#### Agenda – June 3, 2019 (May meeting) Group 9 (College of Engineering) Health and Safety Committee

#### 1. <u>Attending</u>

Eliot George or Fiona Spencer, AA Colleen Irvin, BioE Sean Yeung, CEE Michael Pomfret, CEI Kameron Harmon, ChemE S. Honeydew or M. Glidden, CoE DO Sophie Ostlund, CSE John Young, EE Angie Haggard, EH&S Stacia Green, HCDE Sheila Prusa, ISE Bill Kuykendall, ME Chris Adams, MolES/NanoES Tatyana Galenko, MSE Darick Baker, WNF

#### 2. <u>Guest Speaker</u>

Konrad Schroder from WNF, Software Developer & System Administrator, discusses CORAL

#### 3. Previous Meeting Minutes

- Apr 2018 approve? Corrections/additions?
- Previous meeting minutes are posted at <a href="https://www.engr.washington.edu/mycoe/safety#">https://www.engr.washington.edu/mycoe/safety#</a>

#### 4. Department Incident Reports (use "5 Why's" analysis for one report)

- ChemE @ MolES EDT spill in fume hood prompted local evacuation (Apr)
- ME (CEE?) @ Harris Hydraulics hit head, cutting scalp, on spiral staircase (Apr)
- ME @ Engineering Annex ground off end of thumb on grinder (Apr)

#### 5. Group Business

- EH&S requests data: duration each member has served Group 9
- Update from UWPD's Building Safety Task Force
- Update from Facilities' Building Coordinator Guiding Coalition (BCGC)
- Update from UWEM's Resilience Work Group, re: BARC/Husky Ready

#### 6. UW-Wide Meeting

- Apr minutes attached
- May agenda attached. Discussed Youth Programs' forthcoming policy, update on N22 construction, RSO's on campus, HMC radiation exposure, new Boating Safety Program.
- 7. Member Updates

Next Meeting: June 24th at 3pm, in Loew 355

# Meeting Date: Apr 29, 2019

# <u>Attended</u>

Eliot George and Fiona Spencer, AA Michael Pomfret, CEI Kameron Harmon, ChemE Alexander Lefort for Sophie Ostlund, CSE Sonia Honeydew, DO John Young, EE Angie Haggard, EH&S Stacia Green, HCDE Sheila Prusa, ISE Bill Kuykendall, ME Chris Adams, MolES/NanoES Darick Baker, WNF

# <u>Absent</u>

Colleen Irvin, BioE J. Sean Yeung, CEE Tatyana Galenko, MSE

### **Previous Meeting Minutes**

- Mar 2019 draft approved
- Previous meeting minutes are at: <u>https://www.engr.washington.edu/mycoe/safety#</u>

# Guest Speakers: Denise Bender & Natalie Daranyi, EH&S OS&H

- Denise Bender, Assistant Director of <u>Occupational Safety & Health</u> office of <u>EH&S</u>, managing Physical Safety, Industrial Hygiene, Accident Prevention, and Building & Fire Safety (includes regulation of pressure vessels – liaise with 3<sup>rd</sup> party L&I inspector)
- Natalie Daranyi, Occupational Health & Safety Specialist, addressing shop safety, fall hazards, confined space hazards, hazardous energy control, electrical safety.
- <u>Shop and Maker Space Safety program</u>: Survey every two years; includes hazardous equipment, safety training, SOPs, personal protective equipment, machine guarding, cranes and hoists, 3D printers.
- <u>Fall protection</u>: when work at height >4' need fall protection equipment; >10' need fall protection work plan. Understand the hazards and requirements before accessing a roof, or contact EH&S with questions.

- <u>Confined space entry</u>: certain enclosed spaces that require entrance to perform work could be confined spaces or permit-required confined spaces. Before entrance or work begins, complete the <u>Confined Space Evaluation</u> in order to determine if the space meets the criteria. Submit to EH&S or contact them with questions.
- <u>Hazardous Energy Control (LOTO)</u>: Natalie reaching out to BC's to find occupants who service, repair or maintain department-owned equipment, machinery, or systems that contain potentially hazardous energy, i.e. equipment that is electrically hardwired (>50 V and cannot be unplugged), pneumatic, hydraulic, or mechanical moving parts, and have at least one hazardous energy source, for lockout/tagout training and materials. See <u>focus sheet</u>.
- Drone program? May create one (other colleges have); please email <u>db58@uw.edu</u> if your department uses drones (CEE, HCDE, AA, ME?).
- Student clubs: who oversees safety compliance? Clubs can be intercollegiate. Does each club have a faculty sponsor? Example: fall hazard on roofs for solar panel club members (some CoE students but faculty sponsor not CoE).

