclosed stairways and rooms on the side of the building away from where the hazard is approaching. Doors, windows, and other potential air leaks should be sealed up to prevent toxic fumes from entering.

B. Evacuation

Experience indicated that shelter space would need to be provided for only 30% of the population within the initial isolation and evacuation zones and the remaining 70% would seek shelter with family and friends outside the risk zone. All public schools listed are eligible evacuation shelters.

C. Nearby Shelters

None.

SECTION 4: VULNERABILITY ZONES

A. General Information and Assumptions

The vulnerability zones set forth in this Plan are based on the EPA Technical Guidance for Hazards Analysis. The zones are based on a credible worst case scenario and identify the potential area for impact should an airborne release of a single EHS chemical occur.

The vulnerability zones are NOT intended to be used as a guide for population protection in fire related incidents. Fire incidents were considered in the development of this plan and the plan provides basic information about the facility for first responders to employ. However, in an actual fire situation at this facility, the Incident Commander is strongly recommended to reference the fire department's own individual agency pre-emergency plans and standard operating procedures as well as the County's Emergency Operations Plan Annex K: Fire and Rescue, as they may relate to this facility when making decisions at an incident involving fire.

Further, fire departments that would respond to an incident at this facility are strongly encouraged to meet with facility representatives to determine ways to minimize an event at the facility and to determine what additional information and factors should be taken into consideration in the event of a fire, should one occur.

The actual response to an incident will be determined by the field incident commander and the affected area may vary from the planning vulnerability zone identified in this Plan. Depending on wind speed and direction, the amount of material released and other pertinent factors, the ACTUAL vulnerability zone may be smaller, and in some instances larger, than the credible worst case vulnerability zone identified herein.

The vulnerability zones determined in this Plan are for general PLANNING PURPOSES.

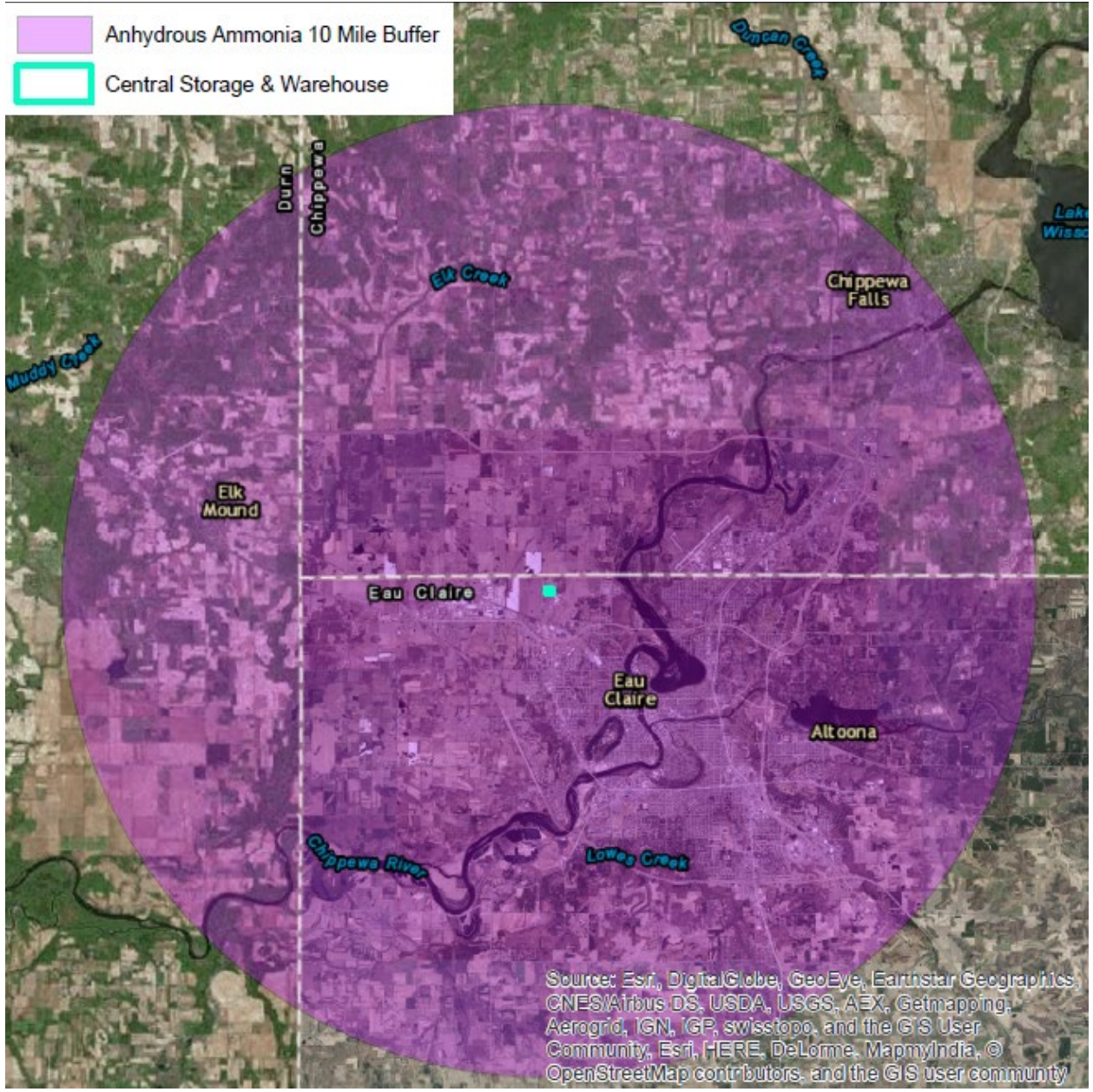
B. Special Facilities Affected

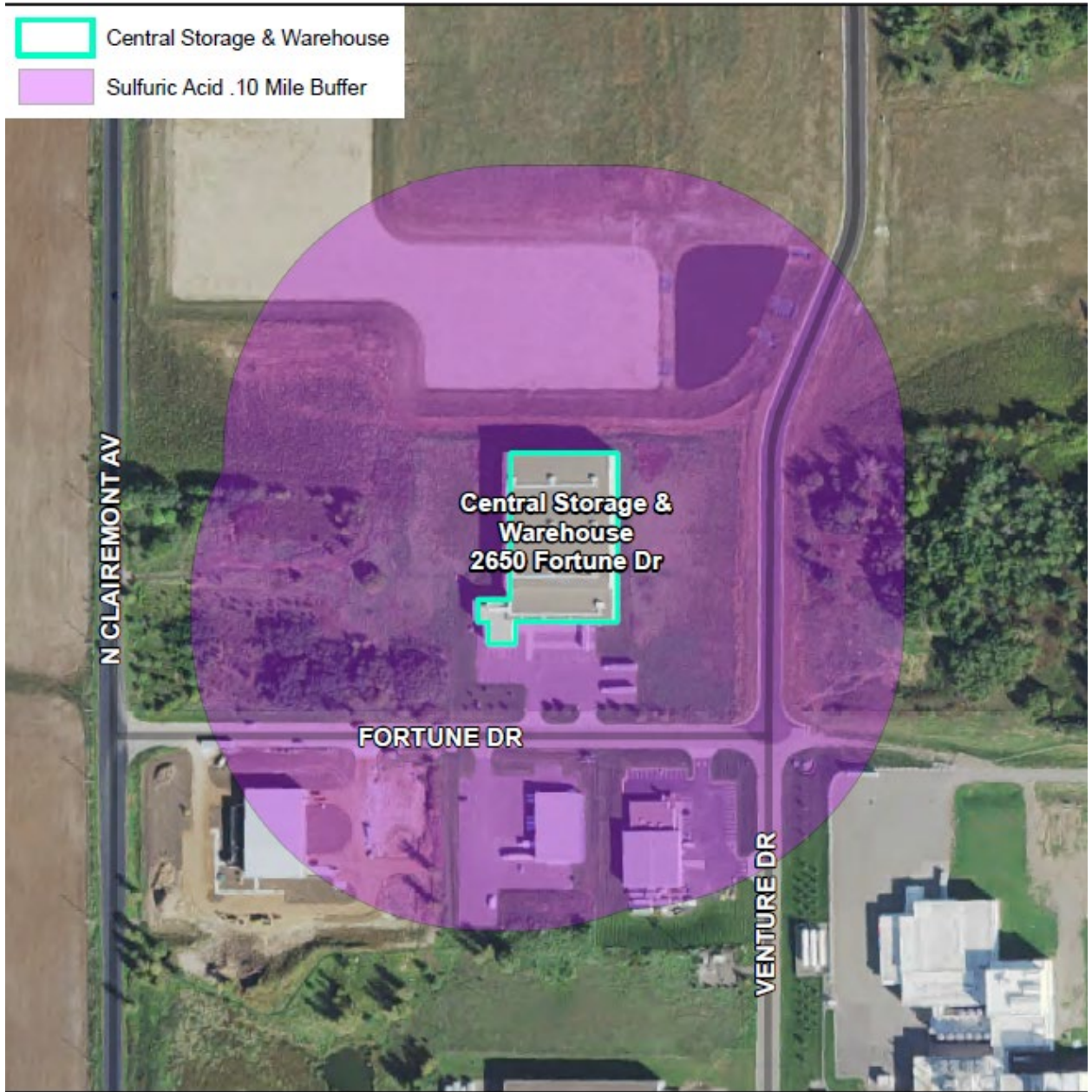
AmericInn Hotel & Suites Eau Claire 6200 Texaco Dr Eau Claire, WI 54703 715-874-4900	Big Brothers Big Sisters 424 Galloway St Eau Claire, WI 54703 715-835-0161	Brighter Beginning Early Learning 1612 Truax Blvd Eau Claire, WI 54703 715-831-9944
Calvary Baptist Church 3036 Epiphany Ln Eau Claire, WI 54703 715-832-6363	Care Partners Assisted Living 2320 Frank St Eau Claire, WI 54703 715-835-6656	Children's Secret Garden North 2857 Western Ave Eau Claire, WI 54703 715-835-7021
Chippewa Valley Montessori Charter School 400 Cameron St Eau Claire, WI 54703 715-852-6950	Chippewa Valley Museum 1204 Half Moon Dr Eau Claire, WI 54703 715-834-7871	Chippewa Valley Regional Airport 3800 Starr Ave Eau Claire, WI 54703 715-839-4900
Chippewa Valley Technical College-Energy Education Center 4000 Campus Rd Eau Claire, WI 54703 715-855-7502	Chippewa Valley Technical College-Manufacturing Education Center 2320 Alpine Rd Eau Claire, WI 54703 715-874-4600	Chippewa Valley Technical College-Emergency Service Education Center 3623 Campus Rd Eau Claire, WI 54703 715-855-7500
Clairemont Motel 2221 N Clairemont Ave Eau Claire, WI 54703 715-832-7611	Color My World Child Care 1903 Western Ave Eau Claire, WI 54703 715-835-2060	Dairyland Power Co-Op 5052 County Hwy X Eau Claire, WI 54703 715-874-5413
Days Inn West-Eau Claire 6319 Truax Ln Eau Claire, WI 54703 715-874-5550	Delong Middle School 2000 Vine St Eau Claire, WI 54703 715-852-4900	Dove Healthcare- Orchard Hills Assisted Living 1403 Truax Blvd Eau Claire, WI 54703 715-552-1030
Eau Claire Children's Theatre 1814 Oxford Ave Eau Claire, WI 54703 715-839-8877	Eau Claire Express Stadium 702 Carson Park Dr Eau Claire, WI 54701 715-839-7788	Eau Claire Fire Station 8 3510 Starr Ave Eau Claire, WI 54703 715-839-5012
Eau Claire Forestry & Parks 1040 Forest St Eau Claire, WI 54703 715-839-5039	Eau Claire Gospel Center 1505 Cameron St Eau Claire, WI 54703 715-839-8628	Eau Claire North High School 1801 Piedmont Rd Eau Claire, WI 54703 715-852-6600
Eau Claire Transit Business 910 Forest St Eau Claire, WI 54703 715-839-5111	First Church of the Nazarene 1921 7th St Eau Claire, WI 54703 715-835-9750	Genesis Child Development Center 418 N Dewey St Eau Claire, WI 54703 715-830-2275
Good Shepherd Senior Apartments 3304 14th St Eau Claire, WI 54703 715-834-3587	Hmong Christian Church 2749 70th St Eau Claire, WI 54703 715-874-6644	Hope Lutheran Church 2226 Eddy Ln Eau Claire, WI 54703 715-832-1414
International Revenue Service 2403 Folsom St Eau Claire, WI 54703 715-836-8750	Knights Inn Eau Claire 6260 Texaco Dr Eau Claire, WI 54703 715-874-6868	Lakes Gas Co 2326 Western Ave Eau Claire, WI 54703 888-289-8185
Lakeshore Elementary School 711 Lake St Eau Claire, WI 54703 715-852-3400	LE Phillips Senior Center 1616 Bellinger St Eau Claire, WI 54703 715-839-4909	Learning Center 1721 Westgate Rd Eau Claire, WI 54703 715-598-1819
Luther Midelfort Hospital 1221 Whipple St Eau Claire, WI 54703 715-838-3311	Lutheran Church-Good Shepherd 1120 Cedar St Eau Claire, WI 54703 715-834-2959	Mayo Clinic Health System 1707 Westgate Rd Eau Claire, WI 54703 715-838-5856

Milestone Senior Living Assist 5512 Renee Dr Eau Claire, WI 54703 715-210-0178	North Central Utility of Wisconsin LLC 7427 Margaret Lane Eau Claire, WI 54701 855-259-9595	Paul Bunyan Logging Camp Museum 1110 E Half Moon Dr Eau Claire, WI 54703 715-835-6200
Plymouth United Church of Christ 2010 Moholt Dr Eau Claire, WI 54703 715-835-5475	Rachel's Place Early Learning Center 2226 Eddy Lane Eau Claire, WI 54703 715-832-1414 ext. 2200	REACH 2205 Heimstead Rd Eau Claire, WI 54703 715-552-2763
River Country Co-op 2802 3rd St Eau Claire, WI 54703 715-835-2003	Roosevelt Elementary School 3010 8th St Eau Claire, WI 54703 715-852-4700	Sacred Heart St. Patrick Parish 322 Fulton Street Eau Claire, WI 54703 715-832-0925
Sam Davey Elementary School 3000 Starr Ave Eau Claire, WI 54703 715-852-3200	Seminars 5130 Old Mill Plaza Eau Claire, WI 54703	Sherman Elementary School 3110 W Vine St Eau Claire, WI 54703 715-852-4800
Sleep Inn & Suites Conference Center 5872 33rd Ave Eau Claire, WI 54703 715-874-2900	St Francis Food Pantry 1221 Truax Blvd Eau Claire, WI 54703 715-839-7706	St James The Greater Catholic Church 2502 11th St Eau Claire, WI 54703 715-835-5887
St. Olaf Catholic Church 3220 Monroe Street Eau Claire, WI 54703 715-832-2504	Trinity Baptist Church 3431 Fear St Eau Claire, WI 54703	Truax Congregational United 1008 S 50th St Eau Claire, WI 54703 715-874-5422
Unity Christ Center 1808 Folsom St Eau Claire, WI 54703 715-836-0010	US Post Office 225 E Madison St Eau Claire, WI 54703 715-830-5300	WBIZ Sports Radio AM 1400 619 Cameron St Eau Claire, WI 54703 715-830-4000
West Ridge Church 3906 Kane Rd Eau Claire, WI 54703 715-834-1930	Westgate Motel 1439 Fairmont Ave Eau Claire, WI 54703 715-834-3580	Westwinds Apartment Homes 2215 Folsom St Eau Claire, WI 54703 715-835-7755

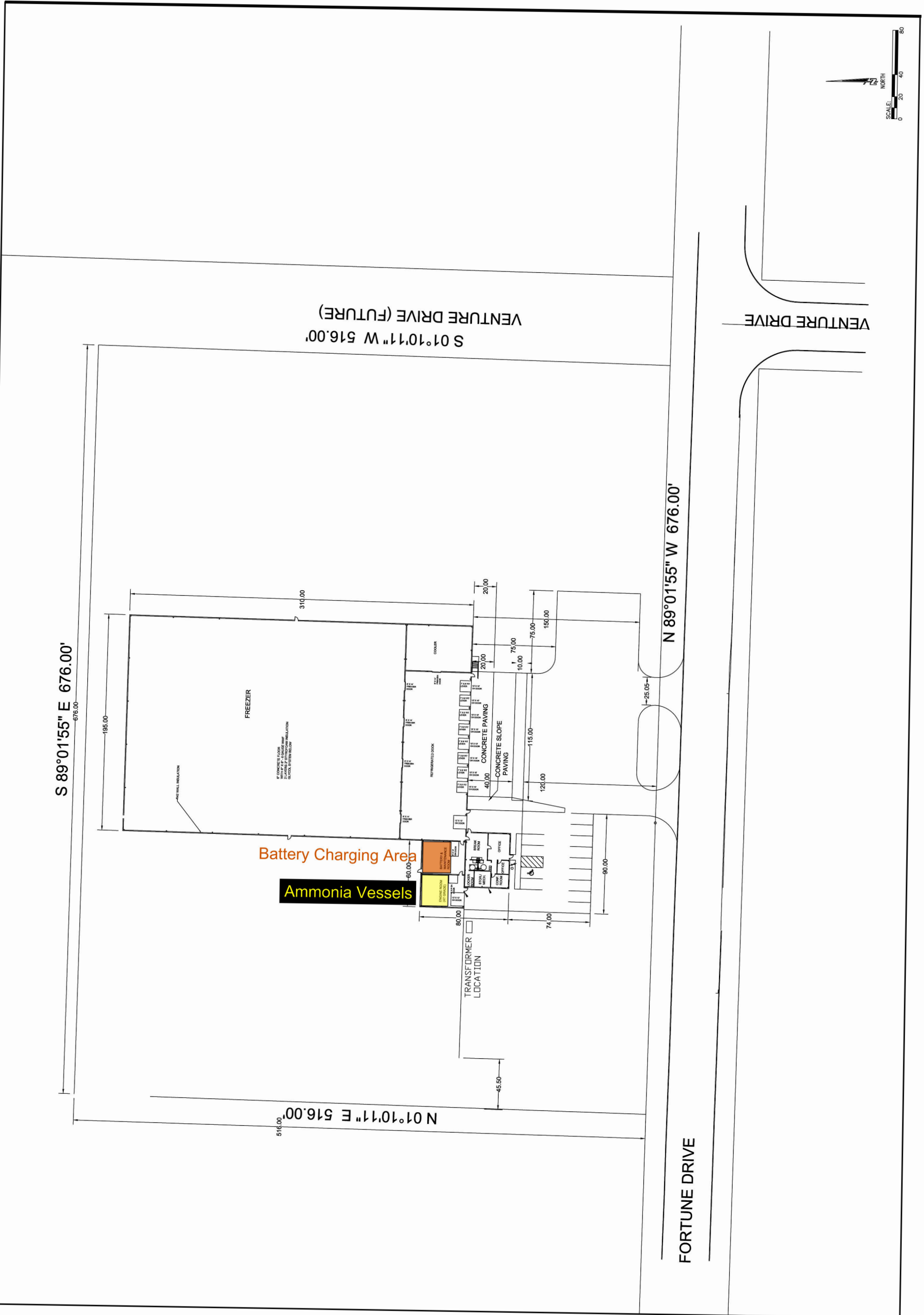
C. Vulnerability Zone Map

See attached maps





Central Storage & Warehouse Co.
 2650 Fortune Dr. Eau Claire, WI 54703





Material Safety Data Sheet # 4001

Last Revision 06/20/07

Page 1 of 2

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

CHEMICAL NAME: Anhydrous Ammonia
DISTRIBUTOR:
 Airgas Specialty Products
 6340 Sugarloaf Parkway, 300
 Duluth, GA 30097 USA

TRADE NAMES / SYNONYMS: Ammonia
EMERGENCY TELEPHONE NUMBERS:
 Transportation (CHEMTREC): 1-800-424-9300
 Transportation, Canada (CANUTEC): 1-800-528-4963
 Environmental/Health/Safety (24-hr): 1-800-528-4963
 Customer Service (Toll Free): 1-877-295-2225

SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL	FORMULA	% BY WEIGHT		CAS	OSHA PEL	NIOSH REL / ACGIH TLV		IDLH
		C-grade	P-grade					
Ammonia	NH ₃	99.5	99.995	7664-41-7	25 ppm (California only) 50 ppm (TWA)	25 ppm (TWA)	35 ppm (STEL)	300ppm
Water	H ₂ O	0.4	33 ppm	7732-18-5	None	None	None	
Oil	----	0.1	2 ppm	-----	None	None	None	

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: 1. Colorless gas or compressed liquid with a pungent, suffocating odor 2. Liquid ammonia reacts violently with water. Vapor cloud is produced. 3. Avoid contact with liquid and vapor. 4. Stay upwind and use water spray to absorb vapor. 5. Not flammable under conditions likely to be encountered outdoors. 6. Stop discharge if possible.

POTENTIAL HEALTH EFFECT

ROUTES OF ENTRY: Inhalation, Skin Contact, Eye Contact, Ingestion **TARGET ORGANS:** Eyes, skin and respiratory system.
EYE CONTACT: Exposure to liquid or high concentrations of vapor can cause painful, instant and possibly irreversible damage to tissue such as conjunctiva, cornea and lens. **SKIN CONTACT:** Prolonged contact with high concentrations can cause painful tissue damage, frostbite and serious chemical burns. **INHALATION:** Depending on exposure concentration and duration, effects can vary from none or only mild irritation, to obstruction of breathing from laryngeal and bronchial spasm, to edema and severe damage to mucous membranes of the respiratory tract with possible fatal results. Latent edema and residual reduction in pulmonary function may occur. **INGESTION:** Tissue damage, chemical burns, nausea and vomiting can occur. Ammonia is a gas under normal atmospheric conditions and ingestion is unlikely. **CARCINOGENICITY:** NTP? No **IARC?** No **OSHA?** No

SECTION 4: FIRST AID MEASURES

EYE CONTACT: Flush with large amounts of water for at least 15 minutes then immediately seek medical aid.
SKIN CONTACT: Immediately flush with large quantities of water for at least 15 minutes while removing clothing. If clothing has frozen to skin, thaw with water before removal. Seek immediate medical aid.
INHALATION: Remove from exposure. If breathing has stopped or is difficult, administer artificial respiration or oxygen as needed. Seek immediate medical aid.
INGESTION: Do not induce vomiting. Have victim drink large quantities of water if conscious. Immediately seek medical aid. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT(method used): Not Applicable **FLAMMABLE LIMITS:** 15-28% in air (for labeling purposes, not DOT flammable gas). **EXTINGUISHING MEDIA:** With a source of ignition, ammonia will burn in the range of 15-28% in air. Stop flow of gas or liquid.

SPECIAL FIRE FIGHTING PROCEDURES: Move containers from fire zone if possible; if not, use water to cool fire-exposed containers. Use water spray to control vapors. Do not put water directly on liquid ammonia. Personnel must be equipped with appropriate protective clothing and respiratory protection.

NFPA HAZARD CLASSIFICATION: Health: 3 Flammability: 1 Reactivity: 0 (least-0 — 4-highest)

SECTION 6: ACCIDENTAL RELEASE MEASURES

In US, release of 100 lb. or more of ammonia must be reported immediately to the National Response Center at (800) 424-8802, the SERC and the LEPC. **SUGGESTED LOCAL ACTION:** Stop leak if feasible. Avoid breathing ammonia. Evacuate personnel not equipped with protective clothing and equipment. Use copious amounts of water spray or fog to absorb ammonia vapor. DO NOT put water on liquid ammonia. Contain run-off to prevent ammonia from entering a stream, lake, sewer, or ditch. Any release of this material, during the course of loading, transporting, unloading or temporary storage, must be reported to U.S. DOT as required by 49 CFR 171.15 and 171.16.

SECTION 7: HANDLING AND STORAGE

Refer to the ANSI K61.1 standard for storage and handling information. Protect containers from physical damage and temperatures exceeding 120°F. Use only approved storage systems. Zinc, copper, silver, cadmium, and their alloys must not be used in ammonia systems since they can be rapidly corroded by it. Avoid hydrostatic pressure, which can cause equipment rupture, by adhering to proper filling procedures and the use of hydrostatic pressure relief valves where appropriate.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Respiratory protection approved by NIOSH / MSHA for ammonia must be used when exposure limits are exceeded. Whether chemical cartridge respirator or self-contained breathing apparatus is sufficient for effective respiratory protection depends on the type and magnitude of exposure.

SKIN PROTECTION: Rubber gloves and rubber or other types of approved protective clothing should be used to prevent skin contact. A face shield should be used for increased protection from contact with liquid or vapor.

EYE PROTECTION: Chemical splash goggles, approved for use with ammonia, must be worn to prevent eye contact with liquid or vapor. A face shield should be used for increased protection from contact with liquid.

VENTILATION: Local positive pressure and/or exhaust ventilation should be used to reduce vapor concentrations in confined spaces. Ammonia vapor, being lighter than air, can be expected to dissipate to the upper atmosphere. Ammonia concentrations may also be reduced by the use of an appropriate absorbent or reactant material.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: -28.1°F

SPECIFIC GRAVITY: 0.62 @ 60°F (water=1)

SOLUBILITY IN WATER: High

VAPOR DENSITY: 0.60 @ 32°F (Air=1)

MELTING POINT: -107.9°F

pH: Approx. 11.6 for 1 N Sol'n. in water

PERCENT VOLATILE BY VOLUME: 100%

APPEARANCE: Colorless, pungent gas

VAPOR PRESSURE: 4802.9 mm Hg @ 60°F or 107.6 psia.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Material generally considered stable. Heating above ambient temperature causes rapid increase of vapor pressure.

INCOMPATIBILITY (materials to avoid): Ammonia can react violently with strong acids. Under certain conditions, ammonia reacts with bromine, chlorine, fluorine or iodine to form compounds, which explode spontaneously. Reactions of ammonia with gold, silver or mercury to form explosive fulminate-like compounds has been reported.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen on heating to over 850°F. The decomposition temperature may be lowered to 575°F by contact with certain metals such as iron or nickel.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

Ammonia is a strong alkali and readily damages all body tissues. Ammonia is not a cumulative metabolic poison.

Carcinogenicity, Reproductive, Mutagenicity, Teratogenicity Effects: No information is available and no adverse effects are anticipated.

