Agenda – March 31, 2020 Group 9 (College of Engineering) Health and Safety Committee

1. Attending

Michael Domar, AA Colleen Irvin, BioE Sean Yeung or Michael Brett, CEE Michael Pomfret, CEI Carter Beamish for K. Harmon, ChemE S. Honeydew or M. Glidden, CoE DO Alex Lefort or Adrian dela Cruz, CSE Mike Kane or Bill Lynes, ECE

Erin McKeown or Denise Bender, EH&S Stacia Green, HCDE Sheila Prusa or Neelu Rajvanshi, ISE Svenja Fleischer or Bill Kuykendall, ME John Young or M. Weaver, MolES/NanoES Tatyana Galenko, MSE N. Shane Patrick or Maria Huffman, WNF

2. Previous Meeting Minutes

- Feb 2020 approve? Corrections/additions?
- Previous meeting minutes are posted at https://www.engr.washington.edu/mycoe/safety# and at each department/group's safety bulletin board.

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

- MSE @ Mueller needle stick while uncapping syringe (Jan)
- ECE @ HSEB lacerated finger on monkey cage (Jan)
- CEE @ More HF spill (Jan)
- MSE @ MolES needle stick in thumb (Jan)
- MSE @ Ben waste container exploded in fume hood (Jan)
- ME @ MEB mercury spill during surplus (Feb)
- AA @ AERB glove caught in drill press (Feb)

4. Group Business

- discuss response to COVID-19 and Restricted Campus Operations
- review and approve Group 9 charter for submission to Dean

5. <u>UW-Wide Meeting</u>

- February minutes attached
- March agenda attached
 - COVID-19 update, including claims
 - U-Wide Charter review
 - UWEM asks we all document COVID-19 response for future planning
 - Walking and Working Surface Inspection Checklist

6. Member Updates

Next Meeting: April 28th at 2pm, via Zoom

Meeting Date: February 25, 2020

Attended

Michael Domar, AA
Phillip Cox for Michael Pomfret, CEI
Carter Beamish, ChemE
Alexander Lefort, CSE
Sonia Honeydew, DO

Mike Kane, ECE
Denise Bender, EH&S
Sheila Prusa, ISE
Svenja Fleischer, ME
John Young, MolES/NanoES

Absent 4 6 1

Colleen Irvin, BioE J. Sean Yeung, CEE Stacia Green, HCDE Tatyana Galenko, MSE N. Shane Patrick, WNF

Guest Speaker: Scott Nelson, EH&S Fire Safety

- Battery safety update
 - o Scott shared EH&S report on battery storage fire at UWMC.
 - o Off-duty SFD Lt happened to be on hand; fire occurred in an area of the hospital where fire should never occur, in plastic storage container in a "clean" area; two fire extinguishers failed to put out fire; sprinkler activated. Lots of money and time to clean up.
 - o Thermal runaway of unused button and slightly larger CR477 batteries free floating in a container (bridge created across terminals allowed excess current flow). This is a potential with all lithium ion batteries.
 - o Recommendations: during procurement avoid batteries without protective packaging; beware potential when dispose of undepleted batteries as the hospital does (they are on a regulated timeline for changing out batteries before they deplete). EH&S will create a focus sheet on best practices from procurement through disposal (can tape over terminals). See EH&S lithium battery safety white paper from 2018.
 - o Fire code covers Battery Rooms (required for lithium ion batteries in quantity over 1,000 lb) but there is no regulation for this quantity.
 - Question: will there be signage at eMedia bins around campus regarding Li Ion battery disposal? Scott will contact UW Recycling.

- Distinction between roles of EH&S' Scott Nelson and EH&S' Natalie Daranyi regarding power hazards:
 - Scott addresses fire code compliance and general electrical safety and design, including physical arrangement
 - Natalie addresses worker interface with electrical systems and battery systems >100V (PPE and safe work practices) and energized systems >50V, and Lockout/Tagout
- Consolidating SFD permits for hazardous materials in buildings
 - EH&S modified MyChem to list permit # for each room/chemical use area. EH&S is entering data and will give us access to permit status.
 - o Update MyChem inventories, then consolidate permits to reduce cost, where building fire areas allow. EH&S will reach out to Building Coordinators, though BC's may not know what's happening in lab space (there may be multiple departments/groups in each building).
 - o The Provost directed that permits be up to date; have a current permit or apply for a permit. Permits are required if over certain quantities of hazardous materials.
- Update on Building/Fire Life Safety Surveys
 - Common findings: not all fire extinguisher inspection tags up to date, improper storage in electrical & mechanical rooms
 - Looking at signage for non-ionizing radiation
 - Checking building number identification signs for SFD, and signs for fire department connections.

Previous Meeting Minutes

- January 2020 draft approved with minor corrections.
- Previous meeting minutes are at: https://www.engr.washington.edu/mycoe/safety#.
 EH&S recommends each department/group post paper copies on their safety board. Inform employees of the name of their rep; best practice is to post name by meeting notes.

Incident Reports

• CEI @ Bowman – sulfuric acid spill (Jan). Reaction was set up a day in advance because it is a long experiment. Two causes of spill: reaction vessel not tightened down at the bottom so there was a drip-by-drip leak, and the secondary container was removed. The backup secondary container normally in that room was not available. The next morning there was a 10-15' trail (uneven floor) of spilled material. Started mopping, then used pH test strip, then switched to neutralizing material

(baking soda) and swept up material. Corrective actions: can't quantify how much to tighten plastic piece, so add signage not to remove secondary container. Also, add sign on reaction vessel, "Contains Acid – reaction in progress". There may be a rule that any unattended or overnight experiment should be labeled with hazard labels and contact info.

