

**EPCRA Off-Site Facility Plan  
For  
Gundersen Health System Medical Center**

**I. FACILITY NAME:**

Name: Gundersen Health System  
Location Address: 1900 South Avenue, La Crosse, WI  
Phone Number: 608-775-7300  
Facility ID # Assigned by WEM: 004818-1

**II. FACILITY EMERGENCY COORDINATOR:**

Name: Gary Brunslík  
Title: Manager of Safety & Comprehensive Waste  
Phone: 608-775-6877  
24 Hr. Phone: 608-782-7300

**ALTERNATE COORDINATOR:**

Name: Eric Bashaw  
Title: Comprehensive Waste Program Coordinator  
Phone: 608-775-1679  
24 Hr. Phone: 608-782-7300

**III. CHEMICALS ON SITE: EXTREMELY HAZARDOUS SUBSTANCES**

<u>CAS #</u>	<u>Chemical Name/ Trade Name</u>	<u>Max. Quantity</u>	<u>Vul. Zone</u>	<u>Rural/ Urban</u>
7664-93-9	Sulfuric Acid	6191 lbs.	.1 mile	URBAN

**OTHER HAZARDOUS CHEMICALS:**

<u>Name</u>	<u>Max. Quantity</u>
68476-33-5 Fuel Oil	438,450 lbs.
8006-61-9 Gasoline	1,799 lbs.
Jet Fuels	38,735 lbs.

**STATE REPORTING REQUIREMENTS:**

Wisconsin Statute §292.11 WISCONSIN SPILL LAW

The spill law, Chapter 292.11, Wis. Stats., requires that a person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance shall notify the department *immediately* of any discharge not exempted by the statute. The Department has a 24-hour toll free number for reporting spills: **1-800-943-0003**.

Chapter NR 706 Wisconsin Administrative Code

Ch. NR 706, Wis. Adm. Code establishes exemptions for small quantity spills of agricultural and petroleum related compounds, as well as substances that have a federal reportable quantity established. These quantities are termed “de minimis” in that below these levels, under the following conditions, state notification of a discharge is not required. While reporting requirements may be exempted, **cleanup requirements remain**. If a discharge meets one of the following de-minimis exemptions **it must be reported to the Wisconsin DNR**:

1. Has not evaporated or been cleaned up in accordance with NR 700 – 726,
2. Adversely impacts or THREATENS to adversely impact the environment,
3. Causes or THREATENS to cause chronic and/or acute human health impacts, or
4. Presents or THREATENS to present a fire or explosion hazard or other safety hazard (including all evacuations)

**IV. PRIMARY EMERGENCY RESPONDERS:**

City of La Crosse Police Department  
City of La Crosse Fire Department  
La Crosse County Type II Hazardous Materials Response Team  
West Central Regional Type I Hazardous Materials Response Team  
La Crosse County Emergency Management  
Tri-State Ambulance Service  
Wisconsin Department of Natural Resources

**V. SUPPORT AVAILABLE FROM FACILITY:**

**CHEMICAL EMERGENCY MONITORING EQUIPMENT:**

None

**PERSONAL PROTECTIVE EQUIPMENT:2**

eye protection

**OTHER EQUIPMENT/SUPPLIES:**

Paramedics and other emergency medical personnel are on-site 24/7/365

**OUTSIDE RESOURCES AVAILABLE:**

La Crosse County does have a Type II Hazardous Materials Response Team. For Type I incidents, contact the West Central Regional Hazardous Response Team

through the Wisconsin Emergency Management Duty Officer (800-943-0003).

## **VI. GENERAL INFORMATION AND ASSUMPTIONS: (Disclaimer)**

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 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'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 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 this Plan are for general "PLANNING PURPOSES."

## **VII. HAZARD ANALYSIS SUMMARY:**

### **A. Brief description of facility.**

Gundersen Lutheran Medical Center is a combined private practice medical clinic and a 325 bed hospital (Level II Trauma Center). This facility provides aeromedical transport via the MedLink Air helicopter service. Helicopter fuel is stored at the helicopter garage. Fuel oil is stored at the heating/cooling plant

and electric storage batteries (electrolyte containing sulfuric acid) are used to power certain devices at three separate sites within the Medical Center campus; Power Plant (heating/cooling building and Laundry), Main Clinic building, and the East Building. 55 gallon drums containing sulfuric acid are stored in the Power Plant building. Sulfuric acid is used in the water treatment processes for the heating/cooling towers.

In 2012 more of the heating and cooling load was transferred to the heating and cooling facility from the East building. For this reason a greater amount of sulfuric acid is stored there.

Commented [BEJ1]: Added

B. Greatest potential for release.

The greatest potential for a release of sulfuric acid would occur during routine maintenance procedures for the industrial batteries or an accidental spill during refilling procedures.

