

# February Safety Newsletter

## Chemical Engineering Student Safety Team (ChESST)



UNIVERSITY of  
**HOUSTON**  
CULLEN COLLEGE OF ENGINEERING  
The William A. Brookshire Department of  
Chemical and Biomolecular Engineering



On February 3, 2023, a train derailed near the small town of East Palestine, Ohio. On board were several tons of refrigerated vinyl chloride, the lead chemical in PVC production.

Vinyl chloride has a boiling point of  $-13^{\circ}\text{C}$ , turning it into a vapor upon exposure with air. Vinyl chloride is a highly flammable gas, which when paired with a fiery accident, can create toxic fumes containing **carbon monoxide**, **hydrogen chloride**, and **phosgene**. Safe to say these emissions are fume hood worthy.

Fearing an explosion, local officials diverted the hazardous materials into a trench to be burned off. Residents were advised to evacuate the area until inspection by the Environmental Protection Agency.



Even though a catastrophic event like this is unlikely to happen in a laboratory setting, it is important to ensure we mitigate any potential accidents that can threaten our well-being and of others.

**In the event of any situations that made you feel unsafe, please share with others via this form: [Near Miss/Accident Reporting](#)**

For any questions or concerns, please contact us at [UHChESST@gmail.com](mailto:UHChESST@gmail.com)