



Chemistry Local Safety Team Meeting Minutes **Approved**

Name of Team: Chemistry Local Safety Team

Chair(s): Derek Gates & Monica Clarkson

Date: Oct 19, 2023

Time: 11:02 am

Location: Online Zoom Meeting

AGENDA:

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| <ol style="list-style-type: none"> 1. Roll Call 2. Approval of Previous LST Meeting Minutes 3. Additional Agenda Items & Approval of Agenda 4. Review Central Accident/Incident Reporting System (CAIRS) report of Accidents/Incidents <ul style="list-style-type: none"> • Monthly Incident List & Statistical Summary Report 5. Review Workplace Safety Inspections (including any changes to equipment, machinery or work processes that may affect the health or safety of workers) | <ol style="list-style-type: none"> 6. Review Education and Training 7. Ongoing Business – Status of Action Items, Review of Previous Minutes 8. New and Other Business 9. Next Meeting 10. Meeting Adjournment |
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1. ROLL CALL

Worker Representatives	Work Location	Present	Regrets	Absent
Guillaume Bussiere	Chemistry - Teaching Faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Karen Button	Chemistry – M&P, Stores Manager	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ken MacFarlane	Chemistry - M&P, Director, Finance and Operations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mohamad Rezaei	Chemistry - M&P, Director, Technical Services	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tori Christianson	Chemistry – CUPE 2950, Outreach and Communications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patrick Dever	Chemistry – Shops and Services Tech	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ben Herring	Chemistry – Research Tech	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jacqueline Higgins	Chemistry – Graduate Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cameron Zheng	Chemistry – Graduate Student	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Employer Representatives	Work Location	Present	Regrets	Absent
Derek Gates	Chemistry – Faculty, Co-Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Monica Clarkson	Chemistry - M&P, Co-Chair & Safety Program Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Resources/Guests	Work Location	Present	Regrets	Absent
Richard Wambolt	UBC Safety & Risk Services	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. APPROVAL OF PREVIOUS LST MEETING MINUTES

(Statement to indicate minutes of previous meeting have been read & acknowledged and to record any corrections to it)

Are the minutes approved?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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3. ADDITIONAL AGENDA ITEMS & APPROVAL OF AGENDA

Is the agenda adopted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:

See attached incident report:

- Monthly Incident List & Statistical Summary Report *(make note of trends etc. For any general CAIRS information that requires discussion or action, please record under "New Business". Any incident specific items and follow up requests are to be listed below)*

(* See Legend at End for Priority and Status Codes)

Item # (Use CAIRS Incident ID #)	Priority	Date	Action Plan (Actions Taken/Need to be taken)	Assigned To	Follow up: Date Pending	Status
129681/129682	C	Jul 22, 2022	Grad student removed Pasteur pipette with phenylbis(trimethylsilyl)phosphine residues on it from glovebox and discarded it into plastic glass waste bucket with plastic bag liner. The plastic bag liner was ignited by chemical residues that remained in the pipette. <ul style="list-style-type: none"> Lengthy discussion regarding glass waste buckets; no recommendations established. DG conducted a straw poll of faculty at the Sep 29 Faculty Meeting. Faculty are in favour of metal glass waste containers. 	DG/MC	In Progress	IP

**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

			<ul style="list-style-type: none">• Response from the Waste Management team from Building Operations was received on Dec 19, 2022. They have discontinued the metal pails. If the department would like to purchase and re-stock the metals pails, the Waste Management team would service them as needed. Monica to check if there are still any discontinued pails available for use.• Metal pails are currently still available to UBC Chem and are still being circulated. There is approximately a 50/50 ratio of metal to plastic pails, which are in circulation within the department. After further discussions with UBC Waste Management, they have agreed and confirmed that it is okay for us to label and use the existing metal pails with "UBC CHEM". Once the metal pails have been labelled, the waste management team will be trained to deliver the metal pails to the department. Signage with instructions will be posted in the glass waste room to encourage synthetic lab users to use the metal pails.• Chem Tech Services have provided us with a stencil for this project. Spray painting has started and is in progress. <p>LST Comments: Spray painting is in progress.</p>			
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