- MSE @ MolES cut fingers while leveling feet (Jan). Using wrench to unscrew leveling feet from a glove box. A small shard not shaved off by the manufacturer cut fingers. This brought up the age-old question of how BC's or HSC reps can be alerted to OARS reports in their group or building. It is a limitation of the OARS system, but EH&S is shopping for an OARS replacement and knows we want this feature.
- MSE @ Mueller needle stick while uncapping syringe (Jan). Discuss in March.
- ECE @ HSEB lacerated finger on monkey cage (Jan). Discuss in March.
- CSE @ Gates cut thumb on stair railing (Jan). There was a sharp edge on the joinery
 of the metal rail. UW Facilities responded and filed it down within a day.
- CEE @ More HF spill (Jan). Discuss in March.
- MSE @ MolES needle stick in thumb (Jan). Discuss in March.
- CSE @ Gates slipped and fell, hitting head (Jan). Problem with design or build of new building; in touch with construction manager to resolve. What should be back-up or emergency drainage from the roof acted as primary drainage, creating a large volume of water at the Loading Dock. The water went over the LD door threshold and inside, creating a ½-1" puddle. The person who fell received medical attention as a precaution but is fine. Warning cone and a sign were placed inside and outside the LD door. Risk mitigated now with a large mat inside the room to improve grip. Construction manager is working with the building manager to reroute the water drainage. The building is new so it is unlikely the primary roof drain is clogged with debris already.
- MSE @ Ben waste container exploded in fume hood (Jan). Discuss in March.

Group Business

- Please tell Administrators that the Lab Safety and Compliance for Administrators webinar is tomorrow, 2/26.
- Group 9 charter update save for March meeting.

UW-Wide Meeting

- No January minutes (no meeting).
- February agenda in packet. Highlights:
 - o S. Honeydew elected Chair; will run meetings & help EH&S set agenda.
 - It was suggested the U-wide regularly review trends in OARS dashboard.

- UWPD increased their planning for cherry blossom crowds, and noted an increase in the population on campus of people living with homelessness.
- o EH&S meets with Executive Sponsors in March and April for annual review of trends and concerns.
- The Provost asked EH&S to reach out to all departments to verify they have supplemented the APP for their group. This should be completed by the end of 2020.
- Please contact the Employee Health Center if you have travelled to mainland China recently. UW discussing COVID-19 impacts on international students.
- Provost's new task force on chemical and physical hazards will conduct outreach in March and voted to approve their formal escalation procedure.

Department Updates

- DO UWPD informed me they've had an increase in unaffiliated visitors at the HUB, so UWPD partnered with HUB managers and increased their presence there. Now seeing a secondary effect as people are "pushed out" to surrounding buildings. Please keep UWPD in the loop; all their officers are trained to establish friendly relationships that give them the opportunity to interact in a helpful way and provide resources
- EH&S EH&S now has a central location for lead processing. They can pick up or you can drop off. They provide buckets for packaging this hazardous material. Get flyer link from Denise Bender.

Next Meeting

• March 31st, 2020 at 2pm, in Loew 355.



Report Number: 2020-01-017 Contact EH&S at 206-543-7262

| Person Reporting Incident | | |
|---|--|--|
| Last Name: Galenko | First Name: Tatyana | |
| Phone: | Email:tgalenko@uw.edu | |
| Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3 (E S 8) | Department: ENG: Materials Science and Engineering | |
| Date Reported(yyyy/mm/dd):2020/01/08 | Time of Reporting:03:33 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):2020/01/08 | Time of Incident:3:15 PM When Shift Begins: N/A | |
| Campus:Seattle | Incident Location/Parking Lot:MUELLER HALL | |
| Room: 165 | Other: | |

Incident Details:

Student was taking a cap of the syringe, cap was on tight, when the needle came out of the cap, student poked index finger. TA had the student wash his hands for 15 min with soap. The needle was previously used for injecting chemical into solution. Chemicals used: bis- acrylamide & acrylamide & TEMED. After 15 min wash, first aid was administered. Lab manager called Hall Health, to see if student should seek immediate attention. Lab manager was informed that skin irritation was the primary concern. Lab manager printed out SDS and provided them to the student in case they wanted to go see a doctor if things got worse. Lab manager plans to check in on student next lab session.

Attachment: No

| Supervisor | |
|---|--|
| Last Name:Galenko | First Name: Tatyana |
| Phone: | Email:tgalenko@uw.edu |
| Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3 (E S 8) | Department: ENG: Materials Science and Engineering |

Classification

Level 1:

Injury requiring first aid,

Type of Incident

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

Body Parts Affected: Fingers,

Cause of Injury or Damage: Chemicals, Needles, Medical Sharps, Scalpels, etc. (Clinical, Research, Teaching),

Possible Causes

Equipment:

Environment:

Policies / Procedures:

Human Factors: Inadequate Training,

Suggested corrective action by the affected party

Don't have the cap on the syringe on so tight.

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.)

Inadequate training.

Recommendations/Preventive Measures:

Lab manager will do additional training with students before the start of the lab. If students doesn't feel safe, ask TA to do it.

Corrective Actions Target Date (yyyy/mm/dd): Corrective Actions Target Date (yyyy/mm/dd): 2020/01/13

Corrective Actions Complete Date (yyyy/mm/dd): 2020/01/13

Other Comments:

Every two weeks a new set of students do the lab that involve needles, will talk with a new set of students every two weeks.

| Review |
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| |

| Last Name:Konnur | First Name:Manisha | Phone Number:+1 206 221- 1759 | Email:mkonnur@uw.edu |
|----------------------|--------------------|----------------------------------|----------------------|
| Occupation/Position: | | Department: | |

Comments:forwarded to Tracey Harvey, EHS-OHN, Ellie Wade, Zara L. - MK 1/9



Report Number: 2020-01-056 Contact EH&S at 206-543-7262

| Person Reporting Incident | | |
|--|--|--|
| Last Name:Orsborn | First Name:Amy | |
| Phone: 2066162049 | Email:aorsborn@uw.edu | |
| Occupation/Position: ASSISTANT PROFESSOR | Department: ENG: Electrical & Computer Engineering | |
| Date Reported(yyyy/mm/dd):2020/01/16 | Time of Reporting:02:45 PM | |
| Person Involved or Affected | | |
| Last Name: | First Name: | |
| Phone: | Email: | |
| Occupation/Position: | Department: ENG: Electrical & Computer Engineering Orsborn Lab | |
| Incident Details | | |
| Date of Incident(yyyy/mm/dd):2020/01/16 | Time of Incident:10:00 AM When Shift Begins: N/A | |
| Campus:Not assigned to Campus | Incident Location/Parking Lot:Health Sciences Education Building | |
| Room: I-565 | Other: | |
| Incident Details: | · | |

Incident Details:

After loading a rhesus macaque from their cage to their chair and lowering the door of the chair, scratched himself on the edge of the cage, ripping through both pairs of gloves and breaking the superficial layers of skin (blood drawn) on the tip of his left pinky finger.

