Chlorine Safety

Will Strength, ARM-P
Loss Control Representative, AMIC/MWCF

Chlorine is a disinfectant that is commonly found in most municipal entities across Alabama. The use of chlorine helps save lives by preventing the spread of waterborne diseases. That being said, however, chlorine is a severe irritant so it’s critical to understand the dangers when working with chlorine at your facility. Exposure to chlorine has effects ranging from irritation to death, depending on the concentration and time of exposure. Because of the danger of respiratory damage, chemical burns and death, it is imperative that workers use, store and handle chlorine properly.

Storage
Most plant operations store 150-pound cylinders or 1-ton containers. Chlorine containers of any size should always be secured to protect them from falling, rolling or being dropped. Chlorine may be stored indoors or outdoors, though shading from sunlight is recommended for outdoor storage. Storage areas should be away from HVAC intakes, as chlorine gas could be distributed throughout a building in case of a leak.

Indoor storage areas should have a ventilation fan located near the floor with a fresh air intake near the ceiling. The ventilation fan must be operated by a switch that is weather proof and located outside the chlorine room entrance door. The fan should be turned on and allowed to run prior to entering the chlorine room. The chlorine storage area should have a well-maintained chlorine gas detector installed, complete with alarm and call-out capability if a leak occurs when the plant is unmanned.

Chlorine has the potential for violent or explosive reactions with certain substances. It is very important to separate chlorine from the following:

- Ammonia and ammonia compounds
- Hydrocarbons – oils, greases, solvents, even in small amounts.

Unloading Chlorine Cylinders and Ton Containers
All employees receiving chlorine cylinders and containers must be properly trained and have the proper equipment to unload and receive chlorine containers.

- Make sure the protective valve housing is on securely.
- **NEVER** lift a chlorine cylinder by its protective valve housing!
- Use a properly rated hoist or forklift to relocate ton containers. When using a hoist, remember that the total weight of the ton container is nearly 2 tons. A one-ton hoist is not sufficient for lifting a ton container.
- The hoist and cables must be in good operating condition. Have a professional inspect the hoist each year and repair or replace it when necessary.
- Once the containers or cylinders are unloaded, secure them properly at the site. Always store cylinders in an upright position. Store ton containers with the two valves lined up vertically.

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**Chlorine Leak Response**

NEVER respond to a chlorine leak unless you have been properly trained and have the necessary safety equipment—including a self-contained breathing apparatus and protective suit. To speed response and recovery, each treatment plant should have the appropriate Chlorine Institute Emergency Kit onsite:

- Kit A: for 100 or 150-pound cylinders
- Kit B: for ton containers
- Kit C: for tank cars and tank trucks
- Cylinder containment vessels: for 100 or 150-pound cylinders

Whether a chlorine leak is handled in-house or not, your Emergency Response Plan should detail the exact procedure. Most importantly, practice, practice and practice the procedure. Finding the Emergency Response Plan and reading it in the middle of a chlorine gas leak is not a good option.

**Security**

The events of 9/11 made treatment plant security all the more important.

- Control access to chlorine cylinders and containers with gates, locked buildings and other barriers.
- Provide bullet-proof shields for containers that are not indoors.
- If funding allows, use electronic gates and doors with access badges that record the comings and goings at the plant. If not, ensure all visitors sign in and show photo identification.

*Sources:* CDC.gov and worksafebc.com

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**Bucket Truck Safety Checklist**

*Aaron Reeves, Loss Control Representative/Biosystems Engineer, AMIC/MWCF*

**Safety Checks**

Perform daily safety checks of the equipment to include:

- Broken, damaged, loose, or missing parts
- Tires (check for bulges, cuts, and tire pressure)
- Oil and hydraulic leaks
- Rust and cracks
- All required lighting and decals

**Worksite Inspections**

- Try to park on level ground
- Check for overhead obstructions
- Maintain safe clearance from power lines
- The boom should not be operated if wind gusts exceed 30mph
- Watch for approaching traffic
- Make sure the outriggers are positioned properly

**Annual Inspections**

- Structural Tests (Acoustic Emission Test, Dye Penetrant Test, Ultrasonic Inspection, Torque Testing, etc.)
- Functional and Operational Testing
- Dielectric Tests
- Others (Such as DOT Inspections, Stability Test, Oil Spectroanalysis, etc.)

**Fall Hazards**

- **ALWAYS WEAR FALL PROTECTION**
- Do not sit, stand, or climb on the edge of the basket
- Always keep feet on the floor of the bucket
- Make sure the floor of the bucket is clean
- Do not try to climb down from the bucket while raised
- Do not carry ladders in the bucket
- Do not exceed the load capacity
- Do not push or pull toward anything while raised in the bucket
- Do not use the bucket as a crane

*Sources:*

- [www.buckettrucks.org/safety](http://www.buckettrucks.org/safety)
- [www.osha.gov/Publications/aerial_lifts_safety.html](http://www.osha.gov/Publications/aerial_lifts_safety.html)
- [www.altec.com/safety](http://www.altec.com/safety)
SAFETY DISCOUNTS AVAILABLE FOR 2016 WORKERS COMP PREMIUMS!

The Municipal Workers Comp Fund (MWCF) works to keep the premiums for our members as low as possible. In addition to the many available discounts MWCF members may qualify for, a full 10% Safety Discount can be earned by appointing a Safety Coordinator, signing the Safe Workplace Guidelines, Post Accident Drug Testing Agreement and having an approved Medical Protocol in place. Last year, 55 percent of MWCF members earned this full discount. These programs not only help to reduce claims but also put thousands of dollars back into the budget of those municipalities and municipal entities to be used elsewhere.