Synergistic Materials: None known.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY: 2.0-2.5 ppm/1-4 days/ goldfish and yellow perch/LC;

WATERFOWL TOXICITY: 120 ppm

60-80 ppm/3 days/crayfish/LC₁₀₀;

BIOCHEMICAL OXYGEN DEMAND: Not pertinent

8.2ppm/96hr/fathead minnow/TLm

FOOD CHAIN CONCENTRATION POTENTIAL: None

SECTION 13: DISPOSAL CONSIDERATIONS

Recover ammonia if feasible. Otherwise, let ammonia evaporate if appropriate. Only personnel experienced in ammonia spills should add water to liquid ammonia. Dispose of diluted ammonia as a fertilizer or in an industrial process. For Hazardous Waste Regulations call (800) 424-9346, the RCRA Hotline.

SECTION 14: TRANSPORT INFORMATION

	DOMESTIC SHIPMENTS	INTERNATIONAL SHIPMENTS	CANADIAN TDG ACT
Proper shipping name:	Ammonia, Anhydrous	Ammonia, Anhydrous	Ammonia, Anhydrous
Shipping Class:	DOT 2.2 (nonflammable gas)	2.3 (poison gas)	2.4 (9.2)
Identification Number:	UN1005	UN1005	UN1005
Packing Group:	None	None	None

SECTION 15: REGULATORY INFORMATION

NOTICE: This product is subject to the reporting requirements of SARA (1986, Section 313 of Title III) and 40 CFR Part 370.

CERCLA/SUPERFUND, 40 CFR 117.302: Unpermitted releases of 100 lb. or more of ammonia in any 24-hour period must be reported immediately to the NRC at 1-800-424-8802, the SERC, and the LEPC. Written follow-up is required to SERC & LEPC.

OSHA HAZARD COMMUNICATION RULE, 20 CFR 1910.1200: Ammonia is considered a hazardous chemical.

TOXIC SUBSTANCE CONTROL ACT: This material is listed in the TSCA Inventory.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (SARA, TITLE III): Section 302 Extremely Hazardous Substance: Yes; Section 311/312 Hazardous Categories: Immediate (Acute) Health Hazards; Section 313 Toxic Chemical: Yes.

WHMIS: One percent (1%) **CALIFORNIA PROPOSITION 65:** Reproductive: No Carcinogen: No

OSHA PROCESS SAFETY MANAGEMENT, 29 CFR 1910.119: This product is subject to the Process Safety Management requirements of 29 CFR 1910.119 if maintained on-site in quantities of 10,000 lb. or greater.

EPA CHEMICAL ACCIDENTAL RELEASE PREVENTION, 40 CFR PART 68: This product is subject to the Risk Management Plan requirements of 40 CFR Part 68 if maintained on-site in quantities of 10,000 lb. or greater.

DRINKING WATER: Maximum use dosage in potable water is 5mg/l.

SECTION 16: OTHER INFORMATION

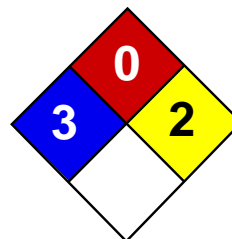
REASON FOR REVISION: 1. Addition of new Toll Free Customer Service Number in Section 1.

2. Revised LEL and UEL from 16-25% to 15-28%. 3. Company name change from LaRoche Industries to Airgas Specialty Products.

4. Canadian transportation emergency information added. 5. California PEL limits added.

MSDS PREPARED BY: Airgas Specialty Products

This information is taken from sources or based upon data believed to be reliable, however, Airgas Specialty Products makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.



Health	3
Fire	0
Reactivity	2
Personal Protection	

Material Safety Data Sheet

Sulfuric acid MSDS

Section 1: Chemical Product and Company Identification

Product Name: Sulfuric acid

Catalog Codes: SLS2539, SLS1741, SLS3166, SLS2371, SLS3793

CAS#: 7664-93-9

RTECS: WS5600000

TSCA: TSCA 8(b) inventory: Sulfuric acid

CI#: Not applicable.

Synonym: Oil of Vitriol; Sulfuric Acid

Chemical Name: Hydrogen sulfate

Chemical Formula: H₂-SO₄

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Sulfuric acid	7664-93-9	95 - 98

Toxicological Data on Ingredients: Sulfuric acid: ORAL (LD50): Acute: 2140 mg/kg [Rat.]. VAPOR (LC50): Acute: 510 mg/m 2 hours [Rat]. 320 mg/m 2 hours [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (irritant, corrosive), of ingestion, of inhalation. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified 1 (Proven for human.) by IARC, + (Proven.) by OSHA. Classified A2 (Suspected for human.) by ACGIH. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys, lungs, heart, cardiovascular system, upper respiratory tract, eyes, teeth. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged

contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion:

Products of combustion are not available since material is non-flammable. However, products of decomposition include fumes of oxides of sulfur. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas. Reacts with cyanides and sulfides to form poisonous hydrogen cyanide and hydrogen sulfide respectively.

Fire Hazards in Presence of Various Substances: Combustible materials

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of oxidizing materials.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards:

Metal acetylides (Monocesium and Monorubidium), and carbides ignite with concentrated sulfuric acid. White Phosphorous + boiling Sulfuric acid or its vapor ignites on contact. May ignite other combustible materials. May cause fire when sulfuric acid is mixed with Cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous (III) oxide, and oxidizing agents such as chlorates, halogens, permanganates.

Special Remarks on Explosion Hazards:

Mixtures of sulfuric acid and any of the following can explode: p-nitrotoluene, pentasilver trihydroxydiaminophosphate, perchlorates, alcohols with strong hydrogen peroxide, ammonium tetraperoxychromate, mercuric nitrite, potassium chlorate, potassium permanganate with potassium chloride, carbides, nitro compounds, nitrates, carbides, phosphorous, iodides, picrates, fulminates, dienes, alcohols (when heated) Nitramide decomposes explosively on contact with concentrated sulfuric acid. 1,3,5-Trinitrosohexahydro-1,3,5-triazine + sulfuric acid causes explosive decomposition.

Section 6: Accidental Release Measures**Small Spill:**

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage**Precautions:**

Keep locked up.. Keep container dry. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, combustible materials, organic materials, metals, acids, alkalis, moisture. May corrode metallic surfaces. Store in a metallic or coated fiberboard drum using a strong polyethylene inner package.

Storage:

Hygroscopic. Reacts violently with water. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

TWA: 1 STEL: 3 (mg/m³) [Australia] Inhalation TWA: 1 (mg/m³) from OSHA (PEL) [United States] Inhalation TWA: 1 STEL: 3 (mg/m³) from ACGIH (TLV) [United States] [1999] Inhalation TWA: 1 (mg/m³) from NIOSH [United States] Inhalation TWA: 1 (mg/m³) [United Kingdom (UK)] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid. (Thick oily liquid.)

Odor: Odorless, but has a choking odor when hot.

Taste: Marked acid taste. (Strong.)

Molecular Weight: 98.08 g/mole

Color: Colorless.

pH (1% soln/water): Acidic.

Boiling Point:

270°C (518°F) - 340 deg. C Decomposes at 340 deg. C

Melting Point: -35°C (-31°F) to 10.36 deg. C (93% to 100% purity)

Critical Temperature: Not available.

Specific Gravity: 1.84 (Water = 1)

Vapor Pressure: Not available.

Vapor Density: 3.4 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility:

Easily soluble in cold water. Sulfuric is soluble in water with liberation of much heat. Soluble in ethyl alcohol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability:

Conditions to Avoid: Incompatible materials, excess heat, combustible material materials, organic materials, exposure to moist air or water, oxidizers, amines, bases. Always add the acid to water, never the reverse.

Incompatibility with various substances:

Reactive with oxidizing agents, reducing agents, combustible materials, organic materials, metals, acids, alkalis, moisture.

Corrosivity:

Extremely corrosive in presence of aluminum, of copper, of stainless steel(316). Highly corrosive in presence of stainless steel(304). Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Hygroscopic. Strong oxidizer. Reacts violently with water and alcohol especially when water is added to the product. Incompatible (can react explosively or dangerously) with the following: ACETIC ACID, ACRYLIC ACID, AMMONIUM HYDROXIDE, CRESOL, CUMENE, DICHLOROETHYL ETHER, ETHYLENE CYANOHYDRIN, ETHYLENEIMINE, NITRIC ACID, 2-NITROPROPANE, PROPYLENE OXIDE, SULFOLANE, VINYLIDENE CHLORIDE, DIETHYLENE GLYCOL MONOMETHYL ETHER, ETHYL ACETATE, ETHYLENE CYANOHYDRIN, ETHYLENE GLYCOL MONOETHYL ETHER ACETATE, GLYOXAL, METHYL ETHYL KETONE, dehydrating agents, organic materials, moisture (water), Acetic anhydride, Acetone, cyanohydrin, Acetone+nitric acid, Acetone + potassium dichromate, Acetonitrile, Acrolein, Acrylonitrile, Acrylonitrile +water, Alcohols + hydrogen peroxide, ally compounds such as Allyl alcohol, and Allyl Chloride, 2-Aminoethanol, Ammonium hydroxide, Ammonium triperchromate, Aniline, Bromate + metals, Bromine pentafluoride, n-Butyraldehyde, Carbides, Cesium acetylene carbide, Chlorates, Cyclopentanone oxime, chlorinates, Chlorates + metals, Chlorine trifluoride, Chlorosulfonic acid, 2-cyano-4-nitrobenzenediazonium hydrogen sulfate, Cuprous nitride, p-chloronitrobenzene, 1,5-Dinitronaphthlene +

sulfur, Diisobutylene, p-dimethylaminobenzaldehyde, 1,3-Diazidobenzene, Dimethylbenzylcarbinol + hydrogen peroxide, Epichlorohydrin, Ethyl alcohol + hydrogen peroxide, Ethylene diamine, Ethylene glycol and other glycols, , Ethylenimine, Fulminates, hydrogen peroxide, Hydrochloric acid, Hydrofluoric acid, Iodine heptafluoride, Indane + nitric acid, Iron, Isoprene, Lithium silicide, Mercuric nitride, Mesityl oxide, Mercury nitride, Metals (powdered), Nitromethane, Nitric acid + glycerides, p-Nitrotoluene, Pentasilver trihydroxydiaminophosphate, Perchlorates, Perchloric acid, Permanganates + benzene, 1-Phenyl-2-methylpropyl alcohol + hydrogen peroxide, Phosphorus, Phosphorus isocyanate, Picrates, Potassium tert-butoxide, Potassium chlorate, Potassium Permanganate and other permanganates, halogens, amines, Potassium Permanganate + Potassium chloride, Potassium Permanganate + water, Propiolactone (beta)-, Pyridine, Rubidium acetelyene carbide, Silver permanganate, Sodium, Sodium carbonate, sodium hydroxide, Steel, styrene monomer, toluene + nitric acid, Vinyl acetate, Thallium (I) azidodithiocarbonate, Zinc chlorate, Zinc Iodide, azides, carbonates, cyanides, sulfides, sulfites, alkali hydrides, carboxylic acid anhydrides, nitriles, olefinic organics, aqueous acids, cyclopentadiene, cyano-alcohols, metal acetylides, Hydrogen gas is generated by the action of the acid on most metals (i.e. lead, copper, tin, zinc, aluminum, etc.). Concentrated sulfuric acid oxidizes, dehydrates, or sulfonates most organic compounds.

Special Remarks on Corrosivity:

Non-corrosive to lead and mild steel, but dilute acid attacks most metals. Attacks many metals releasing hydrogen. Minor corrosive effect on bronze. No corrosion data on brass or zinc.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2140 mg/kg [Rat.]. Acute toxicity of the vapor (LC50): 320 mg/m³ 2 hours [Mouse].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified 1 (Proven for human.) by IARC, + (Proven.) by OSHA. Classified A2 (Suspected for human.) by ACGIH. May cause damage to the following organs: kidneys, lungs, heart, cardiovascular system, upper respiratory tract, eyes, teeth.

Other Toxic Effects on Humans:

Extremely hazardous in case of inhalation (lung corrosive). Very hazardous in case of skin contact (corrosive, irritant, permeator), of eye contact (corrosive), of ingestion, .

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

Mutagenicity: Cytogenetic Analysis: Hamster, ovary = 4mmol/L Reproductive effects: May cause adverse reproductive effects based on animal data. Developmental abnormalities (musculoskeletal) in rabbits at a dose of 20 mg/m³ for 7 hrs.(RTECS) Teratogenicity: neither embryotoxic, fetotoxic, nor teratogenic in mice or rabbits at inhaled doses producing some maternal toxicity

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Skin: Causes severe skin irritation and burns. Continued contact can cause tissue necrosis. Eye: Causes severe eye irritation and burns. May cause irreversible eye injury. Ingestion: Harmful if swallowed. May cause permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the stomach, GI bleeding, edema of the glottis, necrosis and scarring, and sudden circulatory collapse(similar to acute inhalation). It may also cause systemic toxicity with acidosis. Inhalation: May cause severe irritation of the respiratory tract and mucous membranes with sore throat, coughing, shortness of breath, and delayed lung edema. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Cause corrosive action on mucous membranes. May affect cardiovascular system (hypotension, depressed cardiac output, bradycardia). Circulatory collapse with clammy skin, weak and rapid pulse, shallow respiration, and scanty urine may follow. Circulatory shock is often the immediate cause of death. May also affect teeth(changes in teeth and supporting structures - erosion, discoloration). Chronic Potential Health Effects: Inhalation: Prolonged or repeated inhalation may affect behavior (muscle contraction or spasticity), urinary system (kidney damage), and cardiovascular system, heart (ischemic heart leisons), and respiratory system/lungs(pulmonary edema, lung damage), teeth (dental discoloration, erosion). Skin: Prolonged or repeated skin contact may cause dermatitis, an allergic skin reaction.

Section 12: Ecological Information

Ecotoxicity: Ecotoxicity in water (LC50): 49 mg/l 48 hours [bluegill/sunfish].

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Sulfuric acid may be placed in sealed container or absorbed in vermiculite, dry sand, earth, or a similar material. It may also be diluted and neutralized. Be sure to consult with local or regional authorities (waste regulators) prior to any disposal. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Class 8: Corrosive material

Identification: : Sulfuric acid UNNA: 1830 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:

Illinois toxic substances disclosure to employee act: Sulfuric acid New York release reporting list: Sulfuric acid Rhode Island RTK hazardous substances: Sulfuric acid Pennsylvania RTK: Sulfuric acid Minnesota: Sulfuric acid Massachusetts RTK: Sulfuric acid New Jersey: Sulfuric acid California Director's List of Hazardous Substances (8 CCR 339): Sulfuric acid Tennessee RTK: Sulfuric acid TSCA 8(b) inventory: Sulfuric acid SARA 302/304/311/312 extremely hazardous substances: Sulfuric acid SARA 313 toxic chemical notification and release reporting: Sulfuric acid CERCLA: Hazardous substances.: Sulfuric acid: 1000 lbs. (453.6 kg)

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):

CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS E: Corrosive liquid.

DSCL (EEC):

R35- Causes severe burns. S2- Keep out of the reach of children. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S30- Never add water to this product. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 2

Personal Protection:**National Fire Protection Association (U.S.A.):****Health:** 3**Flammability:** 0**Reactivity:** 2**Specific hazard:****Protective Equipment:**

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Face shield.

Section 16: Other Information**References:**

-Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec. -The Sigma-Aldrich Library of Chemical Safety Data, Edition II. -Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.

Other Special Considerations: Not available.**Created:** 10/09/2005 11:58 PM**Last Updated:** 05/21/2013 12:00 PM

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APPENDIX 3: CAMEO CALCULATIONS

Screening & Scenarios		Last Modified 7/20/2017
Facility / Route Name <input style="width: 90%;" type="text" value="Central Storage & Warehouse Company"/>		
Chemical <input style="width: 80%;" type="text" value="Anhydrous Ammonia"/>		CAS <input style="width: 15%;" type="text" value="7664-41-7"/>
Scenario Name <input style="width: 80%;" type="text" value="CSW - Ammonia - Worst Case"/> Datasheet		
<input checked="" type="checkbox"/> In Inventory <input type="checkbox"/> In Transit <input type="checkbox"/> Shipper		
Scenario Description	Notes	
Amount Released <input style="width: 50px;" type="text" value="2464"/> pounds Concentration <input style="width: 50px;" type="text" value="100"/> weight % Release Duration <input style="width: 50px;" type="text" value="10"/> minutes	Physical State <input checked="" type="radio"/> Gas <input type="radio"/> Liquid <input type="radio"/> Solid	
If stored in container with a dike, enter surface area within dike: <input style="width: 80px;" type="text"/> sq ft Atmospheric Concentration Level of Concern <input style="width: 80px;" type="text" value=".035"/> gm/m ³ LOC Description <input style="width: 100px;" type="text" value="Greenbook LOC"/>		
Weather Information		
Wind Speed <input style="width: 50px;" type="text" value="3.35"/> mph Wind From <input style="width: 50px;" type="text"/> in degrees measured clockwise from 0 N. (for example: 015, 315, 270)		Ground Roughness <input style="width: 100px;" type="text" value="open country"/> Stability Class <input style="width: 20px;" type="text" value="F"/>
Risk Assessment		
Risk	<input style="width: 50px;" type="text"/>	Probability of described accident occurring
Consequences	<input style="width: 50px;" type="text"/>	Severity of consequence to people
Overall Risk	<input style="width: 50px;" type="text"/>	Combination of probability and severity of consequence
Threat Zone Radius <input style="width: 50px;" type="text" value="6.2"/> miles		Show on Map

Screening & Scenarios

Last Modified 7/20/2017

Facility / Route Name

Chemical

CAS

Scenario Name

In Inventory

In Transit

Shipper

Scenario Description

Notes

Amount Released pounds

Physical State Gas

Concentration weight %

Liquid

Release Duration minutes

Solid

If stored in container with a dike, enter surface area within dike: sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.

Stability Class

(for example: 015, 315, 270)

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 137176

Facility Name: Indianhead Foodservice

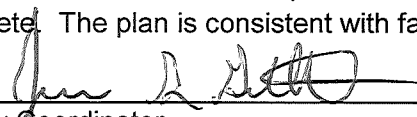
Facility Address: 313 Hastings Place, PO Box 1506, Eau Claire, Wisconsin 54702-1506

STATEMENT OF PLANNING PROCESS

This plan has been prepared in accordance with state and local requirements and is ready to be made a part of the County Emergency Operations Plan (EOP) / Emergency Response Plan (ERP) upon Wisconsin Emergency Management (WEM) / State Emergency Response Commission (SERC) acceptance. This plan meets the facility off-site planning guidance as established by WEM / SERC. Acceptance of this plan is for planning purposes and does not verify facility compliance with the requirements of EPCRA.

FACILITY SIGNATURES:

I have reviewed the attached plan and to the best of my knowledge, all facility information is true, accurate, and complete. The plan is consistent with facility emergency plans and procedures.



Facility Coordinator

5/27/2021

Date

COUNTY SIGNATURES

I have reviewed the attached plan and to the best of my knowledge, all information is true, accurate, and complete.

County Local Emergency Planning Committee Chair

Date

County Emergency Management Director

Date

WEM / SERC ACCEPTANCE:

This plan has been reviewed and meets the off-site planning guidance as established by WEM / SERC.

WEM Regional Director

Date

NOTE: Facility Off-Site Plan Review Guide attached: Yes No

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 137176

Facility Name: Indianhead Foodservice

Facility Address: 313 Hastings Place, PO Box 1506, Eau Claire, Wisconsin 54702-1506

FACILITY OFF-SITE PLAN REVIEW GUIDE

<u>EPCRA Facility Off-Site Plan Elements</u>	<u>Page Number Reference</u>
1) The facility identification with address.	4
2) Facility Coordinator / Alternate Coordinator	4
3) Extremely Hazardous Substances (EHS) chemicals Identified with CAS numbers and maximum amount	4
4) Primary emergency responders identified	6
5) Support and resources available from facility	5
6) General Information / Assumptions (Disclaimer)	7
7) Hazard analysis summary	5 - 6
8) Special facilities affected	7 - 11
9) Population protection	6
10) Special considerations	6
11) Site Plan / Facility Layout	16 (Appendix 1)

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 137176

Facility Name: Indianhead Foodservice

Facility Address: 313 Hastings Place, PO Box 1506, Eau Claire, Wisconsin 54702-1506

- 12) Distribution list: _____
 Facility
 Fire Department of jurisdiction
 Wisconsin Emergency Management- Region Office
 Designated Hazmat team
 County Emergency Management Office
 Adjacent County Emergency Management Office when impacted by vulnerability zone
- 13) Required Attachments
- | | | |
|---|---------|-------|
| A. Vulnerability Zone map highlighting special facilities | 12 - 15 | _____ |
| B. Safety Data Sheet (SDS) for each EHS | 17 - 28 | _____ |
| C. Vulnerability Zone Calculations | 29 - 32 | _____ |
| D. Transportation route(s) map | | _____ |



Indianhead Foodservice Distributor Facility Off-Site Emergency Response Plan



Facility #137176
Indianhead Foodservice Distributor
313 Hastings Place
PO Box 1506
Eau Claire, Wisconsin 54702-1506



Eau Claire County Emergency Management
721 Oxford Avenue, Suite 3344
Eau Claire, Wisconsin 54703

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APPENDICES

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Extremely Hazardous Substances SDS	Appendix 2
CAMEO Calculations.....	Appendix 3

RECORD OF CHANGES

Change	Date Changed	Change Made By
Created	April 30, 2018	JA
Facility Updates	May 7, 2018	Dan Walker
Plan Update	May 27, 2021	SS

SECTION 1: FACILITY INFORMATION

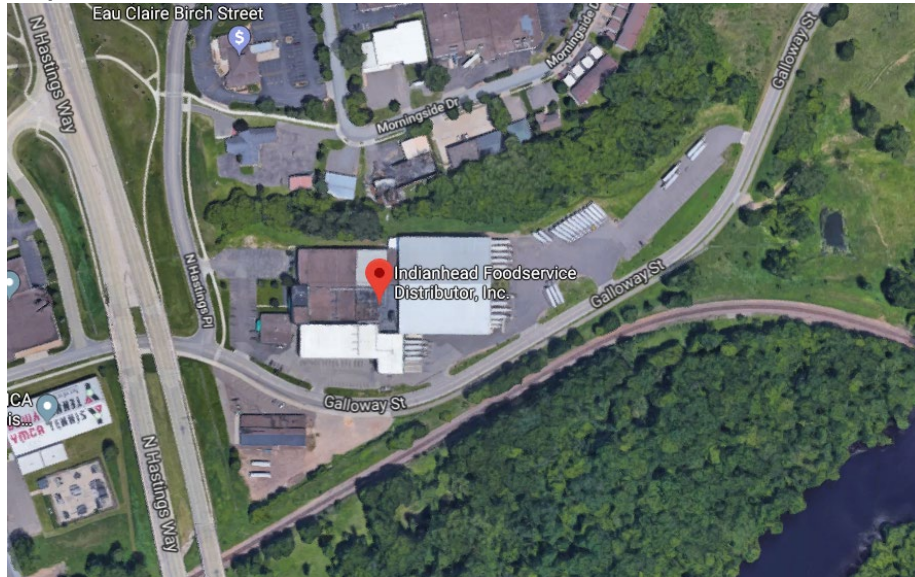
A. Address

Indianhead Foodservice Distributor
 313 Hastings Place
 PO Box 1506
 Eau Claire, Wisconsin 54702-1506

B. Facility ID

137176

C. Map



D. Emergency Contacts

Primary:
 Jesse Gillett
 Phone: 715-930-7977
 24 Hour: 715-271-0717
 jgillett@callifd.com

Secondary:
 Dan Walker
 Phone: 715-834-6513 ext. 127
 24 Hour: 715-225-8864
 dwalker@callifd.com

E. Extremely Hazardous Substances

<p>Anhydrous Ammonia Chemical ID: 407114 CAS: 7664417 ERG: Guide 125</p>	<p>Inventory: Max Daily Amount (lbs): 6083 Ave. Daily Amount (lbs.): 6000 Number of days on site: 365</p>	<p>Storage: Container: Above ground tank Location: Throughout the building as part of refrigeration system</p>
<p>Sulfuric Acid Chemical ID: 407115 CAS: 7664939 ERG: Guide 137</p>	<p>Inventory: Max Daily Amount (lbs.): 8878.64 Ave. Daily Amount (lbs.): 8800 Number of days on site: 365</p>	<p>Storage: Container: Batteries Location: Forklift batteries</p>

F. Hazardous Substances

Not applicable

G. Resources/Support Available

The facility is equipped with ammonia detectors including coolers and engine room. The facility has access to the following Personal Protective Equipment (PPE):

- Mask (1)
- Aprons (1)
- PR Boots (1)
- Pair of Gloves (1)

H. Hazard Analysis

Indianhead Foodservice Distributor is a food warehousing operation that supplies food products for the away-from-home eating industry. The facility has 69,357 square feet of cooled floor space for product storage. The facility is located in an urban area east of Highway 53 and South of Birch Street; the immediate area is primarily a commercial district.

Sulfuric acid is used in batteries that power forklifts and other machinery used to move the food products inside the building; forklifts move throughout the building. It is unlikely that all batteries would spill contents at one time. Batteries vary in capacity from 36V batteries containing 262 pounds of sulfuric acid to 6V batteries containing 39 pounds of sulfuric acid; all batteries contain a 30% solution.

Based on the total amount of pure sulfuric acid on site, the evacuation area is estimated to be less than .1 miles using the scenario criteria listed below. Both the evaluation and reevaluation scenarios show an evacuation radius of less than .1 miles for a release of 8,800 pounds of sulfuric acid. A release at this location of sulfuric acid would impact employees on site and approximately 0 housing units.

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

10 minute release of maximum quantity of chemical in a single vessel

Anhydrous ammonia is used by this industry for the cooling of food products that are warehoused at the facility. The largest container of anhydrous ammonia is a storage tank in the engine room. The system service agency estimates that the maximum amount of material that could be released during a catastrophic failure of a single vessel would be approximately 6,083 pounds. Anhydrous ammonia moves through the closed cooling system, therefore the volumes of the chemical change locations. It would be rare that this entire quantity would be present in the large storage tank, but it is possible.

