

This issue sponsored by ioMosaic

http://www.aiche.org/CCPS/Publications/Beacon/index.aspx

Messages for Manufacturing Personnel

April 2011



← Don't let a small leak...

The pictures show how rapidly a small water leak at a construction site became a large and catastrophic leak. The pictures were taken just a few minutes apart!

This incident reminds us in the process industries that it is important to report and repair any leaks that we detect in piping or other equipment. <u>ALL</u> leaks, no matter how small, are potentially dangerous. Leaks of toxic, combustible, or flammable materials usually have higher risks, but, as shown in the pictures,

...become a BIG leak! >

a leak of any material can be dangerous. A small leak of a very toxic material can be immediately dangerous, and a small leak of a flammable or less toxic material may grow rapidly, and become large enough that it is a major fire, explosion, or health hazard.





What can you do?

- Immediately report any leak that you observe in the course of your work. Signs of a leak include puddles, drips, discolored paint or insulation, and unusual odors. Follow up to make sure that the leak is repaired in a timely manner.
- Identify leaking material and follow your plant procedures to ensure safety until the leak can be repaired. Some examples: confine or absorb the leaking material, drain it to a safe place, set up warning signs or barricades to warn people of the hazard and keep them away, make sure that ignition sources are eliminated if the leaking material is flammable or combustible. Your plant emergency and leak procedures will include specific actions appropriate for the materials in your plant.
- Recognize that it may take time to prepare the plant for maintenance to repair the leak pipes or vessels may have to be emptied, equipment may have to be shut down, equipment may have to be isolated from the area where work is to be done. Monitor the leak from a safe location until it can be repaired, so appropriate actions can be taken if the leak increases in size.
- → When monitoring or inspecting equipment normally hidden from view (for example, covered by insulation), look for evidence of leaks and report your observations so repairs can be made.

There is no such thing as a "small" leak!

AIChE © 2011. All rights reserved. Reproduction for non-commercial, educational purposes is encouraged. However, reproduction for the purpose of resale by anyone other than CCPS is strictly prohibited. Contact us at ccps_beacon@aiche.org or 646-495-1371.