Attachment: No

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| Last Name: Orsborn | First Name:Amy |
|--|--|
| Phone: 2066162049 | Email:aorsborn@uw.edu |
| Occupation/Position: ASSISTANT PROFESSOR | Department: ENG: Electrical & Computer Engineering |

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: Broken Glass, Splinter, Sharp Furniture Edge, etc.,

Possible Causes

Equipment:

Environment: Ergonomics Issues, Sharp Objects,

Policies / Procedures:

Human Factors: Rushing,

Suggested corrective action by the affected party

Lab members will increase their level of PPE (scratch-resistant gloves) when performing chair-loading procedures moving forward, reducing risk of abrasions due to environmental factors. Increased care will be used to avoid rushing that may increase risk of abrasions. The environment will also be assessed to make lab members aware of all sharp edges on cages/the chair.

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.)

Two key causes contributed to this accident. Ergonomic/environmental - Our primate chair design requires that they are positioned very close to the cages. Some cages have additional equipment mounted on the front, creating sharp edges that present additional obstacles and increase risk.

Personnel - Rushing to perform new tasks, combined with the increased obstacles on the cage increased the likelihood of injury on the cage.

Recommendations/Preventive Measures:

Moving forward, we recommend that steps be taken to reduce the hardware mounted to the front of the cages used for our animals. In addition, we will increase the level of PPE beyond the required to assure that, independent of environmental factors, we reduce the risk of abrasions from the cage. Specifically, lab members will wear scratch-resistant gloves while performing operations involving the cage.

| Corrective Actions Target 2020/01/17 | Date (yyyy/mm/dd): | Corrective Actions Comple 2020/01/17 | ete Date (yyyy/mm/dd): |
|--------------------------------------|--------------------|--------------------------------------|------------------------|
| Other Comments: | | | |
| EHS Review | | | |
| Last Name:Konnur | First Name:Manisha | Phone Number:+1 206 221- 1759 | Email:mkonnur@uw.edu |
| Occupation/Position: | | Department: | |

Comments: forwarded to OHN, Ellie Wade, Zara Llewellyn - MK 1/17



Injury Description: None,
Body Parts Affected: None,

University of Washington Accident / Incident Report

| Report Number: 2020-01-076 | Con | ntact EH&S at 206-543-7262 |
|--|---|----------------------------|
| Person Reporting Incident | | |
| Last Name: | First Name: | |
| Phone:+1 | Email: | |
| Occupation/Position: | Department: ENG: Civil and Engineering- Admin Staff | Environmental |
| Date Reported(yyyy/mm/dd):2020/01/23 | Time of Reporting:02:35 PM | 1 |
| Person Involved or Affected | | |
| Last Name: | First Name: | |
| Phone: | Email: | |
| Occupation/Position: | Department: ENG: Civil and - PM Ray | Environmental Engineering |
| Incident Details | | |
| Date of Incident(yyyy/mm/dd):2020/01/16 | Time of Incident:2:00 PM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking | Lot:MORE HALL |
| Room: 324 | Other: | |
| Sample tube (50 mL falcon) containing 10 mL of 40% HF and 1 gram of vanadium aluminum carbonate (V2AlC) was on sample rack without the lid, awaiting transfer into waste bottle. The researcher accidentally knocked the tube, causing it to fall, spilling 1 mL of the solution inside the fume hood. The tube was quickly picked up and placed back in the rack. was not exposed to the solution (no splash). recovered most of the solution with a transfer pipet, which was placed back into the 50 mL falcon tube. There was no HF spill kit available, but she contacted a nearby lab mate to locate the MSDS and calcium carbonate to neutralize the remaining solution. She then placed calcium carbonate powder onto the affected area in the fume hood to neutralize the HF, and mixed well using kimwipes. The powder was then packaged into double bagged hazardous waste using kimwipes. Afterwords, water was used to wipe down the area. was wearing all proper PPE (goggles, face shield, surgical mask, lab coat, HF apron, nitrile glove, and silver shield gloves), and had completed the online HF training. was working alone at the fume hood, but a lab mate was nearby. The lab did have calcium gluconate gel (purchased for exposure), which applied to her hands out of an abundance of caution (she was wearing silver shield gloves when handling the HF clean-up). Attachment:No | | |
| Supervisor | | |
| Last Name:Ray | First Name: Jessica | |
| Phone:+1 206 221-0791 | Email:jessray@uw.edu | |
| Occupation/Position: ASSISTANT PROFESSOR | Department: ENG: Civil and | Environmental Engineering |
| Classification | | |
| Level 1: Near miss (No incident occurred but it could | have), | |
| Type of Incident | | |

ON FILE: Affected/Injured Employee's date of birth, gender, date of hire, and hours of employment.

