

Agenda – January 30, 2017
Group 9 Health and Safety Committee (College of Engineering)

1. Attending

Fiona Spencer or Eliot George, AA
Colleen Irvin, BioE
Sean Yeung, CEE
Kameron Harmon, ChemE
Alex Lefort for Tracy Erbeck, CSE
Sonia Honeydew, DO
Karen Liebert, EE

Angie Haggard, EH&S
Emma Alder, EH&S
Morgan Tubby, HCDE
Jenny Dutton or Sheila Prusa, ISE
Bill Kuykendall, ME
Chris Adams, MoIES
Tatyana Galenko, MSE

2. Absent

Michael Glidden, DO

3. Pop Quiz

- Accident reporting

4. Previous Meeting Minutes

- November 2016 – approve?

5. Group Business

- Discuss Group 9 goals for 2017. Review each building's FSEP? Verify MyChem up-to-date in each dept? Review Health and Safety Plans (Accident Prevention Plans) or wait until Emma updates template?
- How can Group 9 foster a more effective culture of safety within CoE? Brainstorm.

6. Department Incident Reports

- BioE – cut by blade when search microtome blade box (Oct)
- CSE – student cut finger with blade while preparing poster (Nov)
- BioE – exposure to 3D printer resin (Nov)
- CEE – explosion in furnace, no witness or injury (Dec)
- AA – someone had a heart attack and collapsed, hitting head, no response/pulse/breath; faculty/staff performed CPR and applied defibrillator until SFD arrived (Dec)
- EE – burning sensation on face and forearms after working in cleanroom (Dec)
- MoIES – hazmat splash to eyes, flushed for 15 minutes and taken to ER by EMS (Dec)

7. UW-Wide Meeting

- Nov and Dec minutes attached. Highlights from December:
 - Group 1 project for Provost, a quick reference evacuation template for common (office) buildings will be produced Win qtr 2017.
 - Discussion of U-Wide charter draft. Once finalized, organizational groups (e.g. Group 9) may want to review charters.
 - Tent City 3 (TC3) move-in to parking lot W35 is Dec 17, for 63 (initially) to 99 max residents. Advisory committee in place, and responsibilities, safety and 24/7 security established. Residents can't use univ facilities and no alcohol or drugs allowed in TC3. Honestly our local security will probably be higher with them there – great eyes and ears.
 - Unrelated to TC3, concerns about how UWPD is responding to calls about transients in campus buildings, and what we should expect from UWPD – Chief Vinson invited to attend and discuss at next meeting.

- Jan agenda attached. Highlights:
 - UWPD input on response concerns
 - U-wide charter
 - New Bridge learning management system for Fleet Services
 - New electronic OSHA recordkeeping requirements
 - New EH&S section

8. Department Updates

9. Next Meeting

- February 27th at **3pm**, in CSE 128.

DRAFT Meeting Minutes

Health and Safety Committee for Group 9 (College of Engineering)

Meeting Date: November 28, 2016

Attended

J. Sean Yeung, CEE
Kameron Harmon, ChemE
Alex Lefort, CSE
Sonia Honeydew, DO
Karen Liebert, EE
Morgan Tubby, HCDE

Sheila Prusa, ISE
Bill Kuykendall, ME
Chris Adams, MoIES
Angie Haggard, EH&S
Brandon Kemperman, EH&S

Absent

Fiona Spencer, AA
Colleen Irvin, BioE
Tatyana Galenko, MSE

Emma Alder, EH&S
Michael Glidden, DO

Guest Speaker

Brandon Kemperman, Occupational Health & Safety Specialist, EH&S

- EH&S' Shop Safety Program
 - Program was developed in '14 (the year UW had two hand injuries from saws) and implemented in '15 with the first round of shop surveys. Advisory group members from FS, ChemE, Friday Harbor Labs and Chemistry.
 - Definition of shop (vs. lab): where fabrication and repair occurs, using tools/machinery that present physical hazards to untrained person. Some labs are converting to shops.
 - Shop hazards include equipment, materials, and activities. Goal is to prevent injury and/or exposure.
 - Key program elements include signage, hazard communication, training and PPE, emergency supplies/eqpt, engineering controls, housekeeping, hazmat storage/disposal, electrical safety, hoists and lift eqpt, and fire safety/prevention.

DRAFT Meeting Minutes

Health and Safety Committee for Group 9 (College of Engineering)

- Signage/hazard communication include “Staying Safe in Shops” purple signs (available from Brandon); Lab Caution signs generated via MyChem; “Caution Wear PPE” signs (bright, 8.5”x11” metal with adhesive); and Shop Safety Manual (a few printed copies available – insert your shop’s SOPs, training info, and other documents).
- Each shop designates a Shop Safety Coordinator who meets EH&S for the survey, and is responsible for user access, orientation and training, rule enforcement, safety plans, PPE, accident reporting and equipment maintenance.
- Shop Safety Surveys are preceded by 2-wk notice to dept and shop manager with a copy of the survey checklist (that includes hyperlinks to explanations, resources, and code references). At the survey, EH&S evaluates 41 items in 11 subject areas (this takes 60-90 minutes), sends a report and answers immediate questions within two weeks, and acts as consultant as the shop corrects items. Final corrections are reported back within a month, and EH&S includes the dept head in the final closeout.
- Shop Safety Web Page (<http://www.ehs.washington.edu/fsophyssafe/shops.shtm>) includes tools and resources such as an H&S plan template, SOP templates for common machines, the Lockout Tagout (LOTO) program, machine guards, hot work rules, a Shop Safety Orientation and Training template, training matrix for shop personnel, PPE Assessment Guide for both physical and exposure hazards, and guidelines to develop your shop’s Working Alone policy.
- One of the 11 subject areas of survey is Controlling Access to the shop. Can enforce “Authorized Personnel Only” through signs and/or physical restrictions (secured room areas, equipment signage, or securing check keys/blades/control – latter are lockboxes on power cord switches). Example from Bill: ME has lockout on each machine and users must go to manager for key – manager knows who has completed training. May add marks on the floor to demarcate restricted areas and safe walkways.
- Based on findings from 2015, eight focus areas for 2016/2017 are PPE hazard assessment, PPE training, safety training assessment, hot work controls, shop specific training, machine guarding, secure machinery mounts, and LOTO programs.
- Incentives for 2016 include \$50k to provide infrastructure improvements for safety (e.g. secure eqpt, provide machine guards, floor markings). Submit Capital Safety Project request form (online) by 12/31/16.
- Update on 3D printer recommendations: not a lot of data on air exposure. Several enclosures trademarked, so if build own, it may infringe on trademark. Gary Bangs’ last draft was 10/4 (shared with Group 9) and he’s retiring so it will be passed to someone else in EH&S.

DRAFT Meeting Minutes

Health and Safety Committee for Group 9 (College of Engineering)

Previous Meeting Minutes

- October 2016 – approved

Group Business

- Group 9 meeting dates for 2017 established: 1/30, 2/27, 3/27 (start of SPR qtr – approved), 4/24, 5/22 (early b/c 5/29 a holiday), 6/26, 7/31, 8/28, 9/25 (just before start of AUT qtr – approved), 10/30, 11/27, and skip December due to holiday schedules. After Nov meeting, time and location announced: **3-4pm** in CSE 128.
- Hate speech posters in MEB on 11/19 was a planned action by TheRightStuff.biz. Reminder that in addition to reporting to UWPD, and using FS/CS to clean anything, report to Rachel Spencer of Dean's Office. Thank you.
- There is interest in addressing the topic "how do we create a more effective Culture of Safety within CoE" in our 2017 meetings.