Based on the total amount of anhydrous ammonia on site, the evacuation area is estimated to be greater than 10 miles using the scenario criteria listed below. The impact area would encompass the cities of Chippewa Falls, Lake Hallie, and Eau Claire and affect approximately 111,945 people (47,707 housing units) according to the CAMEO modeling tool.

Using the reevaluation criteria listed below, the evacuation area for a release of 4,245 pounds of anhydrous ammonia is 1.2 miles. The impact area would affect approximately 9,109 people (4,347 housing units) according to the CAMEO modeling tool.

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

10 minute release of maximum quantity of chemical in a single vessel

I. Access to Facility

The facility currently operates on a 24/7 schedule, with the exception of a time period from 12:00 p.m. on Saturday to 10:00 a.m. Sunday. The facility has an arrangement with the Fire Department to obtain access to the building on the South side of the building along Galloway Street.

SECTION 2: OUTSIDE RESOURCES

A. Primary Response Agencies

<p>Fire: Eau Claire Fire Dept. Eau Claire, WI 54701 Phone: 715-839-5012</p>	<p>EMS: Eau Claire Fire Dept. Eau Claire, WI 54701 Phone: 715-839-5012</p>	<p>Law: City of Eau Claire Police 721 Oxford Avenue Eau Claire, WI 54703 Phone: 715-839-4972</p>	<p>Emergency Management: Eau Claire Office of Emergency Management 721 Oxford Avenue Suite 3344 Eau Claire, WI 54703 Phone: 715-839-4736</p>
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B. Hazardous Materials Response Teams

Eau Claire County has a Level B hazardous materials response team. For Level B response, the local Fire Chief notifies the Level B team of a response needed through the Eau Claire County Emergency Communications Center. For Level A responses by the Type 1 Regional Hazardous Materials Response Team, requests shall be made through the WEM Duty officer by the county Emergency Management Director.

C. Other Outside Assistance

See the County-Wide Hazardous Materials Strategic Plan for a listing of resources.

SECTION 3: POPULATION/ENVIRONMENTAL PROTECTION

A. Shelter-In-Place

The lead time for a hazardous materials incident may be very short. As a result, there may not be time enough for safe evacuation, especially when extremely toxic chemical fumes are involved. An evacuation under these considerations may expose the population to dangerous toxic chemicals and the decision may be made to shelter-in-place. Preferred areas for protective sheltering would be interior hallways, rooms without windows or exterior doors, enclosed stairways and rooms on the side of the building away from where the hazard is approaching. Doors, windows, and other potential air leaks should be sealed up to prevent toxic fumes from entering.

B. Evacuation

Experience indicated that shelter space would need to be provided for only 30% of the population within the initial isolation and evacuation zones and the remaining 70% would seek shelter with family and friends outside the risk zone. All public schools listed are eligible evacuation shelters.

C. Nearby Shelters

None.

SECTION 4: VULNERABILITY ZONES

A. General Information and Assumptions

The vulnerability zones set forth in the Plan are based on the EPA Technical Guidance for Hazards Analysis. The zones are based on a credible worst-case scenario and identify the potential area for impact should an air-borne release of a single EHS chemical occur.

The vulnerability zones are NOT intended to be used as a guide for population protection in fire-related incidents. Fire incidents were considered in the development of this plan and the plan provides basic information about the facility for first responders to employ. However, in an actual fire situation at this facility, the Incident commander is strongly recommended to reference the fire department own individual agency pre-emergency plans and standard operating procedures as well as the county's Emergency Operations Plan – Annex K: Fire and Rescue, as they may relate to this facility when making decisions at an incident involving fire.

Further, fire departments that would respond to an incident at this facility are strongly encouraged to meet with facility representatives to determine ways to minimize an event at the facility and to determine what additional information and factors should be taken into consideration in the event of a fire, should one occur.

The field incident commander shall determine the actual response to an incident and the affected area may vary from the planning vulnerability zone identified in this Plan. Depending on wind speed and direction, the amount of material released and other pertinent factors, the ACTUAL vulnerability zone may be smaller, and in some instances larger, than the credible worst-case vulnerability zone identified herein. The vulnerability zones determined in the Plan are for general PLANNING PURPOSES.

B. Special Facilities Affected

<p>"I" Care Day Care Center Inc 2821 Fairfax St Eau Claire, WI 54720 715-552-1234</p>	<p>A Child's World Early Learning Center 2857 Western Ave Eau Claire, WI 54703 715-835-7021</p>	<p>Altoona Early Education Center 701 W Seventh St Altoona, WI 54720 715-832-5543</p>
<p>Altoona Elementary School 157 Bartlett Ave Altoona, WI 54720 715-839-6050</p>	<p>Altoona Family Child Care Center 819 S Hillcrest Pkwy Altoona, WI 54720 715-552-5437</p>	<p>Altoona High School 711 7th Street West Altoona, WI 54720 715-839-6031</p>
<p>Altoona Middle School 1903 Bartlett Ave Altoona, WI 54720 715-839-6030</p>	<p>Aurora Residential 1302 Arien Ct Eau Claire, WI 54703 715-835-9202</p>	<p>Aurora Residential Alternative 3635 Livingston Ln Eau Claire, WI 54701 715-838-0719</p>
<p>Azura Memory of Eau Claire 3712 Damon St Eau Claire, WI 54701 715-832-6696</p>	<p>Babes in Toyland Childcare 4430 Tower Dr Eau Claire, WI 54703 715-830-9432</p>	<p>Beautiful Minds Child Care 2821 Fairfax St Eau Claire, WI 54701 715-834-4360</p>
<p>Bethel Christian School 2361 N Hastings Way Eau Claire, WI 54703 715-835-8866</p>	<p>Brighter Beginnings Early Learning 1612 Truax Blvd Eau Claire, WI 54703 715-831-9944</p>	<p>Broadview University 4955 Bullis Farm Rd Eau Claire, WI 54701 715-855-6600</p>
<p>Care Partners 887 Briar Ln Altoona, WI 54720 715-598-7401</p>	<p>Care Partners Assisted Living 3325 Birch St Eau Claire, WI 54701 715-514-3709</p>	<p>Children's House Montessori 415 E Lake St Eau Claire, WI 54701 715-835-7861</p>
<p>Chippewa Falls County Altrntv 2820 E Park Ave Chippewa Falls, WI 54729 715-723-5542</p>	<p>Chippewa Falls Halmstad Elementary School 565 South Ave Chippewa Falls, WI 54729 715-726-2415</p>	<p>Chippewa Falls High School 735 Terrill St Chippewa Falls, WI 54729 715-726-2406</p>
<p>Chippewa Falls Middle School 750 Tropicana Blvd Chippewa Falls, WI 54729 715-726-2400</p>	<p>Chippewa Falls School District 1130 Miles St Chippewa Falls, WI 54729 715-726-2417</p>	<p>Chippewa Manor Retirement 756 Irvine St Chippewa Falls, WI 54729 715-726-2123</p>
<p>Chippewa Valley Montessori Charter School 400 Cameron St Eau Claire, WI 54703 715-852-6950</p>	<p>Chippewa Valley Technical College - Business Education Center 620 W Clairemont Ave Eau Claire, WI 54701 715-833-6200</p>	<p>Chippewa Valley Technical College- Emergency Service Education Center 3623 Campus Rd Eau Claire, WI 54703 715-855-7500</p>
<p>Chippewa Valley Technical College- Energy Education Center 4000 Campus Rd Eau Claire, WI 54703 715-855-7502</p>	<p>Chippewa Valley Technical College- Health Education Center 615 W Clairemont Ave Eau Claire, WI 54701 715-833-6417</p>	<p>Chippewa Valley Technical College- Manufacturing Education Center 2320 Alpine Rd Eau Claire, WI 54703 715-874-4600</p>
<p>Circle Friends Early Learning 1750 Hallie Rd Chippewa Falls, WI 54729 715-552-9696</p>	<p>City of Altoona 1303 Lynn Ave Altoona, WI 54720 715-839-5192</p>	<p>City of Eau Claire 203 S Farwell St Eau Claire, WI 54701 715-839-4947</p>
<p>Clearwater Care Center 2120 Heights Dr Eau Claire, WI 54701 715-832-1681</p>	<p>Color My World Child Care 1903 Western Ave Eau Claire, WI 54703 715-835-2060</p>	<p>Community Based Residential 1930 Cleveland St Eau Claire, WI 54703 715-832-7904</p>

Country Terrace of Altoona 1511 Devney Dr Altoona, WI 54720 715-835-3474	Days Gone By Early Learning 3221 Lorch Ave Eau Claire, WI 54701 715-835-1234	Dearwood 2011 N 60th Ave Eau Claire, WI 54703 715-830-0518
Delong Middle School 2000 Vine Street Eau Claire, WI 54703 715-852-4900	Dove Healthcare- South Eau Claire 3656 Mall Dr Eau Claire, WI 54701 715-552-1035	Dove Healthcare- West Eau Claire 1405 Truax Blvd Eau Claire, WI 54703 715-552-1030
Eau Claire Academy 550 N Dewey St Eau Claire, WI 54703 715-834-6681	Eau Claire County Courthouse 721 Oxford Ave Eau Claire, WI 54703 715-839-4710	Eau Claire County Jail 710 2nd Ave Eau Claire, WI 54703 715-839-4702
Eau Claire Extension Office 227 1st St W A Altoona, WI 54720 715-839-4712	Eau Claire Family Child Care 2140 Sherwin Ave Eau Claire, WI 54701 715-834-5439	Eau Claire KinderCare 2115 Fairfax St Eau Claire, WI 54701 715-832-8099

Eau Claire Police Department 740 2nd Ave Eau Claire, WI 54703 715-839-4972	Elk Mound High School 405 University St Elk Mound, WI 54739 715-879-5521	Elk Mound Middle School 302 University St Elk Mound, WI 54739 715-879-5595
Family Tree 2005 Agnes St Eau Claire, WI 54701 715-832-3663	Family Tree Child Care Center 320 Division St Altoona, WI 54720 715-894-7529	Federal Bureau of Investigation 216 Pinnacle Way #310 Eau Claire, WI 54701 715-835-3761
Flynn Elementary School 1430 Lee St Eau Claire, WI 54701 715-852-3300	From the Roots Early Learning Center, LLC 2912 London Rd Eau Claire, WI 54701 715-514-4881	GCBK Group Homes Inc 2821 Beverly Hills Dr Eau Claire, WI 54701 715-855-7701
Genesis Child Development Center 418 N Dewey St Eau Claire, WI 54703 715-830-2275	Giggles Child Care Center 1626 Starr Ave Eau Claire, WI 54703 715-833-8767	Grace Edgewood Asst 2512 Spooner Ave Altoona, WI 54720 715-832-5813
Grace Lutheran Communities 3410 Sky Park Blvd Eau Claire, WI 54701 715-832-3003	Grace Lutheran Communities- River Pines 206 N Willson Dr Altoona, WI 54720 715-598-7800	Grace Lutheran Foundation Inc 822 Porter Ave Eau Claire, WI 54701 715-832-3003
Grace School Age Child Care 3410 Sky Park Blvd Eau Claire, WI 54701 715-832-3039	Grace Willowbrook 4868 Otteson Ln Eau Claire, WI 54701 715-835-0429	Grace Woodlands 3214 Gala St Eau Claire, WI 54703 715-831-8100
Gracelands Daycare LLC 1711 Bellinger St Eau Claire, WI 54703 715-832-4310	Hand in Hand- A Place-Children 800 Wisconsin St Eau Claire, WI 54703 715-833-7744	Harbor House 3712 Damon St Eau Claire, WI 54701 715-832-6696
Heatherwood Assisted Living & Memory Care 4510 Gateway Dr Eau Claire, WI 54701 715-598-2768	Heritage Court Memory Care 3515 E Hamilton Ave Eau Claire, WI 54701 715-831-8200	Heritage Court Memory Care 3515 E Hamilton Ave Eau Claire, WI 54701 715-831-8200
Heritage Senior Living at Oakwood Hills 3706 Damon St Eau Claire, WI 54701 715-831-9118	Holy Ghost Elementary School 436 Main St Chippewa Falls, WI 54729 715-723-6478	Hope Lutheran Preschool 2226 Eddy Ln Eau Claire, WI 54703 715-832-2998

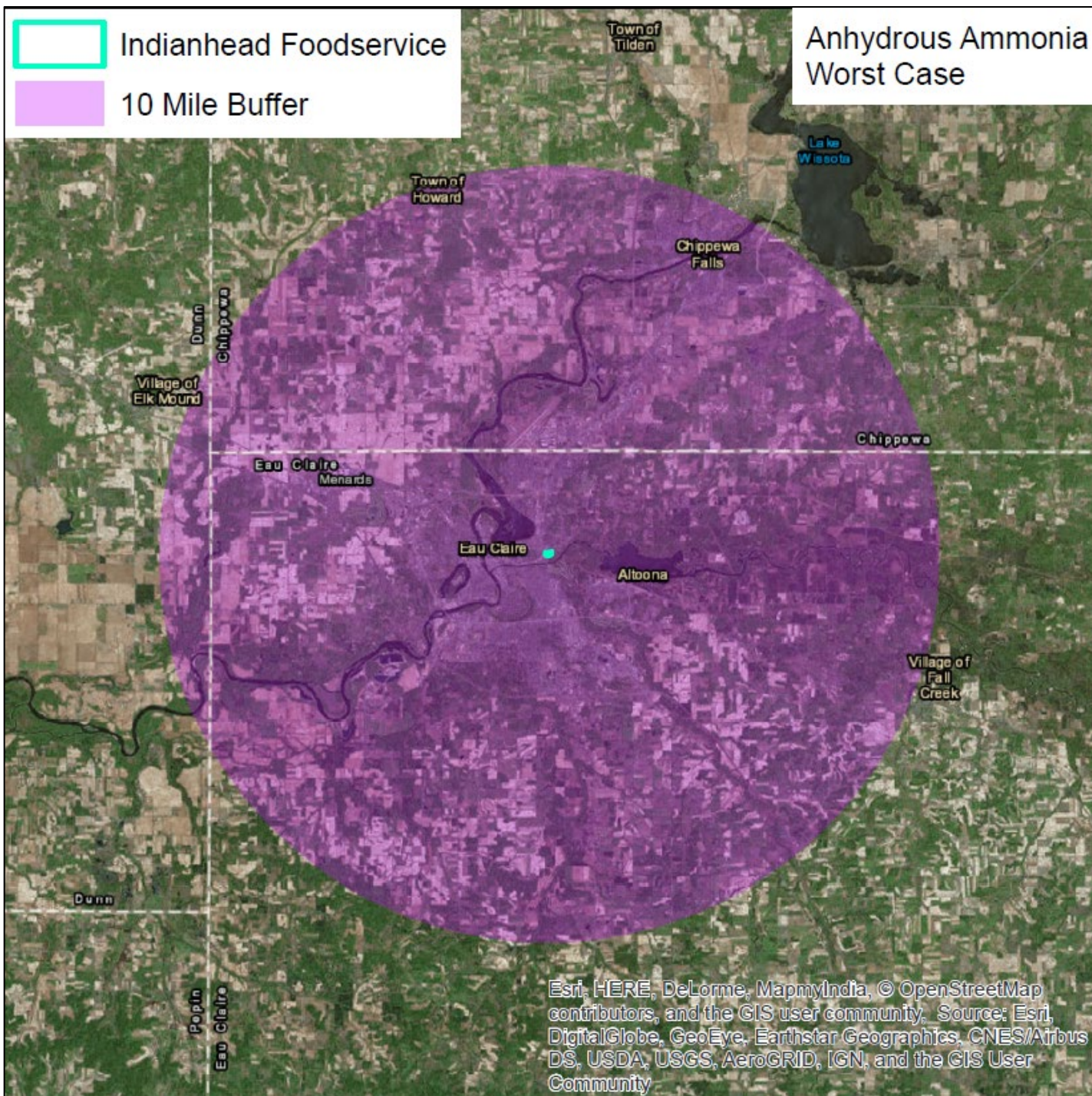
Immanuel Lutheran High School, College, & Seminary 501 Grover Rd Eau Claire, WI 54701 715-836-6621	Kids Kingdom Mcp Llc 3628 Spooner Ave Altoona, WI 54720 715-514-3381	Lake Hallie Memory Care 4407 124th St Chippewa Falls, WI 54729 715-738-0011
Lakeshore Elementary School 711 Lake Street Eau Claire, WI 54703 715-852-3400	Learn-A-Lot Preschool & Daycare 2834 W Princeton Ave Eau Claire, WI 54703 715-834-0308	Learning Center 1721 Westgate Rd Eau Claire, WI 54703 715-598-1819
Liberty Christian School 6027 60th Ave Chippewa Falls, WI 54729 715-723-0336	lil dudes-N-divas Daycare 3631 E Hamilton Ave Eau Claire, WI 54701 715-598-7003	Little Bloomers Child Care Center 3980 Tamara Dr Eau Claire, WI 54701 715-839-1050
Little Jungle Childcare 5433 Star Ridge Rd Eau Claire, WI 54703 715-874-6300	Little School House. LLC 2328 N Hillcrest Pkwy Altoona, WI 54720 715-214-6609	Little Star 2 428 1st St W Altoona, WI 54720 715-271-0743
Little Star Daycare 2245 Hayden Ave Altoona, WI 54720 715-832-1513 ext. 4	Locust Lane Elementary School 3245 Locus Ln Eau Claire, WI 54703 715-852-3700	Luther Midelfort Clairemont 733 W Clairemont Ave Eau Claire, WI 54703 715-838-5222
Manz Elementary School 1000 E. Fillmore Ave Eau Claire, WI 54701 715-852-3900	Marshfield Clinic 1002 W Clairemont Ave Eau Claire, WI 54701 715-858-4099	Marshfield Clinic 1262 W Clairemont Ave Eau Claire, WI 54701 715-858-4610
Mayo Clinic - Luther Campus 1221 Whipple St Eau Claire, WI 54703 715-838-3311	Mayo Clinic Health System 1400 Bellinger St Eau Claire, WI 54702 715-838-5222	McDonnell Central Catholic High School 1316 Bel Air Blvd Chippewa Falls, WI 54729 715-723-9126
McKinley Charter School 1266 McKinley Road Eau Claire, WI 54703 715-852-6900	Meadowview Elementary School 4714 Fairfax Street Eau Claire, WI 54701 715-852-4000	Memorial High School 2225 Keith St Eau Claire, WI 54701 715-852-6300
Mike Wilson House 2409 Rudolph Rd Eau Claire, WI 54701 715-838-9967	Milestone Senior Living- Eau Claire 5512 Renee Dr Eau Claire, WI 54703 715-210-0178	Mound View Elementary School 455 University St Elk Mound, WI 54739 715-879-5744
Natural Resources Conservation 1304 N Hillcrest Pkwy # A Altoona, WI 54720 715-832-6547	New Hope Inc 10875 40th Ave Chippewa Falls, WI 54729 715-720-7360	North High School 1801 Piedmont Rd Eau Claire, WI 54703 715-852-6600
Northstar Middle School 2711 Abbe Hill Dr Eau Claire, WI 54703 715-852-5100	Oak Gardens Place 342 Twin Oak Dr Altoona, WI 54720 715-598-3447	OakLeaf Surgical Hospital 1000 OakLeaf Way Altoona, WI 54720 715-831-8130
Oakwood Villa 2512 New Pine Dr Altoona, WI 54720 715-833-0400	Oakwood Villa 2512 New Pine Dr Altoona, WI 54720 715-839-7027	Our House Senior Living- Memory Care 733 W Hamilton Ave Eau Claire, WI 54701 715-832-3970
Parkview Elementary School 501 Jefferson Ave Chippewa Falls, WI 54729 715-720-3750	Popular Place 3012 Milton Rd Eau Claire, WI 54703 715-832-1745	Putnam Heights Elementary School 633 W MacArthur Ave Eau Claire, WI 54701 715-852-4200
	Real Life Co-Op 4115 Jeffers Rd	Redeemer Christian Preschool 601 Fall St

Rachel's Place Early Learning 2226 Eddy Ln Eau Claire, WI 54703 715-832-1414 ext. 2200	Eau Claire, WI 54703 715-835-7622	Eau Claire, WI 54703 715-835-5239
Regis Child Development Center 2114 Fenwick Ave Eau Claire, WI 54701 715-830-2274	Regis High School 2100 Fenwick Ave Eau Claire, WI 54701 715-830-2271	Robins Elementary 3832 E Hamilton Ave Eau Claire, WI 54701 715-852-4600
Sacred Heart Hospital 900 W Clairemont Ave Eau Claire, WI 54701 715-717-4121	Saint Charles Borromeo Primary School 429 W Spruce St Chippewa Falls, WI 54729 715-723-5827	Sandy's Helping Hands Daycare 1639 Ludgate St Chippewa Falls, WI 54729 715-723-8168
Shared Blessings Child Development Center 520 E Grand Ave Chippewa Falls, WI 54729 534-220-7051	Sisters of St Benedict 2120 Heights Dr Eau Claire, WI 54701 715-852-6221	Sleepers to Sneakers 1303 Margaret St Eau Claire, WI 54701 715-834-6794



South Middle School 2115 Mitscher Ave Eau Claire, WI 54701 715-852-5200	Southview Elementary School 615 A St Chippewa Falls, WI 54729 715-726-2411	St Mark's Lutheran School 3307 State St Eau Claire, WI 54701 715-834-5782
Stay N Play 417 William St Eau Claire, WI 54703 715-833-8331	Syverson Lutheran Home 816 Porter Ave Eau Claire, WI 54701 715-832-1644	The Classic at Hillcrest Greens 2455 Sawgrass Pl Altoona, WI 54720 715-839-0200
The Kiddie Patch Early Learning Center 4605 London Rd Eau Claire, WI 54701 715-833-9464	The Learning Tree Child Care Center 2140 Sherwin Ave Eau Claire, WI 54701 715-834-5439	University of Wisconsin Eau Claire 105 Garfield Ave P.O. Box 4004 Eau Claire, WI 54702 715-836-4636
Westridge 3841 96th St Chippewa Falls, WI 54729 715-720-1309	YMCA-St. Mary's Elementary School 1828 Lynn Ave Altoona, WI 54720 715-830-2278	Youthful Minds Learning Center 827 S Hillcrest Pkwy. Altoona, WI 54720 715-894-7529

