

**EPCRA Off-Site Facility Plan
For
La Crosse Municipal Well #16H
2401 21st Place South
La Crosse WI 54601**

I. FACILITY NAME:
La Crosse Municipal Well #16H
2401 21st Place South
La Crosse, WI 54601
WEM # 1597-6

II. FACILITY EMERGENCY COORDINATOR: ALTERNATE COORDINATOR:

Lee Anderson
Water Superintendent
Telephone Number:
608-789-7388(work)
608-498-6616 (personal cell phone)

Mark Johnson
Utilities Manager
Telephone Number:
608-789-7536 (work)
608-792-0498 (cell)

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>
7782-50-5	Chlorine	900-lbs (Six 150-lbs. cylinders)	2.2 miles	Urban

OTHER HAZARDOUS CHEMICALS:

<u>Name</u>	<u>Max. Quantity</u>
None	

IV. PRIMARY EMERGENCY RESPONDERS:

- West Central Regional Type I Hazardous Materials Response Team
- La Crosse Regional Type II Hazardous Materials Response Team
- La Crosse Water Facility Crew
- La Crosse Fire Department
- La Crosse Police Department
- La Crosse County Sheriff's Department
- Wisconsin Department of Natural Resources
- La Crosse County Emergency Management
- Tri-State Ambulance

V. SUPPORT AVAILABLE FROM FACILITY:

Facility Crew can be notified by two-way radio to support the La Crosse Fire Department. The La Crosse Fire Department has a cylinder containment kit.

CHEMICAL EMERGENCY MONITORING EQUIPMENT: None

PERSONAL PROTECTIVE EQUIPMENT: None

OTHER EQUIPMENT/SUPPLIES: None

OUTSIDE RESOURCES AVAILABLE:

The La Crosse Fire Department serves as the La Crosse Regional 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).

CHEMTREC 800-424-9300
Hydrite Chemical Company 608-784-0024
The Water Utility solicits annual quotations for chemical supply. Hydrite Chemical Company is the current (2014) supplier of chlorine and for the La Crosse Water Utility.

Hydrite Chemical Company
701 Sumner Street
La Crosse, WI 54603
Phone: 608-784-0024
Fax: 608-785-2990

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.”

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)

VII. HAZARD ANALYSIS SUMMARY:

- A. La Crosse Municipal Well #16H supplies potable (drinking) water for the City of La Crosse. There could be two, or more, employees at the facility during an incident; however the facility is not usually occupied. The facility is located near the intersection of Townsend Street and 21st Place South and is adjacent to Spence Elementary School. Chlorine gas is used as a water system disinfectant at this facility.
- B. Four 150-lb chlorine tank cylinders are kept in the facility. Two of the cylinders are connected to the water supply system at any one time. Potentially dangerous materials are used and stored at this facility. These materials, when used under normal conditions, pose no threat. However, the hazard to persons

and property can increase dramatically if the materials are somehow released from their controlled environment. It was determined during a site visit, and following consultation with facility managers, that the greatest risk of a hazmat incident would occur during the unloading or loading of the chlorine gas cylinders or during cylinder connection procedures.

- C. The vulnerability zone for this facility was based on a worst case scenario for a release of one 150-lb. cylinder of chlorine. The hazard analysis, using CAMEO software, is as follows:

The hazard analysis is as follows:

EHS Chemical: Chlorine
Form: Gas
Container Size: 150 lbs.
Concentration: 100%
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: 2.2 miles

RE-EVALUATION SCENARIO:

Urban
Wind Speed: 11.9 mph
Atmospheric Stability Class: D
Vulnerability Zone: 0.1 miles

It is estimated that up to 39,958 people may be affected by an accidental release of chlorine gas from this facility.

- D. There are several industrial facilities and public recreational areas near this facility. It may be difficult to quickly determine the extent of any reported leak or to initiate protective measures.
- E. It is estimated that up to 39,958 people may be affected by an accidental release of chlorine gas from this facility.
- F. Although releases of chlorine gas could have catastrophic consequences, there is very little history of significant chlorine gas leaks or exposure from any of the facilities using chlorine gas in La Crosse County.

VIII. SPECIAL FACILITIES AFFECTED:

The 2.2 mile vulnerability zone includes numerous special facilities. Refer to the

list found in Attachment E.

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 can be found in the La Crosse County Emergency Operations Plan, Annex E.

X. SPECIAL CONSIDERATIONS:

- A. Limited access to facility. Well #16 is located within an industrial/commercial neighborhood, but not along a major thoroughfare.
- B. There are no nearby streams, rivers, lakes or ponds or other environmentally sensitive areas that may be impacted by a release of chlorine gas. However, an elementary school and a city park/swimming pool are located with two blocks of the facility.
- C. City of La Crosse Water Department employees have access to detection equipment and the Fire Department/Hazardous Materials Response Team has access to a cylinder containment kit.
- D. Potential for affecting other jurisdictions: The 2.2 mile vulnerability zone extends slightly into a backwaters area of Houston, County, Minnesota, but does not cross any roadways or impact any developed or occupied areas in Minnesota. Prevailing winds are from the southwest which would prevent most airborne releases to reach any populated areas in Houston County. A portion of the vulnerability zone does extend into Shelby Township, La Crosse County.

NOTE: There are no local ordinances in the City of La Crosse 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.