Incident Reports

- EE – hand cut on office panels (Aug). Any additional follow-up? Angie happy to help. Done for now.
- ChemE – cut from microtome blade, BSL-1 (Sep). Not duplicate report. Additional follow-up? This is an inherent hazard. Recommend removing blade when cleaning apparatus. Ask Colleen if manufacturer provides sleeve for handling blade.
- CEE – inhalation of phenol (Oct). Sean spoke with group this morning. On Oct 6 there were a number of samples in the homogenizer when a lid of sample tube cracked and broke. Upon opening equipment, smelled it. Should have put in fume hood immediately but sat a minute. Felt light-headed. Called Poison Control, went to fresh air. Was sick the next week on Oct 13 – maybe not related but went to Hall Health just in case. Angie had OHN follow up. Angie spoke with supervisors and points out they should have called internal resources rather than Poison Control first, since internal resources know more about the hazards encountered here. Judy Cashman gave supervisors additional chemical exposure/spill posters.
- BioE – but by blade when search microtome blade box (Oct). BioE absent; address at January meeting.
- CEE – 4 stitches where plate hit left temple (Oct). Users failed to follow correct protocol. No PPE missing, just didn't handle danger equipment properly. Department looking at switching from hydraulic to air-powered wrenches. Idea: check out this piece of equipment and each time get reminder about bracing it.

DRAFT Meeting Minutes

Health and Safety Committee for Group 9 (College of Engineering)

- ChemE – hit shin on metal spigot extending into walkway (Oct). Running in lab? Student tripped over piece of pipe on old mobile scale (50-gallon drum with pipe and spigot at bottom). Now has sign directing users to position it so it won't cause a trip hazard, and to watch for pipe.
- CEE – student finger cut by steel fibers on wheelbarrow in lab class (Oct). A type of concrete can be made stronger with short sharp steel fibers, like needles. One PI borrowed wheelbarrow from another to make this concrete and didn't clean off steel fibers before a lab used the wheelbarrow. One PI spoke to the other about cleaning borrowed equipment, or option of getting own wheelbarrow. But this was a one-time thing.

UW-Wide Meeting

- Oct minutes attached.
- November agenda attached. Highlights:
 - Visited Ergonomics and Access Technology Center (ATC) in Mary Gates 064, open 8-5 weekdays. This is a showroom where anyone can try out different combinations of chairs and tables, keyboards, mice, and accessible software (e.g. screen readers, text-to-speech tools). Also helps anyone building sites and apps, to make them accessible. ATC doesn't provide funds to purchase products – dept pay or ask DSO.
 - EH&S wrapping up EH&S-scheduled fire drills this month, and will restart in March. Working to plan drills to maximize peoples' practice while minimizing academic/research disruption. On track to get 75% done this fiscal year (their goal), and next year 100%. Still hope to give faculty/instructors a template for safety/emergency preparedness talk the first day of class each quarter.
 - EH&S notes 5 battery-related fires on campus in 2016 and one in 2015. Recommends each department take a more active approach.
 - EH&S working with GIS on evacuation maps for 50 small buildings. Next will look at whether maps in rest of buildings are current. Eventually all will be available as PDFs so can be linked online. Suggestion to link these at UW Safety Portal.

Department Updates

- None

Next Meeting

- January 30th at **3pm**, CSE 128



University of Washington Accident / Incident Report

Report Number: 2016-10-048

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|---|---------------------------------|
| Last Name: LUO | First Name: PING |
| Phone: +1 206 616-4567 | Email: pingluo@u.washington.edu |
| Occupation/Position: RESEARCH SCIENTIST | Department: BIOENGINEERING |
| Date Reported (yyyy/mm/dd): 2016/10/14 | Time of Reporting: 02:56 PM |

Person Involved or Affected

| | |
|---------------------------------|--------------------------------|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: +1 [REDACTED] | Email: injury@u.washington.edu |
| Occupation/Position: [REDACTED] | Department: BIOENGINEERING |

Incident Details

| | | |
|---|---|------------------------|
| Date of Incident (yyyy/mm/dd): 2016/10/14 | Time of Incident: 11:45 AM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: | |
| Room: | Other: UW South Lake Union, Brotman Building Room 419 | |

Incident Details:
 Cut by blade when search the microtome blade box.
 Attachment: No

Supervisor

| | |
|---|---------------------------------|
| Last Name: LUO | First Name: PING |
| Phone: +1 206 616-4567 | Email: pingluo@u.washington.edu |
| Occupation/Position: RESEARCH SCIENTIST | Department: BIOENGINEERING |

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: Needles, Medical Sharps, Scalpels, etc. (Clinical, Research, Teaching),

Possible Causes

Equipment:
 Environment:
 Policies / Procedures:
 Human Factors: Other,

Suggested corrective action by the affected party

Do not leave half draw blade on the box

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.)

All microtome blade are secured in the box. Push handle to draw one blade at a time. Somehow there is one half draw blade left on the box.

Recommendations/Preventive Measures:

We will send out email to whole lab and address the issue during lab meeting

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

2016/10/14

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

2016/10/14

Other Comments:

EHS Review

Last Name:

First Name:

Phone Number:

Email:

Occupation/Position:

Department:

Comments:

Accident Summary Report

HSC 9

11/1/2016 to 11/30/2016

| <i>Case#</i> | <i>Org Name</i> | <i>Employee Activity</i> | <i>Root Cause</i> | <i>Supervisor Corrective Action</i> |
|--------------|---------------------------|--|--|-------------------------------------|
| 2016-11-057 | COMPUTER SCIENCE & ENG | Student came into the office holding pressure on finger and asking for assistance in bandaging. The finger was bleeding relatively well from a clean laceration about an inch in length, but after several minutes of pressure and bandaging, bleeding had stopped. I stayed with the student for ten minutes afterward to ensure no additional bleeding and gave them materials for re-bandaging later. The student mentioned that they had been attempting to cut a poster to fit on a poster board for an up-coming conference and had slipped with the cutting implement (unspecified what this was) due to rushing to prepare for the conference. | Simple carelessness and hurry. The student was doing an uncommon activity -- printing a poster -- that he does just one or two times a year. | Slow down even when in a hurry. |