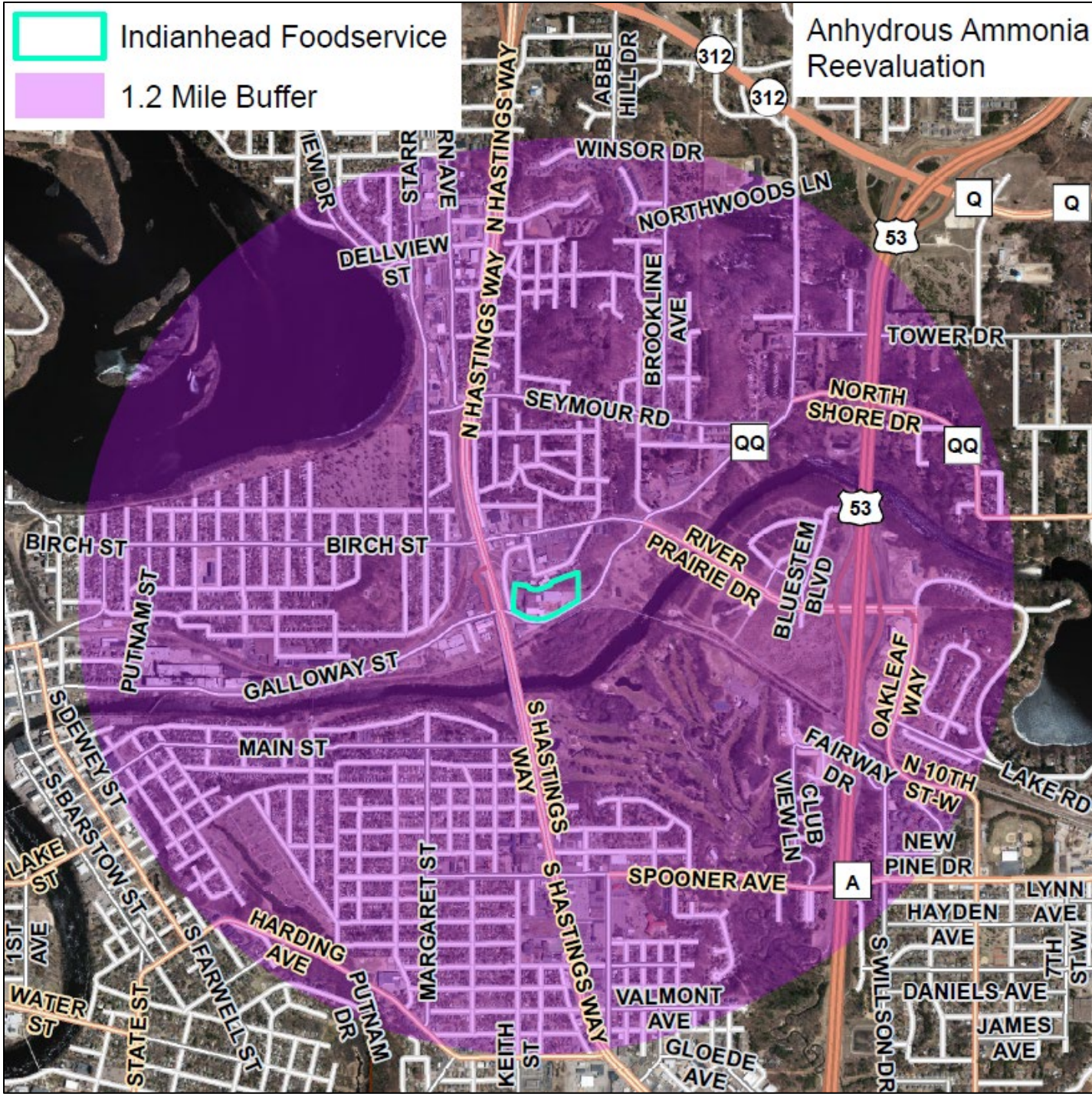
C. Vulnerability Zone Map



See attached maps



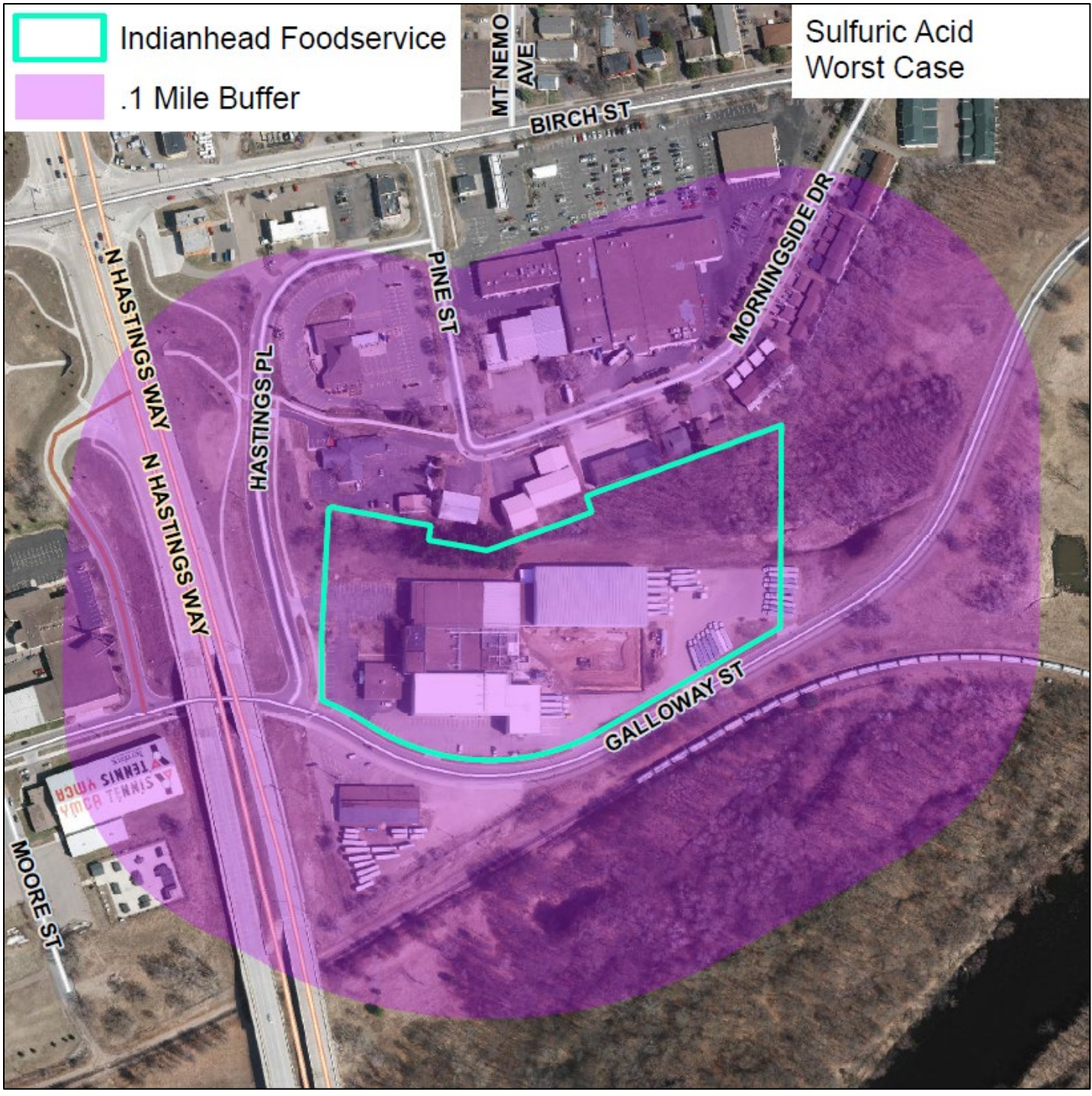
Anhydrous Ammonia Reevaluation

-  Indianhead Foodservice
-  1.2 Mile Buffer



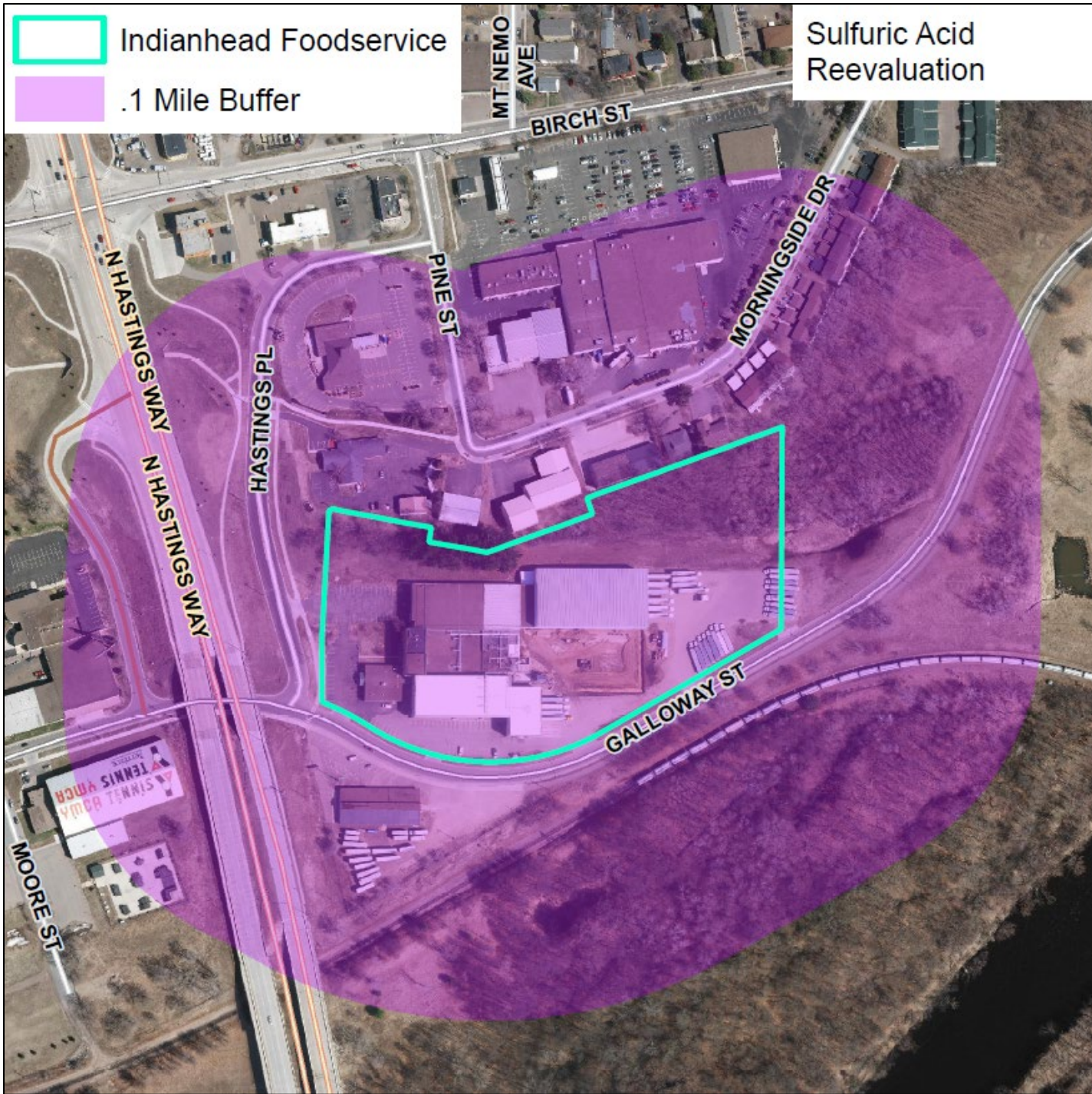
 Indianhead Foodservice
 .1 Mile Buffer

Sulfuric Acid
Worst Case

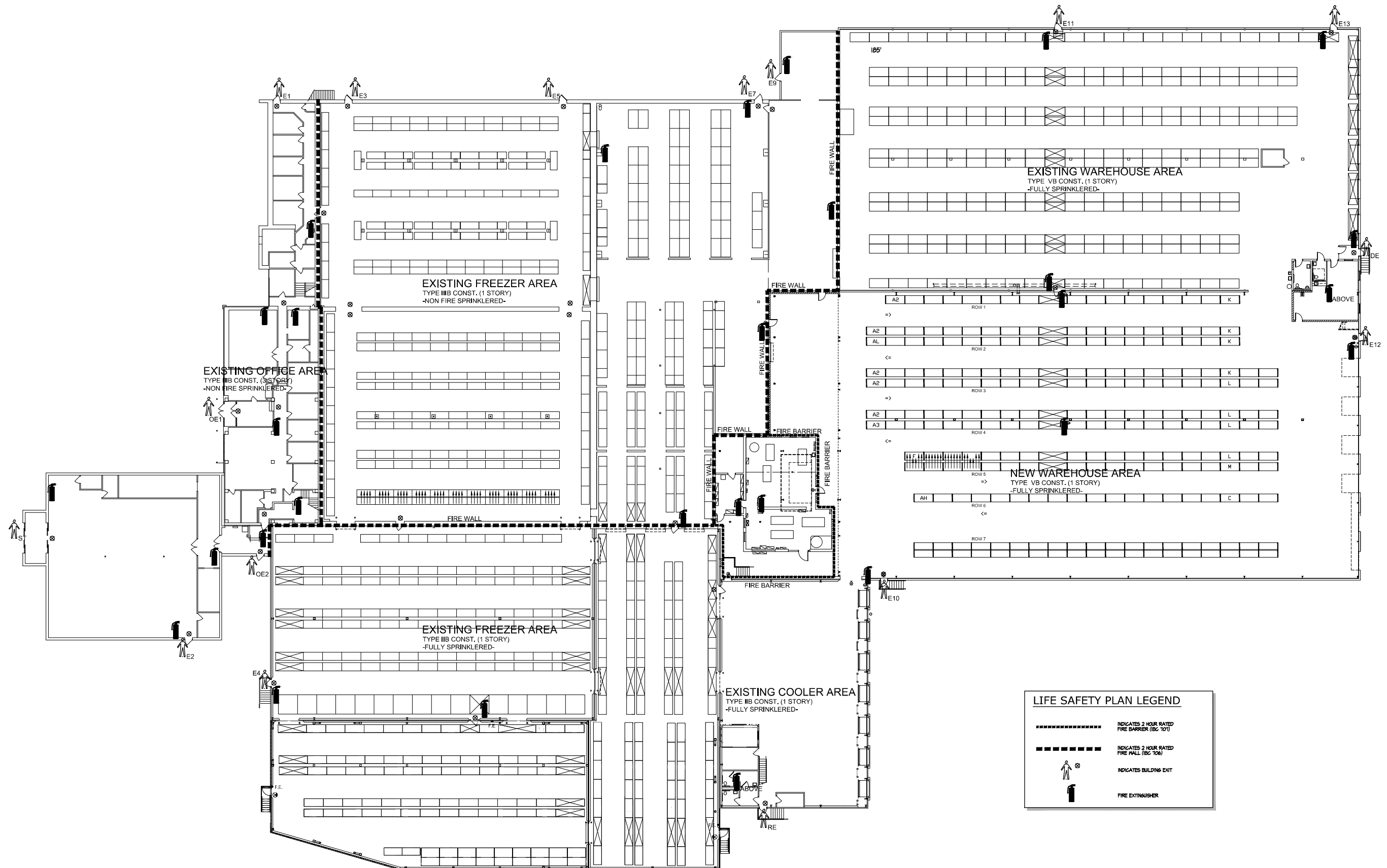


Indianhead Foodservice
.1 Mile Buffer

Sulfuric Acid
Reevaluation



APPENDIX 1: FACILITY LAYOUT



FIRST FLOOR LIFE SAFETY/EVACUATION PLAN
 DEC. 2013

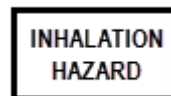


CAMEO Chemicals

[Print](#)

Chemical Datasheet

AMMONIA, ANHYDROUS



Chemical Identifiers

CAS Number	UN/NA Number	DOT Hazard Label	CHRIS Code
7664-41-7	1005	Non-Flammable Gas (domestic) Inhalation Hazard (Special Provision 13) (domestic) Poison Gas (international) Corrosive (international)	AMA

NFPA 704

Diamond	Hazard	Value	Description
1 3 0	Health	3	Can cause serious or permanent injury.
	Flammability	1	Must be preheated before ignition can occur.
	Instability	0	Normally stable, even under fire conditions.
	Special		

Note: The Refrigeration System Classification section of the International Mechanical Code requires a value of 3 for the red quadrant (flammability hazard) for indoor ammonia refrigeration equipment. (NFPA, 2010)

General Description

A clear colorless gas with a strong odor. Shipped as a liquid under its own vapor pressure. Density (liquid) 6 lb / gal. Contact with the unconfined liquid can cause frostbite. Gas generally regarded as nonflammable but does burn within certain vapor concentration limits and with strong ignition. Fire hazard increases in the presence of oil or other combustible materials. Although gas is lighter than air, vapors from a leak initially hug the ground. Prolonged exposure of containers to fire or heat may cause violent rupturing and rocketing. Long-term inhalation of low concentrations of the vapors or short-term inhalation of high concentrations has adverse health effects. Used as a fertilizer, as a refrigerant, and in the manufacture of other chemicals.

Rate of onset: Immediate

Persistence: Minutes

Odor threshold: 17 ppm

Source/use/other hazard: Explosives manufacture; pesticides; detergents industry.

Hazards

Reactivity Alerts

 Water-Reactive

Air & Water Reactions

Soluble in water with evolution of heat. The amount of heat generated may be large.

Fire 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, 1998)

Health Hazard

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, 1998)

Reactivity Profile

AMMONIA is a base. Reacts exothermically with all acids. Violent reactions are possible. Readily combines with silver oxide or mercury to form compounds that explode on contact with halogens. When in contact with chlorates it forms explosive ammonium chlorate [Kirk-Othmer, 3rd ed., Vol. 2, 1978, p. 470]. Reacts violently or produces explosive products with fluorine, chlorine, bromine and iodine and some of the interhalogen compounds (bromine pentafluoride, chlorine trifluoride). Mixing of bleaching powder (hypochlorite solution) with ammonia solutions produces toxic/explosive ammonia trichloride vapors. Undergoes potentially violent or explosive reactions on contact with 1,2-dichloroethane (with liquid ammonia), boron halides, ethylene oxide (polymerization), perchlorates or strong oxidants (chromyl chloride, chromium trioxide, chromic acid, nitric acid, hydrogen peroxide, chlorates, fluorine, nitrogen oxide, liquid oxygen). Reacts with silver chloride, silver oxide, silver nitrate or silver azide to form the explosive silver nitride. May react with some heavy metal compounds (mercury, gold(III) chloride) to produce materials that may explode when dry. [Bretherick, 5th ed., 1995, p. 1553].

Belongs to the Following Reactive Group(s)

- Bases, Weak

Potentially Incompatible Absorbents

No information available.

Response Recommendations

Isolation and Evacuation

Excerpt from GUIDE 125 [Gases - Corrosive]:

As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all

directions.

SPILL: See ERG Tables 1 and 3 - Initial Isolation and Protective Action Distances on the UN/NA 1005 datasheet.

FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 1600 meters (1 mile) in all directions; also, consider initial evacuation for 1600 meters (1 mile) in all directions. (ERG, 2016)

Firefighting

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 the surface. 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, 1998)

Non-Fire Response

Excerpt from GUIDE 125 [Gases - Corrosive]:

Fully encapsulating, vapor-protective clothing should be worn for spills and leaks with no fire. Do not touch or walk through spilled material. Stop leak if you can do it without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Prevent entry into waterways, sewers, basements or confined areas. Do not direct water at spill or source of leak. Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material. Isolate area until gas has dispersed. (ERG, 2016)

Protective Clothing

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, 1998)

DuPont Tychem® Suit Fabrics

Normalized Breakthrough Times (in Minutes)

Chemical	CAS Number	State	QC	SL	TF	TP	C3	BR	LV	RC	TK	RF
Ammonia (gas)	7664-41-7	Vapor	imm.	26	20	90	imm.	133	133	133	>480	>480
Ammonia (liquid, < -35°C)	7664-41-7	Liquid				>480	>480				>480	>480
Anhydrous ammonia (gas)	7664-41-7	Vapor	imm.	26	20	90	imm.	133	133	133	>480	>480
Anhydrous ammonia (liquid, < -35°C)	7664-41-7	Liquid				>480	>480				>480	>480

> indicates greater than.

"imm." indicates immediate; having a normalized breakthrough time of 10 minutes or less.

A blank cell indicates the fabric has not been tested. The fabric may or may not offer barrier.

Special Warnings from DuPont

1. Serged and bound seams are degraded by some hazardous liquid chemicals, such as strong acids, and should not be worn when these chemicals are present.
2. CAUTION: This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of

results and assumes no obligation or liability...
(DuPont, 2016)

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 Acute Ammonia 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 pulse is 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, 1998)

Physical Properties

Chemical Formula: H₃N

Flash Point: data unavailable

Lower Explosive Limit (LEL): 16 % (EPA, 1998)**Upper Explosive Limit (UEL):** 25 % (EPA, 1998)**Autoignition Temperature:** 1204 ° F (USCG, 1999)**Melting Point:** -107.9 ° F (EPA, 1998)**Vapor Pressure:** 400 mm Hg at -49.72 ° F (EPA, 1998)**Vapor Density (Relative to Air):** 0.6 (EPA, 1998)**Specific Gravity:** 0.6818 at -28.03 ° F (EPA, 1998)**Boiling Point:** -28.03 ° F at 760.0 mm Hg (EPA, 1998)**Molecular Weight:** 17.03 (EPA, 1998)


Water Solubility: data unavailable

IDLH: 300 ppm (NIOSH, 2003)**AEGLs (Acute Exposure Guideline Levels)****Final AEGLs for Ammonia (7664-41-7)**

Exposure Period	AEGL-1	AEGL-2	AEGL-3
10 minutes	30 ppm	220 ppm	2700 ppm
30 minutes	30 ppm	220 ppm	1600 ppm
60 minutes	30 ppm	160 ppm	1100 ppm
4 hours	30 ppm	110 ppm	550 ppm
8 hours	30 ppm	110 ppm	390 ppm

(NAC/NRC, 2016)

ERPGs (Emergency Response Planning Guidelines)

Chemical	ERPG-1	ERPG-2	ERPG-3
Ammonia (7664-41-7)	25 ppm 	150 ppm	1500 ppm

 indicates that odor should be detectable near ERPG-1.

(AIHA, 2015)

PACs (Protective Action Criteria)

Chemical	PAC-1	PAC-2	PAC-3	
Ammonia (7664-41-7)	30 ppm	160 ppm	1100 ppm	LEL = 150000 ppm

(SCAPA, 2016)

Regulatory Information

EPA Consolidated List of Lists

Regulatory Name	CAS Number/ 313 Category Code	EPCRA 302 EHS TPQ	EPCRA 304 EHS RQ	CERCLA RQ	EPCRA 313 TRI	RCRA Code	CAA 112(r) RMP TQ
Ammonia	7664-41-7	500 pounds	100 pounds	100 pounds			
Ammonia (anhydrous)	7664-41-7	500 pounds	100 pounds	100 pounds	X		10000 pounds
Ammonia (conc 20% or greater)	7664-41-7			see ammonium hydroxide	X		20000 pounds
Ammonia (includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing)	7664-41-7				313		

"X" indicates that this is a second name for an EPCRA section 313 chemical already included on this consolidated list. May also indicate that the same chemical with the same CAS number appears on another list with a different chemical name.

(EPA List of Lists, 2015)

DHS Chemical Facility Anti-Terrorism Standards (CFATS)

Chemical of Interest	CAS Number	RELEASE			THEFT			SABOTAGE		
		Min Conc	STQ	Security Issue	Min Conc	STQ	Security Issue	Min Conc	STQ	Security Issue
Ammonia (anhydrous)	7664-41-7	1.00 %	10000 pounds	toxic						
Ammonia (conc. 20% or greater)	7664-41-7	20.00 %	20000 pounds	toxic						

(DHS, 2007)

Alternate Chemical Names

- AM-FOL
- AMMONIA
- AMMONIA (ANHYDROUS)
- AMMONIA (ANHYDROUS) (LIQUEFIED)
- AMMONIA GAS
- AMMONIA SOLUTION, WITH MORE THAN 50% AMMONIA
- AMMONIA, ANHYDROUS
- AMMONIA, ANHYDROUS, LIQUEFIED
- AMMONIA, [ANHYDROUS]

- AMMONIA-14N
- ANHYDROUS AMMONIA
- ANHYDROUS AMMONIA, LIQUEFIED
- AQUA AMMONIA
- AQUEOUS AMMONIA
- LIQUID AMMONIA
- NITRO-SIL
- R 717
- REFRIGERENT R717
- SPIRIT OF HARTSHORN



CAMEO Chemicals



Chemical Datasheet

SULFURIC ACID

0
3 2
W

Chemical Identifiers

UN/NA Number	CAS Number	CHRIS Code	DOT Hazard Label
1830	7664-93-9	SFA	CORROSIVE

NFPA 704: Red 0 -- Flammability: Will not burn
 Blue 3 -- Health Hazard: Extremely hazardous - use full protection
 Yellow 2 -- Reactivity: Violent chemical change possible
 White **W** -- Special: Unusually reactive with water

General Description

Sulfuric acid is a colorless oily liquid. It is soluble in water with release of heat. It is corrosive to metals and tissue. It will char wood and most other organic matter on contact, but is unlikely to cause a fire. Density 15 lb / gal. Long term exposure to low concentrations or short term exposure to high concentrations can result in adverse health effects from inhalation. It is used to make fertilizers and other chemicals, in petroleum refining, in iron and steel production, and for many other uses.

Rate of onset: Immediate


Persistence: Hours, days

Odor threshold:

Source/use/other hazard: Battery/dyes/paper/glue/metals industries; volcanic gas; toxic fumes when heated.

Hazards

Reactivity Alerts

 Strong Oxidizing Agent

 Water-Reactive

Air & Water Reactions

Reaction with water is negligible unless acid strength is above 80-90% then heat from hydrolysis is extreme, may cause severe burns [Merck, 11th ed. 1989]. During sulfonation of mononitrobenzene by fuming sulfuric acid, a leak from an internal cooling coil permitted water to enter the reaction tank. A violent eruption occurred due to the heat of solution [MCA Case History 944 1963].

Fire Hazard

It is highly reactive and capable of igniting finely-divided combustible materials on contact. When heated, it emits highly toxic fumes. Avoid heat; water and organic materials. Sulfuric acid is explosive or incompatible with an enormous array of substances. Can undergo violent chemical change at elevated temperatures and pressure. May react violently with water. When heated, it emits highly toxic fumes. Hazardous polymerization may not occur. (EPA, 1998)

Health Hazard

Corrosive to all body tissues. Inhalation of vapor may cause serious lung damage. Contact with eyes may result in total loss of vision. Skin contact may produce severe necrosis. Fatal amount for adult: between 1 teaspoonful and one-half ounce of the concentrated chemical. Even a few drops may be fatal if the acid gains access to the trachea. Chronic exposure may cause tracheobronchitis, stomatitis, conjunctivitis, and gastritis. Gastric perforation and peritonitis may occur and may be followed by circulatory collapse. Circulatory shock is often the immediate cause of death. Those with chronic respiratory, gastrointestinal, or nervous diseases and any eye and skin diseases are at greater risk. (EPA, 1998)

Reactivity Profile

SULFURIC ACID is strongly acidic. Reacts violently with bromine pentafluoride [Mellor 2 Supp. 1:172 1956]. Exploded with para-nitrotoluene at 80 °C [Chem. Eng. News 27:2504]. An explosion occurred when concentrated sulfuric acid was mixed with crystalline potassium permanganate in a vessel containing moisture. Manganese heptoxide was formed, which explodes at 70°C [Delhez 1967]. A mixture of acrylonitrile with concentrated sulfuric acid must be kept well chilled, otherwise a vigorous exothermic reaction occurs [Chem. Safety Data Sheet SD-31:8. 1949]. Mixing sulfuric acid (96%) in equal portions with any of the following substances in a closed container caused the temperature and pressure to increase: acetonitrile, acrolein, 2-aminoethanol, ammonium hydroxide (28%), aniline, n-butyraldehyde, chlorosulfonic acid, ethylene diamine, ethyleneimine, epichlorohydrin, ethylene cyanohydrin, hydrochloric acid (36%), hydrofluoric acid (48.7%), propiolactone, propylene oxide, sodium hydroxide, styrene monomer [NFPA 1991]. Sulfuric acid (concentrated) is extremely hazardous in contact with carbides, bromates, chlorates, fulminates, picrates, and powdered metals [Haz. Chem. Data 1966]. Allyl chloride may polymerize violently under conditions involving an acid catalyst, such as sulfuric acid [Ventrone 1971]. React exothermically with sodium hypochlorite to produce chlorine gas. Mixing chlorosulfuric acid and 98% sulfuric acid may evolve HCl [Subref: Anon, Loss Prev. Bull. 1977, (013), 2-3]. Zinc iodide reacts violently with H₂SO₄. (Pascal, 1962, Vol. 5, 168).

Belongs to the Following Reactive Group(s)

- Acids, Inorganic Oxidizing

Response Recommendations

Firefighting

Fight fire from safe distance or from protected location. Use care as water applied directly to this acid results in evolution of heat and causes spattering. Cool containers that are exposed to flames with streams of water until fire is out. Wear positive pressure breathing apparatus and special protective clothing.

Not flammable. For small fires use dry chemical or carbon dioxide. Use water on combustibles burning in vicinity of this material. For large fires flood fire area with water from a distance. Do not get solid streams of water on material. Move container from area if you can do so without risk. (EPA, 1998)

Non-Fire Response

Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Neutralize spilled material with crushed limestone, soda ash, or lime. Apply water spray or mist 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 agricultural lime (CaO), crushed limestone (CaCO₃) or sodium bicarbonate (NaHCO₃). Water spill: Neutralize with agricultural lime (CaO), crushed limestone (CaCO₃), or sodium bicarbonate (NaHCO₃). (AAR, 2003)

Protective Clothing

Skin: Wear appropriate personal protective clothing to prevent skin contact.

Eyes: Wear appropriate eye protection to prevent eye contact.

Wash skin: The worker should immediately wash the skin when it becomes contaminated.

Remove: Work clothing that becomes wet or significantly contaminated should be removed and replaced.

Change: No recommendation is made specifying the need for the worker to change clothing after the work shift.