131749/121750	C	July 27, 2023	<p>Trifluoroacetic acid (TFA) skin contact</p> <p>The injured student was performing a peptide cleavage reaction in the fume hood. This requires the use of concentrated trifluoroacetic acid (TFA). The student had clamped a glass column with fritted disk (approx. 20-30 mL) to a stand in the fume hood and was getting ready to rinse the sides of the column with TFA using a glass Pasteur pipette. Before beginning the rinse, they accidentally pressed the bulb of the pipette and approximately 1 mL of TFA squirted onto the student's shirt. The pipette was being held towards the student's direction and not the column. The sash of the fume hood was close to the required mark. The student was not wearing goggles nor a lab coat at the time of the incident. Nitrile gloves and long pants were being worn. The student was previously trained, was following previously established procedures, and has been doing this task regularly for over a year.</p> <p>After the skin contact, the student asked another student present in the lab for help. This student guided the injured party to a drench hose which was located directly behind the fume hood and began rinsing the affected areas for 5 minutes. The student was able to remove the drench hose from the holder and use it directly on their body. After 5 minutes the water from the drench hose started to warm up, which caused the chemical burn to feel worse. At this time, the Chemistry Safety Program Officer was contacted. The Safety Officer recommended that the injured party use the emergency shower for a minimum of 15 minutes, while they contacted UBC First Aid and notified the SRS pager. The student went to the other eyewash/shower station located within the same room but declined to use it. The student used the showers on the lower level of Chem D, at</p>	MC/CZ/KM	In Progress	IP
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

which time they realized they had additional chemical contact on their left leg. All affected areas were rinsed for a minimum of 15 minutes. After the area was rinsed, the student was driven to the UBC hospital by UBC First Aid/Campus Security at around 10:30a. The injured party saw a doctor at the hospital.

Actions and Resolutions:

(1) Review the existing SWP procedures and update deficiencies. Include items listed below.

- Pasteur pipette should be pointed away from the user
- All required appropriate PPE should be worn at all times in a lab
- Make sure the fume hood sash is at the appropriate level and to use a shield if the sash is unable to protect the user from being sprayed
- To add a comment that holding the column at the time of the rinse is not recommended.

(2) To remind and train workers to wear the appropriate PPE required for the task.

(3) Once procedures have been updated provide training to the research group.

(4) To provide research group with proper emergency procedures for chemical exposure and to highlight that UBC First Aid must be called for emergency response.

(5) Submit a service request to BO for the plumbers to temper the drench hose station to meet the required temperature range 15 to 30 degrees Celsius.

(6) Notify and train students and workers that in the event that clothing is contaminated with a hazardous material, all clothing must be removed and an emergency shower must be used to wash all affected areas appropriately. The SDS will state how long the affected areas should be washed.

**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

			<p>This incident was recently discussed at the August FOS JOHSC meeting. It was suggested that the Chem LST discuss the lack of PPE being worn by the individual while working in the lab. In addition, it was suggested that the Chem LST discuss ways to encourage individuals to remove contaminated clothing that has been exposed with chemicals and to use the emergency shower located within the lab. It was suggested to install permanent shower curtains.</p> <p>DG to discuss at the next faculty meeting on Sept 28, 2023.</p> <p>LST Comments: At the faculty meeting on Sept 28, 2023, the importance of wearing all required PPE was discussed.</p> <p>All corrective action items except item 3 have been completed.</p>			
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