Cause of Injury or Damage: Chemicals, Contact with Object: Bumped into Something, **Possible Causes** Equipment: Environment: Policies / Procedures: Appropriate Procedures Non-existent, Inadequate Instructions, Procedures, Inadequate Planning, Preparation, Human Factors: Inadequate Training, Inattention, Suggested corrective action by the affected party Don't open cap of falcon tube until we are prepared for the transfer of HF. **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.) Factors that may have contributed to the accident include a lack of standard operating procedures regarding safe handling and use of hydrofluoric acid. Recommendations/Preventive Measures: A corresponding standard operating procedure will be written and signed by all lab members to ensure safe handling of hydrofluoric acid in the future. Corrective Actions Target Date (yyyy/mm/dd): Corrective Actions Complete Date (yyyy/mm/dd): 2020/01/27 2020/01/23 Other Comments: **EHS Review** Last Name: First Name: Phone Number: Email: Occupation/Position: Department: Comments:



Report Number: 2020-01-084 Contact EH&S at 206-543-7262

| Report Number. 2020-01-084 | Contact EA&S at 206-543-7262 |
|---|--|
| Person Reporting Incident | |
| Last Name: | First Name: |
| Phone:+1 | Email: |
| Occupation/Position: | Department: ENG: Materials Science and Engineering - Luscombe Lab JM Student |
| Date Reported(yyyy/mm/dd):2020/01/27 | Time of Reporting:02:02 PM |
| Person Involved or Affected | |
| Last Name: | First Name: |
| Phone:+1 | Email: |
| Occupation/Position: | Department: ENG: Materials Science and Engineering - Luscombe Lab JM Student |
| Incident Details | |
| Date of Incident(yyyy/mm/dd):2020/01/24 | Time of Incident:12:30 PM When Shift Begins: N/A |
| Campus:Not assigned to Campus | Incident Location/Parking Lot:MOLECULAR ENG BLDG |
| Room: 140 | Other: |
| Incident Details: | |
| Needle stick in thumb at reasonable depth | |

Needle stick in thumb at reasonable depth.

Attachment: No

Supervisor

| Last Name:Luscombe | First Name: Christine |
|--------------------------------|--|
| Phone:+1 206 616-1220 | Email:luscombe@uw.edu |
| Occupation/Position: PROFESSOR | Department: ENG: Materials Science and Engineering |

Classification

Level 1:

Injury or Exposure, no first aid required,

Type of Incident

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

Body Parts Affected: Fingers,

Cause of Injury or Damage: Needles, Medical Sharps, Scalpels, etc. (Clinical, Research, Teaching),

Possible Causes

Equipment:

Environment:

Policies / Procedures: Failure to Follow Procedures,

Human Factors: Inadequate Training, Failure to Follow Established Protocol/Procedures,

Suggested corrective action by the affected party

Change initial/onboarding training in safety procedures for new students or lab members to really drill down on correct and safe handling of sharps.

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.) While all new members undergo safety training, in this particular instance, it seems that the new member was not sufficiently aware of the dangers of placing sharps waste in the incorrect area. Recommendations/Preventive Measures: Redesign onboarding safety orientation to ensure that new members are aware of dangers associated with sharps waste. Corrective Actions Target Date (yyyy/mm/dd): 2020/01/27 Other Comments: EHS Review

1759

Department:

Phone Number:+1 206 221-

Email:mkonnur@uw.edu

First Name: Manisha

Comments:forwarded to OHN, Ellie Wade, Zara Llewellyn - MK 1/27

Last Name: Konnur

Occupation/Position:



Report Number: 2020-01-104 Contact EH&S at 206-543-7262

| Person Reporting Incident | | |
|---|---|--|
| Last Name: | First Name: | |
| Phone: | Email: | |
| Occupation/Position: | Department: ENG: Materials Science and Engineering-Yang Lab JM Student | |
| Date Reported(yyyy/mm/dd):2020/01/31 | Time of Reporting:03:50 PM | |
| Person Involved or Affected | | |
| Last Name: | First Name: | |
| Phone: | Email: | |
| Occupation/Position: | Department: ENG: Materials Science and Engineering- Staff JM Student | |
| Person was in Paid Position:No | | |
| Incident Details | | |
| Date of Incident(yyyy/mm/dd):2020/01/30 | Time of Incident:4:45 PM When Shift Begins: N/A | |
| Campus: Seattle | Incident Location/Parking Lot:BEN HALL INT. RSCH | |
| Room: 630 | Other: | |
| Turidant Dataila: | | |

Incident Details:

An acidic solution (80% HNO3, 10% HCL, 10% H2SO4) was added to an existing waste container which was labelled and used in the past to collect this type of waste by a Masters student working in our lab. The waste container was in a fume hood with several other containers that were being cataloged and prepared for waste pickup. ~10 minutes later the container exploded, apparently due to a reaction which produced internal pressure. The sound of the explosion alerted students elsewhere in the lab to the incident. The explosion broke two additional waste containers: a second containing primarily nitric acid and a 3rd which contained additional chemicals in an unknown ratio (NaBH4, NH3OH, NMP, and 2-amino-2-thydroxymethyl-1.3-propanediol). The majority of the spill was contained within the fume hood but some solution and broken glass was deposited on the floor outside the fume hood. Baking soda from the spill kit was applied to the liquid solution on the floor and it was at this point I was alerted to the spill (I was working at my desk in a neighboring room) and contacted EH&S.

Attachment: No

| Supervisor | | | | |
|--------------------------------|--|--|--|--|
| Last Name: Yang | First Name:Jihui | | | |
| Phone:+1 206 543-7090 | Email: jihuiy@uw.edu | | | |
| Occupation/Position: PROFESSOR | Department: PROV: College of Engineering | | | |

Classification

Level 1:

Near miss (No incident occurred but it could have), Property damage only,

Type of Incident

Injury Description: None,
Body Parts Affected: None,

Cause of Injury or Damage: None,

Possible Causes

Equipment:

Environment: Poor Housekeeping,

Policies / Procedures: Appropriate Procedures Non-existent,

Human Factors:

Suggested corrective action by the affected party

After working with EH&S to clean up the spill it was agreed that the process of removing excess waste from our lab should be quickly implemented. Additionally, proper waste storage practices should be implemented with a brief training for all lab staff to bring everyone up to speed. As part of restocking our spill kit we will review the PPE we have available in the even of future acid spills to ensure a quick and safe response.