Provide: Eyewash fountains should be provided (when concentration is >1%) in areas where there is any possibility that workers could be exposed to the substance; this is irrespective of the recommendation involving the wearing of eye protection. Facilities for quickly drenching the body should be provided (when concentration is >1%) within the immediate work area for emergency use where there is a possibility of exposure. [Note: It is intended that these facilities provide a sufficient quantity or flow of water to quickly remove the substance from any body areas likely to be exposed. The actual determination of what constitutes an adequate quick drench facility depends on the specific circumstances. In certain instances, a deluge shower should be readily available, whereas in others, the availability of water from a sink or hose could be considered adequate.] (NIOSH, 2003)

_____ Dupont Average Standardized Breakthrough Times _____
(for SULFURIC ACID)

Tychem® BR
greater than 480 min. (concentration: 95+%)

Tychem® Butyl
160 min. (concentration: 98%)

Tychem® CPE
greater than 480 min. (concentration: 95+%)

Tychem® CPF1
greater than 480 min. (concentration: 98%)

Tychem® CPF2
greater than 480 min. (concentration: 98%)

Tychem® CPF3
greater than 480 min. (concentration: 98%)

Tychem® CPF4
greater than 480 min. (concentration: 98%)

Tychem® F
greater than 480 min. (concentration: 95+%)

Tychem® LV
greater than 480 min. (concentration: 95+%)

Tychem® PVC
150 min. (concentration: 95+%)

Tychem® QC
greater than 480 min. (concentration: 95+%)

Tychem® QC for Corrections
greater than 480 min. (concentration: 95+%)

Tychem® Reflector®
greater than 480 min. (concentration: 93%)

Tychem® Responder®
greater than 480 min. (concentration: 95%)

Tychem® Responder® CSM
greater than 480 min. (concentration: 95%)

Tychem® SL
greater than 480 min. (concentration: 95+%)

Tychem® ThermoPro
greater than 480* min. (concentration: 95-98%)

Tychem® TK
greater than 480 min. (concentration: 95+%) (DuPont, 2008)

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First Aid

Caution: Sulfuric acid is extremely corrosive. Caution is advised.

Signs and Symptoms of Acute Sulfuric Acid Exposure: Signs and symptoms of acute ingestion of sulfuric acid may be severe and include salivation, intense thirst, difficulty in swallowing, pain, and shock. Oral, esophageal, and stomach burns are common. Vomitus generally has a coffee-ground appearance. The potential for circulatory collapse is high following ingestion

of sulfuric acid. Acute inhalation exposure may result in sneezing, hoarseness, choking, laryngitis, dyspnea (shortness of breath), respiratory tract irritation, and chest pain. Bleeding of nose and gums, ulceration of the nasal and oral mucosa, pulmonary edema, chronic bronchitis, and pneumonia may also occur. If the eyes have come in contact with sulfuric acid, irritation, pain, swelling, corneal erosion, and blindness may result. Dermal exposure may result in severe burns, pain, and dermatitis (red, inflamed skin).

Emergency Life-Support Procedures: Acute exposure to sulfuric acid 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. Rescue vehicles should carry supplies such as plastic sheeting and disposable plastic bags to assist in preventing spread of contamination.

Inhalation Exposure:

1. Move victims to fresh air. Emergency personnel should avoid self-exposure to sulfuric acid.
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. RUSH to a health care facility.

Dermal/Eye Exposure:

1. Remove victims from exposure. Emergency personnel should avoid self-exposure to sulfuric acid.
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. Remove contaminated clothing as soon as possible.
4. If eye exposure has occurred, eyes must be flushed with lukewarm water for at least 15 minutes.
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. RUSH to a health care facility.

Ingestion Exposure:

1. 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.
2. Rinse mouth with large amounts of water. Instruct victims not to swallow the water.
3. DO NOT induce vomiting or attempt to neutralize!
4. Obtain authorization and/or further instructions from the local hospital for administration of an antidote or performance of other invasive procedures.
5. Activated charcoal is of no value.
6. 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.
7. RUSH to a health care facility. (EPA, 1998)

Physical Properties

Molecular Formula: H₂SO₄

Flash Point: data unavailable

Lower Explosive Limit: data unavailable

Upper Explosive Limit: data unavailable

Autoignition Temperature: Not flammable (USCG, 1999)

Melting Point: 50.65 ° F (EPA, 1998)

Vapor Pressure: 1.0 mm Hg at 294.8 ° F (EPA, 1998)

Vapor Density: 3.4 (EPA, 1998)

Specific Gravity: 1.841 (EPA, 1998)

Boiling Point: 554.0 ° F at 760 mm Hg (EPA, 1998)

Molecular Weight: 98.08 (EPA, 1998)

Water Solubility: Miscible (NIOSH, 2003)

AEGL: data unavailable

ERPG-1

2.0 mg/m³
(AIHA, 2008)

ERPG-2

10.0 mg/m³

ERPG-3

30.0 mg/m³

TEEL: data unavailable

IDLH: 15.0 mg/m³ (NIOSH, 2003)

Regulatory Information

Regulatory Names: SULFURIC ACID (AEROSOL FORMS ONLY)
SULFURIC ACID

CAA RMP: Not a regulated chemical.

CERCLA: Regulated chemical with a Reportable Quantity of 1000 pounds.

EHS (EPCRA 302): Regulated chemical with a Reportable Quantity of 1000 pounds and a Threshold Planning Quantity of 1000 pounds.

TRI (EPCRA 313): Not a regulated chemical.

RCRA Chemical Code: none

Alternate Chemical Names

- ACIDE SULFURIQUE (DOT FRENCH)
- ACIDE SULFURIQUE, CONTENANT PLUS DE 51% D'ACIDE (DOT FRENCH)
- ACIDO SULFÚRICO (DOT SPANISH)
- ACIDO SULFÚRICO, CON MÁS DEL 51% DE ÁCIDO (DOT SPANISH)
- BATTERY ACID
- BOV
- CHAMBER ACID
- CONTACT ACID
- DIHYDROGEN SULFATE
- DIPPING ACID
- FERTILIZER ACID
- HYDROGEN SULFATE
- MATTING ACID
- NORDHAUSEN ACID
- OIL OF VITRIOL
- SPENT SULFURIC ACID
- SPIRIT OF SULFUR
- SULFURIC ACID (AEROSOL FORMS ONLY)
- SULFURIC ACID (AQUEOUS)
- SULFURIC ACID, WITH MORE THAN 51% ACID
- SULPHURIC ACID
- SULPHURIC ACID, WITH MORE THAN 51% ACID
- VITRIOL BROWN OIL

APPENDIX 3: CAMEO CALCULATIONS

Edit Screening & Scenarios		Last Modified 4/30/2018
Facility / Route Name <input type="text" value="Indianhead Foodservice"/>		
Chemical <input type="text" value="ANHYDROUS AMMONIA"/>	CAS <input type="text" value="7664-41-7"/>	
Scenario Name <input type="text" value="Indianhead Foodservice - Worst Case"/>		
<input checked="" type="checkbox"/> In Inventory	<input type="checkbox"/> In Transit	<input type="checkbox"/> Shipper
Scenario Description	Notes	
Amount Released <input type="text" value="6083"/> pounds	Physical State <input checked="" type="radio"/> Gas	
Concentration <input type="text" value="100"/> weight %	<input type="radio"/> Liquid	
Release Duration <input type="text" value="10"/> minutes	<input type="radio"/> Solid	
If stored in container with a dike, enter surface area within dike <input type="text"/> sq ft		
Atmospheric Concentration Level of Concern <input type="text" value=".035"/> gm/m ³		
LOC Description <input type="text" value="Greenbook LOC"/>		
Weather Information		
Wind Speed <input type="text" value="3.35"/> mph	Ground Roughness <input type="text" value="open country"/>	
Wind From <input type="text"/> in degrees measured clockwise from 0 N. (for example: 015, 315,270)	Stability Class <input type="text" value="F"/>	
Risk Assessment		
Risk <input type="text"/>	Probability of described accident occurring	
Consequences <input type="text"/>	Severity of consequence to people	
Overall Risk <input type="text"/>	Combination of probability and severity of consequence	
Estimate Threat Zone Radius: <input type="text" value="> 10"/> miles		
<input type="button" value="Save Changes"/>		<input type="button" value="Cancel"/>

Edit Screening & Scenarios

Last Modified 4/30/2018

Facility / Route Name

Chemical

CAS

Scenario Name

In Inventory

In Transit

Shipper

Scenario Description

Notes

Amount Released pounds

Concentration weight %

Release Duration minutes

If stored in container with a dike, enter surface area within dike sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Physical State Gas

Liquid

Solid

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315,270)

Stability Class

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Estimate Threat Zone Radius: miles

Save Changes

Cancel

Screening & Scenarios

Last Modified 5/3/2018

Facility / Route Name

Chemical

CAS

Scenario Name

In Inventory

In Transit

Shipper

Scenario Description

Notes

Amount Released pounds

Concentration weight %

Release Duration minutes

Physical State Gas

Liquid

Solid

If stored in container with a dike, enter surface area within dike: sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315, 270)

Stability Class

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles

Screening & Scenarios

Last Modified 5/3/2018

Facility / Route Name

Chemical CAS

Scenario Name

In Inventory In Transit Shipper

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 Liquid
 Solid

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Wind Speed mph

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Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315, 270)

Stability Class

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Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Xcel Energy Substation

Facility Address: Old Wells Road, Eau Claire, Wisconsin 54703

STATEMENT OF PLANNING PROCESS

This plan has been prepared in accordance with state and local requirements and is ready to be made a part of the County Emergency Operations Plan (EOP) / Emergency Response Plan (ERP) upon Wisconsin Emergency Management (WEM) / State Emergency Response Commission (SERC) acceptance. This plan meets the facility off-site planning guidance as established by WEM / SERC. Acceptance of this plan is for planning purposes and does not verify facility compliance with the requirements of EPCRA.

FACILITY SIGNATURES:

I have reviewed the attached plan and to the best of my knowledge, all facility information is true, accurate, and complete. The plan is consistent with facility emergency plans and procedures.

Tina M. Ball  5-21-2021
Facility Coordinator Date

COUNTY SIGNATURES

I have reviewed the attached plan and to the best of my knowledge, all information is true, accurate, and complete.

County Local Emergency Planning Committee Chair Date

County Emergency Management Director Date

WEM / SERC ACCEPTANCE:

This plan has been reviewed and meets the off-site planning guidance as established by WEM / SERC.

WEM Regional Director Date

NOTE: Facility Off-Site Plan Review Guide attached: Yes No

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Xcel Energy Substation

Facility Address: Old Wells Road, Eau Claire, Wisconsin 54703

FACILITY OFF-SITE PLAN REVIEW GUIDE

EPCRA Facility Off-Site Plan Elements

Page Number Reference

1) The facility identification with address.	<u>4</u>
2) Facility Coordinator / Alternate Coordinator	<u>4</u>
3) Extremely Hazardous Substances (EHS) chemicals Identified with CAS numbers and maximum amount	<u>4</u>
4) Primary emergency responders identified	<u>6</u>
5) Support and resources available from facility	<u>5</u>
6) General Information / Assumptions (Disclaimer)	<u>7</u>
7) Hazard analysis summary	<u>5</u>
8) Special facilities affected	<u>7</u>
9) Population protection	<u>7</u>
10) Special considerations	<u>7</u>
11) Site Plan / Facility Layout	<u>9 (Appendix 1)</u>

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Xcel Energy Substation

Facility Address: Old Wells Road, Eau Claire, Wisconsin 54703

12) Distribution list: _____
Facility
Fire Department of jurisdiction
Wisconsin Emergency Management- Region Office
Designated Hazmat team
County Emergency Management Office
Adjacent County Emergency Management Office when impacted by vulnerability zone

13) Required Attachments

A. Vulnerability Zone map highlighting special facilities	8
B. Safety Data Sheet (SDS) for each EHS	10 - 16
C. Vulnerability Zone Calculations	17 - 18
D. Transportation route(s) map	



Xcel Energy Substation Facility Off-Site Emergency Response Plan



Facility #99570
Xcel Energy Substation
Old Wells Road (Adjacent to Domer Park)
Eau Claire, Wisconsin 54703

Eau Claire County Emergency Management
721 Oxford Avenue, Suite 3344
Eau Claire, Wisconsin 54703

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Extremely Hazardous Substances SDS	Appendix 2
CAMEO Calculations.....	Appendix 3

RECORD OF CHANGES

Change	Date Changed	Change Made By
Created	1/2018	JA
Updated	3/13/2018	JA
Updated	5/2021	SS

SECTION 1: FACILITY INFORMATION

A. Address

Xcel Energy Substation
 Old Wells Road (Adjacent to Domer Park)
 Eau Claire, Wisconsin 54703

B. Facility ID

99570

C. Map



D. Emergency Contacts

Primary:
 Tina Ball
 Phone: 715-737-1346
 24 Hour: 715-577-0003
 christine.m.ball@xcelenergy.com

Secondary:
 Northern States Power System Operations
 Phone: 715-737-2610
 24 Hour: 715-737-2618
 christine.m.ball@xcelenergy.com

E. Extremely Hazardous Substances

<p>Sulfuric Acid Chemical ID: 403724 CAS: 7664939 ERG: Guide 137</p>	<p>Inventory: Max Daily Amount (lbs): 1317 Ave. Daily Amount (lbs): 1317 Number of days on site: 365</p>	<p>Storage: Container: Lead-Acid Batteries Location: In Substation House</p>
---	--	---

F. Hazardous Substances

Not applicable

G. Resources/Support Available

The batteries are kept in coated steel containment structures with spill pads and a neutralizing agent. A chemical-resistant apron, gloves and face shield are provided in each house. A loss of DC power or AC power to the charger signaling a potential loss of acid from a battery would result in an alarm being sent to Xcel Energy's dispatch center located at 1414 W. Hamilton Avenue in Eau Claire. Dispatch would send a troubleman to the substation to investigate the alarm.

H. Hazard Analysis

Xcel Energy operates an unmanned electrical substation facility. The substation is part of the electrical generation, transmission, and distribution system. Sulfuric acid is used in lead batteries stored in three Substation Houses. The total quantity of Sulfuric Acid on site is 1,317 lbs. The evacuation radius for sulfuric acid is less than 0.1 mile.

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The evacuation radius, as calculated by CAMEO software for a 1,317 pound Sulfuric Acid release, was determined to be less than 0.1 miles. The threat would not leave the property, and is expected to affect 0 homes. The population in this area is estimated to be 0.

Reevaluation of a 1,317 pound release of Sulfuric Acid using more realistic variables in the CAMEO model yields an evacuation radius of less than 0.1 miles. The population in this area is estimated to be 0.

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

10 minute release of maximum quantity of chemical in a single vessel

I. Access to Facility

Access to the facility is controlled via gated drive off of Old Wells Road. Additionally, each storage house is located within gate-controlled areas.

SECTION 2: OUTSIDE RESOURCES

A. Primary Response Agencies

Fire: Eau Claire Fire Dept. Eau Claire, WI 54701 Phone: 715-834-6868	EMS: Eau Claire Fire Dept. Eau Claire, WI 54701 Phone: 715-834-6868	Law: City of Eau Claire Police 721 Oxford Avenue Eau Claire, WI 54703 Phone: 715-839-4972	Emergency Management: Eau Claire Office of Emergency Management 721 Oxford Avenue Suite 3344 Eau Claire, WI 54703 Phone: 715-839-4736
--	---	--	--

B. Hazardous Materials Response Teams

Eau Claire County has a Level B hazardous materials response team. For Level B response, the local Fire Chief notifies the Level B team of a response needed through the Eau Claire County Emergency Communications Center. For Level A responses by the Type 1 Regional Hazardous Materials Response Team, requests shall be made through the WEM Duty officer by the county Emergency Management Director.

C. Other Outside Assistance

See the County-Wide Hazardous Materials Strategic Plan for a listing of resources.

SECTION 3: POPULATION/ENVIRONMENTAL PROTECTION

A. Shelter-In-Place

The lead time for a hazardous materials incident may be very short. As a result, there may not be time enough for safe evacuation, especially when extremely toxic chemical fumes are involved. An evacuation under these considerations may expose the population to dangerous toxic chemicals and the decision may be made to shelter-in-place. Preferred areas for protective sheltering would be interior hallways, rooms without windows or exterior doors, enclosed stairways and rooms on the side of the building away from where the hazard is approaching. Doors, windows, and other potential air leaks should be sealed up to prevent toxic fumes from entering.

B. Evacuation

Experience indicated that shelter space would need to be provided for only 30% of the population within the initial isolation and evacuation zones and the remaining 70% would seek shelter with family and friends outside the risk zone. All public schools listed are eligible evacuation shelters.

C. Nearby Shelters

Not applicable.

SECTION 4: VULNERABILITY ZONES

A. General Information and Assumptions

The vulnerability zones set forth in the Plan are based on the EPA Technical Guidance for Hazards Analysis. The zones are based on a credible worst-case scenario and identify the potential area for impact should an air-borne release of a single EHS chemical occur.

The vulnerability zones are NOT intended to be used as a guide for population protection in fire-related incidents. Fire incidents were considered in the development of this plan and the plan provides basic information about the facility for first responders to employ. However, in an actual fire situation at this facility, the Incident commander is strongly recommended to reference the fire department own individual agency pre-emergency plans and standard operating procedures as well as the county's Emergency Operations Plan – Annex K: Fire and Rescue, as they may relate to this facility when making decisions at an incident involving fire.

Further, fire departments that would respond to an incident at this facility are strongly encouraged to meet with facility representatives to determine ways to minimize an event at the facility and to determine what additional information and factors should be taken into consideration in the event of a fire, should one occur.

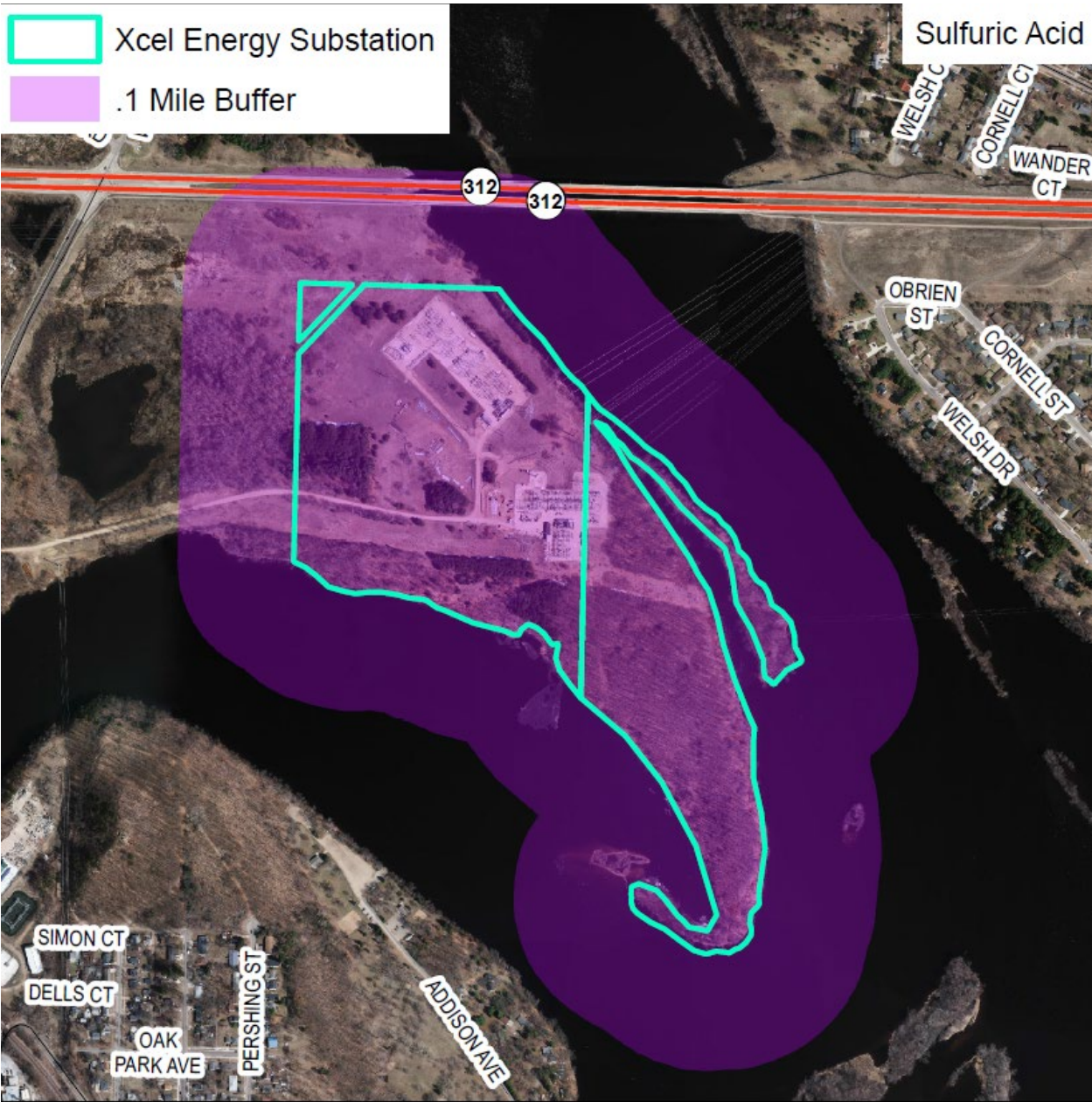
The field incident commander shall determine the actual response to an incident and the affected area may vary from the planning vulnerability zone identified in this Plan. Depending on wind speed and direction, the amount of material released and other pertinent factors, the ACTUAL vulnerability zone may be smaller, and in some instances larger, than the credible worst-case vulnerability zone identified herein. The vulnerability zones determined in the Plan are for general PLANNING PURPOSES.

B. Special Facilities Affected

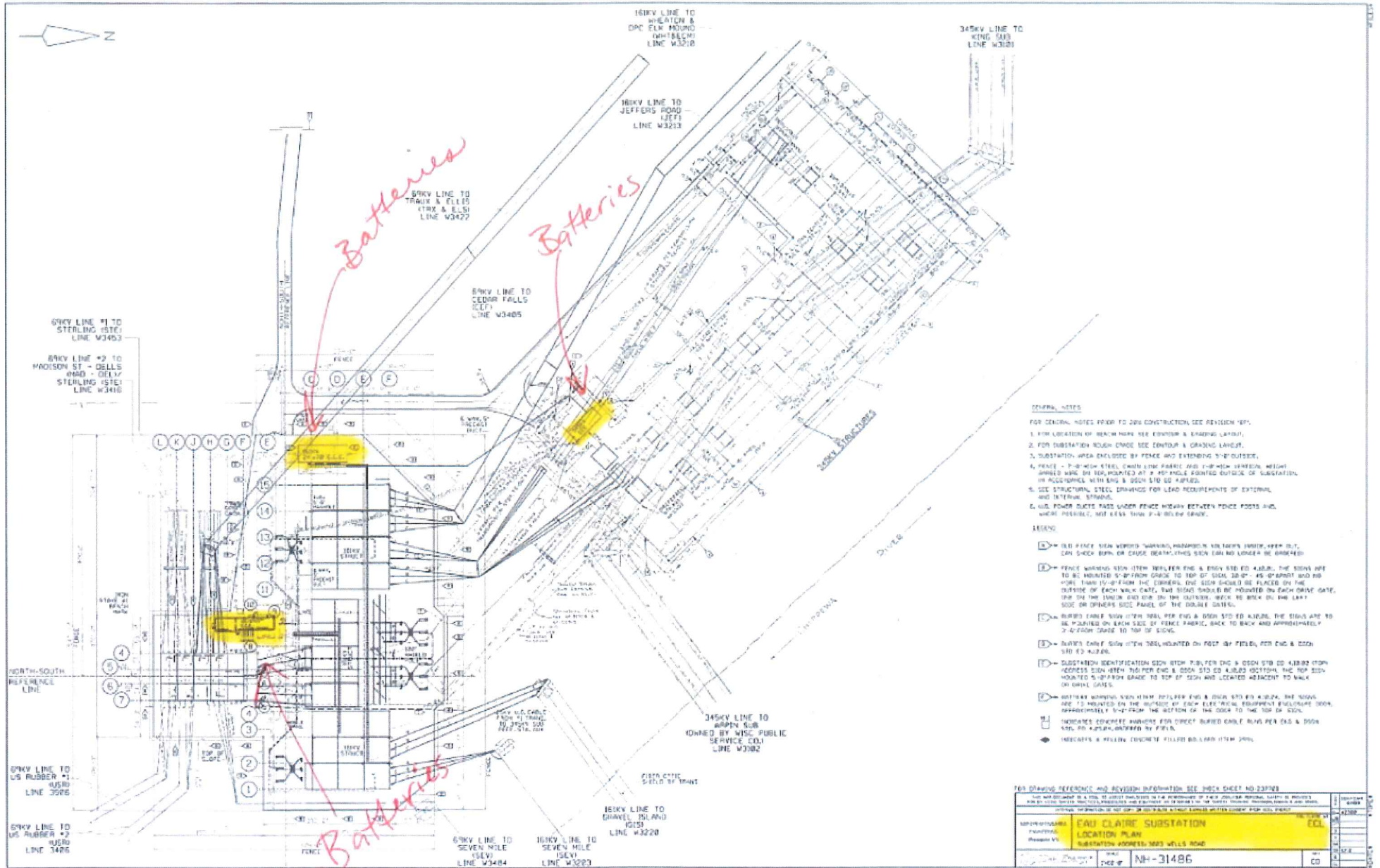
Not applicable.

C. Vulnerability Zone Map

See map.