2016 Safe Workplace Guidelines

The Safe Workplace Guidelines is comprised of safety guidelines each member is encouraged to follow. It is updated annually and mailed to every MWCF member during November. Please try to return by December 1, 2015, so that this discount will be reflected on the initial 2016-2017 billing. This two-page document must be renewed each year.

Post Accident Drug and Alcohol Testing Program

The MWCF provides an additional 3% discount for those members that commit to a Post Accident Drug and Alcohol Testing program. In order to qualify, a member must sign a “Participating Commitment” (which will be enclosed with the above mentioned document) and have such program certified by their attorney that the member’s drug and alcohol policy is Fourth Amendment compliant. Unlike the Safe Workplace Guidelines, this document does not have to be renewed each year.

Medical Protocol

Another 3% discount is available to those members who establish and implement a Medical Protocol. This program is a great benefit to both the member and the claims management team. A sample protocol will be included in the November mailout for those members that do not yet have one on file. For further information, call MWCF at 1-888-736-0210.

MWCF members who participate in all three programs will receive a bonus 1% discount – earning those members a full 10% discount on their annual premium for 2016! All members are encouraged to watch for the Safe Workplace Guidelines information packet coming in November and return it promptly to take advantage of these benefits. It will also be available for downloading on our website by going to the MWCF page www.almwcf.org.

New Claims Adjuster Joins AMIC Staff

Ramona Lavoie joined the AMIC staff as a Claims Adjuster in August 2015 bringing more than 20 years experience in Graphic Design and Marketing. Since 2005, she has been in the Workers’ Compensation Industry where she worked with Loss Control projects organizing educational seminars for insureds, creating presentations for the company and designing ads for magazines and newsletters. Ramona graduated from Auburn in Montgomery in 1996 with a BA in Graphic Design and Marketing. She currently resides in Montgomery where she enjoys spending time with her family, her dog and attending church.

Defining Moment

Transitional Return to Work Program aka Light Duty

Transitional Return to Work Programs are designed to get an employee back to work after he or she has suffered an on-the-job injury or illness. Transitional Return to Work Programs significantly reduce the impact of the current claim as well as the impact on future insurance premiums. Getting an injured employee back to work as soon as possible after an on-the-job injury is an important way to not only control the cost of a workers compensation claim but speed recovery and improve morale in the workplace. The employee may be able to return to work but he or she will have restrictions imposed on them by the treating physician. These restrictions are designed to prevent re-injury and can be anything from how much a person can lift to limiting the number of hours he or she can work. When assigning an injured employee to a light duty job, make sure the job meets the doctor’s restrictions and the job is meaningful and productive. Always monitor to ensure that the doctor’s restrictions are not exceeded. Keep in mind the light duty assignment is temporary – this should be made clear with the employee and be in your written policy. If you do not have a policy, or you have questions regarding light duty, contact your Loss Control Representative, Millennium Risk Managers or visit www.losscontrol.org.

Need Help Filing Work Comp Claims?

For step-by-step instructions, visit: www.almwcf.org
2015 SkidCar Schedule

Through an advanced, computer-controlled driver training vehicle known as the Skidcar System, trainees learn how to react quickly and safely to a range of hazardous driving conditions. Training is conducted throughout the state at a minimal cost. Visit www.losscontrol.org for more information.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Location</th>
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<tbody>
<tr>
<td>Sept. 29 - Oct 2</td>
<td>Oneonta</td>
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<tr>
<td>October 6-16</td>
<td>Pelham</td>
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<tr>
<td>November 3-13</td>
<td>Orange Beach</td>
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<tr>
<td>December 1-11</td>
<td>Montgomery</td>
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Register and pay ONLINE
www.losscontrol.org!

Loss Control Division
P.O. Box 1270 • 535 Adams Avenue • Montgomery, AL • 36102

Fall Safety DVDs

- 5.014-DVD* Forklift Safety: Real Accidents, Real Stories
- 5.023-DVD* Machines, Operators and Guards: Real Accidents, Real Stories
- 5.069-DVD* Defensive Driving: When Good Weather Goes Bad
- 5.070-DVD* Driving Distractions of the Everyday Driver
- 5.071-DVD* Forklift Safety: The Triangle of Stability
- 7.100-DVD Emergency Action Plan: The Team Approach
- 7.133-DVD* The Top Five Things You Need to Know About the Flu
- 7.148-DVD* Blink! A Practical Approach to Workplace Stretching
- 7.149-DVD* A Better Way to Lift
- 9.108-DVD* Traffic Stops of Sovereign Citizens
- 9.109-DVD* Emergency Response Driving
- 9.110-DVD* Use of Force: Report Writing
- 9.111-DVD* Body Cameras: What Every Cop Needs to Know
- 11.030-DVD* Safety Management in Action

Employment Practices Law Hotline

1-800-864-5324

Through a toll-free Employment Practices Law Hotline, members can be in direct contact with an attorney specializing in employment-related issues. When faced with a potential employment situation, the hotline provides a no-cost, 30-minute consultation.

Video/DVD requests to: Rachel Wagner at: 334-262-2566; rachelw@alalm.org; or FAX at 334-263-0200.

www.losscontrol.org