| <i>Case#</i> | <i>Org Name</i> | <i>Employee Activity</i> | <i>Root Cause</i> | <i>Supervisor Corrective Action</i> |
|--------------|-----------------|---|--|--|
| 2016-11-085 | BIOENGINEERING | <p>Dear EHS staff,</p> <p>We would like to report an incident related to exposure of the hands, wrists, and forearm to a certain photolabile chemical ("photoresin" or "resin") that we use for 3D-printing. The part of the 3D printer containing the resin is covered by a plastic casing that can be lifted up and down. The back of the printer is connected to an exhaust tube inside our cleanroom (Foegen N-423G). This resin is a mixture of poly-ethylene glycol-diacrylate (MW - 258)(PEG-DA-258), photoinitiator (Irgacure 819, 0.4% wt), and a UV absorber (ITX or 2-isopropylthioxanthone, 0.2% wt). I followed the safety data sheet instructions and the standard operating procedures for all compounds, yet the exposure appears to have happened through the protective barriers (two layers of nitrile gloves). The exposure can be explained by the situation when removing prints from the 3D printer. Prints are attached to a glass slide that is attached to the underside of the build plate of the printer. The glass slide along with the print is removed by sliding a razorblade between the build plate and the slide. There is some amount of resin on the build plate such that some can seep through the gloves when trying to remove a print. The exposure led to a mild burning sensation that over time developed into skin rashes, itching, and swelling. A previous case of exposure to the resin has occurred before and EHS guidance was sought out. One of the corrective actions consisted of wearing two layers of nitrile gloves, however, it seems that two layers are still insufficient.</p> <p>At first, I didn't think the exposure was serious, so the PI was informed of the severity of the exposure well after the rashes started healing. The safety data sheets of the individual chemicals indicate that nitrile gloves are sufficient to provide adequate protection against exposure to these chemicals. However, we have now learned that the mixture could go through the gloves and the cuffs of the cleanroom garment over time and can create severe burns when exposed to light by light-assisted creation of free radicals. We would like to seek EHS guidance to see if all the following corrective measures are the appropriate ones.</p> | <p>The exposure can be explained by the situation when removing prints from the 3D printer. Prints are attached to a glass slide that is attached to the underside of the build plate of the printer. The glass slide along with the print is removed by sliding a razorblade between the build plate and the slide. There is some amount of resin on the build plate such that some can seep through the gloves when trying to remove a print. The exposure led to a mild burning sensation that over time developed into skin rashes, itching, and swelling. A previous case of exposure to the resin has occurred before and EHS guidance was sought out.</p> | <p>One of the previous corrective actions consisted of wearing two layers of nitrile gloves, however, it seems that two layers are still insufficient.</p> <p>At first, the student didn't think the exposure was serious, so I was informed of the severity of the exposure well after the rashes started healing. The safety data sheets of the individual chemicals indicate that nitrile gloves are sufficient to provide adequate protection against exposure to these chemicals. However, we have now learned that the mixture could go through the gloves and the cuffs of the cleanroom garment over time and can create severe burns when exposed to light by light-assisted creation of free radicals.</p> |



University of Washington Accident / Incident Report

Report Number: 2016-11-057

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|--|---|
| Last Name: LEFORT | First Name: ALEXANDER |
| Phone: +1 206 685-9198 | Email: aalefort@cs.washington.edu |
| Occupation/Position: FACILITIES & EVENT COORDINATOR | Department: COMPUTER SCIENCE & ENG |
| Date Reported (yyyy/mm/dd): 2016/11/17 | Time of Reporting: 10:19 AM |

Person Involved or Affected

| | |
|--|---|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: | Email: injury@u.washington.edu |
| Occupation/Position: GRADUATE STUDENT | Department: COMPUTER SCIENCE & ENG |
| Person was in Paid Position: Yes | |

Incident Details

| | | |
|--|--|-------------------------------|
| Date of Incident (yyyy/mm/dd): 2016/11/15 | Time of Incident: 1:15 PM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: ALLEN CENTER FOR | |
| Room: Unknown | Other: | |

Incident Details:

Student came into the office holding pressure on finger and asking for assistance in bandaging. The finger was bleeding relatively well from a clean laceration about an inch in length, but after several minutes of pressure and bandaging, bleeding had stopped. I stayed with the student for ten minutes afterward to ensure no additional bleeding and gave them materials for re-bandaging later. The student mentioned that they had been attempting to cut a poster to fit on a poster board for an up-coming conference and had slipped with the cutting implement (unspecified what this was) due to rushing to prepare for the conference.

Attachment: **No**

Supervisor

| | |
|---|---|
| Last Name: ERNST | First Name: MICHAEL |
| Phone: +1 206 221-0965 | Email: mernst@cs.washington.edu |
| Occupation/Position: ASSOCIATE PROFESSOR | Department: COMPUTER SCIENCE & ENG |

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: **Box Cutters, Knives, etc.,**

Possible Causes

Equipment: **Using Equipment Improperly,**

Environment: **Sharp Objects,**

Policies / Procedures: **Failure to Follow Procedures,**

Human Factors: **Inattention,**

Suggested corrective action by the affected party

Student stated that the reason they accidentally cut themselves was due to rushing to finish preparing their poster for the conference of which they were leaving for in just a few hours' time. Stated that they should have prepared beforehand so that they did not have to worry about rushing.

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.)

Simple carelessness and hurry. The student was doing an uncommon activity -- printing a poster -- that he does just one or two times a year.

Recommendations/Preventive Measures:

Slow down even when in a hurry.

Corrective Actions Target Date (yyyy/mm/dd):
2016/11/17

Corrective Actions Complete Date (yyyy/mm/dd):
2016/11/17

Other Comments:

EHS Review

Last Name:

First Name:

Phone Number:

Email:

Occupation/Position:

Department:

Comments:



University of Washington Accident / Incident Report

Report Number: 2016-11-085

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|--|-----------------------------|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: [REDACTED] | Email: [REDACTED] |
| Occupation/Position: GRADUATE RESEARCH ASSISTANT | Department: BIOENGINEERING |
| Date Reported (yyyy/mm/dd): 2016/11/24 | Time of Reporting: 08:43 PM |

Person Involved or Affected

| | |
|--|----------------------------|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: [REDACTED] | Email: [REDACTED] |
| Occupation/Position: GRADUATE RESEARCH ASSISTANT | Department: BIOENGINEERING |

Incident Details

| | | |
|---|--|------------------------|
| Date of Incident (yyyy/mm/dd): 2016/11/08 | Time of Incident: Can Not Be Determined | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: W.H. FOEGE BIOENG | |
| Room: 423G | Other: | |

Incident Details:

Dear EHS staff,

We would like to report an incident related to exposure of the hands, wrists, and forearm to a certain photolabile chemical ("photoresin" or "resin") that we use for 3D-printing. The part of the 3D printer containing the resin is covered by a plastic casing that can be lifted up and down. The back of the printer is connected to an exhaust tube inside our cleanroom (Foegen N-423G). This resin is a mixture of poly-ethylene glycol-diacrylate (MW - 258)(PEG-DA-258), photoinitiator (Irgacure 819, 0.4% wt), and a UV absorber (ITX or 2-isopropylthioxanthone, 0.2% wt). I followed the safety data sheet instructions and the standard operating procedures for all compounds, yet the exposure appears to have happened through the protective barriers (two layers of nitrile gloves). The exposure can be explained by the situation when removing prints from the 3D printer. Prints are attached to a glass slide that is attached to the underside of the build plate of the printer. The glass slide along with the print is removed by sliding a razorblade between the build plate and the slide. There is some amount of resin on the build plate such that some can seep through the gloves when trying to remove a print. The exposure led to a mild burning sensation that over time developed into skin rashes, itching, and swelling. A previous case of exposure to the resin has occurred before and EHS guidance was sought out. One of the corrective actions consisted of wearing two layers of nitrile gloves, however, it seems that two layers are still insufficient.

At first, I didn't think the exposure was serious, so the PI was informed of the severity of the exposure well after the rashes started healing. The safety data sheets of the individual chemicals indicate that nitrile gloves are sufficient to provide adequate protection against exposure to these chemicals. However, we have now learned that the mixture could go through the gloves and the cuffs of the cleanroom garment over time and can create severe burns when exposed to light by light-assisted creation of free radicals. We would like to seek EHS guidance to see if all the following corrective measures are the appropriate ones.