APPENDIX 1: FACILITY LAYOUT



- GENERAL NOTES**
- FOR GENERAL NOTES REFER TO JOB CONSTRUCTION SEE REVISION #1.
 - FOR LOCATION OF REAR MARK SEE EXISTING & GRADING LAYOUT.
 - FOR SUBSTATION ROUGH GRADE SEE EXISTING & GRADING LAYOUT.
 - SUBSTATION AREA ENCLOSED BY FENCE AND EXTENDING 5'-0" OUTSIDE.
 - FENCE - 2'-0" HIGH STEEL CHANNEL FENCE PANEL AND 1/2" HIGH VERTICAL WEIGH BARRING AND 80# GALVANIZED 4" POSTS AND POINTS OUTSIDE OF SUBSTATION. IN ACCORDANCE WITH ENG & OSER STD 00 4010.
 - SEE STRUCTURAL STEEL DRAWINGS FOR LOAD REQUIREMENTS OF EXTERNAL AND INTERNAL STRAINS.
 - ALL POWER DUCTS PASS UNDER FENCE HIGHWAY BETWEEN FENCE POSTS AND, WHERE POSSIBLE, NOT LESS THAN 2'-0" BELOW GRADE.
- LEGEND**
- 1. OLD FENCE SIGN WEIGH BARRING, HANGERS, SIGN POSTS, SIGN BRACKET, CAN CHECK SIGN OR CROSS WEIGH BARRING SIGN CAN NO LONGER BE ORDERED.
 - 2. FENCE WEIGH BARRING SIGN WEIGH BARRING END & SIGN STD 00 4010. THE SIGN ARE TO BE MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN. SIGN - 45° SPACED AND NO MORE THAN 15'-0" FROM THE CORNERS. ONE SIGN SHOULD BE PLACED ON THE OUTSIDE OF EACH WALK GATE, TWO SIGN SHOULD BE MOUNTED ON EACH DRIVE GATE. ONE ON THE INSIDE AND ONE ON THE OUTSIDE. MARK AS BOLD ON THE LEFT SIDE OR DRIVERS SIDE PANEL OF THE DOUBLE GATES.
 - 3. BURIED FENCE SIGN WITH REAL FOR ENG & OSER STD 00 4010. THE SIGN ARE TO BE MOUNTED ON EACH SIDE OF FENCE PANEL, BACK TO BACK AND APPROXIMATELY 2'-0" FROM GRADE TO TOP OF SIGN.
 - 4. BATTERY SIGN WITH REAL MOUNTED ON POST BY FIELD, FOR ENG & OSER STD 00 4010.
 - 5. SUBSTATION IDENTIFICATION SIGN WITH PUBLIC ENG & OSER STD 00 4100. SIGN SHOULD BE MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND LOCATED ADJACENT TO WALK OR DRIVE GATES.
 - 6. WEIGH BARRING SIGN WITH REAL FOR ENG & OSER STD 00 4010. THE SIGN ARE TO BE MOUNTED ON THE OUTSIDE OF EACH ELECTRICAL EQUIPMENT ENCLOSURE DOOR. APPROXIMATELY 5'-0" FROM THE BOTTOM OF THE DOOR TO THE TOP OF SIGN.
 - 7. TERMINALS COVERED BARRING FOR DIRECT BURIED CABLE RUNS PER ENG & OSER STD 00 4010. MOUNTED BY FIELD.
 - 8. UNREINFORCED & FILLING CONCRETE FILLED 60-90# ITEM 200.

FOR DRAWING REFERENCE AND REVISION INFORMATION SEE INDEX SHEET NO 237201

THE INFORMATION ON THIS DRAWING IS THE PROPERTY OF THE ENGINEER OR ARCHITECT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF THE ENGINEER OR ARCHITECT.		
APPROVED FOR: PROJECT NO.	CHAU CLAIRE SUBSTATION LOCATION PLAN SUBSTATION ADDRESS: 2025 WELLS ROAD	DATE: 11/20/2018 DRAWN BY: [Signature] CHECKED BY: [Signature]
DRAWING NUMBER: NH-31486		SHEET NO. 1 OF 1

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.15.2015

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Sulfuric Acid, 3M

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Sulfuric Acid, 3M

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25899

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Health hazard

Skin corrosion, category 1A
Serious eye damage, category 1

Corrosive to metals, category 1

skin corr./irrit. 1A

Corrosive to metals. 1

Eye corr. 1

Signal word : Danger

Hazard statements:

May be corrosive to metals

Causes severe skin burns and eye damage

Causes serious eye damage

Precautionary statements:

If medical advice is needed, have product container or label at hand

Keep out of reach of children

Read label before use

Wear protective gloves/protective clothing/eye protection/face protection

Wash ... thoroughly after handling

Do not breathe dust/fume/gas/mist/vapours/spray

Keep only in original container

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

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according to 29CFR1910/1200 and GHS Rev. 3

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Sulfuric Acid, 3M

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
Specific treatment (see ... on this label)
Absorb spillage to prevent material damage
Store locked up
Dispose of contents/container to ...

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 7664-93-9	Sulfuric Acid, ACS	31.004 %
CAS 7732-18-5	Water	68.996 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

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Sulfuric Acid, 3M

Irritation.Headache.Nausea.Shortness of breath,;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment.Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyewear, gloves, and clothing. Refer to Section 8.Always obey local regulations.Containerize for disposal. Refer to Section 13.If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing.Follow good hygiene procedures when handling chemical materials. Refer to Section 8.Follow proper disposal methods. Refer to Section 13.Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages.Protect from freezing and physical damage.Provide ventilation for containers. Keep container tightly sealed.Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection



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according to 29CFR1910/1200 and GHS Rev. 3

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Sulfuric Acid, 3M

Control Parameters:	7664-93-9, Sulfuric Acid, ACS, OSHA PEL: 1mg/m ³ 7664-93-9, Sulfuric Acid, ACS, ACGIH TLV: 1 mg/m ³
Appropriate Engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Respiratory protection:	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.
Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.
Eye protection:	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.
General hygienic measures:	Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Clear, colorless liquid.	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Odorless	Vapor pressure:	<0.00120mmHg
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	< 0.03	Relative density:	Not Determined
Melting/Freezing point:	11C	Solubilities:	Miscible
Boiling point/Boiling range:	105 - 325C	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Not Determined	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.
Chemical stability: Stable under normal conditions.
Possible hazardous reactions: None under normal processing.

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according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.15.2015

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Sulfuric Acid, 3M

Conditions to avoid:Incompatible materials.

Incompatible materials:Organics. Metals. Chlorates. Alkalines. Carbides. Fulminates. Reducing agents. Nitrates. Acetic acid. Oxidizing agents

Hazardous decomposition products:Oxides of sulfur.

SECTION 11 : Toxicological information

Acute Toxicity:		
Inhalation:	510 mg/m ³ 2 h	Inhalation LC50 Rat
Oral:	2140 mg/kg	Oral LD50 Rat
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:	No additional information.	
Single Target Organ (STOT):	No additional information.	
Numerical Measures:	No additional information.	
Carcinogenicity:	No additional information.	
Mutagenicity:	No additional information.	
Reproductive Toxicity:	No additional information.	

SECTION 12 : Ecological information

Ecotoxicity

Freshwater Fish: 96 Hr LC50 Brachydanio rerio: >500 mg/L [static]

Fish: LC50 - Gambusia affinis (Mosquito fish) - 42 mg/l - 96 h

Invertebrates: EC50 - Daphnia magna (Water flea) - 29 mg/l - 24 h

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

1830

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

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Sulfuric Acid, 3M

UN proper shipping name

Sulfuric Acid Solution

Transport hazard class(es)



Class:

8 Corrosive substances

Packing group:II

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

7664-93-9 Sulfuric Acid

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7664-93-9 Sulfuric Acid 1000 lbs

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.15.2015

Page 7 of 7

Sulfuric Acid, 3M

SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

Effective date : 02.15.2015

Last updated : 03.19.2015

APPENDIX 3: CAMEO CALCULATIONS

Screening & Scenarios		Last Modified 2/16/2018
Facility / Route Name <input style="width: 90%;" type="text" value="Xcel Energy"/>		
Chemical <input style="width: 80%;" type="text" value="Sulfuric Acid"/>	CAS <input style="width: 15%;" type="text" value="7664-93-9"/>	
Scenario Name <input style="width: 80%;" type="text" value="Xcel Energy - Sulfuric Acid: Worst Case"/> Datasheet		
<input checked="" type="checkbox"/> In Inventory <input type="checkbox"/> In Transit <input type="checkbox"/> Shipper		
Scenario Description	Notes	
Amount Released <input style="width: 100px;" type="text" value="1317"/> pounds Concentration <input style="width: 100px;" type="text" value="100"/> weight % Release Duration <input style="width: 100px;" type="text"/> minutes If stored in container with a dike, enter surface area within dike <input style="width: 100px;" type="text"/> sq ft Atmospheric Concentration Level of Concern <input style="width: 100px;" type="text" value="008"/> gm/m ³ LOC Description <input style="width: 150px;" type="text" value="Greenbook LOC"/>	Physical State <input type="radio"/> Gas <input checked="" type="radio"/> Liquid <input type="text" value="Ambient"/> <input type="radio"/> Solid	
Weather Information		
Wind Speed <input style="width: 100px;" type="text" value="3.35"/> mph Wind From <input style="width: 100px;" type="text"/> in degrees measured clockwise from 0 N. (for example: 015, 315, 270)		
Ground Roughness <input style="width: 150px;" type="text" value="open country"/> Stability Class <input style="width: 50px;" type="text" value="F"/>		
Risk Assessment		
Risk <input style="width: 100px;" type="text"/> Probability of described accident occurring Consequences <input style="width: 100px;" type="text"/> Severity of consequence to people Overall Risk <input style="width: 100px;" type="text"/> Combination of probability and severity of consequence		
Threat Zone Radius <input style="width: 100px;" type="text" value="< .1"/> miles Show on Map		

Screening & Scenarios

Last Modified 2/16/2018

Facility / Route Name

Chemical

CAS

Scenario Name

In Inventory

In Transit

Shipper

Scenario Description

Notes

Amount Released pounds

Physical State Gas

Concentration weight %

Liquid

Release Duration minutes

Solid

If stored in container with a dike, enter surface area within dike: sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315, 270)

Stability Class

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Schuman Cheese

Facility Address: 120 Brickyard Street, Fall Creek, Wisconsin 54742

STATEMENT OF PLANNING PROCESS

This plan has been prepared in accordance with state and local requirements and is ready to be made a part of the County Emergency Operations Plan (EOP) / Emergency Response Plan (ERP) upon Wisconsin Emergency Management (WEM) / State Emergency Response Commission (SERC) acceptance. This plan meets the facility off-site planning guidance as established by WEM / SERC. Acceptance of this plan is for planning purposes and does not verify facility compliance with the requirements of EPCRA.

FACILITY SIGNATURES:

I have reviewed the attached plan and to the best of my knowledge, all facility information is true, accurate, and complete. The plan is consistent with facility emergency plans and procedures.

Nate Smith

Facility Coordinator

6/8/2021

Date

COUNTY SIGNATURES

I have reviewed the attached plan and to the best of my knowledge, all information is true, accurate, and complete.

County Local Emergency Planning Committee Chair

Date

County Emergency Management Director

Date

WEM / SERC ACCEPTANCE:

This plan has been reviewed and meets the off-site planning guidance as established by WEM / SERC.

WEM Regional Director

Date

NOTE: Facility Off-Site Plan Review Guide attached: Yes No

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Schuman Cheese

Facility Address: 120 Brickyard Street, Fall Creek, Wisconsin 54742

FACILITY OFF-SITE PLAN REVIEW GUIDE

<u>EPCRA Facility Off-Site Plan Elements</u>	<u>Page Number Reference</u>
1) The facility identification with address.	4
2) Facility Coordinator / Alternate Coordinator	4
3) Extremely Hazardous Substances (EHS) chemicals Identified with CAS numbers and maximum amount	4
4) Primary emergency responders identified	6
5) Support and resources available from facility	5
6) General Information / Assumptions (Disclaimer)	7
7) Hazard analysis summary	5
8) Special facilities affected	7
9) Population protection	7
10) Special considerations	10-11
11) Site Plan / Facility Layout	12 (Appendix 1)

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Schuman Cheese

Facility Address: 120 Brickyard Street, Fall Creek, Wisconsin 54742

12) Distribution list: _____
Facility
Fire Department of jurisdiction
Wisconsin Emergency Management- Region Office
Designated Hazmat team
County Emergency Management Office
Adjacent County Emergency Management Office when impacted by vulnerability zone

13) Required Attachments

A. Vulnerability Zone map highlighting special facilities	8 - 9
B. Safety Data Sheet (SDS) for each EHS	13 - 25
C. Vulnerability Zone Calculations	26 - 27
D. Transportation route(s) map	



Schuman Cheese
d/b/a Imperia Foods Inc. Fall Creek
(Formerly Greenwood Packaging)
Facility Off-Site
Emergency Response Plan



Facility #201310
Schuman Cheese
120 Brickyard St
Fall Creek, Wisconsin 54742



Eau Claire County Emergency Management
721 Oxford Avenue, Suite 3344
Eau Claire, Wisconsin 54703

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RECORD OF CHANGES

Change	Date Changed	Change Made By
Initial Draft	2/16/18	T. Esh
Edited	2/26/18	J. Allen
Edited (Facility requested changes)	3/19/18	J. Allen
Updated	5/03/21	S. Simmons

SECTION 1: FACILITY INFORMATION

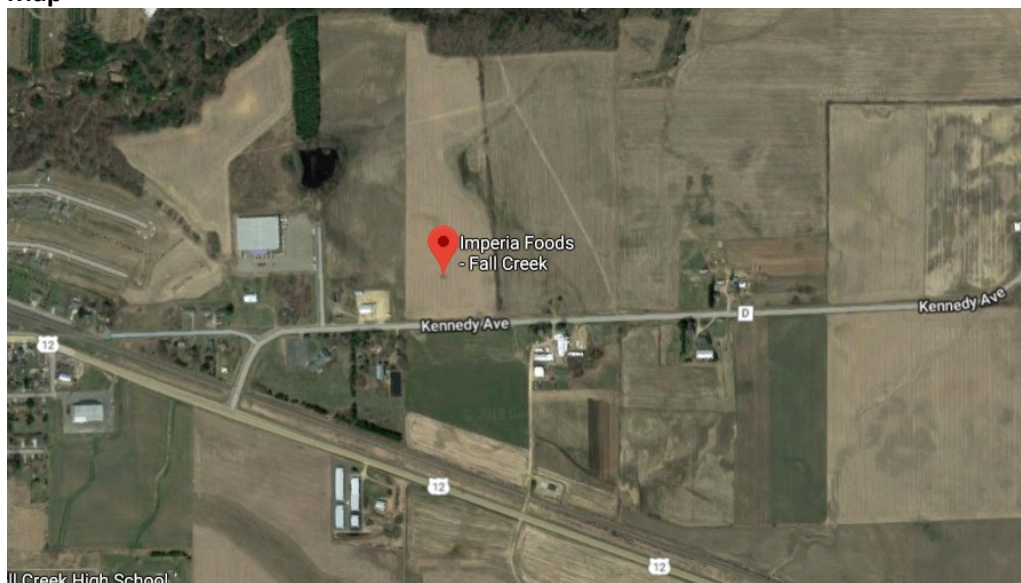
A. Address

Schuman Cheese
 120 Brickyard Street
 Fall Creek, Wisconsin 54742

B. Facility ID

201310

C. Map



D. Emergency Contacts

Primary:
 Nate Smith
 Phone: 715-318-6504
 24 Hour: 715-514-7324
 nsmith@schumancheese.com

Secondary:
 Samantha Erickson
 Phone: 715-318-6480
 24 Hour: 715-828-8145
 serickson@schumancheese.com

E. Extremely Hazardous Substances

<p>Ammonia Chemical ID: 420155 CAS: 7664417 ERG: Guide 125</p>	<p>Inventory: Max Daily Amount (lbs): 9856 Ave. Daily Amount (lbs): 9856 Number of days on site: 365</p>	<p>Storage: Container: Above Ground Tank Location: Ammonia Room SW corner of plant, segregated from rest of plant. May be piped to the evaporator unit</p>
---	--	---

F. Hazardous Substances

<p>Carbon Dioxide Chemical ID: 420154 CAS: 124389 ERG: Guide 120</p>	<p>Inventory: Max Daily Amount (lbs): 60000 Ave. Daily Amount (lbs): 40000 Number of days on site: 365</p>	<p>Storage: Container: Above Ground Tank Location: Outside Building East Side</p>
---	--	--

G. Resources/Support Available

Schuman Cheese does not maintain any personal protective equipment on-site in the event of a leak. They have a contract in place with a vendor to clean up leaks and plan to utilize emergency services as needed. There are ammonia monitors and an auto dialer in place to notify the Maintenance Manager in the event a monitor is tripped. Maintenance Manager is able to remotely log in as needed.

H. Hazard Analysis

Schuman Cheese is a national importer of cheeses, primarily from Italy. There are an average of thirty (30) employees on site each shift from Sunday night-Friday night. During the day, there will likely be closer to forty (40) employees on site. The size of the building is 54,208 square feet. The cooling system for the facility uses Anhydrous Ammonia. In the screening scenarios as stated for Anhydrous Ammonia below, the evacuation radius for anhydrous ammonia is 6.2 miles.

The hazard analysis determined this Anhydrous Ammonia to be the major chemical hazard present at the facility. It is used for cooling. The chemical is located in the southwest corner of the plant, separate from the rest of the plant. Piping for the Anhydrous Ammonia is located above the roof of the building leading to the evaporators and minimally inside the building. There are two exhaust fans in the motor room that will turn on automatically to disperse any system release of Anhydrous Ammonia. A leak of Anhydrous Ammonia in the main containment area would be detected by equipment that is monitored by on-site monitors (see Section 5: Note 1). If a leak were to be detected the monitors would alert company personnel so they could take appropriate action. On site, strobes and siren announce the detected release of a chemical. The facility reports 9,856 pounds of Anhydrous Ammonia on site. The modeled evacuation area is based on worst case scenario for Anhydrous Ammonia (2,464 lbs.) ten minutes after a catastrophic failure of containment. The largest containment of Anhydrous Ammonia in the cooling system is the receiver. This is the amount of material used in the worst-case scenario.

The greatest potential for release would be the failure of "receiver units" which contain the greatest volume of material. Anhydrous Ammonia is delivered to the facility by truck. The maximum shipment is 2,500 pounds (see Section 5: Note 2).

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The evacuation radius, as calculated by CAMEO software for a 2,464 pound Anhydrous Ammonia release, was determined to be 6.2 miles. It is estimated that 4,553 people may be affected by the release (1,836 housing units).

Reevaluation of a 2,464 pound release of Anhydrous Ammonia using more realistic variables in the CAMEO model yields an evacuation radius of .7 miles. The population in this area is estimated to be 398 (159 housing units).

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

I. Access to Facility

The local fire department has keys to the facility to gain access.

SECTION 2: OUTSIDE RESOURCES

A. Primary Response Agencies

Fire: Fall Creek Area Fire District 530 E. Lincoln Ave Eau Claire, WI 54742 Phone: 715-834-6868	EMS: Eau Claire Fire Department Eau Claire, WI 54701 Phone: 715-834-6868	Law: Fall Creek Police Department 530 E. Lincoln Ave Fall Creek, WI 54742 Phone: 715-877-3231	Emergency Management: Eau Claire Office of Emergency Management 721 Oxford Avenue Suite 3344 Eau Claire, WI 54703 Phone: 715-839-4736
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B. Hazardous Materials Response Teams

Eau Claire County has a Level B hazardous materials response team. For Level B response, the local Fire Chief notifies the Level B team of a response needed through the Eau Claire County Emergency Communications Center. For Level A responses by the Type 1 Regional Hazardous Materials Response Team, requests shall be made through the WEM Duty officer by the county Emergency Management Director.

C. Other Outside Assistance

See the County-Wide Hazardous Materials Strategic Plan for a listing of resources.

SECTION 3: POPULATION/ENVIRONMENTAL PROTECTION

A. Shelter-In-Place

The lead time for a hazardous materials incident may be very short. As a result, there may not be time enough for safe evacuation, especially when extremely toxic chemical fumes are involved. An evacuation under these considerations may expose the population to dangerous toxic chemicals and the decision may be made to shelter-in-place. Preferred areas for protective sheltering would be interior hallways, rooms without windows or exterior doors, enclosed stairways and rooms on the side of the building away from where the hazard is approaching. Doors, windows, and other potential air leaks should be sealed up to prevent toxic fumes from entering.

B. Evacuation

Experience indicated that shelter space would need to be provided for only 30% of the population within the initial isolation and evacuation zones and the remaining 70% would seek shelter with family and friends outside the risk zone. All public schools listed are eligible evacuation shelters.

C. Nearby Shelters

N/A

SECTION 4: VULNERABILITY ZONES

A. General Information and Assumptions

The vulnerability zones set forth in the Plan are based on the EPA Technical Guidance for Hazards Analysis. The zones are based on a credible worst-case scenario and identify the potential area for impact should an air-borne release of a single EHS chemical occur.

The vulnerability zones are NOT intended to be used as a guide for population protection in fire-related incidents. Fire incidents were considered in the development of this plan and the plan provides basic information about the facility for first responders to employ. However, in an actual fire situation at this facility, the Incident commander is strongly recommended to reference the fire department own individual agency pre-emergency plans and standard operating procedures as well as the county's Emergency Operations Plan – Annex K: Fire and Rescue, as they may relate to this facility when making decisions at an incident involving fire.

Further, fire departments that would respond to an incident at this facility are strongly encouraged to meet with facility representatives to determine ways to minimize an event at the facility and to determine what additional information and factors should be taken into consideration in the event of a fire, should one occur (Note 3).

The field incident commander shall determine the actual response to an incident and the affected area may vary from the planning vulnerability zone identified in this Plan. Depending on wind speed and direction, the amount of material released and other pertinent factors, the ACTUAL vulnerability zone may be smaller, and in some instances larger, than the credible worst-case vulnerability zone identified herein. The vulnerability zones determined in the Plan are for general PLANNING PURPOSES.

B. Special Facilities Affected

Fall Creek School District (1 mi SW)



St. Paul's Little Lamb Childcare and Preschool (1.3 mi SW)

Tiny Tots Playhouse (.9 mi West)

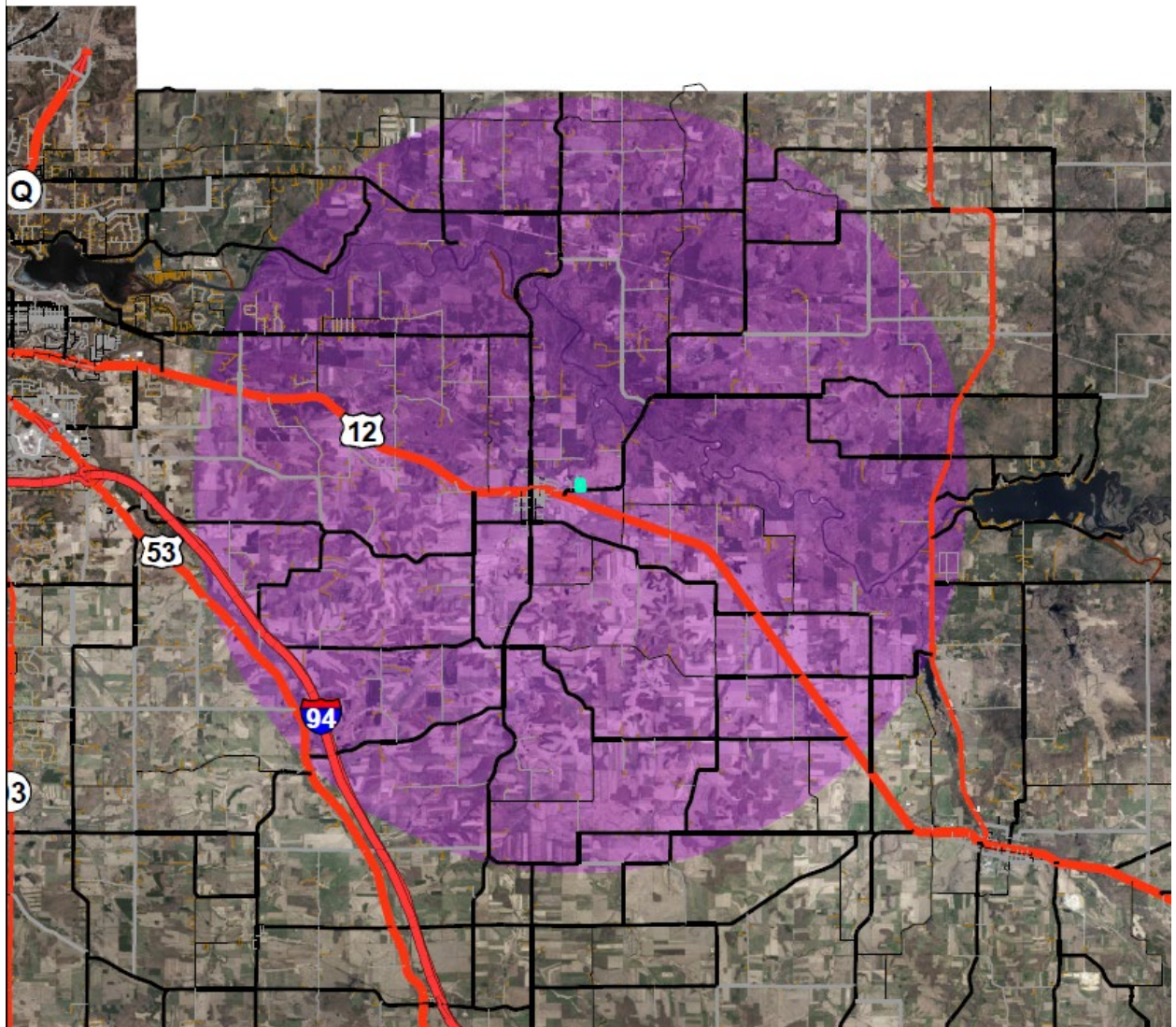
Wildlands Charter School (4.9 mi N)



C. Vulnerability Zone Map

See maps

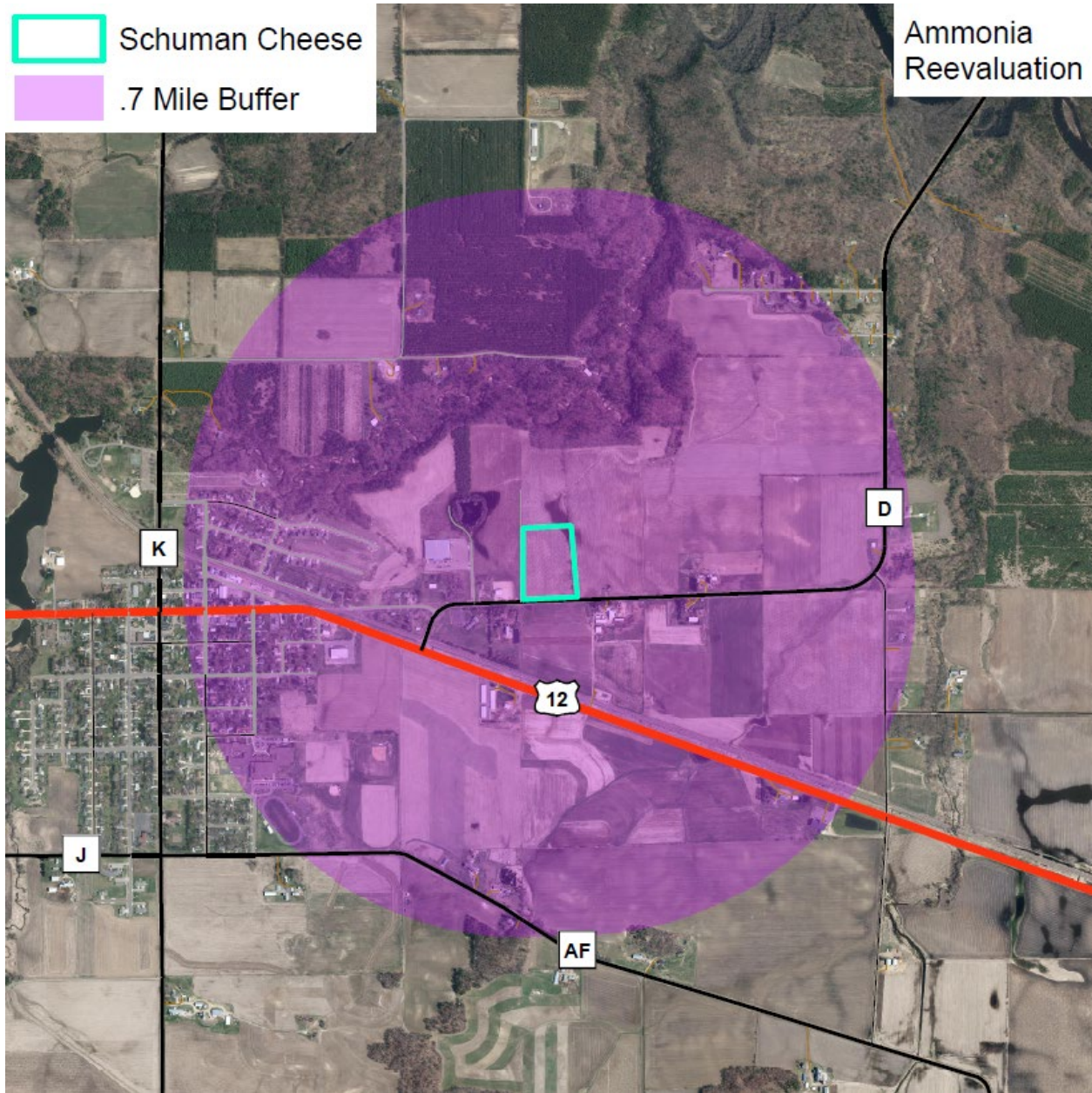
-  Schuman Cheese
-  6.2 Mile Buffer

Ammonia
Worst Case



 Schuman Cheese
 .7 Mile Buffer

Ammonia
Reevaluation



SECTION 5: SPECIAL FACILITY NOTATIONS

Note 1: There are two exhaust fans in the motor room that will turn on automatically to disperse any system release of Anhydrous Ammonia. A leak of Anhydrous Ammonia in the main containment area would be detected by equipment that is monitored by on-site monitors.