# Incident Reports

- Follow-up on last month's ME Shop eyewash water not rusty if flushed weekly for 1-2 minutes. Reminder: labs are required to test <u>eyewashes</u> weekly.
- Collab Core WCET @ Bowman capped bottle of piranha waste found (Feb). Must neutralize piranha waste immediately, not leave it (explosion hazard). SOP had been reviewed and signed off, new user observed on first run, but on second run they ran out of neutralizer. Staff found it in the fume hood and off-gassed it safely. Because of this near miss, there were good conversations with the staff and EH&S, and the SOP was fortified (in addition to sign-off on the SOP, there is an in-person training module for the SOP). SOP had specified to neutralize it when done but updated now to specify neutralizing same day or as soon as no longer in use. They have also switched to vented bottle caps. Side note: this lab is a good example for other labs dealing with acids, in that members sign off on training for both equipment and hazardous materials.

- ChemE @ Benson fire in fume hood (Feb). The sample, a highly volatile compound, should have been dried in the oven but was dried in a crucible using a bunsen burner. The crucible (ceramic, not meant for rapid heating under flame) cracked and spilled on the gas hose, causing a fire. The fire was eventually extinguished and natural gas shut off. 5 Whys: fire because flammable material (didn't recognize hazard despite training) heated with improper tools, because oven not in room. Should undergrads be doing this work alone? The SOP has been improved, and the lab now has an oven so it is more convenient than walking to the oven in another lab. Extra lesson learned: don't put fire extinguishers back on the wall after using them; instead have the fire shop replace/refill them. Department will investigate possibility of shutting off natural gas to areas of the building where it is not needed.
- Dean's Office @ Loew chemical smell in office suite (Mar). EH&S measured air quality and Facilities inspected air intake, but source not found. One person developed headache and left to work from home. This smell has been reported 3-4 times in two years and is described as similar to acetone (but no old citrus found nearby). Could there have been any unusual custodial projects in the building at the time? Could a lab experiment smell from a neighboring building have been blown by wind to Loew windows or air intake? Dry floor traps can carry smell, but there are no floor traps at this location.
- ECE @ Henderson Hall meeting attendee had seizure (Mar). 911 was called and they were transported to the hospital. This does not appear to be work-related. What do you do when someone is having a seizure? CDC's seizure first aid instructions are <u>here</u>. It's preferable to call 911 from a UW land line to aid location identification; if you use your cell phone be ready to identify that you are at UW Seattle campus, and know the street (not mailing box) address for your building.
- AA @ KWT customer saw need for hazard identification and controls (Mar). Group 9 asked for redacted report (customer has NDA). Near miss: safety officer for customer advised operations manager and EH&S of concerns regarding fall hazard, floor weight capacities, crane lift capacities and maintenance, and potential for tools falling between floors. EH&S working with operations manager to address all; have installed fall protection, have harnesses with self-retracting lanyards and have done preliminary training (another in May with more people). Observation deck weight limit is under review. Identified that tool truck needs kick rail so tools can't fall. Working on hoist's maintenance and annual inspection plans, and rigging plan.

### Group Business

- Laundry service provider change Colleen absent; ask for any update
- UWPD's Building Safety Task Force no new activity

- Facilities' Building Coordinator Guiding Coalition (BCGC) generating resources for BC's to reference, and updating APS 13.4
- UWEM's Resilience Work Group, re: BARC/Husky Ready no new activity
- UW Laboratory Safety Task Force (new) 9 people, 1.5 months to recommend policy for non-clinical, non-teaching research safety)... no news yet
- Follow-up on last month's "compare/contrast how each dept onboards for safety, to identify best practices": HCDE's new staff hire checklist points to UW New Employee Health & Safety Orientation. The UW form is on our group drive, and the HCDE checklist is on our drive under "templates."

# UW-Wide Meeting

- Mar minutes in packet.
- April agenda attached. Highlights:
  - N22 parking lot construction by HUB will block through traffic on Stevens Way for 2-3 weeks in July (dates changed after Group 9 meeting)
  - A recent fire marshal inspection cited UWMC for <u>light-diffusing "leaf"</u> <u>attached to office chair</u>, meant to block light but also would block fire sprinkler water.
  - Some volunteers get workers comp so check with Risk Management on general volunteer best practices.
  - o President and cabinet did a tabletop incident response exercise.
  - o June is National Safety Month get free materials <u>here</u>.

# Department Updates

- MolES/NanoES (1) A SoM lab with an OARS report two months ago (splash in hood, needed SOP's to resolve) had another similar but more serious incident (resulting in chemical burn) in the same location, and now has written SOPs. In general, labs need to really think through their processes, develop SOP's, and do proper training.
   (2) There was an incident of very strong cigarette smoke in the building. Window washers were smoking on the roof by the air intake.
- ChemE The new departmental chair is pushing faculty members to have safety topics every two weeks at the faculty meetings. Five minutes on safety is now the expectation. Kudos!
- CEE SoM best practice link from Angie forthcoming