Attachment: No

Supervisor

| | |
|--|--------------------------------|
| Last Name: FOLCH | First Name: ALBERT |
| Phone: +1 206 685-2257 | Email: afolch@u.washington.edu |
| Occupation/Position: ASSOCIATE PROFESSOR | Department: BIOENGINEERING |

Classification

Level 1:
Injury requiring first aid,
Injury requiring medical treatment (go to level 3 if in-patient hospitalization or amputation occurred),

Type of Incident

Injury Description: Burn (Thermal, Chemical, Electrical), Pain, Irritation, Inflammation, Swelling, Rash, Eczema, Dermatitis, Other Skin Condition,

Body Parts Affected: Hands, Wrists,

Cause of Injury or Damage: Chemicals,

Possible Causes

Equipment: Inadequate Guards/Barriers,

Environment: Chemicals,

Policies / Procedures:

Human Factors: Inadequate, Improper PPE,

Suggested corrective action by the affected party

We have taken the following corrective measures after evaluating the risks associated with this particular chemical:

- 1) The two layers of nitrile gloves (4 mil thick each) has been substituted with one layer of nitrile gloves (High Five Integra EC Nitrile, 8 mil thick) that are twice as thick as before and has an extended cuff. Another layer of chemically resistant gloves (Kimberly Clark Professional Jackson Safety G80 Nitrile Chemical Resistant, 15 mil thick) that are resistant to harsh chemicals will be worn over the 8 mil thick nitrile gloves.
- 2) The procedure for the removal of prints has been changed such that the build plate has to be removed (the thumbscrew that attaches the build plate to the printer allows for removal of the plate) and soaked in a tub of water (the resin is water-soluble) prior to using a razorblade to remove the print. The tub of water would then be emptied out each day.
- 3) If there is any suspicion that the gloves or garment have contacted the resin solution , the operator must thoroughly rinse the hands or other suspected body parts with water.
- 4) The cleanroom coats worn by the operators will be laundered if they get exposed to resin.

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 exposure can be explained by the situation when removing prints from the 3D printer. Prints are attached to a glass slide that is attached to the underside of the build plate of the printer. The glass slide along with the print is removed by sliding a razorblade between the build plate and the slide. There is some amount of resin on the build plate such that some can seep through the gloves when trying to remove a print. The exposure led to a mild burning sensation that over time developed into skin rashes, itching, and swelling. A previous case of exposure to the resin has occurred before and EHS guidance was sought out.

Recommendations/Preventive Measures:
One of the previous corrective actions consisted of wearing two layers of nitrile gloves, however, it seems that two layers are still insufficient.
At first, the student didn't think the exposure was serious, so I was informed of the severity of the exposure well after the rashes started healing. The safety data sheets of the individual chemicals indicate that nitrile gloves are sufficient to provide adequate protection against exposure to these chemicals. However, we have now learned that the mixture could go through the gloves and the cuffs of the cleanroom garment over time and can create severe burns when exposed to light by light-assisted creation of free radicals.

| | |
|--|--|
| Corrective Actions Target Date (yyyy/mm/dd): 2016/12/07 | Corrective Actions Complete Date (yyyy/mm/dd): |
|--|--|

Other Comments:

EHS Review

| | | | |
|--------------------|------------------------|-------------------------------|------------------------|
| Last Name: HAGGARD | First Name: ANGELINA M | Phone Number: +1 206 616-3442 | Email: ahaggard@uw.edu |
|--------------------|------------------------|-------------------------------|------------------------|

| | |
|---|-------------|
| Occupation/Position: | Department: |
| Comments:11/28/16 forwarded to OHN, Phil N., BF&S | |

Accident Summary Report

HSC 9

12/1/2016 to 12/31/2016

| <i>Case#</i> | <i>Org Name</i> | <i>Employee Activity</i> | <i>Root Cause</i> | <i>Supervisor Corrective Action</i> |
|--------------|-------------------------|---|--|---|
| 2016-12-004 | CIVIL & ENVIR ENGR | As part of cleaning procedure, student rinsed glassware with 9:1 mixture of toluene:dichlorodimethylsiloxane, and did not properly allow the solvent to evaporate before placing into the muffle furnace at 450 C. Sometime during the early afternoon, an explosion occurred inside the furnace, ejecting some of the door jamb seal material and the peep hole plug from the door. The furnace door remained shut. There were no witnesses, and no injuries. | Better communication and mindfulness would have helped avoid this situation. This cleaning procedure has long been used in my lab (I used it as a graduate student), and yet as it is passed from person to person, parts of the procedure (like fully drying) get left out. As a routine and simple procedure, it tends to get less attention than more complex procedures, which probably contributed. | Improved communication of laboratory procedures would help. Possibly also a reminder sign on the muffle oven about dry glassware would help. |
| 2016-12-029 | AERONAUTICS & ASTRO- | At roughly 1 PM, [REDACTED] was leaving Guggenheim Hall and collapsed in the South breezeway just outside the GUG 220 entrance. He hit his head on the brickwork and was initially speaking with a fellow professor, but stopped responding, had no pulse, and was not breathing. A student, Kyle SHiple, called 911 and alerted Victor Aque, who took over phone conversation with the paramedics. While on the phone, a fellow professor, Ray Golingo, commenced CPR while another student, Elliot Claveau, fetched the automatic defibrillator, which was applied to [REDACTED]. The Seattle Fire Department arrived approximately 5 minutes after the incident started. They took over from there. [REDACTED] was taken to University Hospital by the paramedics. | Medical Emergency. [REDACTED] had a heart attack, 911 was called and medics took him to University Hospital. He was in a medically induced coma for 24 hours, but subsequently has recovered and is home now, doing very well. | We are considering the following preventive measures: <ul style="list-style-type: none">· Have department Safety Committee review and update our Emergency Evacuation Operations document, with review by UW Environmental Health and Safety (EHS)· Develop an abbreviated (short, bulleted) list of actions in case of emergency (i.e., medical, natural disaster, act of violence, lab accident, etc.). Distribute and post in buildings.· Work with EHS & UW Police Dept. to provide training to students, staff and faculty in CPR, basic first aid and emergency reporting procedures· Consider placing defibrillators in hallways in each building.· Consider Mental Health First Aid student/staff training. |

| <i>Case#</i> | <i>Org Name</i> | <i>Employee Activity</i> | <i>Root Cause</i> | <i>Supervisor Corrective Action</i> |
|--------------|------------------------|---|--|--|
| 2016-12-067 | ELECTRICAL ENGINEERING | <p>Was working in cleanroom. In full gown. Experienced burning sensation on face. Left cleanroom, washed face for 5 min. Returned to cleanroom, new gown. 20 min later started feeling burning again. Left and washed face again. Came back and started again after another 20 min. No other in the immediate vicinity. Two others in adjacent rooms. Reported to Khbeis, Lab Director via email at 1230pm. On the way to permanent workplace started burning again. Washed again and experienced burning at 330 now in throat, but was battling a cold - so not sure if related. Washed and moisturized again. Mostly irritated. That night, both forearms started having burning sensation. Face sensitive to touch. Did not seek medical treatment. On Saturday, still had symptoms on cheek, red and sensitive to touch. Appearance of large hive-like (reddish bumps). Sunday morning symptoms subsided.</p> | <p>Root cause for this are inconclusive. The space had some openings to the construction zone that were created during demo work. Possible irritants from construction environment; however, no construction personnel reported experiencing similar conditions. Possibly sensitization to cleanroom garment cleaning agents; however, the garment service said this was unlikely due to rinsing with DI water. [REDACTED] has worn these garments for prolonged periods preceding this incident without issue. Process Equipment in the vicinity is operating properly; however, air filter (HEPA) units are not completely flowing, resulting in stagnant air.</p> | <p>We had the contractors close the gaps created by demo work. "Sealed" with plastic sheeting. Added some filter fan units to help with airflow.</p> |
| 2016-12-084 | CIVIL & ENVIR ENGINEER | <p>We had a small accident in lab today.</p> <p>Only [REDACTED] was contaminated, he splashed a 10 wt% solution of PHENYLMETHANESULFONYL FLUORIDE in ethanol in his eyes.</p> <p>He flushed them with water for 15 minutes before the EMS arrived.</p> <p>They evaluated him and took him to the ER as per the Poison Center's recommendation.</p> <p>[REDACTED] was not in severe pain and could see normally.</p> <p>No one else was exposed and all waste has been cleaned up.</p> <p>The volume of hazardous material involved was less than 50 mL.</p> | <p>Lack of PPE use. Did not perform operation in chemical hood.</p> | <p>Enforce PPE usage and usage of chemical hood with sash lowered to protect eyes/face.</p> |