C. Vulnerability Zone for each EHS chemical

The largest battery on site is a series of linked UPS12-270FR made by C&D.

These batteries weigh approximately 57 lbs. using an H2SO4 absorbed electrolyte.

Commented [BEJ2]: added

The hazard analysis is as follows:

EHS Chemical: Sulfuric Acid  
Form: Liquid  
Container Size: 841 lbs.  
Concentration: 93 %  
Parameters used in the hazard analysis:  
Level of Concern: 1/10 IDLH  
Duration of Release: 10 minutes

WORST CASE SCENARIO:  
Rural  
Wind Speed: 3.4 mph  
Atmospheric Stability Class: F  
Vulnerability Zone: .1miles

RE-EVALUATION SCENARIO:  
Urban  
Wind Speed: 11.9 mph  
Atmospheric Stability Class: D  
Vulnerability Zone: .1miles

It is estimated that very few people may be affected by an accidental release of

sulfuric acid at the heating/cooling ("Power Plant") facility. There are NO homes within .1 mile of the heating/cooling building. However, large batteries containing sulfuric acid are also located in the Gundersen Clinic basement (1,682 pounds) and in the East Building basement (1,682 pounds). Separate vulnerability zones are prepared for each of the three sites.

D. Possible limitations or problems that could arise.

The release of any EHS in a medical facility can result in heightened risks and challenges for responders. However, any release of sulfuric acid found in industrial battery electrolyte results in a small vulnerability zone and may be mitigated by common absorbent and neutralizing products.

E. Estimate of population affected.

Because of the enormity of the Gundersen Lutheran Medical Center, and the relatively remote location of the heating/cooling facility (Power Plant), the .1 mile vulnerability zone does not extend into any of the health care buildings except the Behavioral Health Building.

Approximately 59 persons live within the .1 mile vulnerability zone for the Gundersen Lutheran Medical Center Clinic Building.

Approximately 21 persons live within the .1 mile vulnerability zone for the Gundersen Lutheran Medical Center East Building.

F. Conclusions.

Releases of sulfuric acid from industrial electric storage batteries are rare. Industrial batteries are used at three distinctive sites within the Gundersen-Lutheran Medical Center campus. It is unlikely that ALL of the batteries would be located at the same location simultaneous and nearly impossible to release the entire quantity of sulfuric acid. The largest containers of sulfuric acid are located in the Power Plant building. The vulnerability zone for sulfuric acid is always calculated to be .1 mile, regardless of the quantity.

## VIII. SPECIAL FACILITIES AFFECTED:

- A. The only special facility located within .1 mile of the heating/cooling building where the sulfuric acid is located is the Medical Center itself and the adjacent Behavioral Health Building. The Medical Center's child care center lies nearly .3 mile away (directly south of the heating/cooling building).

A release of sulfuric acid from industrial batteries found in the basement of the Gundersen Clinic may affect the Clinic, the adjacent Hospital and the underground levels of the attached parking ramp.

A release of sulfuric acid from industrial batteries found in the basement of the East Building may affect the lower levels of the East Building and potentially the adjacent Founders Building.

**IX. POPULATION PROTECTION:**

The determination to shelter in place or to evacuate will be made by the on-scene commander as appropriate. 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.

Experience indicates 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 of the risk zone.

Roles and responsibilities relative to evacuation and sheltering, as well as a list of shelters, appear in the La Crosse County Emergency Operations Plan, Annex E.

**X. SPECIAL CONSIDERATIONS:**

- A. Limited access to facility. Except when the limited-use railroad siding track is being used to ship supplies to the nearby brewery, there are no limitations to vehicle access to any of the Gundersen Lutheran Medical Center campus buildings.
- B. Address environmental concerns at facility and in Vulnerability Zone. The .1 mile vulnerability zone for the release of sulfuric acid does not extend into any waterways or other environmentally sensitive areas.
- C. Actual response capabilities at facility. Immediate medical care for any person affected by the release of sulfuric acid is always available.
- D. Potential for affecting other jurisdictions. The .1 mile vulnerability zone for any of the three Gundersen Lutheran Medical Center campus sites is entirely within the City of La Crosse. The zone for the heating/cooling building is near a remote section of the Town of Shelby along 7<sup>th</sup> Street South/Hanifl Road.

**XI. REQUIRED ATTACHMENTS:**

- A. Facility Layout Highlighting EHS Chemical Storage Location
- B. Vulnerability Zone map highlighting Special Facilities
- C. Chemical Data Sheet on EHS Chemicals (Response Information Data Sheets or MSDS)
- D. Hazardous Materials Worksheet/Calculations or Computer-Generated Vulnerability Zone Calculations

**NOTE:** There are no local ordinances in La Crosse County which mandate specific routes for vehicles carrying Extremely Hazardous Substances (EHSs). Thus, EHSs may be transported over any local, state, or federal highway for which weight limits are met.