- AA professor tested emergency shower without a way to collect the water. Should submit work order to Facilities if emergency showers are overdue for annual testing Facilities does that testing and has the proper equipment to capture the water.
- CEI SPD chase extended into Bowman. Property managers Kidder Matthews looking at security footage for SPD.
- CSE In consultation with EH&S, created new consistent signage for soldering stations in new makerspace, and one in fabrications class environment. Alex shared with Group 9 on our drive under Resources. In this makerspace they are soldering little circuit boards, not using lead solder so just health hazard level 1. They have some smoke eaters, so must ensure smoke eater filter is active before begin soldering. Do not breathe in fumes, do not eat or drink, and do wear goggles. Provide best type of gloves to maintain manual dexterity, to encourage people to use this PPE. Alex also has 3D printer safety signs. This is for the new makerspace in the Gates Center, but there will also be a makerspace in the Allen Center after they alter the roof.
- ME forthcoming OARS report: nicked thumb on grinder
- CEI CORAL or Bridge for online management system? have "Articulate" to build own training in PPT and upload it – EH&S is just getting Bridge, which is the direction UW is going
- Dean's Office During the Loew evacuation alarm Friday, contractors refused to evacuate. Scott Nelson and UW project manager were alerted.

# Next Meeting

• June 3rd 2018 at 3pm, in Loew 355 (this is our May meeting, delayed a week due to holiday)



Report Number:2019-04-062

Last Name:Stoddard	First Name: <b>Ryan</b>			
Phone:6167456557	Email:rstodd@uw.edu			
Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE)	Department:ENG: Chemical Engineering- Hillhouse Lab JM Student			
Date Reported(yyyy/mm/dd):2019/04/19	Time of Reporting:03:27 PM			
Person Involved or Affected				
Last Name:	First Name:			
Phone:	Email:			
Occupation/Position:RESEARCH ASSOCIATE	Department:ENG: Chemical Engineering- Hillhouse Lab			
Incident Details				
Date of Incident(yyyy/mm/dd):2019/04/19	Time of Incident:2:30 PM When Shift Begins: N/A			
Campus:Not assigned to Campus	Incident Location/Parking Lot:MOLECULAR ENG BLDG			
Room:	Other:			
Incident Details:				
glass vial and spilled about 3mL in the fume hood. He then tried to use wipes to clean it up and evaporate the remainder by blowing N2 on the spill. This was improper use of the fume hood, and the labs and office space were exposed with EDT vapors. We evacuated the lab and office space, since EDT vapors are an acute toxin. Noone reported any symptoms beyond minor headache. Was wearing gloves and lab coat and did not have any skin contact to BDT. Attachment:Yes				
Supervisor				
Last Name:Stoddard	First Name:Ryan			
Last Name: <b>Stoddard</b> Phone: <b>6167456557</b>	First Name:Ryan Email:rstodd@uw.edu			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE)	First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification	First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None, Body Parts Affected: None,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: None,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: None, Possible Causes	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: None, Possible Causes Equipment: Using Equipment Improperly,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have),</pre>			
Last Name:Stoddard Phone:6167456557 Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE) Classification Level 1: Near miss (No incident occurred but it could Injury or Exposure, no first aid required, Type of Incident Injury Description: None, Body Parts Affected: None, Cause of Injury or Damage: None, Possible Causes Equipment: Using Equipment Improperly, Environment: Chemicals,	<pre>First Name:Ryan Email:rstodd@uw.edu Department:ENG: Chemical Engineering- Hillhouse Lab JM Student have), </pre>			

Human Factors: Failure to Follow Established Protocol/Procedures, Inattention,					
Suggested corrective action by the affected party					
needs to review MSDS for new chemicals before using in lab. needs to review chemical spill clean up procedures (despite already having completed training)					
Supervisor's Comments					
Root Causes: (Please look at all the factors that may have contributed to the accident.Such factors may include equipment, environment, policies, procedures, and personnel.) Improper handling of chemical and vial. was using a wrench to remove a cap on a glass vial with a hazardous solvent - this was poor judgement and with proper use of glassware the spill would not have happened					
Recommendations/Preventive Measures: Add an SOP for working with EDT and similar class of solvents Discuss importance of reviewing MSDSs with where he evaluates root causes, steps that could have writes a safety memo about the incident, where he evaluates root causes, steps that could have been taken, and future prevention measures					
Corrective Actions Target 2019/05/01	Date (yyyy/mm/dd):	Corrective Actions Complete Date (yyyy/mm/dd): 2019/04/24			
Other Comments: attached is safety memo					
EHS Review					
Last Name:Haggard	First Name:Angelina M	Phone Number:+1 206 616- 3442	Email: <b>ahaggard@uw.edu</b>		
Occupation/Position:		Department:			
Comments:4/19/19 forwarded to Tracy Harvey - Angie Haggard					

# Memo on the incident of EDT release

# in 4/19/2019 by

TO: Hillhouse Group FROM: The second second

# 1. Description of what led up to the incident and what happened during the incident:

At 2:30pm in 4/19/19, I tried to dispose 3mL ethanedithiol (EDT) in a glass vial into the waste container in a fume hood. I found the lid of the vial was stuck. **Then, I put the vial close to the edge of the fume hood (the position is shown in Fig. 1) and used a wrench to open the lid. The vial broke** and EDT was spilled out. Some of the spilled EDT was inside the fume hood, and some was outside of the fume hood (the spilled region is shown in the red circle of Fig. 1).