University of Washington Accident / Incident Report

Report Number: 2016-12-004

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|--|---|
| Last Name: YEUNG | First Name: JEREMY |
| Phone: +1 206 543-2547 | Email: jsean@u.washington.edu |
| Occupation/Position: LABORATORY MANAGER | Department: CIVIL & ENVIR ENGR |
| Date Reported (yyyy/mm/dd): 2016/12/01 | Time of Reporting: 04:39 PM |

Person Involved or Affected

| | |
|--|---|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: | Email: injury@u.washington.edu |
| Occupation/Position: RESEARCH ASSISTANT | Department: CIVIL & ENVIR ENGR |
| Person was in Paid Position: Yes | |

Incident Details

| | | |
|--|---|-------------------------------|
| Date of Incident (yyyy/mm/dd): 2016/11/29 | Time of Incident: 2:00 PM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: MORE HALL | |
| Room: 319 | Other: | |

Incident Details:

As part of cleaning procedure, student rinsed glassware with 9:1 mixture of toluene:dichlorodimethylsiloxane, and did not properly allow the solvent to evaporate before placing into the muffle furnace at 450 C. Sometime during the early afternoon, an explosion occurred inside the furnace, ejecting some of the door jamb seal material and the peep hole plug from the door. The furnace door remained shut. There were no witnesses, and no injuries.

Attachment: **Yes**

Supervisor

| | |
|---|---|
| Last Name: KOLODZIEJ | First Name: EDWARD |
| Phone: +1 253 692-5659 | Email: koloj@uw.edu |
| Occupation/Position: ASSOCIATE PROFESSOR | Department: INTERDISCIPLINRY A&S-T |

Classification

Level 2:
Fire or Explosion,

Type of Incident

Injury Description: **None,**

Body Parts Affected: **None,**

Cause of Injury or Damage: **Chemicals, Fire, Explosion, Temperature Extreme (Hot or Cold),**

Possible Causes

Equipment:

Environment:

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

Human Factors: **Inadequate Training, 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.

Comments by J. Sean Yeung (lab manager):

The student was aware that glassware should be evaporated before going into the furnace, but had previously baked glassware containing solvent residue (at another institution), with no apparent effect. This accident reiterates the need to follow established procedures.

Modification to procedure: After solvent rinse, allow glassware to evaporate overnight under a fume hood prior to placing into furnace. Visually inspect glassware for solvent residual when preparing to bake.

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.)

Better communication and mindfulness would have helped avoid this situation. This cleaning procedure has long been used in my lab (I used it as a graduate student), and yet as it is passed from person to person, parts of the procedure (like fully drying) get left out. As a routine and simple procedure, it tends to get less attention than more complex procedures, which probably contributed.

Recommendations/Preventive Measures:

Improved communication of laboratory procedures would help. Possibly also a reminder sign on the muffle oven about dry glassware would help.

Corrective Actions Target Date (yyyy/mm/dd):
2016/12/09

Corrective Actions Complete Date (yyyy/mm/dd):
2016/12/09

Other Comments:

Procedures were communicated, with the involvement of the laboratory manager

Second Higher Authority Review

Last Name:

First Name:

Phone Number:

Email:

Occupation/Position:

Department:

Comments:

EHS Review

Last Name: **HAGGARD**

First Name: **ANGELINA M**

Phone Number: **+1 206 616-3442**

Email: **ahaggard@uw.edu**

Occupation/Position:

Department:

Comments: **12/1/16 forwarded to Mark M.**



University of Washington Accident / Incident Report

Report Number: 2016-12-029

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|---|---|
| Last Name: FREDERICK | First Name: WANDA |
| Phone: +1 206 616-1113 | Email: wanda@aa.washington.edu |
| Occupation/Position: COMMUNICATIONS AND COMMUNITY RELATIONS SPECIALIST | Department: AERONAUTICS & ASTRO- |
| Date Reported (yyyy/mm/dd): 2016/12/09 | Time of Reporting: 02:00 PM |

Person Involved or Affected

| | |
|---------------------------------|---|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: +1 [REDACTED] | Email: [REDACTED] |
| Occupation/Position: [REDACTED] | Department: AERONAUTICS & ASTRO- |

Incident Details

| | | |
|--|---|-------------------------------|
| Date of Incident (yyyy/mm/dd): 2016/12/09 | Time of Incident: 1:00 PM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: | |
| Room: | Other: Guggenheim Hall South Breezeway | |

Incident Details:

At roughly 1 PM, [REDACTED] was leaving Guggenheim Hall and collapsed in the South breezeway just outside the GUG 220 entrance. He hit his head on the brickwork and was initially speaking with a fellow professor, but stopped responding, had no pulse, and was not breathing. A student, Kyle SHipley, called 911 and alerted Victor Aque, who took over phone conversation with the paramedics. While on the phone, [REDACTED] Ray Golingo, commenced CPR while another student, Elliot Claveau, fetched the automatic defibrillator, which was applied to [REDACTED]. The Seattle Fire Department arrived approximately 5 minutes after the incident started. They took over from there. [REDACTED] was taken to University Hospital by the paramedics.

Attachment: No

Supervisor

| | |
|--|---|
| Last Name: WAAS | First Name: MODERAGE |
| Phone: +1 206 221-2569 | Email: awaas@aa.washington.edu |
| Occupation/Position: BOEING EGTVEDT PROFESSOR AND CHAIR | Department: AERONAUTICS & ASTRO- |

Classification

Level 3:
 In-patient hospitalization of the injured party or amputation (Please call EH&S immediately at 206-543-7262, or if after daily hours UWPD at 206-685-8973 and ask for EH&S on-call),

Type of Incident

| |
|--|
| Injury Description: Fainting, Loss of Consciousness, Seizure, |
| Body Parts Affected: Head, |
| Cause of Injury or Damage: Other, |