131988/ 131992	C	Sept 12, 2023	<p>Reaction Vessel Explosion</p> <p>A reaction was set up in a 20 mL high pressure vessel (thick-walled glass vessel with Kontes valve) and put that in a room temperature oil bath. The temperature of the reaction [1-octene (0.25 g), tantalum species catalyst (0.2 g), Azure B (0.61 g) in toluene (13-15 mL)] was raised to 120 C and the fume hood sash was closed before stepping away from the fume hood. The tantalum catalyst is (L)(Cl)Ta(CH₂SiMe₃)₃ where L is a cyclic amidate ligand. The oil bath temperature was controlled by feedback from a temperature probe back to the hot plate-stirrer. About 10 min later a popping noise was heard in the fume hood, which was heard by the experimentalist. The experimentalist checked the reaction vessel and learned it had broken due to pressure build up. The oil bath captured the broken glassware and reaction mixture. There was a small spill due to an overfull oil bath. The hot plate/stir plate was turned off, the contaminated oil was disposed in chemical waste, the broken glass was cleaned and disposed in glass waste and the stir plate was wiped clean. The researcher and the witness were both wearing full PPE (long pants, closed-toe shoes, lab coat, safety glasses and glove). No blast shield was in place. The fume hood sash was fully closed. The glassware appears to have failed at a reasonably low pressure as the broken glassware was found in the oil bath or directly adjacent to the oil bath. There was no evidence that any glass had hit the fume hood sash.</p> <p>Campus security was called but there was no answer for over 20 minutes. Ultimately, SRS was notified via email. There were no injuries so UBC First Aid was not required.</p>	KM/CZ/JH/DG	Complete	C
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

		<p>Actions and Resolutions:</p> <p>(1) Review safe laboratory protocols for super-heated reactions.</p> <p>(2) Develop a Safe Working Procedure for heated sealed reactions. Work procedure should include the use of a blast shield, specifications for total volume of reaction compared to volume of reaction vessel, maximum scale of reaction permitted, inspection of glassware for flaws prior to reaction being setup, PPE requirements (consider if a face shield should be worn from start of heating until thermal equilibrium reached), fume hood sash closed during heating, notification of co-workers, completion and posting of the overnight reaction form on the fume hood with the safety precautions. Consider using thicker-walled glassware that is coated with latex.</p> <p>(3) Notify UBC SRS that the CHEM LST was not unable to get through to UBC SRS to immediately report the incident. Chem safety staff to notify UBC SRS with their concerns and request for Campus Security to improve training.</p> <p>LST Comments:</p> <p>All corrective action items have been completed. This item is closed.</p>			
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132059	C	Sept 19, 2023	<p>Glass cut from Pasteur pipette During a lab exam for chem 211 students, a student had cut (minor cut) themselves on their finger while picking up a Pasteur pipette. Upon further observation it was identified that the pipette was already chipped. The pipette was either new (i.e., unused) or used only for transferring water. UBC First Aid was called. The student felt faint and sat down in the office area while waiting for UBC First Aid (Campus Security) to attend to the cut. The student was picked up by a family member and chose to go home as they were feeling faint.</p> <p>The student was wearing long pants, closed-toe shoes, lab coat, and safety glasses.</p> <p>Actions and Resolutions: (1) Remind students to get enough sleep and eat prior to the lab. (2) Remind students about the safe handling of glassware, including inspecting prior to use.</p> <p>LST Comments: All corrective action items have been completed. This item is closed.</p>	KM/JH	Complete	C
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132060	C	Sept 19, 2023	<p>Severe Glass Cut</p> <p>During the lab exam, the student was preparing a solution in a 50 mL volumetric flask. The student put the cap on it to mix the contents of the flask and presumably the student used excessive force and broke the tip of the glassware in doing so. During this motion they cut themselves on the piece of glassware. The student reported to the teaching assistant. One technical staff member applied gauze to the cut while the other called 2-2222. The Security phone was not answered for a few minutes, during which time the technical staff decided to walk the student to Urgent Care for treatment. Security answered as they were leaving the lab and the security staff member instructed them to proceed to Urgent Care by foot.</p> <p>The volumetric flask contained copper nitrate ($\text{Cu}(\text{NO}_3)_2 \cdot 2.5\text{H}_2\text{O}$) with an approximate concentration of 3.2 mg/L. The student was wearing safety glasses, lab coat, closed toed shoes and safety glasses.</p> <p>Actions and Resolutions:</p> <p>(1) Remind students to handle glassware carefully and to not rush.</p> <p>(2) FOS JOHSC - It was suggested that it would be useful if the lab manual included some wording added (if not already added) to ask students to not use excessive force when handling glassware.</p> <p>LST Comments:</p> <p>All corrective action items have been completed. This item is closed.</p>	KM/JH	Complete	C
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132096/132095	C	Sept 25, 2023	<p>MRSA-PAO1 Cultural Media Spill with Eye Contact</p> <p>It was reported that the supervisor was informed at 1:15 pm about the spill and was told that the student was at the UBC hospital. The supervisor met the student at UBC Hospital at 1:30 pm. According to the student, roughly 10 mL of bacterial culture media with MRSA and PAO1 was spilled with facial and eye contact. The student came to the Emergency Department of UBC Hospital to follow emergency response for eye contact. The supervisor stayed at the Emergency Department until the examination was completed. The doctor confirmed that no infection was observed. However, antibiotic eye drops were prescribed to prevent potential infections.</p> <p>The student confirmed that the spilled area was disinfected following the proper safety protocol. No other personnel were in the lab at the time of the accident.</p> <p>The student was wearing long pants, closed-toe shoes, prescription glasses, but did not have on safety glasses or a lab coat.</p> <p>Added Notes: It was reported that the sample was taken out of the biological services lab into another laboratory that did not have a biosafety permit. The sample was contained in a Falcon tube, which was opened and then closed. The lid of the Falcon tube was not properly secured and the sample was not handled in a biosafety cabinet. The student vortexed the sample. At the same time, the student's phone rang, and while answering their phone, some of the sample splashed out of the tube and splashed on their face and eye.</p>	KM/TC/EP/SE	In Progress	IP
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