I used wipes to clean most of the spilled EDT in the fume hood but found some EDT was under the white plastic table cover in the fume hood and some was spilled outside of the fume hood. I tried to clean all of them, but I could still smell the rotten odor from EDT. Thus, I used  $N_2$  nozzle to blow towards the inside of the fume hood to dry spilled EDT quickly and made the vapor flow toward the inside of the fume hood. Unfortunately, EDT vapor flew out of the fume hood and entered the lab and office.



Fig. 1 Position of the broken vial in the fume hood.

2. Possible Causes: (Please look at all the factors that may have contributed to the accident. Such factors may include equipment, policies, procedures, and personnel.)

- 1) Improper method to open stuck lid of the vial.
- 2) Improper placement of the vial in the fume hood. The vial was put too close to the edge so that EDT would spill out of the fume hood even the sash was shut.
- 3) Improper placement of table cover. The table cover was too close to the edge of fume hood and the solvent under the table cover couldn't be dried so that EDT vapor would flow into the lab even the sash was shut.
- Improper use of N<sub>2</sub> nozzle. The flow of N<sub>2</sub> would disrupt the fume hood flow, accelerating the escape of EDT vapor into the lab.
- 5) I didn't read the MSDS of each chemical I used. I also ignored safety issues in the lab.
- 6) When EDT was spilled, I was very nervous at that time and was at a loss.
- 7) I didn't use fume hood correctly. I should close the fume hood immediately decreasing the exposure of EDT.

#### 3. Recommendations and Preventive Measures to be Implemented:

- 1) Each time when you enter the lab, think of all the potential risks of your experiment.
- 2) **The transfer of solvents**: When we transfer vials with solvent out from or into glove box, it's better to seal the vials in another big bottle to avoid the spill of the solvents.
- 3) Never put vials sealed in glove box for a long time, otherwise, it may be difficult to open the lid of the vials when the vials are taken out from glove box. There are two possible reasons. One is that the solvent in vials always evaporate which makes the pressure inside the vials very high, generating large pressure difference between the inside and outside of vials. The other reason may be that the solvent react gradually with the polymeric materials which are used to seal the lid.
- 4) Open vials by tight lid opener if the lid is stuck, don't use wrench to open vials.

- 5) Close the sash of fume hood immediately if some hazardous solvent is spilled and remind others of the emergence.
- 6) Be familiar with MSDS of each chemical you use.
  - **MSDS of EDT** is as follows:
    - Vapor pressure of EDT is 4.8 torr at 20 °C, and 5.61 torr at 25°C.
    - EDT is a kind of thiols. It has a very characteristic odor which is compared by many people to rotten cabbage.
    - It is suggested not for food, drug, pesticide or biocidal product use.
    - The hazardous identification icons are shown in Fig. 2.



Fig. 2 Hazardous identification icon

- It's flammable. The flash point is 50°C.
- Major health hazardous: central nervous system depression
- **Physical hazardous**: flash back hazard. Combustible liquid and vapor.
- Short term exposure: irritation, changes in body temperature, nausea, vomiting, diarrhea, loss of voice, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, loss of coordination, bluish skin color, lung congestion, blood disorders, kidney damage, liver damage, brain damage, convulsions, unconsciousness, coma
- **Skin contact**: irritation
- **Eye contact**: irritation
- Ingestion: headache, drowsiness, dizziness, loss of coordination
- Long term exposure: No information is available.
- The release measures is as follows:
  - Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray.

- Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal.
- Large spills: Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.

#### • First aid measures:

**Inhalation:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

**Skin contact**: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

**Eye contact**: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

**Ingestion**: If swallowed, drink plenty of water, do NOT induce vomiting. Get immediate medical attention. Induce vomiting only at the instructions of a physician. Do not give anything by mouth to unconscious or convulsive person.

Antidote: amyl nitrite, inhalation; sodium nitrite, intravenous; pyridoxine, intravenous; urea, intravenous.

CAUTION! Get medical attention immediately.

NOTE TO PHYSICIAN: For inhalation, consider oxygen. For ingestion, consider gastric lavage.

#### • Exposure controls and personal protection:

**Ventilation**: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

**Eye protection**: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Clothing: Wear appropriate chemical resistant clothing.

Gloves: Wear appropriate chemical resistant gloves.

**Respirator**: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic vapor

cartridge(s).

Any air-purifying respirator with a full facepiece and an organic vapor canister.

- 7) Correctly use fume hood:
  - Check that the fume hood is operating correctly before you start work.
  - Avoid cross drafts and disruptive air currents in front of the fume hood.
     Ensure that windows and doors near the fume-hoods are CLOSED.
  - Always keep work at least 15cm in from the opening of the fume hood (as show in Figure 3).



