

# CLOSE ENCOUNTERS OF THE LAB KIND

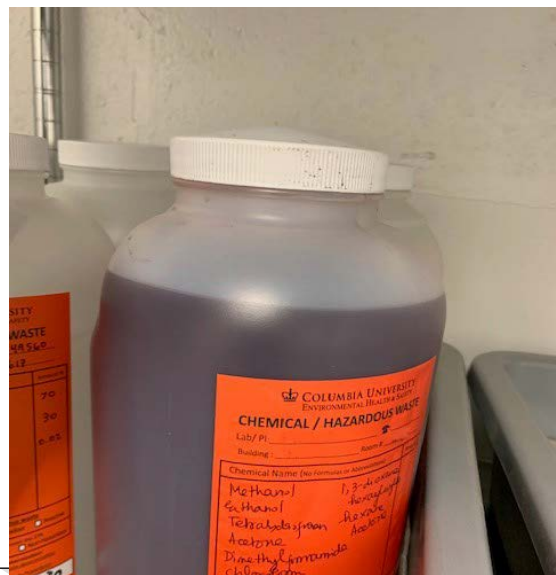
## THE SANTAYANA REPORT

*George Santayana was a Spanish-American philosopher, essayist, poet, and novelist. In 1905, he penned the famous aphorism “those who cannot remember the past are condemned to repeat it.” More than a century later, the saying reverberates with professionals the world over. The following is a summary of a recent incident at Columbia University. The information presented is intended to provide awareness and help readers plan against the occurrence of a similar situation in their laboratory or work area.*

### Commingle the Compatibles

Recently while completing weekly storage room inspections, EH&S safety advisors identified two bulging waste containers collected from two different laboratories. Pressurized waste containers can pose a significant safety hazard. The force exerted on the container can result in failure, leading to injury, a spill or potential exposure. In these recent incidents, the decomposition of carbonate compounds, exacerbated by the inactivity of the ramp-down period, led to the unavoidable formation of gases, pressurizing the waste containers.

The Safety Advisors overpacked the bulging containers into larger drums to protect them in the event of failure and communicated their findings with the individual laboratories.



### Lessons Learned

- Check waste containers regularly! Contact EH&S if a waste container appears to be under pressure, leaking, or distorted in any way.
- Check the Safety Data Sheet (SDS), available through [ChemWatch](#). Decomposition products are generally provided in the stability and reactivity section.
- If a waste will unavoidably generate small amounts of gas, request a vented waste cap for the 5-gallon liquid carboys from EH&S or ask for guidance in creating one for the 1-gallon liquid containers.
- Compile written standard operating procedures (SOPs) that adhere to the tenets of safe waste management, and share these materials with the entire laboratory.
- If the research space may be left unattended for long periods of time, submit any items that may become unstable for waste pickup prior to vacating the space.
- All laboratory personnel are responsible for their own safety and the safety of people, property and environment around them. See something potentially unsafe? Say something!

### Lab Action Items:

- Pay careful attention to the 5 Ls of Hazardous Waste Management!
- Assess the stability of compounds commonly found in your waste stream and request vented waste caps if necessary.
- Avoid mixing incompatible materials like nitric or perchloric acid with organic solvents. More information about incompatible materials can be found in the respective SDS. Also refer to previous Santayana Reports ([Dec 2014](#), [April 2015](#)).
- Stay up to date on [EH&S Covid-19 guidance](#).

For further information, or to view previous Santayana Reports, please visit our [lessons learned website](#).  
For any other safety related matter, please contact the [EH&S office](#).