			<p>Actions and Resolutions:</p> <p>(1) The supervisor to advise all group members that no cell phones are allowed when carrying out lab work.</p> <p>(2) The supervisor to advise all group members that safety goggles are required for everyone entering the lab, in addition to the long pants, lab coat and closed-toed shoes.</p> <p>(3) Remind users that live biohazardous materials should not be taken out of biological services.</p> <p>LST Comments:</p> <p>The investigation is in progress and additional corrective actions will be included. It was noted at the Oct 12, 2023 FOS JOHSC meeting that this incident will be reviewed by the university's Biosafety Committee as well as the FOS JOHSC and CHEM LST.</p> <p>Item 3 has been completed.</p>			
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132108/132082	C	Sept 22, 2023	<p>Chemical Spill A researcher picked up a 1 L bottle of triethylamine by the cap from the chemical storage space beneath their fume hood. The cap came loose and some of the contents of the bottle spilled. The bottle did not break but approximately 300 - 400 mL of triethylamine spilled onto the floor. The worker inhaled some vapors and experienced a tingling sensation on their face and lips. With the help of lab mates, the researcher moved to a sink to rinse their face before moving to an eyewash station in the office area of the lab. Rinsing continued for a further 10 - 15 minutes. A final face was completed in the washroom. The lab was evacuated and closed for the day as residual triethylamine was evaporating. Campus Security was notified and Custodial staff were notified that the lab should not be entered until the following work week. The researcher was wearing long pants, closed-toe shoes, safety glasses, lab coat, and gloves at the time of the spill. With the guidance of SRS, students and workers were cleared to enter the space after the weekend.</p> <p>Actions and Resolutions: (1) Review with the group correct technique for picking up bottles of chemicals and solvents.</p> <p>LST Comments: All corrective action items have been completed. This item is closed.</p>	KM/JH/BH/CZ	Complete	C
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132219/132221	C	Oct 16, 2023	<p>Cut on Head Worker stood up to allow another staff member sit at their desk. While moving over to make space, the worker hit their head on an overhead shelf (located opposite of the desk), which caused a minor cut on their head. The worker applied pressure to the cut with tissue and walked to my office to notify me. I called UBC First Aid to attend. UBC First Aid attended.</p> <p>Actions and Resolutions: (1) Submit a service request for carpenters to remove and dispose of the overhead shelf. (2) Ask worker to exit the space before letting another person enter until the shelf has been removed.</p> <p>LST Comments: All corrective action items have been completed. SR # 236190 was created for this incident. This item is closed.</p>	MC/KB/KM	Complete	C
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**4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:**