Fig. 3 Correct work position of fume hood

- Connect all electrical devices outside of the hood to avoid sparks which may ignite a flammable or explosive chemical.
- DO NOT overcrowd or clutter the fume hood. Overcrowding creates vortices and dead spots. Vortices may cause hazardous material to flow back out of the fume hood causing exposure; dead spots may allow ignitable concentrations of flammable and combustible materials to accumulate



Report Number:2019-04-074

Person Reporting Incident					
Last Name:	First Name:				
Phone:	Email:				
Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE)	Department:ENG: Mechanical Engineering-Polagye Lab JM Student				
Date Reported(yyyy/mm/dd):2019/04/24	Time of Reporting:04:04 PM				
Person Involved or Affected					
Last Name:	First Name:				
Phone :	Email:				
Occupation/Position:RESEARCH ASSISTANT (E S UAW ASE)	Department:ENG: Mechanical Engineering-Polagye Lab JM Student				
Incident Details					
Date of Incident(yyyy/mm/dd):2019/04/23	Time of Incident:2:00 PM When Shift Begins: N/A				
Campus:Seattle	Incident Location/Parking Lot:HARRIS HYDRAULICS				
Room:101	Other:				
Incident Details:					
I was walking and hit my head on a metal spiral staircase. The incident was sufficient to cut my scalp but did not require medical attention or stiches. In order to prevent further injuries in the future, foam padding is being installed on the staircase.					
Supervisor					
Last Name: Polagye	First Name:Brian				
Phone:+1 206 543-7544	Email: <b>bpolagye@uw.edu</b>				
Occupation/Position:ASSOCIATE PROFESSOR	Department:ENG: Mechanical Engineering				
Classification					
Level 1: Injury requiring first aid,					
Type of Incident					
Injury Description: Cut, Laceration, Puncture, Scrat	ch, Abrasion (Open Wound),				
Body Parts Affected: Head,					
Cause of Injury or Damage: Structures, Surfaces,					
Possible Causes					
Equipment: Inadequate Guards/Barriers,					
Environment:					
Policies / Procedures:					
Human Factors: Inattention,					
Suggested corrective action by the affected party					
Protective foam will be installed on staircase faces to prevent future injury of this type. Potential					

Protective foam will be installed on staircase faces to prevent future injury of this type. Potential ON FILE: Affected/Injured Employee's date of birth, gender, date of hire, and hours of employment.

collision surfaces had previously been marked with caution tape.					
Supervisor's Comments					
Root Causes: (Please look at all the factors that may have contributed to the accident.Such factors may include equipment, environment, policies, procedures, and personnel.) The spiral staircase to the student offices above the High Bay is a collision hazard, with stair landings at head level. Familiarity with the space can lead to inattention of surroundings.					
Recommendations/Preventive Measures: Padding potential collision surfaces should be a simple and effective measure to prevent future accidents of this type.					
Corrective Actions Target 2019/05/08	Date (yyyy/mm/dd):	Corrective Actions Complete Date (yyyy/mm/dd): 2019/04/30			
Other Comments:					
EHS Review					
Last Name:	First Name:	Phone Number:	Email:		
Occupation/Position:		Department:			
Comments:					



Report Number:2019-04-082

Person Reporting Incident					
Last Name:McQuaide	First Name: <b>Eamon</b>				
Phone:+1 206 383-0875	Email:eamonm@uw.edu				
Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3	Department:ENG: Mechanical Engineering-Staff				
Date Reported(yyyy/mm/dd):2019/04/25	Time of Reporting:03:55 PM				
Person Involved or Affected					
Last Name:	First Name:				
Phone:	Email:				
Occupation/Position:Undergraduate Student	Department:				
Person was in Paid Position:No					
Incident Details					
Date of Incident(yyyy/mm/dd):2019/04/25	Time of Incident:3:30 PM When Shift Begins:9:00 A				
Campus:Seattle	Incident Location/Parking Lot:ENGINEERING ANNEX				
Room: <b>EGA116</b>	Other:				
Incident Details:					
THE STUDENT WAS GRINDING A PIECE OF 1.5 X 1.5 X.25 INCH PIECE OF STEEL ON THE GRINDING WHEEL. HE TILTED THE PART UP TO DEBURR THE EDGE, AND THE PART FLIPPED UP AND WAS SUCKED DOWN INTO THE GAP BETWEEN THE GRINDER REST AND THE WHEEL. THE STUDENT'S THUMB WAS CAUGHT IN BETWEEN THE PART AND THE GRINDER WHEEL, AND HE GROUND OFF THE TOP OF HIS RIGHT THUMB UP TO THE NAIL CUTICLE. THE GRINDER REST WAS OUT OF ADJUSTMENT BY 1/8 OF AN INCH, AND THE GAP ON THE SIDES OF THE REST WERE EXACTLY THE SIZE OF THE PART. THESE TWO CHARACTERISTICS GAVE THIS PARTICULAR PART EXACTLY ENOUGH ROOM TO GET SUCKED INTO THE GAP.					