Possible Causes

| |
|--------------|
| Equipment: |
| Environment: |

| | | | |
|---|-----------------------------|--|-------------------------------|
| Policies / Procedures: | | | |
| Human Factors: Other , | | | |
| Suggested corrective action by the affected party | | | |
| Install defibrillators in hallways in our building. | | | |
| Supervisor's Comments | | | |
| <p>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.)</p> <p>Medical Emergency. [REDACTED]. [REDACTED] had a heart attack, 911 was called and medics took him to University Hospital. He was in a medically induced coma for 24 hours, but subsequently has recovered and is home now, doing very well.</p> | | | |
| <p>Recommendations/Preventive Measures: We are considering the following preventive measures:</p> <ul style="list-style-type: none"> • Have department Safety Committee review and update our Emergency Evacuation Operations document, with review by UW Environmental Health and Safety (EHS) • Develop an abbreviated (short, bulleted) list of actions in case of emergency (i.e., medical, natural disaster, act of violence, lab accident, etc.). Distribute and post in buildings. • Work with EHS & UW Police Dept. to provide training to students, staff and faculty in CPR, basic first aid and emergency reporting procedures • Consider placing defibrillators in hallways in each building. • Consider Mental Health First Aid student/staff training. | | | |
| Corrective Actions Target Date (yyyy/mm/dd): 2016/12/30 | | Corrective Actions Complete Date (yyyy/mm/dd): 2016/12/30 | |
| Other Comments: | | | |
| Second Higher Authority Review | | | |
| Last Name: HAGGARD | First Name: ANGELINA | Phone Number: +1 206 616-3442 | Email: ahaggard@uw.edu |
| Occupation/Position: ACCIDENT REPORTING SYSTEM ADMINISTRATOR | | Department: ENV HEALTH & SAFETY | |
| Comments: | | | |
| Third Higher Authority Review | | | |
| Last Name: ALDER | First Name: EMMA | Phone Number: +1 206 221-2852 | Email: ealder@uw.edu |
| Occupation/Position: ACCIDENT PREVENTION MANAGER | | Department: ENV HEALTH & SAFETY | |
| Comments: | | | |
| EHS Review | | | |
| Last Name: ALDER | First Name: EMMA K | Phone Number: +1 206 221-2852 | Email: ealder@uw.edu |
| Occupation/Position: | | Department: | |
| Comments: 12/9/16 forwarded initial report to EHS staff - KH, DB, EA, & DZ amh; 12/9/16 confirmed with UWMC patient directory employee involved admitted | | | |



University of Washington Accident / Incident Report

Report Number: 2016-12-067

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|---|------------------------------------|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: [REDACTED] | Email: [REDACTED] |
| Occupation/Position: AFFILATE | Department: Unspecified |
| Date Reported (yyyy/mm/dd): 2016/12/20 | Time of Reporting: 09:58 AM |

Person Involved or Affected

| | |
|--------------------------------------|--------------------------------|
| Last Name: [REDACTED] | First Name: [REDACTED] |
| Phone: [REDACTED] | Email: [REDACTED] |
| Occupation/Position: AFFILATE | Department: Unspecified |

Incident Details

| | | |
|--|--|-------------------------------|
| Date of Incident (yyyy/mm/dd): 2016/12/16 | Time of Incident: 9:00 AM | When Shift Begins: N/A |
| Campus: Seattle | Incident Location/Parking Lot: FLUKE HALL | |
| Room: 135 | Other: | |

Incident Details:

Was working in cleanroom. In full gown. Experienced burning sensation on face. Left cleanroom, washed face for 5 min. Returned to cleanroom, new gown. 20 min later started feeling burning again. Left and washed face again. Came back and started again after another 20 min. No other in the immediate vicinity. Two others in adjacent rooms. Reported to Khbeis, Lab Director via email at 1230pm. On the way to permanent workplace started burning again. Washed again and experienced burning at 330 now in throat, but was battling a cold - so not sure if related. Washed and moisturized again. Mostly irritated. That night, both forearms started having burning sensation. Face sensitive to touch. Did not seek medical treatment. On Saturday, still had symptoms on cheek, red and sensitive to touch. Appearance of large hive-like (reddish bumps). Sunday morning symptoms subsided.

Attachment: No

Supervisor

| | |
|--|---|
| Last Name: KHBEIS | First Name: MICHAEL |
| Phone: +1 206 543-5101 | Email: khbeis@uw.edu |
| Occupation/Position: ASSOCIATE DIRECTOR MICROFABRICATION FACILITY | Department: ELECTRICAL ENGINEERING |

Classification

Level 1:
Injury or Exposure, no first aid required,

Type of Incident

Injury Description: **Allergy, Sensitivity Reaction,**

Body Parts Affected: **Face, Arms,**

Cause of Injury or Damage: **Other,**

Possible Causes

Equipment: **Other,**

Environment:

Policies / Procedures:

Human Factors:

Suggested corrective action by the affected party

Unknown root cause

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.)

Root cause for this are inconclusive. The space had some openings to the construction zone that were created during demo work. Possible irritants from construction environment; however, no construction personnel reported experiencing similar conditions. Possibly sensitization to cleanroom garment cleaning agents; however, the garment service said this was unlikely due to rinsing with DI water. [REDACTED] has worn these garments for prolonged periods preceding this incident without issue. Process Equipment in the vicinity is operating properly; however, air filter (HEPA) units are not completely flowing, resulting in stagnant air.

Recommendations/Preventive Measures:

We had the contractors close the gaps created by demo work. "Sealed" with plastic sheeting. Added some filter fan units to help with airflow.

Corrective Actions Target Date (yyyy/mm/dd):
2016/12/28

Corrective Actions Complete Date (yyyy/mm/dd):
2016/12/28

Other Comments:

Will re-open if issues reemerge; however, no other people have experienced similar issues.

EHS Review

| | | | |
|-------------------|-----------------------|------------------------------|-----------------------|
| Last Name:HAGGARD | First Name:ANGELINA M | Phone Number:+1 206 616-3442 | Email:ahaggard@uw.edu |
|-------------------|-----------------------|------------------------------|-----------------------|

Occupation/Position:

Department:

Comments:12/20/16 forwarded to Phil N. and EmpHealth amh



University of Washington Accident / Incident Report

Report Number: 2016-12-084

Contact EH&S at 206-543-7388

Person Reporting Incident

| | |
|---|------------------------------------|
| Last Name: MURPHY | First Name: MICHAEL |
| Phone: +1 425 681-1711 | Email: murphymp@uw.edu |
| Occupation/Position: RESEARCH SCIENTIST/ENGINEER 2 | Department: BIOCHEMISTRY |
| Date Reported (yyyy/mm/dd): 2016/12/22 | Time of Reporting: 03:28 PM |

Person Involved or Affected

| | |
|---|--|
| Last Name: ██████████ | First Name: ██████████ |
| Phone: | Email: injury@u.washington.edu |
| Occupation/Position: GRADUATE RESEARCH STUDENT ASSISTANT | Department: BIOCHEMISTRY |
| Person was in Paid Position: Yes | |

Incident Details

| | | |
|--|--|-------------------------------|
| Date of Incident (yyyy/mm/dd): 2016/12/22 | Time of Incident: 2:30 PM | When Shift Begins: N/A |
| Campus: Not assigned to Campus | Incident Location/Parking Lot: MOLECULAR ENG BLDG | |
| Room: 440 | Other: | |

Incident Details:

We had a small accident in lab today.

Only ██████████ was contaminated, he splashed a 10 wt% solution of PHENYLMETHANESULFONYL FLUORIDE in ethanol in his eyes.

He flushed them with water for 15 minutes before the EMS arrived.

They evaluated him and took him to the ER as per the Poison Center's recommendation.

██████████ was not in severe pain and could see normally.

No one else was exposed and all waste has been cleaned up.

The volume of hazardous material involved was less than 50 mL.