132233	C	Oct 18, 2023	<p>Teaching Lab Splinter A student was reaching into a cubby hole to reach for their personal bag. While reaching for their bag they received a splinter under their fingernail. UBC First Aid was called and attended after 30 min. They were unable to remove the splinter and decided to transport the student to UBC Urgent Care.</p> <p>Actions and Resolutions: (1) CHEM LST to check for any sharp edges in the cubby hole. (2) Teaching lab staff to check all other cubby holes in lab to see if there are any other areas that have exposed wood.</p> <p>LST Comments: All areas of the cubby hole were found to be smooth. All corrective action items have been completed.</p>	MC/CZ	Complete	C
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**5. REVIEW OF WORKPLACE SAFETY INSPECTIONS (including any changes to equipment, machinery or work processes that may affect the health or safety of workers)***Attach inspection checklist(s) and report(s) to these meeting minutes and use this table to record discussion and new recommendation(s)*

Item # (Use Inspection #)	Priority	Discussion/Comments/Recommendations	Assigned To	Follow up: Date Pending	Status
Sep 2018	C	Demo Lab Areas <ul style="list-style-type: none"> BH will oversee day-to-day processes KM/HW cleaned-up benchtop areas on Mar 10; sorted out chemicals for disposal on Mar 16 and plan to attend for further clean-up/disposal processing on Mar 25 in the Demo Room Jose has a TA organizing the Demo Kits <ul style="list-style-type: none"> Lab Tech & TA working on Demo Kits Inspection of the demo areas have been completed. All items listed above are on hold or in progress as follow up items. LST Comments: In progress.	BH/KM	On hold	IP
			KM	In Progress	IP
May 2023	C	Chem Shops and Service Spaces Chem shops and service spaces (E214, E215, E313, D112, D124, D116, D118, D120, D128, & B460) were inspected this May. <ul style="list-style-type: none"> The noted deficiencies included, labels/signage were missing and items were being stored on the floor. 65-70% of the deficiencies have been completed all other items are in progress. All deficiencies from the May inspections have been resolved. However, inspections for some of the spaces are pending. LST Comments: Tabled.	MR	In Progress	IP



5. REVIEW OF WORKPLACE SAFETY INSPECTIONS (including any changes to equipment, machinery or work processes that may affect the health or safety of workers)					
July 2023	C	Chem A Research Labs All research spaces within Chem A were inspected in July. <ul style="list-style-type: none"> A lot of deficiencies were noted and are in progress. September update, 65% of deficiencies were completed LST Comments: 90% of the deficiencies have been completed. All other items are in progress.	MC	In Progress	IP
Sept 2023	C	Chem D & E Research Labs All research spaces within Chem D & E were inspected in September. This will be the second round of inspections for these spaces. LST Comments: Inspection reports are in progress and will be sent to PIs soon.	MC	In Progress	IP

* *GI- General Inspection**LI - Lab Inspection**S&SI Shops & Services Inspections*

6. EDUCATION AND TRAINING					
(General discussion, RMS Courses, external training opportunities etc. For all actionable items please list below)					
Item #	Priority	Discussion/Comments/Recommendations	Assigned To	Follow up: Date Pending	Status
N/A	E	The UBC CHEM Fire Extinguisher training for the new fall semester has been scheduled for Nov 21, 2023. Please contact safety@chem.ubc.ca to sign up.	MC	N/A	N/A



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
Original Item #	Priority	Action Plan (Actions Taken/Need to be taken)	Assigned To	Follow up: Date Pending	Status
E	E	Prepare meeting minutes and to post approved minutes to UBC Chemistry Safety website and upload a copy to the FOS JOHSC site.	MC	Ongoing	N/A
2020	C	<p>Develop review process for SWPs before being posted onto Safety webpage;</p> <ul style="list-style-type: none">• SWP to have Risk Assessment information incorporated• Include resources about compatibility and storage of chemicals• The Chem LST has a student worker available this summer to help draft SWPs for the department. DG to provide a list of priority SWPs that should be drafted.• The student worker has drafted an SWP for handling alkyl lithium compounds, which are in the first stages of development. They will be contacting DG soon for next steps.• It was requested for the student worker to draft an SOP for needle and syringe use.• SOPs are being developed and have been saved on a departmental shared drive. If you are interested in using any of the documents, please email safety@chem.ubc.ca. <p>LST Comments: No updates at this time.</p>	DG	Ongoing	IP