All evaporators are located inside except the one that is located inside of the air makeup unit.

Available safety devices on the system:

1. Ammonia monitors in the following areas:
 - a. Main compressor room
 - b. Finish Cooler (south west cooler)
 - c. Freezer (north west cooler)
 - d. Raw Cooler (north east cooler)
 - e. Process AMU
2. System automatically shuts down if ammonia sensors are tripped and the Maintenance Manager is contacted.
3. Fans and louvers are automatically turned on and evacuate the air in the compressor room through the roof.
4. Ammonia system control/system warning box on the outside of the compressor room. Items that can be controlled from there are:
 - a. Emergency stop for whole system. (Under glass. Glass needs to be broken to get to it with the small hammer that is hanging on the box)
 - b. Fault lights
 - i. Red for system fault
 - ii. Amber for ammonia leak
 - iii. Auditable alarm
 - c. Ability to turn motor room exhaust fans on.
 - d. Ability to silence the audible alarm.
 - e. Indicator lights for the exhaust fans

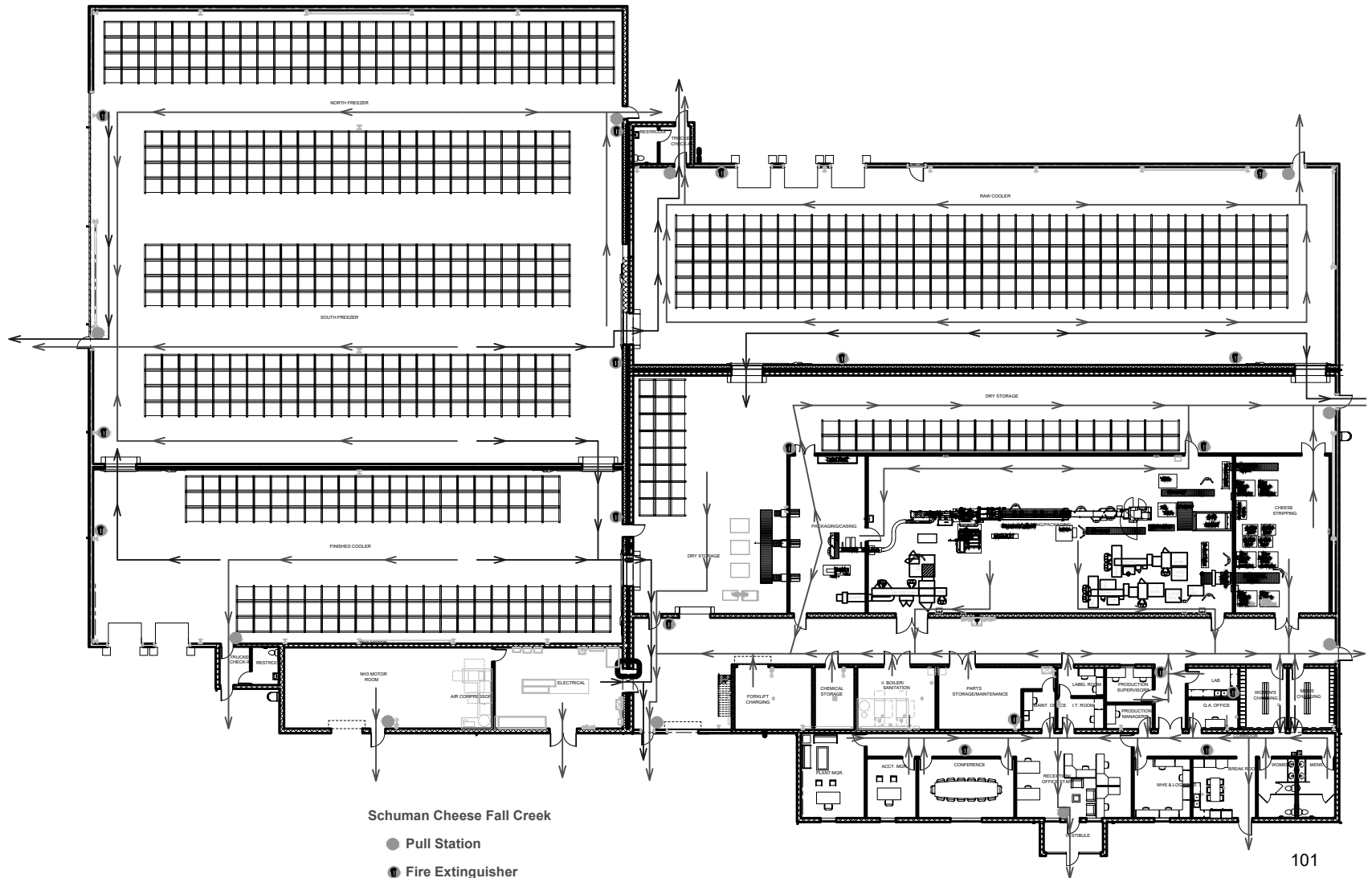


5. Emergency backup generator.
 - a. Auto-switches to generator power if grid goes down
 - b. Powers ammonia system, lighting, and communications for the whole plant

Note 2: The facility system is a closed loop system, meaning there is no gain or loss of ammonia. Ammonia would only ever need to be added if the system had been expanded or a major leak had been experienced at the facility.

Note 3: The local fire department has held a biannual training at the facility, with the last occurring February 19, 2018. The entire department participates in a plant tour and a review of facility safety measures. Additionally, the department conducts an annual facility fire inspection at this time. The fire department has been provided keys to the plant for easy access to the facility.

APPENDIX 1: FACILITY LAYOUT



SAFETY DATA SHEET

Ammonia

Section 1. Identification

GHS product identifier	: Ammonia
Chemical name	: ammonia, anhydrous
Other means of identification	: ammonia; anhydrous ammonia; Aqueous ammonia; Aqua ammonia
Product use	: Synthetic/Analytical chemistry.
Synonym	: ammonia; anhydrous ammonia; Aqueous ammonia; Aqua ammonia
SDS #	: 001003
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253
24-hour telephone	: 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE GASES - Category 2 GASES UNDER PRESSURE - Liquefied gas ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 AQUATIC HAZARD (ACUTE) - Category 1

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable gas.
Contains gas under pressure; may explode if heated.
May cause frostbite.
May form explosive mixtures in Air.
Harmful if inhaled.
Causes severe skin burns and eye damage.
Very toxic to aquatic life.

Precautionary statements

General

: Read and follow all Safety Data Sheets (SDS'S) before use. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Always keep container in upright position. Approach suspected leak area with caution.

Prevention

: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing gas. Wash hands thoroughly after handling.

Section 2. Hazards identification

- Response** : Collect spillage. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.
- Storage** : Store locked up. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : Liquid can cause burns similar to frostbite.

Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Chemical name** : ammonia, anhydrous
- Other means of identification** : ammonia; anhydrous ammonia; Aqueous ammonia; Aqua ammonia

CAS number/other identifiers

- CAS number** : 7664-41-7
- Product code** : 001003

Ingredient name	%	CAS number
ammonia, anhydrous	100	7664-41-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 10 minutes. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Section 4. First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Chemical burns must be treated promptly by a physician. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage. Liquid can cause burns similar to frostbite.
- Inhalation** : Harmful if inhaled.
- Skin contact** : Causes severe burns. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
- Frostbite** : Try to warm up the frozen tissues and seek medical attention.
- Ingestion** : Ingestion of liquid can cause burns similar to frostbite.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:., pain, watering, redness, frostbite
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:., pain or irritation, redness, blistering may occur, frostbite
- Ingestion** : Adverse symptoms may include the following:., frostbite, stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : Contains gas under pressure. Flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides

Section 5. Fire-fighting measures

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.
- Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Do not breathe gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Refer to ANSI/CGA G-2.1, Section 5.13 for electrical classification of anhydrous ammonia storage and handling areas. Where anhydrous ammonia is stored indoors, use electrical (ventilating, lighting and material handling) equipment with the appropriate electrical classification rating and use only non-sparking tools.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
ammonia, anhydrous	<p>ACGIH TLV (United States, 3/2015). STEL: 24 mg/m³ 15 minutes. STEL: 35 ppm 15 minutes. TWA: 17 mg/m³ 8 hours. TWA: 25 ppm 8 hours.</p> <p>NIOSH REL (United States, 10/2013). STEL: 27 mg/m³ 15 minutes. STEL: 35 ppm 15 minutes. TWA: 18 mg/m³ 10 hours. TWA: 25 ppm 10 hours.</p> <p>OSHA PEL (United States, 2/2013). TWA: 35 mg/m³ 8 hours. TWA: 50 ppm 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). STEL: 27 mg/m³ 15 minutes. STEL: 35 ppm 15 minutes.</p>

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use ventilation equipment with the appropriate electrical classification rating.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. If contact with the liquid is possible, insulated gloves suitable for low temperatures should be worn. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Gas. [Liquefied gas]
- Color** : Colorless.
- Molecular weight** : 17.03 g/mole
- Molecular formula** : H₃-N
- Boiling/condensation point** : -33°C (-27.4°F)
- Melting/freezing point** : -77.7°C (-107.9°F)
- Critical temperature** : 132.85°C (271.1°F)
- Odor** : Pungent.
- Odor threshold** : Not available.
- pH** : Not available.
- Flash point** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Extremely flammable in the presence of the following materials or conditions: oxidizing materials.
- Lower and upper explosive (flammable) limits** : Lower: 15%
Upper: 28%
- Vapor pressure** : 114.1 (psig)
- Vapor density** : 0.59 (Air = 1)
- Specific Volume (ft³/lb)** : 22.7273
- Gas Density (lb/ft³)** : 0.044
- Relative density** : Not applicable.
- Solubility** : Not available
- Solubility in water** : 540 g/l
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 651°C (1203.8°F)
- Decomposition temperature** : Not available.

Section 9. Physical and chemical properties

SADT	: Not available.
Viscosity	: Not applicable.
Physical/chemical properties comments	: SPECIFIC GRAVITY (AIR=1): @ 70°F (21.1°C) = 0.59 PH: Approx. 11.6 for 1 N Sol'n. in water

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Oxidizers
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
ammonia, anhydrous	LC50 Inhalation Gas.	Rat	7338 ppm	1 hours

IDLH : 300 ppm

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Section 11. Toxicological information

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage. Liquid can cause burns similar to frostbite.
Inhalation : Harmful if inhaled.
Skin contact : Causes severe burns. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
Ingestion : Ingestion of liquid can cause burns similar to frostbite.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following: pain, watering, redness, frostbite
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, frostbite
Ingestion : Adverse symptoms may include the following: frostbite, stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Long term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

- General** : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information : IDLH : 300 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
ammonia, anhydrous	Acute EC50 29.2 mg/l Marine water	Algae - Ulva fasciata - Zoea	96 hours
	Acute LC50 2080 µg/l Fresh water	Crustaceans - Gammarus pulex	48 hours
	Acute LC50 0.53 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 300 µg/l Fresh water	Fish - Hypophthalmichthys nobilis	96 hours
	Chronic NOEC 0.204 mg/l Marine water	Fish - Dicentrarchus labrax	62 days

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil












Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1005	UN1005	UN1005	UN1005	UN1005
UN proper shipping name	AMMONIA, ANHYDROUS	AMMONIA, ANHYDROUS; OR ANHYDROUS AMMONIA	AMMONIA, ANHYDROUS	AMMONIA, ANHYDROUS	AMMONIA, ANHYDROUS
Transport hazard class(es)	2.2 	2.3 (8)   	2.3 (8)  	2.3 (8)   	2.3 (8)  
Packing group	-	-	-	-	-
Environment	No.	No.	No.	Yes.	No.

Section 14. Transport information

<p>Additional information</p>	<p>Inhalation hazard</p> <p>This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.</p> <p>Reportable quantity 100 lbs / 45.4 kg Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.</p> <p>Limited quantity Yes.</p> <p>Packaging instruction Passenger aircraft Quantity limitation: Forbidden.</p> <p>Cargo aircraft Quantity limitation: Forbidden.</p> <p>Special provisions 13,T50</p>	<p>Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark).</p> <p>The marine pollutant mark is not required when transported by road or rail.</p> <p>Explosive Limit and Limited Quantity Index 0</p> <p>ERAP Index 3000</p> <p>Passenger Carrying Ship Index Forbidden</p> <p>Passenger Carrying Road or Rail Index Forbidden</p> <p>Special provisions</p>	<p>Toxic Inhalation Hazard Zone D</p>	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p>	<p>The environmentally hazardous substance mark may appear if required by other transportation regulations.</p> <p>Passenger and Cargo Aircraft Quantity limitation: 0 Forbidden</p> <p>Cargo Aircraft Only Quantity limitation: Forbidden</p>
--------------------------------------	---	---	---------------------------------------	--	--

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Special precautions for user : **Transport within user’s premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): This material is listed or exempted.
Clean Water Act (CWA) 311: ammonia, anhydrous

Clean Air Act (CAA) 112 regulated toxic substances: ammonia, anhydrous

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
ammonia, anhydrous	100	Yes.	500	-	100	-

SARA 304 RQ : 100 lbs / 45.4 kg

SARA 311/312

Classification : Fire hazard
Sudden release of pressure
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
ammonia, anhydrous	100	Yes.	Yes.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	ammonia, anhydrous	7664-41-7	100
Supplier notification	ammonia, anhydrous	7664-41-7	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : This material is listed.
New York : This material is listed.
New Jersey : This material is listed.
Pennsylvania : This material is listed.

International regulations

International lists

National inventory

Australia : This material is listed or exempted.
Canada : This material is listed or exempted.
China : This material is listed or exempted.
Europe : This material is listed or exempted.
Japan : This material is listed or exempted.
Malaysia : This material is listed or exempted.
New Zealand : This material is listed or exempted.
Philippines : This material is listed or exempted.
Republic of Korea : This material is listed or exempted.
Taiwan : This material is listed or exempted.

Canada

WHMIS (Canada) : Class A: Compressed gas.
Class B-1: Flammable gas.
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class E: Corrosive material

Section 15. Regulatory information

CEPA Toxic substances: This material is listed.

Canadian ARET: This material is not listed.

Canadian NPRI: This material is listed.

Alberta Designated Substances: This material is not listed.

Ontario Designated Substances: This material is not listed.

Quebec Designated Substances: This material is not listed.

Section 16. Other information

Canada Label requirements : Class A: Compressed gas.
Class B-1: Flammable gas.
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class E: Corrosive material

Hazardous Material Information System (U.S.A.)

Health	3
Flammability	1
Physical hazards	2

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Flam. Gas 2, H221	Expert judgment
Press. Gas Liq. Gas, H280	Expert judgment
Acute Tox. 4, H332	Expert judgment
Skin Corr. 1, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment
Aquatic Acute 1, H400	Expert judgment

History

Date of printing : 1/5/2017
Date of issue/Date of revision : 1/5/2017
Date of previous issue : 12/20/2016
Version : 0.09

Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

APPENDIX 3: CAMEO CALCULATIONS

Screening & Scenarios		Last Modified 2/16/2018
Facility / Route Name <input style="width: 90%;" type="text" value="Schuman Cheese"/>		
Chemical <input style="width: 80%;" type="text" value="AMMONIA"/>		CAS <input style="width: 15%;" type="text" value="7664-41-7"/>
Screening Name <input style="width: 80%;" type="text" value="SCHUMAN CHEESE - AMMONIA: WORST CASE"/> Datasheet		
<input checked="" type="checkbox"/> In Inventory <input type="checkbox"/> In Transit <input type="checkbox"/> Shipper		
Screening Description	Notes	
Amount Released <input style="width: 100px;" type="text" value="2464"/> pounds		
Concentration <input style="width: 100px;" type="text" value="100"/> weight %		
Release Duration <input style="width: 100px;" type="text" value="10"/> minutes		
Physical State <input checked="" type="radio"/> Gas <input type="radio"/> Liquid <input type="radio"/> Solid		
If stored in container with a dike, enter surface area within dike: <input style="width: 100px;" type="text"/> sq ft		
Atmospheric Concentration Level of Concern <input style="width: 100px;" type="text" value=".035"/> gm/m ³		
LOC Description <input style="width: 100px;" type="text" value="Greenbook LOC"/>		
Weather Information		
Wind Speed <input style="width: 100px;" type="text" value="3.35"/> mph		
Ground Roughness <input style="width: 100px;" type="text" value="open country"/>		
Wind From <input style="width: 100px;" type="text"/> in degrees measured clockwise from 0 N. (for example: 015, 315, 270)		
Stability Class <input style="width: 50px;" type="text" value="F"/>		
Risk Assessment		
Risk <input style="width: 50px;" type="text"/> Probability of described accident occurring		
Consequences <input style="width: 50px;" type="text"/> Severity of consequence to people		
Overall Risk <input style="width: 50px;" type="text"/> Combination of probability and severity of consequence		
Threat Zone Radius <input style="width: 100px;" type="text" value="6.2"/> miles		
Show on Map		

Screening & Scenarios

Last Modified 2/16/2018

Facility / Route Name

Chemical

CAS

Scenario Name

In Inventory

In Transit

Shipper

Scenario Description

Notes

Amount Released pounds

Physical State Gas

Concentration weight %

Liquid

Release Duration minutes

Solid

If stored in container with a dike, enter surface area within dike: sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315, 270)

Stability Class

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Menard, Inc

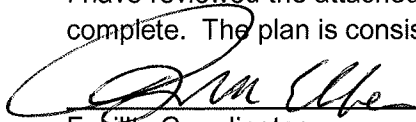
Facility Address: 5101 Menard Dr, Eau Claire, Wisconsin 54703

STATEMENT OF PLANNING PROCESS

This plan has been prepared in accordance with state and local requirements and is ready to be made a part of the County Emergency Operations Plan (EOP) / Emergency Response Plan (ERP) upon Wisconsin Emergency Management (WEM) / State Emergency Response Commission (SERC) acceptance. This plan meets the facility off-site planning guidance as established by WEM / SERC. Acceptance of this plan is for planning purposes and does not verify facility compliance with the requirements of EPCRA.

FACILITY SIGNATURES:

I have reviewed the attached plan and to the best of my knowledge, all facility information is true, accurate, and complete. The plan is consistent with facility emergency plans and procedures.



Facility Coordinator

05/27/2021
Date

COUNTY SIGNATURES

I have reviewed the attached plan and to the best of my knowledge, all information is true, accurate, and complete.

County Local Emergency Planning Committee Chair

Date

County Emergency Management Director

Date

WEM / SERC ACCEPTANCE:

This plan has been reviewed and meets the off-site planning guidance as established by WEM / SERC.

WEM Regional Director

Date

NOTE: Facility Off-Site Plan Review Guide attached: Yes No

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Menard, Inc

Facility Address: 5101 Menard Dr, Eau Claire, Wisconsin 54703

FACILITY OFF-SITE PLAN REVIEW GUIDE

<u>EPCRA Facility Off-Site Plan Elements</u>	<u>Page Number Reference</u>
1) The facility identification with address.	4
2) Facility Coordinator / Alternate Coordinator	4
3) Extremely Hazardous Substances (EHS) chemicals Identified with CAS numbers and maximum amount	4
4) Primary emergency responders identified	8
5) Support and resources available from facility	6
6) General Information / Assumptions (Disclaimer)	9
7) Hazard analysis summary	7
8) Special facilities affected	9
9) Population protection	9
10) Special considerations	9
11) Site Plan / Facility Layout	11 (Appendix 1)

**EPCRA HAZARDOUS MATERIALS FACILITY OFF-SITE PLAN
TRANSMITTAL FORM AND REVIEW GUIDE**

COUNTY: Eau Claire

NEW UPDATE FINAL UPDATE

Facility ID No. : 143371

Facility Name: Menard, Inc

Facility Address: 5101 Menard Dr, Eau Claire, Wisconsin 54703

- 12) Distribution list: _____
 Facility
 Fire Department of jurisdiction
 Wisconsin Emergency Management- Region Office
 Designated Hazmat team
 County Emergency Management Office
 Adjacent County Emergency Management Office when impacted by vulnerability zone
- 13) Required Attachments
- | | | |
|---|---------|-------|
| A. Vulnerability Zone map highlighting special facilities | 10 | _____ |
| B. Safety Data Sheet (SDS) for each EHS | 12 - 15 | _____ |
| C. Vulnerability Zone Calculations | 16 - 17 | _____ |
| D. Transportation route(s) map | | _____ |



Menard, Inc. Facility Off-Site Emergency Response Plan



Facility #143371
Menard, Inc
5101 Menard Dr
Eau Claire, Wisconsin 54703

Eau Claire County Emergency Management
721 Oxford Avenue, Suite 3344
Eau Claire, Wisconsin 54703

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RECORD OF CHANGES

Change	Date Changed	Change Made By
Initial Draft	5/2018	TE
Updated	5/2021	SS

SECTION 1: FACILITY INFORMATION

A. Address

Menard, Inc
 5101 Menard Drive
 Eau Claire, WI 54703

B. Facility ID

143371

C. Map



D. Emergency Contacts

Primary:
 Rob Ebben
 Phone: 715-876-2300
 24 Hour: 715-214-6112
 rebben@menard-inc.com

Secondary:
 Chris Witkowski
 Phone: 715-876-2400
 24 Hour: 715-828-0145
 cwitkowski@menard-inc.com

E. Extremely Hazardous Substances

<p>Sulfuric Acid Chemical ID: 140415 CAS: 7664939 ERG: Guide 137</p>	<p>Inventory: Max Daily Amount (lbs): 2135 Ave. Daily Amount (lbs): 2135 Number of days on site: 365</p>	<p>Storage: Container: Batteries Location: Batteries for forklifts and other equipment that are throughout the Menards complex</p>
---	--	---

F. Hazardous Substances

<p>Arsenic Acid Chemical ID: 401269 CAS: 7778394 ERG: Guide 154</p>	<p>Inventory: Max Daily Amount (lbs): 41000 Ave. Daily Amount (lbs): 28000 Number of days on site: 365</p>	<p>Storage: Container: Above Ground Tank Location: Treating Plant</p>
--	--	--

Battery Electrolyte Chemical ID: 401272 CAS: 7664939 ERG: Guide	Inventory: Max Daily Amount (lbs): 2135 Ave. Daily Amount (lbs): 2135 Number of days on site: 365	Storage: Container: Battery Location: Batteries for forklifts and other equipment located with buildings contiguous on complex
Bituminous Coal Fly Ash Chemical ID: 401271 CAS: 68131748 ERG: Guide	Inventory: Max Daily Amount (lbs): 200000 Ave. Daily Amount (lbs): 125000 Number of days on site: 365	Storage: Container: Silo Location: Concrete Plant
Carbon Black Chemical ID: 401258 CAS: 1333864 ERG: Guide	Inventory: Max Daily Amount (lbs): 30000 Ave. Daily Amount (lbs): 20000 Number of days on site: 365	Storage: Container: Bag Location: Concrete Plant
Copper Carbonate Chemical ID: 401264 CAS: 12069691 ERG: Guide	Inventory: Max Daily Amount (lbs): 62000 Ave. Daily Amount (lbs): 32000 Number of days on site: 365	Storage: Container: Tank Inside Building Location: Treating Plant
Diesel Fuel Chemical ID: 401256 CAS: 68476346 ERG: Guide 128	Inventory: Max Daily Amount (lbs): 83200 Ave. Daily Amount (lbs): 56000 Number of days on site: 365	Storage: Container: Above Ground Tanks Location: Various Plants throughout complex
Granulated Blast Furnace Slag Chemical ID: 401266 CAS: 65996692 ERG: Guide	Inventory: Max Daily Amount (lbs): 200000 Ave. Daily Amount (lbs): 100000 Number of days on site: 365	Storage: Container: Silo Location: Concrete Plant
Iron Oxide Chemical ID: 401265 CAS: 1309371 ERG: Guide 135	Inventory: Max Daily Amount (lbs): 60000 Ave. Daily Amount (lbs): 40000 Number of days on site: 365	Storage: Container: Above Ground Tank Location: Extrusion Plant
Polyethylene Chemical ID: 401263 CAS: 9002884 ERG: Guide	Inventory: Max Daily Amount (lbs): 31750000 Ave. Daily Amount (lbs): 1800000 Number of days on site: 365	Storage: Container: Silo Location: Extrusion Plant
Polymethylene Polyphenyl Isocyanate Chemical ID: 401257 CAS: 9016879 ERG: Guide 155	Inventory: Max Daily Amount (lbs): 60000 Ave. Daily Amount (lbs): 35000 Number of days on site: 365	Storage: Container: Tank Inside Building Location: Prehung Plant

Portland Cement Chemical ID: 401259 CAS: 65997151 ERG: Guide	Inventory: Max Daily Amount (lbs): 400000 Ave. Daily Amount (lbs): 250000 Number of days on site: 365	Storage: Container: Silo Location: Concrete Plant
Propane Chemical ID: 401270 CAS: 74986 ERG: Guide 115	Inventory: Max Daily Amount (lbs): 38220 Ave. Daily Amount (lbs): 21840 Number of days on site: 365	Storage: Container: Above Ground Tanks Location: Buildings throughout complex
Red Iron Oxide Chemical ID: 401268 CAS: 1309371 ERG: Guide 135	Inventory: Max Daily Amount (lbs): 17000 Ave. Daily Amount (lbs): 13000 Number of days on site: 365	Storage: Container: Above Ground Tank Location: Treating Plant
Sand Chemical ID: 401260 CAS: 14808607 ERG: Guide	Inventory: Max Daily Amount (lbs): 800000 Ave. Daily Amount (lbs): 500000 Number of days on site: 365	Storage: Container: Silo Location: Concrete Plant
Slack Wax, Petroleum Chemical ID: 401267 CAS: 64742616 ERG: Guide 128	Inventory: Max Daily Amount (lbs): 64000 Ave. Daily Amount (lbs): 40000 Number of days on site: 365	Storage: Container: Above Ground Tank Location: Treating Plant
Talc Chemical ID: 401262 CAS: 14807966 ERG: Guide	Inventory: Max Daily Amount (lbs): 50000 Ave. Daily Amount (lbs): 30000 Number of days on site: 365	Storage: Container: Bag Location: Extrusion Plant
Zinc Stearate Chemical ID: 401261 CAS: 557051 ERG: Guide	Inventory: Max Daily Amount (lbs): 12000 Ave. Daily Amount (lbs): 8000 Number of days on site: 365	Storage: Container: Bag Location: Extrusion Plant

G. Resources/Support Available

Menards has absorbent and neutralizer material on supply and staff able to use it in the event of a spill. Due to the only EHS being sulfuric acid as a mixture in forklift batteries, it is unlikely that every battery will fail simultaneously or close enough to other batteries to cause a major issue.