#### Attachment:Yes

Supervisor

Last Name:McQuaide	First Name: Eamon
Phone:+1 206 383-0875	Email:eamonm@uw.edu
Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3	Department:ENG: Mechanical Engineering-Staff

#### Classification

Level 1:

Injury requiring medical treatment (go to level 3 if in-patient hospitalization or amputation occurred),

Type of Incident

Injury Description: Cut, Laceration, Puncture, Scratch, Abrasion (Open Wound),

Body Parts Affected: Fingers,

Cause of Injury or Damage: Machinery,

Possible Causes

Equipment: Using Equipment Improperly, Inadequate Maintenance,

Environment:

Policies / Procedures: Failure to Follow Procedures,

Human Factors: PPE Not Used, Failure to Follow Established Protocol/Procedures,

#### Suggested corrective action by the affected party

IN THE FUTURE, PLEASE FOLLOW THE INSTRUCTIONS GIVEN IN DURING SHOP SAFETY TRAINING, AND IF YOU A ARE AT ALL UNSURE ABOUT A MACHINE, PLEASE ASK US TO CLARIFY CORRECT USE. THERE ARE ALSO GUIDELINES FOR CORRECT USE ON THE SIGN DIRECTLY ABOVE THE GRINDER. IF GRINDING SMALL OR AWKWARD PARTS, USE VICE GRIPS TO HOLD THE PART. THIS WILL GIVE YOU MORE MECHANICAL LEVERAGE, AND PUT DISTANCE BETWEEN YOU AND THE GRINDER. IN THIS PARTICULAR CASE, VICE GRIPS ARE PART OF YOUR PPE.

#### **Supervisor's Comments**

Root Causes:

(Please look at all the factors that may have contributed to the accident.Such factors may include equipment, environment, policies, procedures, and personnel.)

THE ROOT CAUSES OF THE ACCIDENT ARE:

IMPROPER GAP BETWEEN GRINDER AND REST RESULTING IN THE ABILITY FOR THE PART TO BE SUCKED INTO THE GAP BETWEEN THE REST AND THE GRINDING WHEEL.

IMPROPER USE OF THE GRINDER (SEE SHOP SAFETY TRAINING, AND WARNING SIGN DIRECTLY ABOVE GRINDER)

DUE TO IT'S SMALL SIZE, THE STUDENT HAD POOR MECHANICAL GRIP AND LEVERAGE ON THE PART HE WAS GRINDING

Recommendations/Preventive Measures:

THE GRINDER REST WAS ADJUSTED AS CLOSE TO THE GRINDING WHEEL AS POSSIBLE TO MINIMIZE THE GAP BETWEEN IT AND THE REST.

THE STUDENT SHOULD FOLLOW THE INSTRUCTIONS AS TO PROPER PART POSITIONING AS EXPLAINED IN SHOP SAFETY, AND ON THE SIGN ABOVE THE MACHINE.

THE STUDENT SHOULD USE VICE GRIPS TO HOLD ONTO SMALL PARTS IN THE FUTURE WHILE USING THE GRINDER TO PROTECT HIMSELF FROM FURTHER HARM.

Corrective Actions Target Date (yyyy/mm/dd): 2019/04/29 Corrective Actions Complete Date (yyyy/mm/dd): 2019/04/30

Other Comments:

we will maintain the equipment, provide training and PPE. Shop Users: IN THE FUTURE, FOLLOW THE INSTRUCTIONS GIVEN IN DURING SHOP SAFETY TRAINING, AND GUIDELINES FOR CORRECT USE ON THE SIGN DIRECTLY ABOVE THE GRINDER. IF GRINDING SMALL OR AWKWARD PARTS, USE VICE GRIPS TO HOLD THE PART. THIS WILL GIVING YOU MORE MECHANICAL LEVERAGE, AND PUT DISTANCE BETWEEN YOU AND THE GRINDER. IN THIS PARTICULAR CASE, VICE GRIPS ARE PART OF YOUR PPE.

#### EHS Review

Last Name:Haggard	First Name: <b>Angelina M</b>	Phone Number:+1 206 616- 3442	Email: <b>ahaggard@uw.edu</b>
Occupation/Position:		Department:	

Comments: 4/25/19 forwarded to natalie daranyi - Angie Haggard



![](_page_18_Picture_0.jpeg)