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
Dec 2021	C	<p>Earthquake Securing straps for large Dewars; and, Lab installations for Compressed Gas Cylinder tie-downs</p> <ul style="list-style-type: none">• TM advised that Bldg E completed as at Sept 15/22;• Due to new equipment installation in C224 they will be installing the straps there next; and• TM is reviewing Bldg D – Knuckle compile list and that will be next• A proposal for securing compressed gas cylinders for D240 has been established. If approved, the upgrades will occur by the end of February.• Parts have been ordered for the items remaining in Chem D's knuckle.• Buildings Chem B and E have been completed.• The outstanding items for Chem D's knuckle are now completed, which completes the Chem D building. Chem C224 is in progress. The next steps are to start working on Chem A.• Buildings Chem C and D have been completed. Inspections of Chem A have begun and are currently in progress. <p>LST Comments: Tabled.</p>	MR	In Progress	IP
Feb 2021	C	<p>LN2 Safety Training – TM working on setting this up as an actual course with a quiz and certificate</p> <ul style="list-style-type: none">• TM is working on the processes required for this course <p>LST Comments: This item has been referred forward.</p>	MR	Referred Forward	RF



Nov 9, 2022	C	<p>Two staff raised concerns regarding the use of dichloromethane (DCM) in the open lab. One experiment in first year and two experiments (3 lab sessions) in 2nd year.</p> <ul style="list-style-type: none">• First year labs have been moved off of the bench and into the fume hoods going forward.• Air changeovers were discussed for each lab. Preliminary calculations were also presented. MC to request for SRS to double check the proposed calculations.• MC and KM to discuss this concern with the course lab director to see what changes can be made to the experiments that use DCM outside of the fume hood.• We are discussing all of the available options with teaching faculty and staff.• The CHEM LST, has discussed, reviewed and considered best practices of the DCM exposure concerns. This has also been discussed with the Head. Going forward, the Chemistry teaching labs will no longer be permitted to use DCM on the bench top. If possible, experiments should be moved into a fume hood. If one must use DCM on the bench top the vessel must be capped or closed at all times. With the help of the course instructors, we are identifying which labs have been affected. In this process, we are also identifying what other chemicals are being used on the bench top and will be helping with risk assessments.• In addition to the evaluation of the use of halogenated solvents on the bench top, the Chem LST has been asked to evaluate diethyl ether, ethyl acetate, acetone and toluene use. The Chem LST with help of teaching faculty and staff are reviewing each of the specific labs and providing assistance with risk assessments to reduce exposure.• For one of the experiments the 3rd and 4th year analytical labs have stopped using chloroform on the bench top and have switch to DCM. The amount of DCM used is in trace amounts and is below the allowable limit. In addition, the Mass Spectrometry (MS) experiment does use halogenated reagents in a trace amount, which is loaded in a fume hood and then transferred into the MS directly. Also, please note this item was discussed at the faculty meeting on March 23, 2023. Updates on halogenated solvents were discussed.	KM/MC/ DG/BH	Complete	C
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7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
		<ul style="list-style-type: none">Using halogenated solvents on the bench top is not acceptable. Due to the limited number of fume hoods in the teaching facilities modifications have been made for lab experiments to continue. In particular, adjustments to the second-year organic labs have been made to ensure that there are no halogenated solvents being used on the bench top, unless they are closed/capped.Modifications were done to the teaching labs over the summer. <p>LST Comments: All teaching labs that previously used DCM on the benchtop have been modified to use DCM exclusively inside a fume hood or in closed vessels on the bench top. This item is closed.</p>			