H. Hazard Analysis

Menard, Inc. is one of the largest home improvement chains in the United States. This plant employs one thousand (1,000) individuals. These employees work shifts with an average number of five hundred (500) per shift. The facility operates up to 24 hours/day. There are multiple buildings on site as part of the complex. The extremely hazardous substance is sulfuric acid which is used in electrolyte of batteries. The total quantity of sulfuric acid electrolyte is 2,135 lbs. These batteries are used in forklifts and other equipment that is in the complex. In the screening scenarios as stated for sulfuric acid below, the evacuation radius for sulfuric acid is less than 0.1 mile.

The hazard analysis determined this sulfuric acid to be the major chemical hazard present at the facility. It is used in the batteries associated with equipment. A leak of sulfuric acid would be detected by equipment that is monitored by visual inspection. If a leak were to be detected employees will alert a supervisor so they can take appropriate action. 2,135 pounds of sulfuric acid are on site. The modeled evacuation area is based on worst case scenario for Sulfuric Acid ten minutes after a catastrophic failure of containment. The largest containment of Sulfuric Acid is a failure of equipment batteries. This is the amount of material used in the worst-case scenario.

The greatest potential for release would be the failure of batteries which contain the greatest volume of material.

The worst case scenario criteria are:

Neutral Air Stability (Class F)

Night Time

Open Country

3.35 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

Rapid release of maximum quantity of chemical in a single vessel (10 min.)

The evacuation radius, as calculated by CAMEO software for a 2,135-pound Sulfuric Acid release, was determined to be less than .1 mile. Due to the size of the Menards complex, the release would be contained on-site and not affect any housing units.

The reevaluation evacuation radius, as calculated by CAMEO software for a 2,135-pound Sulfuric Acid release, was determined to be less than .1mile. Due to the size of the Menards complex, the release would be contained on-site and not affect any housing units.

The reevaluation scenario criteria are:

Neutral Air Stability (Class D)

Open Country

11.9 mph wind

1/10 IDLH (Immediately Dangerous to Life and Health) concentration

10 minute release of maximum quantity of chemical in a single vessel

I. Access to Facility

In the event of an incident on the Menards complex, staff in guard shacks and at intersections will direct emergency personnel to the scene. The facility is staffed 24/7.

SECTION 2: OUTSIDE RESOURCES

A. Primary Response Agencies

Fire:	EMS:	Law:	Emergency Management:
Township Fire Department 4601 E. Hamilton Ave Eau Claire, WI 54703 Phone: 715-834-6868	Eau Claire Fire Department 216 S. Dewey St Eau Claire, WI 54701 Phone: 715-834-6868	Eau Claire County Sheriff's Office 721 Oxford Avenue Suite 1400 Eau Claire, WI 54703 Phone: 715-839-4701	Eau Claire Office of Emergency Management 721 Oxford Avenue Suite 3344 Eau Claire, WI 54703 Phone: 715-839-4736

B. Hazardous Materials Response Teams

Eau Claire County has a Level B hazardous materials response team. For Level B response, the local Fire Chief notifies the Level B team of a response needed through the Eau Claire County Emergency Communications Center. For Type 1 responses by the Type 1 Regional Hazardous Materials Response Team, requests shall be made through the WEM Duty officer by the county Emergency Management Director.

C. Other Outside Assistance

See the County-Wide Hazardous Materials Strategic Plan for a listing of resources.

SECTION 3: POPULATION/ENVIRONMENTAL PROTECTION

A. Shelter-In-Place

The lead time for a hazardous materials incident may be very short. As a result, there may not be time enough for safe evacuation, especially when extremely toxic chemical fumes are involved. An evacuation under these considerations may expose the population to dangerous toxic chemicals and the decision may be made to shelter-in-place. Preferred areas for protective sheltering would be interior hallways, rooms without windows or exterior doors, enclosed stairways and rooms on the side of the building away from where the hazard is approaching. Doors, windows, and other potential air leaks should be sealed up to prevent toxic fumes from entering.

B. Evacuation

Experience indicated that shelter space would need to be provided for only 30% of the population within the initial isolation and evacuation zones and the remaining 70% would seek shelter with family and friends outside the risk zone. All public schools listed are eligible evacuation shelters.

C. Nearby Shelters

N/A

SECTION 4: VULNERABILITY ZONES

A. General Information and Assumptions

The vulnerability zones set forth in the Plan are based on the EPA Technical Guidance for Hazards Analysis. The zones are based on a credible worst-case scenario and identify the potential area for impact should an air-borne release of a single EHS chemical occur.

The vulnerability zones are NOT intended to be used as a guide for population protection in fire-related incidents. Fire incidents were considered in the development of this plan and the plan provides basic information about the facility for first responders to employ. However, in an actual fire situation at this facility, the Incident commander is strongly recommended to reference the fire department own individual agency pre-emergency plans and standard operating procedures as well as the county's Emergency Operations Plan – Annex K: Fire and Rescue, as they may relate to this facility when making decisions at an incident involving fire.

Further, fire departments that would respond to an incident at this facility are strongly encouraged to meet with facility representatives to determine ways to minimize an event at the facility and to determine what additional information and factors should be taken into consideration in the event of a fire, should one occur.



The field incident commander shall determine the actual response to an incident and the affected area may vary from the planning vulnerability zone identified in this Plan. Depending on wind speed and direction, the amount of material released and other pertinent factors, the ACTUAL vulnerability zone may be smaller, and in some instances larger, than the credible worst-case vulnerability zone identified herein. The vulnerability zones determined in the Plan are for general PLANNING PURPOSES.

B. Special Facilities Affected

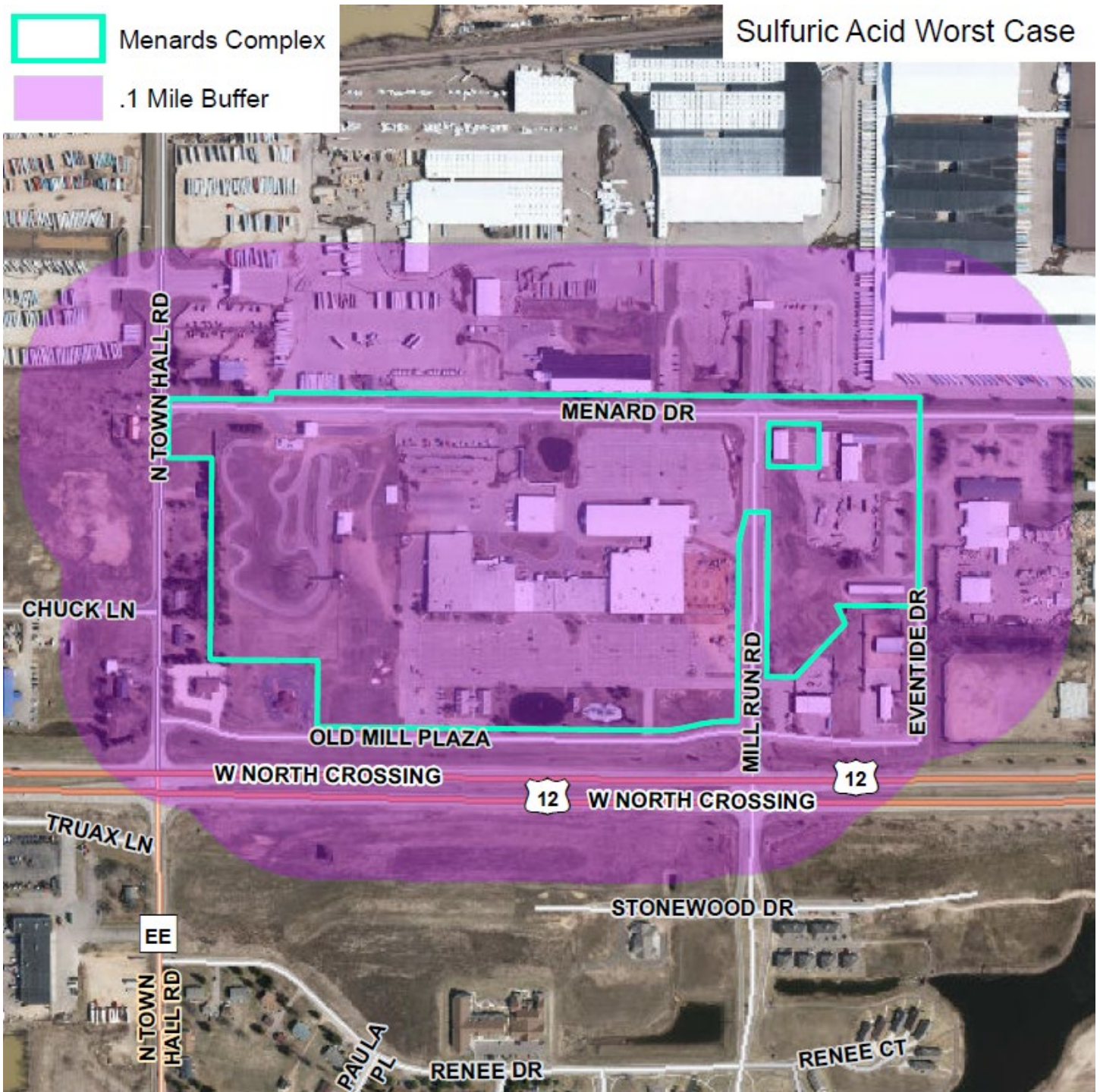
Not applicable

C. Vulnerability Zone Map

See attached map

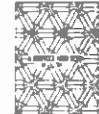
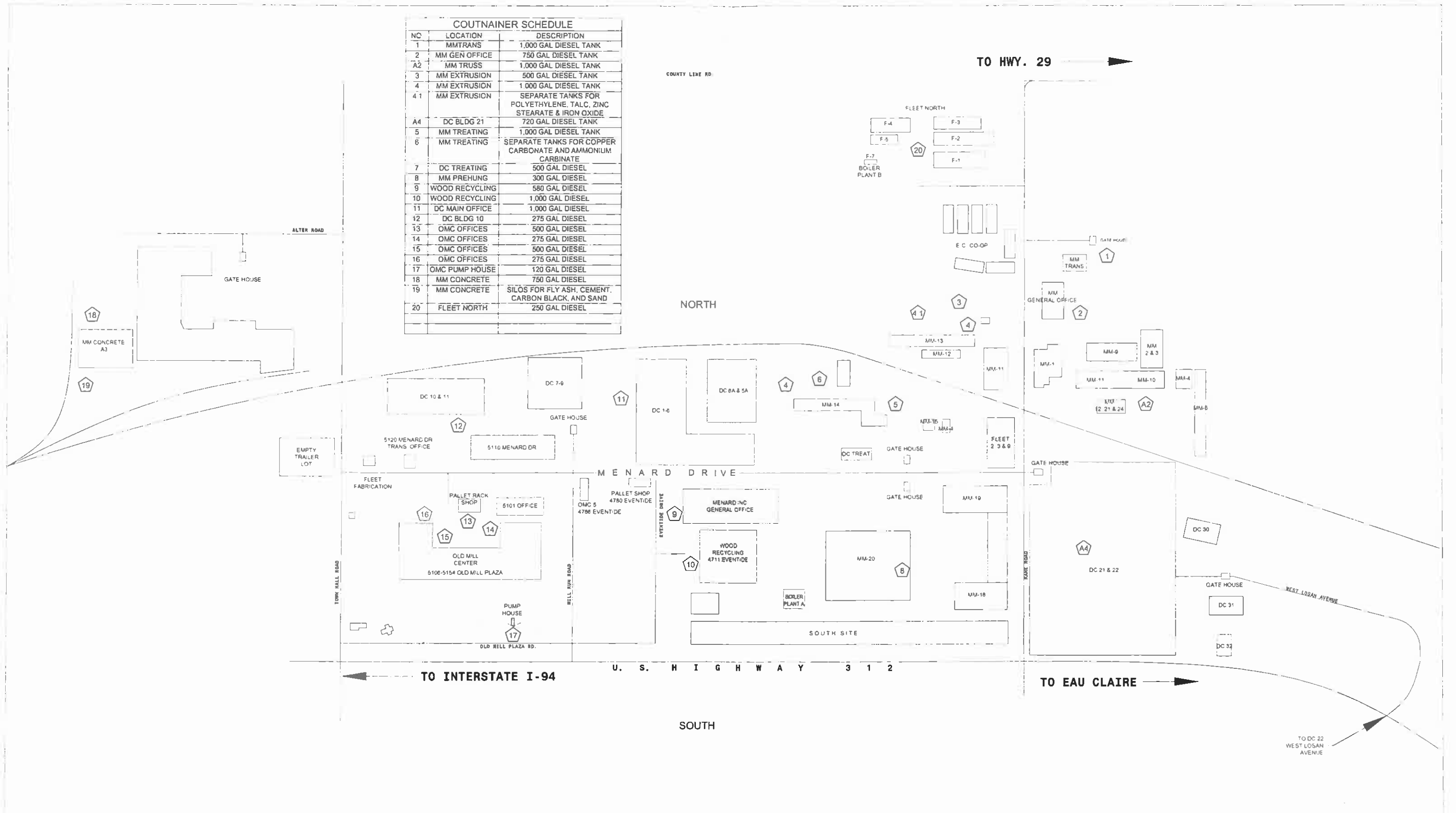
-  Menards Complex
-  .1 Mile Buffer

Sulfuric Acid Worst Case



APPENDIX 1: FACILITY LAYOUT

COUTNAINER SCHEDULE		
NO	LOCATION	DESCRIPTION
1	MMTRANS	1,000 GAL DIESEL TANK
2	MM GEN OFFICE	750 GAL DIESEL TANK
A2	MM TRUSS	1,000 GAL DIESEL TANK
3	MM EXTRUSION	500 GAL DIESEL TANK
4	MM EXTRUSION	1,000 GAL DIESEL TANK
4.1	MM EXTRUSION	SEPARATE TANKS FOR POLYETHYLENE, TALC, ZINC STEARATE & IRON OXIDE
A4	DC BLDG 21	720 GAL DIESEL TANK
5	MM TREATING	1,000 GAL DIESEL TANK
6	MM TREATING	SEPARATE TANKS FOR COPPER CARBONATE AND AMMONIUM CARBINATE
7	DC TREATING	500 GAL DIESEL
8	MM PREHUNG	300 GAL DIESEL
9	WOOD RECYCLING	580 GAL DIESEL
10	WOOD RECYCLING	1,000 GAL DIESEL
11	DC MAIN OFFICE	1,000 GAL DIESEL
12	DC BLDG 10	275 GAL DIESEL
13	OMC OFFICES	500 GAL DIESEL
14	OMC OFFICES	275 GAL DIESEL
15	OMC OFFICES	500 GAL DIESEL
16	OMC OFFICES	275 GAL DIESEL
17	OMC PUMP HOUSE	120 GAL DIESEL
18	MM CONCRETE	750 GAL DIESEL
19	MM CONCRETE	SILOS FOR FLY ASH, CEMENT, CARBON BLACK, AND SAND
20	FLEET NORTH	250 GAL DIESEL



MENARD, INC.
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F.C. FACILITIES
EAU CLAIRE, WISCONSIN

PROJECT: MENARD, INC. CORPORATE HEADQUARTERS
EAU CLAIRE, WI

SHEET NO: CONTAINER SCHEDULE

REVISIONS				SCALE		DRAWING NAME	
NO	DATE	DESCRIPTION	BY	NTS	DRAWN BY	SHEET NO	DATE
1							
2							
3							

Sulfuric Acid, Concentrated 18 M

Section 1 Product Description

Product Name: Sulfuric Acid, Concentrated 18 M
Recommended Use: Science education applications
Synonyms: Oil of Vitriol; , Hydrogen Sulfate
Distributor: Carolina Biological Supply Company
 2700 York Road, Burlington, NC 27215
 1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Causes severe skin burns and eye damage. Causes serious eye damage. Toxic if inhaled. May cause cancer. Harmful to aquatic life.

GHS Classification:

Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Carcinogenicity Category 1A, Acute Toxicity - Inhalation Dust / Mist Category 3, Hazardous to the aquatic environment - Acute Category 3

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Acute Toxicity Dermal Contains 100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Sulfuric Acid, Concentrated 18M	7664-93-9	100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

Section 5 Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Non-combustible but contact with water or moisture may generate sufficient heat to ignite combustible materials Contact with water produces sulfuric acid.
Hazardous Combustion Products: Sulfur Oxides

Section 6 Spill or Leak Procedures

Safety Data Sheet

Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Do not allow the spilled product to enter public drainage system or open waterways.

Section 7 Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Never add water to this product.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sulfuric Acid, Concentrated 18M	0.2 mg/m ³ TWA (thoracic fraction)	N/A	1 mg/m ³ TWA	N/A

Control Parameters

Engineering Measures:

Local exhaust ventilation, process enclosures, or other engineering controls are necessary when handling or using this product to avoid overexposure.

Personal Protective Equipment (PPE): Respiratory Protection:

Lab coat, apron, eye wash, safety shower.
Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. NIOSH approved air purifying respirator with acid gas cartridge and dust/mist filter

Respirator Type(s): Eye Protection:

Wear chemical splash goggles when handling this product. Additionally, wear a face shield when the possibility of splashing of liquid exists. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

Nitrile - Extra Thick (8 mm)

Section 9 Physical Data

Formula: H₂SO₄
Molecular Weight: 98.08
Appearance: Colorless, Oily Liquid
Odor: Strong Pungent
Odor Threshold: No data available
pH: -1.26
Melting Point: 10 C
Boiling Point: 280 C
Flash Point: No data available
Flammable Limits in Air: No data available

Vapor Pressure: 0.7 hPa at 25°C
Evaporation Rate (BuAc=1): No data available
Vapor Density (Air=1): No data available
Specific Gravity: 1.834-1.836 at 20°C
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: 0.24
Percent Volatile by Volume: No data available

Section 10 Reactivity Data

Reactivity: Moderately reactive - See below
Chemical Stability: Stable under normal conditions.

Safety Data Sheet

Conditions to Avoid: Contact with water
Incompatible Materials: Water, Organic Compounds, Strong reducing agents, Acetaldehydes, Amines
Hazardous Decomposition Products: Sulfur Oxides
Hazardous Polymerization: Will not occur

Section 11 Toxicity Data

Routes of Entry: Inhalation.
Symptoms (Acute): Respiratory disorders
Delayed Effects: Dental Erosion

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric Acid, Concentrated 18M	7664-93-9	Oral LD50 Rat 2140 mg/kg	Not determined	INHALATION LC50 GUINEA PIG 18 MG/M3 INHALATION LC50 Rat 510 MG/M3 INHALATION LC50 Mouse 320 MG/M3

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Sulfuric Acid, Concentrated 18M	7664-93-9	Not listed	Not listed	Listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: No information available
Chronic: Respiratory system

Section 12 Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility: This material is expected to have high mobility in soil. It absorbs weakly to most soil types.
Persistence: Biodegradation, adsorption to sediment, and bioconcentration to aquatic organisms should not be significant.
Bioaccumulation: Bioconcentration is not expected to occur.
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Sulfuric Acid, Concentrated 18M	7664-93-9	96 HR LC50 BRACHYDANIO RERIO > 500 MG/L [STATIC] 24 HR EC50 DAPHNIA MAGNA 29 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): If discarded, this product is considered a RCRA corrosive waste, D002.

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Sulfuric Acid, Concentrated 18 M
Air - IATA Proper Shipping Name:

Sulfuric Acid, Concentrated 18 M

Safety Data Sheet

UN1830
Sulfuric Acid
Class 8
P.G. II

UN1830
Sulfuric Acid
Class 8
P.G. II

Section 15

Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Sulfuric Acid, Concentrated 18M	7664-93-9	Sulfuric acid	1000 lb RQ	1000 lb final RQ; 454 kg final RQ	1000 lb TPQ	No

California Prop 65:

WARNING: This product contains a chemical known to the state of California to cause cancer.

Section 16

Additional Information

Revised: 09/09/2015

Replaces: 09/03/2014

Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

APPENDIX 3: CAMEO CALCULATIONS

Screening & Scenarios		Last Modified 5/18/2018
Facility / Route Name <input style="width: 90%;" type="text" value="Menard, Inc. - Eau Claire"/>		
Chemical <input style="width: 80%;" type="text" value="Sulfuric Acid"/>		CAS <input style="width: 15%;" type="text" value="7664-93-9"/>
Screening Name <input style="width: 80%;" type="text" value="Menard Inc. - Sulfuric Acid - Worst Case"/> Datasheet		
<input checked="" type="checkbox"/> In Inventory <input type="checkbox"/> In Transit <input type="checkbox"/> Shipper		
Screening Description	Notes	
Amount Released <input style="width: 50px;" type="text" value="2135"/> pounds Concentration <input style="width: 50px;" type="text" value="100"/> weight % Release Duration <input style="width: 50px;" type="text"/> minutes If stored in container with a dike, enter surface area within dike: <input style="width: 50px;" type="text"/> sq ft Atmospheric Concentration Level of Concern <input style="width: 50px;" type="text" value=".008"/> gm/m ³ LOC Description <input style="width: 100px;" type="text" value="Greenbook LOC"/>	Physical State <input type="radio"/> Gas <input checked="" type="radio"/> Liquid <input style="width: 50px;" type="text" value="Ambient"/> <input type="radio"/> Solid	
Weather Information		
Wind Speed <input style="width: 50px;" type="text" value="3.35"/> mph Wind From <input style="width: 50px;" type="text"/> in degrees measured clockwise from 0 N. (for example: 015, 315, 270)		Ground Roughness <input style="width: 100px;" type="text" value="open country"/> Stability Class <input style="width: 20px;" type="text" value="F"/>
Risk Assessment		
Risk <input style="width: 50px;" type="text"/> Probability of described accident occurring Consequences <input style="width: 50px;" type="text"/> Severity of consequence to people Overall Risk <input style="width: 50px;" type="text"/> Combination of probability and severity of consequence		
Threat Zone Radius <input style="width: 50px;" type="text" value="<.1"/> miles Show on Map		

Screening & Scenarios

Last Modified 5/18/2018

Facility / Route Name

Chemical CAS

Scenario Name

In Inventory In Transit Shipper

Scenario Description

Notes

Amount Released pounds

Concentration weight %

Release Duration minutes

If stored in container with a dike, enter surface area within dike: sq ft

Atmospheric Concentration Level of Concern gm/m³

LOC Description

Physical State Gas
 Liquid
 Solid

Weather Information

Wind Speed mph

Ground Roughness

Wind From in degrees measured clockwise from 0 N.
(for example: 015, 315, 270)

Stability Class

Risk Assessment

Risk Probability of described accident occurring

Consequences Severity of consequence to people

Overall Risk Combination of probability and severity of consequence

Threat Zone Radius miles