



Investigation and Corrective Action

Standard Investigation Report

Incident ID: 122123 (Supervisor Report)

Incident Information

Incident Details		
Incident Title: Unsafe conditions in common access fume hood room		
Start Date: Jul 11, 2018	End Date: Jul 11, 2018	Building: OK - EME - Engineering /Management/Education
Description of Incident Location: EME 0202		
Main Body Part Injured: No injuries	Secondary Body Part Injured: No injuries	Side of body injured: Middle
Accident Type: Spills or Gas Leaks	Injury Type: No Injuries	Is this a serious injury?: No
Describe fully what happened before, during, and after the incident (please do not include names or personal information): My student informed me of a smell in the room with the common access fume hood. He grabbed another student from another lab who had a gas sensor on hand. That student opened a refrigerator located in the room, and felt dizzy after opening it.		

Accident Investigation

Equipment Related Causes	
<input checked="" type="checkbox"/> Defective equipment	

Root cause
Incorporating the above factors, determine and describe the root cause of the incident or accident: Chemical was store improperly in the refrigerator in that room.

Corrective Actions

Corrective Action to prevent recurrence of similar incidents (1)
Corrective Action Identified: Use alternate fume hood until that room is deemed safe and the chemical responsible has been stored properly



Assigned to (name): Navy Nata	Job title: Coop Student	
Final Actions Taken: Alternate fume hood used.		
Date to be Completed: 2018-07-11	Date Completed:	

JOHSC/LST Additional Action to prevent recurrence of similar incidents (1)

Follow-up Item: investigation report indicating corrective actions	
Assigned to (name): David Zinz	JOHSC or LST Membership (JOHS Committee or Local Safety Team you are following from): both local and joint health and safety member

Final Actions Taken:
Odors in 0202 and 0204 have been an ongoing issue. Earlier the same day there was gas venting out of the floor drain in 1215A. It felt like a blower from a boat blowing air out of the floor drain. Water was poured down the drain to fill the trap. At the same time (July 12th) the shower/eyewash room in 0260 had a potent sewer smell. Water was poured down the floor drain. July 13th, 1212 and 1212A had the same issue. Water poured down floor drains. It is determined the source of the gas in EME 0202 is through the floor drain. The fridge was not sealing the drain as indicated. Upon moving the fridge and having a detector close to the source provided the high concentrations reported. Facilities indicated there was no work anywhere in EME that would have contributed to this. Weather outside was very hot with heat warning issued. In the past, outside condition did not appear to impact smells based on memory (no records were kept). The fridge located in 0202 was opened and the storage of samples was appropriate and no leakage had occurred. The sour water in the fridge is not the source of the H2S and would not contribute to the measurement of CO as there is no source of CO. There is no source of CO in either 0202 or 0204. The H2S gas bottle is stored properly and is not the source of the H2S gas. The gas meter used was not calibrated, calibration station not functioning properly (now fixed), users were not using calibration station as standard practice (training now provided and instructed to use bump/cal station every time the monitor is turned on). Data log for both meters do not show any record of sensing levels of CO or H2S above zero. Data was corrupted and communication to get data off was faulty resulting in uncertainty regarding the accuracy/quality of data. In any case the numbers reported by the user are likely incorrect due to no calibration of the detectors (possibly higher or lower). Was not able to verify the reports from the users indicating high levels of H2S and CO. Several options were discussed to prevent the gases from entering the space through the floor drains. It was decided to fill the traps with water then pour food grade mineral oil down the floor drain to prevent evaporation. This will be completed by the end of this week (July 20 2018) by facilities headed by Alan Prout. The concern remains on how and why the air was blowing out of the floor drains as the system should not allow for this and the only way for this to occur is if the system is completely dried and a pressure differential. For further instances of either smells or air coming from floor drains, David (safety lead in Engineering) will contact Alan Prout prior to taking any corrective measures. Alan will then asses and provide recommendations. Notice of this procedure has been sent by David to the engineering technical support group, has been added to the agenda for the local health and safety committee, as well as professors who previously had issues with the



smells. A notice has been placed on 0202 and 0204 outlining a procedure to follow in the event of odors appearing in the space. The notice states to inform David Zinz and David will arrange all the next steps with Alan (Facilities) and RMS should they be required.

Date to be Completed: 2018-07-20	Date Completed:	
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