July 2023	C	<p>PPE Requirements in Chem Stores</p> <p>It was confirmed through UBC SRS that there are no regulatory requirements for wearing PPE in Chem Stores for shopping. Depending on the task being done, staff are required to wear basic PPE and any additional PPE as required. It is recommended that at minimum everyone should wear safety glasses (new suggestion), lab coat (new suggestion), long pants and fully foot encompassing liquid-resistant shoes, especially in areas where solvents/chemicals are located (Solvent Shed & Chemical Room).</p> <p>DG to discuss this at next faculty meeting.</p> <p>It was discussed that while shopping in Chem Stores, customers should wear safety glasses, a lab coat, long pants and fully foot encompassing liquid-resistant shoes. However, this request could be hard for staff to enforce since a lot of customers do not come to buy hazardous materials. Instead, some customers come to buy gloves or pick up non-hazardous items. In addition, there are common areas of Chem Stores where individuals transporting hazardous materials would be in very close proximity to other individuals (staff, visitors, other customers, etc.). In these cases, it would be recommended that everyone should wear all the suggested PPE, rather than trying to decipher if an individual has come to pick up a hazardous material or not. Also, in the event of a hazardous spill or incident, individuals would have a barrier of protection.</p> <p>Aug 2023 Update: In addition to the current requirements of wearing closed-toed shoes and long pants, anyone entering Chem Stores will be required to wear eye protection effective immediately. Spare safety glasses will be provided. An email will be sent to notify the department. An audit to assess PPE requirements for all service areas are in progress.</p> <p>LST Comments:</p> <p>This was discussed at the faculty meeting on Sept 28, 2023. Majority of the faculty support wearing full PPE use while shopping in Chem Stores. A subcommittee will be formed and discussions will be continued offline.</p>	N/A	N/A	IP
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7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
July 2023	C	<p>Earbuds and headphone Use</p> <p>There was an incident on campus where an individual was calling for help for over 8 minutes. Unfortunately, the other individuals in the lab could not hear the call for help because they were wearing headphones/earbuds that restricted them for hearing anything else. The individual was very distressed at the time. At UBC Chem, depending on the supervisor, there are both the “no earbud/headphones policy” or the “only one earbud policy”. Wearing headphones or both earbuds at a time are not allowed. The Chem LST will review this policy.</p> <p>DG to discuss this at the next faculty meeting.</p> <p>LST Comments:</p> <p>This item was discussed at the faculty meeting on Sept 28, 2023. A subcommittee will be formed and discussions will be continued offline. It was suggested that we involve the CGSS for their perspective.</p>	N/A	N/A	IP
May 2023	E	<p>Preventative Maintenance – Fume Hood Sash/Cable Audit</p> <p>A mandatory fume hood sash/cable audit is currently being done by Building Operations (BO). The audit started at the beginning of May and will be continuing until the end of the summer. A level 1 shut down is required for the audit. If BOs find any deficiencies during their audit, they will contact us at a later time, and provide us with further instructions.</p> <ul style="list-style-type: none">• The audits for buildings A, D and E have started and are in progress.• Buildings D and E have been completed.• Any emergency repairs have been prioritized.• The audit for all buildings (A,B,C,D&E) have been completed. BO will now be focusing on repairing any non-urgent deficiencies. <p>LST Comments:</p> <p>The preventative maintenance audit has been completed. This can be closed.</p>	MC	Complete	C



8. NEW & OTHER BUSINESS					
<ul style="list-style-type: none"> General discussion items (list actionable items below) 					
Item #	Priority	Discussion and/or Action Items	Assigned To	Date to be Completed	Status
N/A	E	CHEM LST Recipient of Safety Achievement Award The CHEM Local Safety Team (LST) was awarded the Safety Achievement Award earlier this week at UBC's Safety Day! Specifically, the award recognized the 2-point seismic upgrades for large equipment housed in the Chemistry Complex, such as chemical fridges, compressed gas cylinders, liquid nitrogen Dewar's, etc. Over 175 upgrades, with the collaboration of the CHEM Machine Shop, Building Operations and the CHEM LST, were done since the start of the project. Thank you to all of you who helped support and achieve this huge endeavor for the department.	N/A	N/A	N/A
Oct 2023	C	Diethyl Ether Use Chem LST to assess if there are any exposure concerns for using diethyl ether in closed vessels on the bench top of the teaching labs. LST Comments: No updates.	MC/DG	In Progress	IP
N/A	E	CHEM LST Member Updates and Concerns Are there any safety concerns or updates that were not discussed? LST Comments: DG – No updates MC – UBC CHEM Flu Clinic was run on Oct, 13, 2023 with the help and support of Tori Christianson, Nicky Gan, Sunny To, and David Wu. We were able to help vaccinate over 100 people this year. KM – No updates MR – Tabled KB – No updates GB – Tabled BH – No updates TC – No updates PD – No updates	N/A	N/A	N/A