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.)

Accumulation of excess waste combined with improper storage of waste containers within the fume hood. As our lab's new CHO I had already begun the process of accessing our waste streams but had not yet requested waste pickup. This reaction may have occurred since the waste container quite old and may no longer have only contained the compounds listed on the label.

Recommendations/Preventive Measures:

As was already our intention we want to remove all currently collected waste from our lab to allow for a fresh start implementing a new waste collection system more in line with UW EH&S guidelines and policies to avoid this type of incident in the future.

Corrective Actions Target Date (yyyy/mm/dd): 2020/02/07

Corrective Actions Complete Date (yyyy/mm/dd):

Other Comments:

This is my first time completing an incident report. I have completed it to the best of my ability but would happily receive feedback on what additional information can be included. I listed myself as a supervisor since I am the lab's CHO.

EHS Review

| Last Name:Konnur | First Name:Manisha | Phone Number:+1 206 221- 1759 | Email:mkonnur@uw.edu | |
|----------------------|--------------------|----------------------------------|----------------------|--|
| Occupation/Position: | | Department: | | |

Comments:forwarded to Tracy Harvey - MK 2/3



Report Number: 2020-02-025 Contact EH&S at 206-543-7262

| Report Namber 2010 01 015 | 50. | nedect Ends de Eco 515 7EcE |
|---|------------------------------------|-----------------------------|
| Person Reporting Incident | | |
| Last Name:Fleischer | First Name:Svenja | |
| Phone:+1 206 616-2602 | Email:ffleisch@uw.edu | |
| Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3 (E S 8) | l Engineering-Staff | |
| Date Reported(yyyy/mm/dd):2020/02/06 | Time of Reporting:03:49 PM | М |
| Person Involved or Affected | | |
| Last Name: | First Name: | |
| Phone: | Email: | |
| Occupation/Position:Undergraduate Student | Department: | |
| Person was in Paid Position:Yes | | |
| Incident Details | | |
| Date of Incident(yyyy/mm/dd):2020/02/06 | Time of Incident:1:45 PM | When Shift Begins: N/A |
| Campus:Seattle | Incident Location/Parking | Lot: |
| Room: | Other:Mechanical Engineer:entrance | ing Building B-floor East |
| Incident Details: | | |
| A large (maybe 5ft tall) mergury manometer had been | placed incorrectly in the | MER curplus area |

A large (maybe 5ft tall) mercury manometer had been placed incorrectly in the MEB surplus area (presumably a long time ago). Not knowing what the instrument was, my student assistant asked the UW Moving staff during a scheduled surplus pick-up if they could take the manometer as well. The movers did not immediately notice the mecury-filled glass tubing either. Reportedly they carried it upright for most of the way, but then tilted it while opening the exterior building door. The manometer was capped at the top, but apparently it was not fully sealed; a few drops of mercury were spilled onto the ground. It was made sure that no further people walked through the affected area, then the spill was cleaned up using a mercury spill kit. The manometer was bagged in plastic to prevent further spills until pickup by EH&S.

Attachment: No

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| ouper visor | |
|---|---|
| Last Name:Fleischer | First Name:Svenja |
| Phone:+1 206 616-2602 | Email:ffleisch@uw.edu |
| Occupation/Position:RESEARCH SCIENTIST/ENGINEER 3 (E S 8) | Department: ENG: Mechanical Engineering-Staff |

Classification

Level 1:

Near miss (No incident occurred but it could have),

Type of Incident

Injury Description: None,

Body Parts Affected: None,

Cause of Injury or Damage: Chemicals, Tools, Instruments,

Possible Causes

Equipment: Defective Tools, Equipment,

Environment: Chemicals,

Policies / Procedures: Failure to Follow Procedures,

Human Factors: Inadequate Training, Failure to Follow Established Protocol/Procedures, Inattention,

Suggested corrective action by the affected party

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.)

Failure to follow procedures - no hazardous materials are allowed in the surplus area. Additionally, the instrument apparently was not fully sealed. On further investigation, also the difficulty in disposing of mercury-containing equipment and a lack of markings identifying the hazard contributed to the incident.

Recommendations/Preventive Measures:

Provide signs and a department-wide reminder that hazardous materials may not be placed in the surplus area. Train students helping with surplus to better identify hazardous materials / objects. Clearly mark identified hazardous materials until they can be removed.

Corrective Actions Target Date (yyyy/mm/dd): 2020/02/20

Corrective Actions Complete Date (yyyy/mm/dd):
2020/02/20

Other Comments:

Added signage and sent a department-wide reminder that hazardous materials may not be placed in the surplus area. Trained students helping with surplus to be aware of the possibility that people may not follow this rule and told them to ask for guidance if unsure about anything found in the surplus area. Clearly marked identified hazardous materials until they can be removed.

EHS Review

| Last Name:Konnur | First Name:Manisha | Phone Number:+1 206 221- 1759 | Email:mkonnur@uw.edu | |
|----------------------|--------------------|----------------------------------|----------------------|--|
| Occupation/Position: | | Department: | | |
| | | | | |

Comments:forwarded to Tracy Harvey - MK 2/7



Report Number: 2020-02-048 Contact EH&S at 206-543-7262

| Report Namber 2020-02-040 | CO. | illact Ellab at 200-545-7202 | | |
|---|----------------------------|------------------------------|--|--|
| Person Reporting Incident | | | | |
| Last Name: Knowlen | First Name:Carl | | | |
| Phone:+1 206 543-7159 | Email:knowlen@uw.edu | | | |
| Occupation/Position: RESEARCH ASSOCIATE PROFESSOR | Department: ENG: Aeronauti | cs and Astronautics | | |
| Date Reported(yyyy/mm/dd):2020/02/11 | Time of Reporting:09:47 A | М | | |
| Person Involved or Affected | | | | |
| Last Name: | First Name: | | | |
| Phone: | Email: | | | |
| Occupation/Position:Undergraduate Student | Department: | | | |
| Person was in Paid Position:Yes | | | | |
| Incident Details | | | | |
| Date of Incident(yyyy/mm/dd):2020/02/10 | Time of Incident:4:15 PM | When Shift Begins: N/A | | |
| Campus: Seattle | Incident Location/Parking | Lot: | | |
| Room: 012 | Other: AERB | | | |
| Incident Details: | • | | | |
| | | | | |

