Master Brewers Safety Toolbox Talk



Spills in the Brewery: How to Prepare for and Handle Them

Not all spills are created equal. Because of this, not all spills are handled in the same way nor are they governed by the same rules and regulations. Depending on the spill and where it occurs, it can trigger requirements from OSHA, the EPA, and even local authorities. This Toolbox Talk (TBT) discusses the potential spills that may occur within a brewery, the regulations that may apply to different spills, and how to prepare for and handle most spills. This is not intended to be an all-inclusive document. It does provide guidance and information to help you develop your plan to successfully handle a spill that occurs inside or outside your facility.

Potential Spills

Brewing operations present opportunities for all kinds of spills, including not only grain and wort, but chemicals as well. Most breweries do not consider a grain or wort spill as an issue, but it can be just as bad as the loss of a chemical. Spills of unexpected items also can occur, such as tractor tailers making deliveries, forklifts, and power transformers. Spills can occur inside and outside the facility, and breweries need to evaluate their sites for potential spills. Even if a spill is not a result of your operations, you may be responsible for its mitigation. We can't go into details in this TBT, but there is an example scenario that occurred February 26, 2019, at the site of the former Olympia Brewery in Washington. The article provides a timeline of events that you may find interesting.

Regulations Related to Spills

There are two major organizations that provide regulations for spills that may occur at your brewery. The Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) both provide rules for spill response, reporting, and cleanup activities. The EPA looks at a spill based on its impact on the environmentwhether a spill affects air, soil, or water. OSHA looks at a spill primarily from the perspective of employee interactions but may consider environmental impacts as well. The EPA oversees regulations such as Spill Prevention, Control, and Counter Measure (SPCC) and the Clean Water Act and can apply other regulations based on the specific situation and what is being impacted. For OSHA, the first regulation you should be familiar with is the Hazardous Waste Operations and Emergency Response Standard (HazWoper). Specifically, you will want to look at Subpart Q of the regulation, since this is the primary section that applies to breweries. Other standards overseen by OSHA with which you should be familiar include Hazard Communication and Emergency Action Plan, as well as other regulations that could be triggered based on the specific situation and the chemical or product involved.

States, and sometimes municipalities, may also have requirements that are imposed locally. These may include notifications and reporting, among other requirements. Under the EPA's Emergency Planning and Community Right-to-Know Act (EPCRA), Local Emergency Planning Committees (LEPCs) must develop emergency response plans that should include business operations in the community. Breweries may be required, based on product quantities, to supply information to these LEPCs for inclusion in their plans. LEPCs may be able to assist you with your planning for a spill response. More information about LEPCs and how they work is available on the EPA website.

Planning for Spills

There are several steps that can be taken to adequately prepare for a potential spill at your brewery.

- 1. Conduct a hazard analysis to determine where spills are likely to occur, what materials could be released, and what conditions could cause a spill to occur. Bear in mind that there could be more than one scenario that could lead to a spill.
- 2. Document your findings. Review Safety Data Sheets for guidance.
- 3. Meet with your LEPC, local fire department, or emergency management to obtain input and assistance. Consider using a third-party company to provide spill response training and other assistance.
- 4. Look at ways to prevent a spill from occurring. Think about secondary containment, barriers to prevent impacts, and other options.
- 5. Build or purchase a spill cleanup kit. Consider all potential spilled materials or items. There are also spill kits designed for specific chemicals; for example, acid from a forklift battery. Include absorbent mats, pads, booms, and socks. Consider items that could block outside storm drains if this is a potential issue.
- 6. Create a spill plan that includes how you will contain the spill, who will respond, who needs to be notified, and where spill response equipment is located.
- 7. Develop a spill response team and provide training on how to respond to spills and mitigate the resulting issues.
- 8. Provide spill awareness and prevention training to all of your employees.
- 9. Conduct audits periodically to ensure that all measures are being taken to prevent a spill from occurring.

Spill Response

Take the following steps to handle a spill. Remember that persons who respond to a spill must be trained.

- 1. Identify the spill. Determine what materials have been released and the hazards associated with them.
- 2. Communicate information about the spill. Notify those on your call list, including internal employees, and make any external notifications that may be required.
- 3. Contain the spill. Use your spill kit to contain the spill.
- 4. Cleanup the spill. If it is safe for you to clean it up, do so. If the spill requires further training and experience, ensure that you have contacted either the fire department, emergency management, or a contracted third-party provider for spill response. Cleanup may also include decontamination of the area.
- 5. Report. Document the spill and ensure that if it is required by a regulation, whether federal, state, or local, that you have completed and met all reporting requirements.
- 6. Review the spill. Go over what happened. Create a lessonlearned report and improve any noted deficiencies.
- 7. Replenish. Ensure that all spill kit supplies used are replaced so you are prepared if another spill occurs in the future.

If you have questions regarding spills in breweries, please see your supervisor/manager or contact a member of the Safety Committee for additional information.