# U-WIDE HEALTH AND SAFETY COMMITTEE

# April 10<sup>th</sup>, 2019 Meeting Minutes | 1:00 pm - 2:30 pm | Foege N130A

	Elected Members (HSC Group)		Appointed Members (HSC		Environmental
			Group)		Health &Safety
					(EH&S) Staff
X	Leslie Anderson, Co-Chair (1)	Х	Paul Zuchowski (3)		Katia Harb
	Fieta Robinson (1)		Katie Beth (3)	X	Denise Bender
X	Ryan Hawkinson (1) alternate	X	Beth Hammermeister (4)	X	Doug Gallucci
	Sterling Luke (2)	Х	Liz Kindred, Co-Chair (5)	Х	Angelina Haggard
X	Jeff Mellema (2)		Nicole Sanderson (7)	X	Manisha Konnur
	Carol Harvey (4)	Х	David Zuckerman (10)		
Χ	Ann Aumann (5)		Sonia Honeydew (9)		
	Natassia Stelmaszek (6)				
Χ	Lori Anthony (6)				
	Kelly Carter-Lynn (7)				
	David Hirschberg (8)				
Х	Hannah Wilson (8)				
	Kameron Harmon (9)				
Х	Colleen Irvin (9)				
Х	David Warren (10)				
	Lesley Colby (Faculty Senate)				
			The Official Manual and		Ex-Officio Members
	Labor Union Representation		EX-Officio Members		EX-Officio Miembers
	Labor Union Representation Paula Lukaszek, WFSE Local		Tracey Mosier, UW Facilities		Felicia Foster, Atty
	Labor Union Representation Paula Lukaszek, WFSE Local 1488		Tracey Mosier, UW Facilities		Felicia Foster, Atty General's Office
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate &		Tracey Mosier, UW Facilities Chris Pennington, UW		Felicia Foster, Atty General's Office Lt. Chris Jaross,
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate		Tracey Mosier, UW Facilities Chris Pennington, UW Facilities		Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121		<b>EX-Officio Members</b> Tracey Mosier, UW Facilities Chris Pennington, UW Facilities		Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121		Tracey Mosier, UW Facilities Chris Pennington, UW Facilities	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella,
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121		<b>Ex-Officio Members</b> Tracey Mosier, UW Facilities Chris Pennington, UW Facilities	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121		Ex-Officio Members Tracey Mosier, UW Facilities Chris Pennington, UW Facilities	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199		Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	×	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Lewy, Emergency	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	X	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	×	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	x	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management         Barry Morgan, Emergency	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen Risk
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	x	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management         Barry Morgan, Emergency         Management	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen, Risk Claims Services
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	x	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management         Barry Morgan, Emergency         Management         Barry Morgan, Emergency         Management         Barry Morgan, Emergency         Management         Birk Gleason DEOHS	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen, Risk Claims Services Vacant Capital
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	x x x	Ex-Officio MembersTracey Mosier, UW FacilitiesChris Pennington, UW FacilitiesSteve Charvat, Emergency ManagementMegan Levy, Emergency ManagementBarry Morgan, Emergency ManagementBarry Morgan, Emergency ManagementRick Gleason, DEOHS	x	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen, Risk Claims Services Vacant, Capital Planning &
	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199	x x x x	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management         Barry Morgan, Emergency         Management         Rick Gleason, DEOHS	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen, Risk Claims Services Vacant, Capital Planning & Development
**	Labor Union Representation Paula Lukaszek, WFSE Local 1488 Christine Kang, Graduate & Professional Student Senate (GPSS), UAW 4121 Vacant, SEIU Local 1199 = Present at meeting (quorum = 1)	X X X	Ex-Officio Members         Tracey Mosier, UW Facilities         Chris Pennington, UW         Facilities         Steve Charvat, Emergency         Management         Megan Levy, Emergency         Management         Barry Morgan, Emergency         Management         Rick Gleason, DEOHS	X	Felicia Foster, Atty General's Office Lt. Chris Jaross, UWPD Cmdr. Diego Zanella, UWPD Vacant, Transportation Services Ken Nielsen, Risk Claims Services Vacant, Capital Planning & Development

#### Agenda

- 1. Call to Order
- 2. Approval of Meeting Minutes
- 3. Organizational Group Reports
- 4. Union Reports
- 5. Ex-Officio Reports
- 6. EH&S Updates and L&I Updates
- 7. Open Discussion
- 8. Adjourn

#### Recorded by Manisha Konnur

- **1. Call to Order:** Leslie Anderson called the meeting to order at 1:04pm.
- 2. Approval of Meeting Minutes: March meeting minutes were approved as amended.
- 3. Organizational Group Reports

**HSC 1:** Ryan Hawkinson reported for HSC-1. The group met on April 10<sup>th</sup> at the Access Technology Center. The group toured the state of the art facility which serves users with disabilities, allowing full use of campus resources. Ryan pointed out that a good portion of what they do is fixing the content for courses on Canvas. The group discussed one specific OARS report that described an employee being possibly affected by a Wi-Fi router. Ryan asked for feedback from the committee members on this report. To which Denise Bender replied, Amy Lim – the Compliance Analyst with the Radiation Safety Team, has scheduled an assessment with the affected individual and will let the committee members know more about this in the next meeting. Denise added these type of instances are infrequent and uncommon but these assessments have been done before.

**HSC 2:** Jeff Mellema reported for HSC 2. The group will be meeting tomorrow and had no additional updates.

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**HSC 3:** Paul Zuchowski reported for HSC3. The group met last month and talked briefly about the demolition and reconstruction of the N22 parking lot this summer. During part of the construction, Stevens Way will be shut down for about 3 weeks in July.

