LESSON LEARNED

Berkeley Environment, Health & Safety

Flooding Event and Improper Disposal of Glassware

What Happened

Last month, severe flooding occurred in a campus building, leading to unexpected challenges in laboratory waste management.



Soaked Cardboard Boxes

A serious concern emerged when floodwater seeped into cardboard boxes, used for clean glass disposal, that did not have plastic liners.

Without this essential barrier, the integrity of the boxes were compromised, rendering them unsafe for handling and disposal.

As a result, safety responders had to take extra precautions to safely transfer the broken glass and sharps to new disposal bags using tongs. This was a very time-consuming and hazardous process that could have been avoided if the boxes were utilized as intended.



Top Down View of Water Damaged Box

Importance of Proper Waste Management in Labs

This incident highlights an important yet often overlooked detail in lab safety protocols. Many labs do not include plastic liners in their glass disposal bins, assuming the sturdy cardboard structure is sufficient. However, a flooding event is one of many possible external factors that can present risks of exposure, such as moisture or biological or chemical spills, which can significantly weaken or compromise these containers, leading to potential risks for lab personnel.

What went right?

The flooding incident was reported to the designed safety responder.

Extra precautions were taken to safely transfer the broken glass and sharps to new disposal bags using tongs. This was done to mitigate potential cuts and punctures from the broken glass that could have resulted in exposure to biological or chemical materials.

What should be done differently?

Preventive measures should have been taken to properly dispose of and manage waste in the laboratory to mitigate potential exposure risks during flood cleanup.

Polybag-lined glass disposal boxes to properly separate broken and contaminated glass from other waste should have been part of the lab's waste disposal procedures.

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What corrective actions were taken?

- The building was temporarily shut down for hazardous materials cleanup.
- Lab personnel reviewed proper waste management and disposal procedures.
- Polybag-lined glass disposal boxes to properly separate broken and contaminated glass were acquired by the lab.

Lessons Learned

To prevent similar issues in the future, we strongly encourage all labs to implement the following best practices:

- Always use a plastic liner for cardboard boxes that are used for glass disposal to provide an additional layer of protection against leaks, spills, and unexpected moisture exposure.
- Regularly inspect disposal bins for any signs of wear or weakness, especially in high-risk areas where environmental conditions could compromise their integrity (e.g., next to a sink)...
- Train lab personnel on proper waste disposal procedures to ensure everyone understands the importance of using liners and securely sealing waste containers.

Taking these small but important steps can help maintain a safer lab environment and reduce the risk of hazardous exposure. Let's work together to reinforce this best practice across all our workspaces!