Attachment: **Yes**

Supervisor

| | |
|---|---------------------------------|
| Last Name: MURPHY | First Name: MICHAEL |
| Phone: +1 425 681-1711 | Email: murphymp@uw.edu |
| Occupation/Position: RESEARCH SCIENTIST/ENGINEER 2 | Department: BIOCHEMISTRY |

Classification

Level 1:
Injury requiring medical treatment (go to level 3 if in-patient hospitalization or amputation occurred),

Type of Incident

| |
|--|
| Injury Description: Pain, Irritation, Inflammation, Swelling, |
| Body Parts Affected: Eyes, |
| Cause of Injury or Damage: Chemicals, Splash, |

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

| Possible Causes | | | |
|--|---------------------------|---|-----------------------------|
| Equipment: Defective Tools, Equipment, | | | |
| Environment: | | | |
| Policies / Procedures: | | | |
| Human Factors: PPE Not Used, | | | |
| 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.) Lack of PPE use. Did not perform operation in chemical hood. | | | |
| Recommendations/Preventive Measures: Enforce PPE usage and usage of chemical hood with sash lowered to protect eyes/face. | | | |
| Corrective Actions Target Date (yyyy/mm/dd): 2016/12/30 | | Corrective Actions Complete Date (yyyy/mm/dd): 2017/01/04 | |
| Other Comments: | | | |
| EHS Review | | | |
| Last Name: ALDER | First Name: EMMA K | Phone Number: +1 206 221-2852 | Email: ealder@uw.edu |
| Occupation/Position: | | Department: | |
| Comments: | | | |

University-Wide (U-Wide) Health and Safety Committee Meeting Minutes
November 9, 2016
1:00-2:30 pm Mary Gates Hall Rm 064

Agenda

1. Call to Order
 2. Approval of Meeting Minutes
 3. Ergonomics & Access Technology Center Presentation
 4. Organizational Group Reports
 5. Union Reports
 6. Ex-Officio Reports
 7. EH&S Updates
 8. Good of the Order
 9. Adjourn
 10. Meeting Attendance Sheet
-

Recorded: by Angelina Haggard

1. **Call to Order:** Meeting was called to order at 1:05PM by Leslie.
2. **Approval of Meeting Minutes:** There were no suggested changes to the October Meeting Minutes and they were approved as written.
3. **Ergonomics & Access Technology Center Presentation:** Emma Alder, Dan Comden and Phil Numoto presented on how to use the resources available at the Access Technology Center. **The PowerPoint presentation is located here:**
4. **Organizational Group Reports**
 - a. **Group 1:** Leslie and Ryan reported Group 1 met earlier today. The group reviewed the Online Accident Reporting System (OARS) reports. Provost Baldasty attended the meeting. The members discussed their safety project - developing a campus-wide safety/emergency template to be used in all classrooms and offices. The group discussed transportation safety; training for the different types of vehicles and the new vehicle training platform – BRIDGE. Group 1 also discussed the current recall involving the Samsung Galaxy Note 7.
 - b. **Group 2:** Chad stated Group 2 meets tomorrow. An election was held for D2. Group 2 reviewed OARS reports. The group discussed how to balance the safety and security of all staff when there is a restraining order.
 - c. **Group 3:** Paul reported Group 3 reviewed OARS reports. One of the reports involved a lock-out/tag-out concern. After the meeting, Paul showed Emma and Angie the incident location at the bowling alley. Justin Berry was elected as the co-chair.

- d. **Group 4:** Carol reported Group 4 will elect a new chair at the November meeting due to a lack of quorum at the October meeting. They reviewed the Green Dot presentation given at the U-Wide. OARS reports were reviewed. Mark Murray will attend the November meeting to discuss the new Fire Safety and Evacuation Plan template implementation for the Health Sciences Building.
- e. **Group 5:** Liz reported Group 5 reviewed Patient Safety Net and Safety Intelligence reports. They discussed slip/fall and Northwest Medical Center Shuttle incidents. There was also a UWMC Legionella update.
- f. **Group 6:** Maggie reported Group 6 met and reviewed OARS reports. Elections were held and there will be seven additional members beginning with the December meeting.
- g. **Group 7:** No report due to traffic constraints.
- h. **Group 8:** Hannah reported they met with the City of Tacoma regarding pedestrian safety. One of the most challenging locations is the trail to 21st and Market.
- i. **Group 9:** Sonia reported Group 9 reviewed OARS reports and participated in a pop quiz about Fire Safety and evacuations from the meeting room location. Diana Zumba from Building Fire & Safety provided an update on the Fire Safety and Evacuation Plan. Group members are planning for the chilled water shut down in early 2017.
- j. **Group 10:** David Z. reported that group 10 reviewed OARS reports which included indoor air quality concerns in Moore Hall and bicycle incidents at Friday Harbor Labs. Group 10 members participated in the Great Shakeout. They also discussed the challenges identifying areas of refuge.
- k. **Faculty Senate:** Rick Gleason – no report.

5. Union Reports: No report.

6. Ex-Officio Reports

- a. Staci from Emergency Management provided a staff update. Scott left last month and they will be hiring for the vacant position. On December 14, 2016 there will be an active threat training exercise taking place at the building formerly occupied by the University of Washington Police Department. The Emergency Operations Center will be stood up for Saturday's football game which will be featured on ESPN's College Game Day show. The weather forecast includes lowland snow. Staci reminded committee members to make inclement weather preparations for work and home.
- b. Jay Sedivy reported pedestrian safety in and around the Burke Gilman Trail is being re-evaluated at six locations; two are owned by the University and four are owned by the City of Seattle. The new vehicle training platform BRIDGE is up and running. Ford is drafting a national recall as a result of communicating the recent mechanical issues with University owned and operated vehicles.

- c. Mark provided an update regarding the Fire Safety and Evacuation Plan. Mark acknowledged the success of the revised plan could not have happened without the grass roots support of the U-Wide committee. Leslie congratulated Mark on the speed and depth of the wholesale change to this vital resource. Mark stated there were five fires in 2016 and one in 2015 related to batteries. Environmental Health and Safety will recommend and support department actions for addressing consumer product recalls. Evacuation maps are being updated with the help of work study students and the GIS (Geographic Information Systems) department staff in line with the TAP (Transforming Administration Program) initiative. The UW Bothell campus signage will be supported with these efforts however UW Tacoma will be provided limited support.

7. **EH&S Updates:** The Accident Prevention Unit welcomed Robyn Kunsman, Health & Safety Coordinator. Robyn will be helping with the training program and OARS.
8. **Good of the Order:** There was a motion to extend the meeting five minutes. The motion passed.
9. **Meeting Adjournment:** Leslie adjourned the meeting at 2:40 PM.

University-Wide (U-Wide) Health and Safety Committee
December 14, 2016 Meeting Minutes
1:00-2:30 pm Foege N130A

Agenda

1. Call to Order
 2. Approval of Meeting Minutes
 3. Organizational Reports & 2016 Recognition and Accomplishments
 4. Union Reports
 5. Faculty Senate
 6. Ex-Officio Reports
 7. U-Wide Charter
 8. Tent City 3 Update
 9. Environmental Health & Safety (EH&S) Updates
 10. Good of the Order
 11. Adjournment
-

Recorded: by Angelina Haggard

1. **Call to Order:** The meeting was called to order at 1:10 PM by Leslie Anderson.
2. **Approval of Meeting Minutes:** The November Meeting Minutes were approved as corrected.
3. **Organizational Reports & 2016 Recognition and Accomplishments**
 - a. **Group 1:** Leslie Anderson and Ryan Hawkinson reported Group 1 met earlier today. The group reviewed the Online Accident Reporting System (OARS) reports. One report presented challenges in that a construction worker discovered a cooler of tissue cells and involved multiple departments for reporting. Group 1 project for the pProvost Building Evacuation Template basic for quick reference for emergencies for relatively common buildings will be produced in the first quarter of 2017.

Katia Harb, EH&S assured the committee there was no loss of containment by the Fred Hutch partner and that the Department of Comparative Medicine and the Capital Projects Office ensured proper handling.
 - b. **Group 2:** Chad Cook stated Group 2 met last week Group 2 reviewed OARS reports. They met twice since the last U-Wide. At the December 8th meeting they discussed slips/trips/falls and Tent City 3 (TC3). Group 2 has good participation and engaged committee members. Creative Communications has a safety website and a safety lean board.
 - c. **Group 3:** Paul Zuchowski reported Group 3 reviewed OARS reports. The students return to campus increased the number of OARS reports for Group 3. An update from November U-Wide was provided.