8. NEW & OTHER BUSINESS					
		CZ – No updates JH – No updates RW – Tabled			
N/A	E	SRS Updates Recommended items to discuss at JOHSC/LST Meeting Communicable disease prevention With the academic year and fall in full swing, it is important to review ways to prevent the spread of communicable diseases. Communicable disease prevention outlines how Public Health, UBC and individuals can work together to prevent the spread of communicable disease. A communicable disease is an illness caused by an infectious agent or its toxic product that can be transmitted in a work, research or academic environment from one person to another (i.e. influenza, COVID-19, norovirus). The Communicable Disease Prevention Framework is not meant to replace existing customized workplace exposure control plans. (For more information, please refer to 5.2 and 6.33 to 6.40 of the Occupational Health & Safety Regulation). <ul style="list-style-type: none"> Mask update: There is no general requirement to wear a face covering (mask) on UBC Premises. Starting October 3, medical mask wearing will be required by all health-care workers, volunteers, contractors and visitors in patient care areas (including UBC faculty, staff and learners who operate in the mentioned areas) to increase protections in health-care facilities in B.C. For further details, visit the SRS website. Get Ready to Shakeout On October 19, 2023, practice how to DROP, COVER and HOLD ON at 10:19 a.m. during the annual Great BC ShakeOut . The Great BC ShakeOut is an annual province-wide earthquake drill for everyone to practice how to protect themselves and to be better prepared in the event of an earthquake: DROP to	SRS Updates	N/A	N/A

**8. NEW & OTHER BUSINESS**

the ground (before the earthquake drops you!), take COVER by getting under a sturdy desk or table, and HOLD on to it until the shaking stops.

Informational Items**LST Training**

Resister [here](#) for LST Training.

LST Training	
Part 2a	Part 2b
October 5 th 11:00am – 12:30pm	October 6 th 1:00pm – 2:30pm
October 5 th 11:00am – 12:30pm	October 6 th 1:00pm – 2:30pm

WorkSafeBC Inspection Reports (IR)

There was one WorkSafeBC Inspection Reports received since the last co-chair email. As always, the “WSBC IR Summary” attachment provides a brief summary for the inspection report and some discussion points to consider.

1) SEPTEMBER 15, 2023 – IR #202317748092A

Description:

- On September 15, 2023, a worker tripped on the concrete surface at the Rugby Centre, causing them to fall and sustain injuries.
- First aid was provided to the worker, and they were transported to a nearby hospital for further assessment.
- There were zero (0) orders issued to the University.

JOHSC/LST General Learnings/Discussion Points:

- As a reminder, a workplace incident that has caused a life-threatening or serious injury must be reported to Campus Security at 604-822-2222 (after calling 911 emergency services) as part of the incident response.



8. NEW & OTHER BUSINESS					
		<ul style="list-style-type: none"> More information regarding what to do in the event of a serious incidents or possible serious incident can be found on the SRS Website. Encourage everyone to report incidents and near misses into CAIRS within 48 hours of the occurrence so that a preliminary investigation can be completed within 48 hours as required by section 71 of the Workers Compensation Act Reminder that incident investigations require a site visit that must be completed within 30 days, with description, unsafe conditions, contributors, causes, corrective actions, and worker rep participation. 			

9. NEXT MEETING	
Date:	Nov 16, 2023
Time:	11:00 am
Location:	Online Zoom Meeting

10. MEETING ADJOURNED	
Time:	11:47 am

LEGEND

PRIORITY:		STATUS:	
A	High Risk, Immediate Response within 1-2 days: Potential for causing loss of life, body part and/or extensive loss of structure, equipment or material.	N	New
B	Moderate Risk, response as soon as possible within 1 week: Potential for causing a serious injury, illness or property damage.	R	Repeat
C	Low Risk, response as soon as possible; Next regular inspection or further investigation required: Probable potential for causing a non-disabling injury or non-disruptive property damage.	C	Complete
D	Reminders	IP	In Progress
E	Information	RF	Referred forward

Send a copy of the meeting minutes to the JOHSC. Highlight important items that must be reviewed/discussed at next JOHSC meeting.

Monthly Distribution and Posting of Approved Meeting Minutes (Required):

- All LST members
- Appropriate JOHSC