Attachment:No

| _ | | | | | | | |
|----|----|---|----|----|---|---|---|
| Sı | ın | e | r١ | /1 | S | O | r |

| Last Name: Knowlen | First Name:Carl | | |
|---|---|--|--|
| Phone:+1 206 543-7159 | Email:knowlen@uw.edu | | |
| Occupation/Position: RESEARCH ASSOCIATE PROFESSOR | Department: ENG: Aeronautics and Astronautics | | |

After turning off the drill press, student's glove got caught in spindle which twisted the glove and

fingers, resulting in a sprained middle finger on the right hand.

Classification

Level 1:

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

Type of Incident

Injury Description: Bruise, Contusion, Cut, Laceration, Puncture, Scratch, Abrasion (Open Wound), Fracture, Dislocation,

Body Parts Affected: Fingers,

Cause of Injury or Damage: Machinery,

Possible Causes

Equipment: Using Equipment Improperly,

Environment:

Policies / Procedures: Failure to Follow Procedures, Inadequate Instructions, Procedures,

Human Factors: Inadequate Training, Inadequate, Improper PPE, Failure to Follow Established Protocol/Procedures,

Suggested corrective action by the affected party

ON FILE: Affected/Injured Employee's date of birth, gender, date of hire, and hours of employment.

Do not use gloves with rotating machinery.

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)

Student was wearing loose fitting gloves while using a drill press, which is inappropriate use of PPE and key factor in this incident. He was assisting contractors () with assembling an experimental apparatus. Student was instructed to drill a hole adjacent to another hole in a thin (1/16") sheet of SS. The material between the holes was to be removed with a file to form a slot. Student had just finished the drilling on his 3rd piece when his glove got caught in the spindle. The spinning spindle wrapped glove and hand around it, students nearby quickly shut off the machine and helped him extract hand and glove. Even though the student was introduced to the drill press and shown how to operate it, he was inexperienced and had not been through the shop safety training (where he would of learned that wearing gloves for machining processes is not recommended). Had the contractor known the student was not shop safety certified, he would not of asked the student to help with this task.

Recommendations/Preventive Measures:

Review safety training status of all students working in the lab and enforce policy of not allowing anyone without proper training to use the power tools.

Clearly identify the shop certification status of student volunteers so that they are not asked to do something they are not qualified to do.

Corrective Actions Target Date (yyyy/mm/dd):
2020/02/14 Corrective Actions Complete Date (yyyy/mm/dd):
2020/02/12

Other Comments:

Student has been debriefed and all information for this incident has been gathered. Recommended corrective steps have been taken.

| EHS Review | | | | | | |
|----------------------|-------------|---------------|--------|--|--|--|
| Last Name: | First Name: | Phone Number: | Email: | | | |
| Occupation/Position: | | Department: | | | | |
| Comments: | | | | | | |



U-WIDE HEALTH AND SAFETY COMMITTEE

February 12, 2020 Meeting Minutes | 1 p.m. - 2:30 p.m. | N-130A

| | Elected Members* (HSC Group) | | Appointed Members* (HSC Group) | | Environmental Health &Safety (EH&S) Staff** |
|-----|--|------|--|------|---|
| X | Ryan Hawkinson (1) | X | Mark Pekarek (2) | X | Katia Harb |
| X | Carmen Parisi (1) | X | Kurt Oglesby (3) | X | Denise Bender |
| | Erick Rostad (2) | | | X | Erin McKeown |
| Х | Christine Aker (4) | X | Liz Kindred, Vice-Chair (5) | X | Manisha Konnur |
| Х | Tony Colinares (3) | X | Beth Hammermeister (4) | | |
| Х | David Zuckerman (10) | X | Adam Geoffrey (7) | | |
| Х | Matthew Unruh (6) | | David Warren (10) | | |
| Х | Tamara Leonard (6) | | Susan Wagshul-Golden (8) | | |
| Х | Sonia Honeydew, Chair (9) | X | Ann Aumann (5) | | |
| Х | Colleen Irvin (9) | | | | |
| Х | Anne Sumpter (5) | | | | |
| Х | Martin Arroyo (7) – via Zoom | | | | |
| | | | | | |
| | Faculty Senate* | | | | |
| X | Lesley Colby, Dept. of Comparative Medicine | | | | |
| | Labor Union Representation* | | Ex-Officio Members** | | Ex-Officio Members** |
| | Paula Lukaszek, WFSE Local 1488 | X | Anne Donegan, UW Facilities | | Felicia Foster, Atty. General's Office |
| X | Christine Kang, UAW 4121 | | | | Nancy Gwin, Atty. General's Office |
| X | Amanda Clouser, UAW 4121 | Х | Rick Gleason, DEOHS | X | Lt. Chris Jaross, UWPD |
| | | | Steve Charvat, Emergency Management | | Vacant, Transportation Services |
| | | | Barry Morgan, Emergency Management | X | Ken Nielsen, Risk Claims Services |
| | | | | | Vacant, Capital Planning & Development |
| _ | present at meeting (quorum will | | | ers) | |
| *vc | oting members **non-voting mer | nber | s | | |
| *vc | ting members **non-voting mer | nber | S | | |

Agenda



- 1. Call to Order and Introductions
- 2. Welcome
- 3. Election of Chair and Vice-Chair for 2020-2021 term
- 4. 2020-2021 Meeting Terms: Time, Day, Location, Meeting Length
- 5. Organizational Group Reports
- 6. Union Reports
- 7. Ex-Officio Reports
- 8. EH&S Updates
- 9. Good of the Order
- 10. Adjourn

Recorded by Manisha Konnur

1. Call to Order and Introductions

Erin McKeown, EH&S Accident Prevention Manager, called the first meeting of the 2020-2021 term to order at 1:08 pm. Erin introduced herself to the new U-Wide committee and asked everyone around the room to introduce themselves.

