INCIDENT DATE: September 23, 2022
SUBJECT: Chemical leak in office

BACKGROUND:
At around noon on September 23 2022, a courier delivered three packages to an administrative office of a science department. The office staff placed the boxes on the floor and notified the research group that ordered the packages to pick up. The office staff noticed a minor odour from one of the boxes but after a couple of hours the pungent odour intensified. The staff inspected the boxes and realized one of the boxes was wet underneath the label which was an indication the package contents was leaking and/or broken. Closer inspection of the delivery labels indicated the item in the box was for an organic chemical. Staff looked up online the Safety Data Sheet on the chemical and found out it was an irritant. The office staff bagged the entire package in a garbage bag and took it to the nearest laboratory with a fume hood for temporary storage. They opened the windows to the office and turned on the desk fans to help clear out the odour.

INJURIES
The office staff experienced mild throat irritation and headache but symptoms went away after refreshing the air in the office.
Lab Safety Alert
Chemical leak in office

IMMEDIATE CAUSE

The packages delivered contained chemicals for scientific research. The chemical bottle broke within one of the package during transport. Fortunately, the leaking chemical was not toxic nor detrimental to health. The other two packages also contained chemicals, one of which was flammable. Even though the boxes were temporarily stored on the floor until the researcher came to pick up, the office does not have proper long term storage (such as a flammable cabinet) if the researcher was coming the next day or after the weekend to pick up.

LEARNING OUTCOMES

Administrative offices are not equipped to receive hazardous chemicals for research labs. Offices do not have proper storage for chemicals, do not have spill response equipment for accidental release of hazardous materials and do not have the appropriate air ventilation. In addition, many administrative office staff are not knowledgeable in chemical hazards and did not realize the initial odour was a cause of concern. Individuals with chemical knowledge and laboratory experience could have acted faster in inspecting and removing the package and prevent the odour to intensify and prevent inhalation exposure. Staff that receives and accepts delivery of hazardous materials must have Transportation of Dangerous Goods (TDG) certification as mandated by law. Science Stores at UVic in the Petch building is certified to receive and properly store hazardous material orders from researchers. Staff at Science Stores are also trained on TDG and have the capability to respond to defective packages.

RECOMMENDATIONS TO PREVENT RECURRENT

- Do not deliver hazardous materials to administrative offices
- All hazardous material delivered to UVic have to be received and handled by staff with Transportation of Dangerous Goods certification.

More information on Transportation of Dangerous Goods:
https://www.uvic.ca/ohse/research/laboratory/tdg/index.php

More information on chemical storage:
https://www.uvic.ca/ohse/research/laboratory/chemical-storage/index.php

More information on WHMIS:
https://www.uvic.ca/ohse/research/laboratory/whmis/index.php