**HSC 4:** Beth Hammermeister reported for HSC 4. The group met on March 26<sup>th</sup>, discussed OARS reports and March U-wide meeting minutes. Eleanor Wade presented on 'Youth Safety in Research Facilities'. Angelina Haggard gave an overview on the Health and Safety committees. The group also discussed the lack of UW staff/personnel affecting the safety at UW.

**HSC 5:** Liz Kindred reported for HSC 5. The group reviewed the OARS reports. Harborview Medical Center switched their laundry services and the staff has new scrubs. About 20-40 people have reportedly had rashes because of the new scrubs. UWMC has also had few cases like this. The DEOHS field group is assisting with the concerns with the new scrubs. David Manley is the new Safety Officer for Airlift Northwest.

**HSC 6:** Lori Anthony reported for HSC 6. The group met, discussed the OARS reports, Consolidated Llaundry closure and approved the U-wide meeting minutes. The group followed up on the protocol to deal with concussions because of students hurting themselves during dancing classes.

Lori also reported that the elevators in Smith Hall are being replaced in the next 5 months. The group discussed dealing with the construction and the elevator closure.

**HSC 7:** There was no one present from HSC 7. UW Bothell is hosting the July 10 U-Wide meeting.

HSC 8: Hannah Wilson reported there were no updates for HSC 8.

**HSC 9:** Colleen Irvin gave updates for HSC 9. The group met last month and discussed OARS reports and the Consolidated Laundry closure. They approved U-wide meeting minutes and discussed the on-boarding process specifically for health and safety.

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**HSC 10:** David Warren reported for HSC 10. The group met on March 18<sup>th</sup> and discussed the three OARS reports. One of them was related to a volunteer falling on ice. David mentioned there are relatively high number of volunteer injuries and suggested we should start asking the volunteers for their primary care information. David Zuckerman added there should be a centralized system dealing with volunteer information, tracking their hours and giving them information on how to report L&I claims. Colleen mentioned they use a Catalyst survey for volunteers to sign up and track their hours. The survey also gives information on the description of the work, if minors – there is a signed form from their guardians. The supervisor is present at all times during work hours and there should be an end date for the volunteer working. Several departments follow the School of Medicine's best practice for volunteers.

4. Union Reports: There were no updates.

#### 5. Ex-Officio Reports:

Cmdr. Diego Zanella reported there were no updates from UWPD. Megan Levy reported for Emergency Management. She introduced Barry Morgan – the new 'Plans, Training and Exercise Manager' to the committee. Megan added there is an upcoming table-top earthquake preparedness training on April 29<sup>th</sup> for President Cauce and the cabinet. The National Weather Forecast predicted hot, dry and drought conditions in the months of April to June and July to September which may cause wildfires. Megan encouraged everyone to start planning and ordering the respirators that may be needed for their departments based on these predictions.

Rick Gleason reported for DEOHS. He reminded everyone about the annual <u>Worker</u> <u>Memorial Day Ceremony</u> at the UW; an event organized for commemorating the workers who died on the job in King County. The event will take place on April 24th in the HUB. U-wide members were encouraged to attend.

**6. EHS Updates:** Angelina Haggard presented on the 2018 Injury Statistics. Presentation will be inserted here.

Denise Bender reported for EH&S and mentioned Emma Corell's departure from EH&S. The Accident Prevention Manager's position will be posted soon. Denise reminded everyone of the Senior EH&S Director position being open. **L&I Updates:** Denise Bender gave the L&I updates. There is a noise concern reported at IMA from the smoothie machines. Denise mentioned EH&S is conducting noise monitoring at the Café and will update the committee more in the next meeting.

- 7. Open Discussion: Liz Kindred recommended committee members review the use of the light diffusing chair attachments. In a recent inspection, the State Fire Marshall determined these items are a fire hazard. Angie Haggard stated June is National Safety Month.
- 8. Adjourn Leslie Anderson adjourned the meeting at 2:20pm.

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### University-Wide (U-Wide) Health and Safety Committee Meeting Agenda

### May 8, 2019

#### 1:00 – 2:30 PM

### William H. Foege Bldg. N-130A

Agenda Item	Lead	Process	Time
Call to Order	Leslie Anderson	Robert's Rules of Order	
Approval of Meeting Minutes		Robert's Rules of Order	5 min
Safety of Minors	Caroline Shelton, Director Office for Youth Programs Development & Support	Presentation	25 min
Organizational Group Reports*	Committee Members	Discussion	20 min
Union Reports	nion Reports Union Representatives		10 min
Ex-Officio Reports	Ex-Officio Members	Discussion	5 min
EH&S and L&I	EH&S and L&I Updates: EH&S staff Boating Safety Manual:	Discussion	5 min
Updates	Will Love, Diving Safety Officer		15 min
Good of the Order	ood of the Order Leslie Anderson		5 min
Adjourn	Leslie Anderson	Robert's Rules of Order	

\*Organizational Group Reports include topics covered at their most recent meeting

Please send ideas for agenda items to the co-chairs Leslie Anderson and Liz Kindred at least 2 weeks prior to our meetings.