2. Welcome

Erin McKeown welcomed the committee members and gave a brief explanation of the structure and purpose of the U-Wide Committee. She also reviewed member responsibilities, and EH&S' role facilitating these meetings including assisting the Chairs with formulating an agenda, taking and distributing the minutes, posting minutes on the EH&S website, reserving the room, and reserving Zoom so members can have remote access to the meetings. She displayed the U-Wide Charter and encouraged everyone to familiarize themselves with it. She mentioned that the committee can modify the charter, and that at least one member has already suggested changes to the section on the length of meetings. Currently the charter states that the meetings should be at least 90 minutes. The regulations say that meetings should be one hour or less, but can be extended by a majority vote.

Erin mentioned that these meetings will be voice recorded for the purpose of generating the meeting minutes.

Lesley Colby suggested that the committee have a regular standing item on the agenda to view and discuss data trends. The new OARS Dashboard could facilitate this discussion, however it is limited to UW incident reporting excluding the hospitals. Liz will follow up with the medical centers to see what metrics might be available to review monthly

3. Election of Chair and Vice-Chair for 2020-2021 term:

The U-Wide Committee elected Sonia Honeydew as the Chair, and Liz Kindred as the Vice-Chair for 2020-2021 term.



4. 2020-2021 Meeting Terms: Time, Day, Location, Meeting Length:

The committee agreed to keep the same meeting time and location. They will meet on the second Wednesday of each month at 1 pm in Foege N130A.

5. Organizational Group Reports

HSC 1 – Ryan Hawkinson and Carmen Parisi said that their committee met this morning. They didn't have a quorum. The group discussed the possibility of using Zoom for remote access, to boost attendance. They reviewed OARS reports and discussed OSHA 300 summaries. Since most of the members are new, Ryan briefly explained how the committee works and reminded everyone to complete their online Health and Safety Committee training.

HSC 2 – Mark Pekarek said his committee will meet tomorrow. At their January committee meeting, the Chair and Co-Chair were elected. They discussed committee logistics, encouraged everyone to take the Health and Safety Committee training, and agreed on a meeting time & place for their monthly meeting. They couldn't review the OARS reports due to a time constraint. Mark asked about the turnaround time when testing patients for COVID 19, and was told it takes approximately one week.

HSC 3 – Kurt Oglesby and Tony Colinares said their committee met last month. Paul Zuckowski was present to help facilitate the committee meeting. The group discussed what should be posted on the health and safety bulletin boards, where they're located, and the importance of keeping them updated. They reviewed OARS reports and noticed a trend of accidents involving housing and food services (HFS) employees. Most of these incidents involved employees rushing which caused slips, trips or falls and cuts.

HSC 4 – Beth Hammermeister said her committee met on January 28. They reviewed the December U-Wide meeting minutes and elected a Chair (Eleanor Wade) and Vice-Chair (Bob Ennes). Melinda Young will Chair the HSC-4 Sub-Committee. Beth said that HSC-4 committee meetings can now be accessed remotely. She said the committee discussed the OARS dashboard and upcoming training on 'rape aggression and self-defense class' scheduled on February 22 and 23. This self-defense training is open to the public and provided by UWPD. Genome Sciences is planning to have 'active shooter training'. Beth mentioned that the group discussed an increase in laptop thefts amongst their employees. Beth asked if there is a required length of time to complete self-inspections prior to a laboratory safety survey. EH&S indicated it is an annual requirement and will verify with the laboratory safety program owner.

HSC 5 – Liz Kindred indicated that her committee met at the end of January. Liz was elected Chair and re-elected as the U-Wide representative. She also introduced a new member, Anne Sumpter. She said that they don't have any Northwest Hospital members yet. Liz gave an overview of Group-5 committee. She mentioned that they don't use OARS, but have their own accident reporting system called PSN. Liz mentioned they receive more than 100 incidents/month and they highlight one incident for group review as 'PSN of the month'. She said that a big majority of their

ENVIRONMENTAL HEALTH & SAFETY UNIVERSITY of WASHINGTON

accident reports involve workplace violence incidents, and that they have a separate committee on this topic. Liz also mentioned that they receive reports involving employees from 'Airlift Northwest'. These are the employees who travel all over Alaska and Washington in helicopters, and need specialized hearing protection in their helmets. These employees are fitted to their helmets every year and follow a hearing conservation program. Liz was asked to elaborate on what she meant by workplace violence. Liz explained most of the workplace violence incidents involve employees being verbally or physically assaulted by patients. Denise Bender from EH&S noted that there is a new law regarding workplace violence in a healthcare setting. Liz agreed and mentioned that the definition of a healthcare setting had been modified.

HSC 6 - Matthew Unruh and Tamara Leonard provided committee updates from their January meeting. Matthew was elected Chair and Eric Camp is continuing as the Vice-Chair. The committee discussed logistics and reviewed OARS reports. The committee is comprised of a lot of departments, leading to challenges defining who is in the group and how everyone is represented. HSC 6 had big turnover with the change of term and more than half their representatives are new. The committee questioned why work order numbers were redacted. EH&S will verify the privacy rules and communicate the results. The committee requested that EH&S provide comments on the OARS reports so that they have information on any follow-up to the incident. EH&S explained that the current OARS software is not designed to allow EH&S to open closed reports to add comments. EH&S indicated they have funding to replace OARS and will include the EH&S comments in the user requirement for the new software.