- d. **Group 4:** Carol Harvey and Beth Hammermeister reported the Group 4 subcommittee reviewed OARS reports. Melinda Young was elected as the Chair. Emma Alder reported Group 4 does a good job of addressing safety issues and inviting subject matter experts to their meetings; one example included a discussion with Facilities Staff about elevator maintenance and power outage protocols.
- e. **Group 5:** Stephen Lundgren reported Group 5 reviewed Patient Safety Net and Safety Intelligence reports. A 2016 highlight was teleconferencing the monthly meetings proved successful for consistent and engaged committee member participation. The medical centers are different but efficient, have excellent staff and respond to major department issues. Employee generated concerns are resolved. They coordinated just in time response. Medical Center staff are concerned about the transit hub and the influx of people into UWMC and surrounding buildings.
- f. **Group 6:** Maggie Luning reported Group 6 met and reviewed OARS reports. Elections were held and there will be seven additional members beginning with the January meeting.
- g. **Group 7:** Kelly Carter-Lynn reported Group 7 did not meet in November and their December meeting was yesterday. They reviewed OARS reports. Slip and falls were the trend in October. There were no OARS reports for November. Cham Kao, Director for Campus Safety has conducted safety town halls with the Cascadia College President and UW Bothell Chancellor. The recent icy conditions and late start highlighted the effectiveness of the updated alert notification system. Elections will be held for several vacancies. They would like to see more Union representatives attending the monthly meetings. They secured a budget for their committee which resulted in additional stop signs, improved walkways and improved office lighting. UW Bothell participated in the Great Shakeout and Cascadia Rising. UW Bothell campus was the location for an active shooter drill in coordination with Bothell and Woodinville police and fire departments. There is an active recruitment for the Director of Environmental Health & Safety at UW Bothell.
- h. **Group 8:** Hannah Wilson reported Group 8 reviewed OARS reports. A recent safety initiative involved snow and winter safety. A campus map was shared with the City of Tacoma and was used as a communication tool to the campus community; noting the suggested snow pathways and which walkways were maintained by UW Tacoma and which were maintained by the City of Tacoma. Group 8 met with City of Tacoma regarding pedestrian safety and identified intersections and pathways for improved safety.
- i. **Group 9:** Sonia Honeydew reported Group 9 reviewed OARS reports. Brandon Kemperman from EH&S presented on Shop Safety. Group 9 invites a guest speaker for 2 out of 3 meetings. They use Google drive to share common safety resources. Group 9 members were the successful beta test group for EH&S scheduling of the annual evacuation drills.

- j. **Group 10:** David Warren reported that group 10 reviewed OARS reports. Group 10 members reviewed an incident involving hydrofluoric acid. Safety measures resulting from the review included adding safety tape to mark 6 inches for proper use of the fume hood and clarifying how, when and where to seek medical treatment while on campus.

Group 10 has concerns about battery testing which have resulted in fires. Group 10 is relieved that the construction work is almost done at Wallace Hall. Group 10 is also concerned that TC3 is located at their designated emergency evacuation assembly point and the potential for increased use of public facilities in the Fishery Sciences.

Mark M. updated the group that Building & Fire Safety and Emergency Management have tentatively identified Rainier Vista and/or Parrington Lawn as the new alternate mass assembly point.

Group 10 members updated their Fire Safety and Evacuation Plan (FSEP) and MyChem. All departments participated in the Great Shake Out. A member of the Associate Dean's office attends the health and safety committee meeting and recognizes the work of the Group 10 members.

- 4. **Union Reports:** Paula Lukaszek appreciates being heard and the efforts taken to resolve concerns. Stephen reiterated similar sentiments. Kelly encouraged union representatives to attend the Group 7 meeting at UW Bothell.
- 5. **Faculty Senate Report:** Rick Gleason no report at this time.
- 6. **Ex-Officio Reports:** Ron Fouty reported there are currently a lot of projects on campus, particularly north campus.

Tracey Mosier reported that although the Safety & Health Investment Projects grant for "A participatory Ergonomics Approach to Reducing Discomfort and Injuries among Custodial Workers" has ended, there are ongoing conversations and the work will continue. There is a commitment to fund further solutions - i.e. longer toilet brush handles. They are looking for adjustable tools but they are just not available on the market. The new Transportation Director starts in January 2017.

- 6. **U-Wide Draft Charter Discussion:** Committee members discussed the draft U-Wide charter and made recommendations to the draft sent out prior to the meeting Emma Alder will compile the edits and recommendations and send the updated draft out to the committee before the January 2017 meeting.
- 7. **Tent City 3 (TC3) Update:** TC3 move in day is December 17. Sheryl Schwartz, EH&S shared with the group that the TC3 Community Advisory Committee meets Thursdays at 4:30m in the UPWD meeting room. There is an agreement that establishes responsibilities during the hosting, as well setting out a safety and security plan. There are currently 63 residents of TC3 with maximum capacity for 99 residents. TC3 residents cannot use campus facilities and no alcohol or drugs are allowed. TC3 provides 24/7 security. Residents must abide by rules. TC3 is overseen by SHARE. Currently TC3 is located in parking lot W35.

David Warren commented that Group 10 members had building access issues adjacent to parking lot W35. Members were encouraged to pass along TC3 concerns to the Community Advisory Committee.

At 2:28 p.m. there was a motion to extend the meeting 10 minutes. The motion carried.

A guest to the committee, Dave Muzia, brought up concerns regarding transient access to the campus. He recalled an incident where a transient individual appeared to be disrupting a student on campus. He called UWPD and was informed that officers could not respond unless a crime was involved. This brought on a broader discussion of how UWPD fields incoming calls and concerns and what type of response can be expected for these situations. It was decided that the discussion would continue when Chief Vinson could attend the meeting to respond on behalf of UWPD.

8. Environmental Health & Safety Updates: Agenda items were tabled until next meeting

9. Good of the Order: Agenda items were tabled until next meeting.

10. Adjournment: Leslie Anderson adjourned the meeting at 2:41 PM.

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

January, 11, 2016

1:00 – 2:30 PM

William H. Foege Bldg. N-130A

Regular Attendees:

- 2016-2017 University-Wide Health and Safety Committee Members
(<http://www.ehs.washington.edu/ohssafcom/groups.shtm>)
- EH&S Staff : Jude Van Buren, Katia Harb, Denise Bender, Emma Corell, Angie Haggard

| Agenda Items | Persons Responsible | Process | Time |
|---------------------------------|---|-------------------------|--------|
| Call to Order | Leslie Anderson | Robert's Rules of Order | |
| Approval of Meeting Minutes | Leslie Anderson | Robert's Rules of Order | 5 min |
| UWPD Input on Response Concerns | Leslie Anderson Chief Vinson | Discussion | 20 min |
| U-Wide Charter | Committee Members | Discussion | 20 min |
| Organizational Group Reports | Committee Members | Discussion | 15 min |
| Union Reports | Union Representatives | Discussion | 5 min |
| Ex-Officio Reports | Ex-Officio Members Bridge Learning Management System, Jay Sedivy | Discussion | 10 min |
| EH&S Updates | New Electronic OSHA Recordkeeping Requirements: Emma Corell New EH&S Section: Katia Harb | Discussion | 15 min |
| Adjourn | Leslie Anderson | Robert's Rules of Order | |