HSC 7 – Adam Geoffroy said that the committee did not meet in January due to snow closure. However, they did meet on February 11. They were not able to elect a Chair or Vice-Chair. They talked about new departments on the campus, safety tools like the Blue Emergency Phones, who answers emergency calls, resources on the website, and also reviewed OARS reports. They also reviewed how to conduct a root cause analysis of an OARS report.

HSC 8 - There was no one present from HSC-8.

HSC 9 – Sonia Honeydew said her committee met on January 28. They elected a Chair and Vice-Chair and reviewed the November OARS reports. The group discussed the purpose and function of the committee and reminded everyone to complete their Health and Safety Committee training. They also discussed what needs to be updated on the safety bulletin boards. Sonia mentioned that Scott Nelson from EH&S will be talking about 'Lithium battery safety' at their next meeting.

HSC 10 – David Zuckerman said that the committee met on January 27. David said that though he was not present at that meeting, the group reviewed OARS reports. He said that there was one report where the person received a head injury at the UW Botanic Gardens. HSC 10 members requested guidance for supervisors on what to tell an employee who has suffered a head injury and may have a concussion. HSC 10 members believe supervisors should have authority to ask employees to discontinuing work even if the employees think they are fine. HSC 10 has arranged for an active shooter training for the UW Arboretum staff.



6. Union Reports: Christina Kang introduced Amanda Clouser. Amanda will be replacing Leandro Casiraghi as the post-doc representative.

7. Ex-Officio Reports:

Claims Services: Ken Nielsen - no updates. **UW Facilities:** Anne Donegan - no updates.

DEOHS: Rick Gleason - no updates.

Emergency Management: Steve Charvat and Barry Morgan were not present at the meeting.

Faculty Senate: Lesley Colby - no updates. **Attorney General's Office:** Felicia – no updates.

UWPD: Lt. Chris Jaross reported UWPD is getting ready for the cherry blossoms season and is expecting large crowds in March. Lt. Jaross mentioned that increased planning has occurred and that they hope to better manage the crowds this March. Lt. Jaross also mentioned that UWPD has encountered an increase in homelessness across the campus.

8. L&I updates – Erin McKeown reported there were concerns of potential exposure to fuel, brake dust, and exhaust at Fleet Services. The L&I inspector conducted employee interviews and was provided the requested documents.

EH&S updates – Katia Harb welcomed the new U-Wide committee members. She indicated that she will be meeting with the Executive Sponsors of the each of the ten health and safety committees in March and April to review the previous years' incidents, data trends, and current safety concerns.

Katia provide an update on the novel coronavirus. As of now, there are no confirmed cases within the UW community. She said that EH&S convened the Advisory Committee on Communicable Diseases, and has representation from many departments across the campus, including Student Life, Hall Health Center, Human Resources, and many more. EH&S is coordinating with Public Health - Seattle & King County, and will continue to maintain current information on the EH&S website.

There were questions about travel restrictions from other countries to the USA. Katia said that everyone in the UW Community is being encouraged to contact Employee Health Center (EHC) if they have travelled to Mainland China recently. EHC is sending a survey asking for specifics on their travel dates and consulting with public health officials and medical care providers in order to determine if the employees/staff/students should stay home. University Global Affairs Office also tracks university related travels that is registered with their office.

Tamara brought up the concern of the effect of coronavirus on the international students, specifically from China.

• If they are graduating, will their families be allowed to attend the ceremony?



- If they are current students is it advisable for them to go back home to China, since they might not be able to enter back into the USA? If they are advised to not leave the country, how would they be taken care of during the summer? How will they be accommodated?
- How will UW deal with the new admitted students from China and other coronavirus affected areas?

Katia said these are all good questions that are being discussed.

Anne Sumpter mentioned, she is part of the committee dealing with coronavirus at the UW Medical Center. They have training and a drill next Wednesday on how to triage the coronavirus patients. Denise asked if they plan to collaborate with Steve Charvat, UW Emergency Management. Ann Aumann didn't know, but suggested the UW Medical Center's Emergency Management Manager would know those details.

Liz added, there is a home assessment team at Harborview Medical Center that is working closely with Public Health - Seattle & King County.

Katia provided updates on the Provost's lab safety task force. She said that a new committee has been formed focused on chemical and physical hazards in research and teaching. The committee met last month for the first time. They elected the chair (Forrest Michael) and vice chair (Lesley Colby) and voted to approve a formal escalation procedure. The committee will conduct outreach in March. This new committee will meet next at the end of February.

EH&S is currently recruiting for the following vacant staff positions:

- Biological Safety Manager
- Accident Prevention Specialist

9. Good of the Order:

Erin announced that EH&S will soon be reaching out to all departments asking if they have completed their supplemental portion of the accident prevention plan. Tamara Leonard asked if EH&S can send an email suggesting what should be included in the supplement to the Accident Prevention Plan. Erin said she would send a follow-up email to the committee members. Matthew added HSC-6 is working on a document providing a list of safety coordinators that'll help them assign accountability.

10. Adjourn: Liz Kindred adjourned the committee at 2:05 pm.

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

March 11, 2020

1:00 p.m. - 2:30 p.m.

William H. Foege Bldg. N-130A

http://www.washington.edu/maps/

| Agenda Item | Lead | Process | Time |
|----------------------------------|--|----------------------------|--------|
| Call to Order and Introductions | Sonia Honeydew, Chair | Robert's Rules of Order | 5 min |
| COVID-19 Update | Katia Harb | Discussion | 15 min |
| U-Wide Charter review | Sonia Honeydew | Discussion | 5 min |
| Organizational Group Reports* | Committee members | Discussion | 25 min |
| Union Reports | Union representatives | Discussion | 10 min |
| Ex-Officio Reports | Ex-Officio members | Discussion | 10 min |
| EH&S Updates | LNI Update – Erin McKeown General Updates – Katia Harb or Denise Bender | Discussion | 10 min |
| Good of the Order | Sonia Honeydew | Discussion | 10 min |
| Adjourn | Sonia Honeydew | 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 at least 2 weeks prior to the scheduled meetings.