



Chemistry Local Safety Team Meeting Minutes **APPROVED**

Name of Team: Chemistry Local Safety Team

Chair(s): Derek Gates & Monica Clarkson

Date: June 27, 2024

Time: 11:01 am

Location: Online Zoom Meeting

AGENDA:

<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mohamad Rezaei	Chemistry - M&P, Director, Technical Services	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glenn Sammis	FOS JOHSC & University Chemical Safety Committee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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	<p>CHEM Glass Waste Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes. UBC Waste Management Services is in agreement with the department to allow for the metal glass waste pails to be labelled with spray paint. Labelling the pails will help UBC Waste Management workers to identify and deliver the marked "UBC CHEM" metal pails to CHEM. Several of the</p>	DG/MC	In Progress	IP



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>metal pails have already been labelled and is still in progress.</p> <p>Mar 2024 - It was noted that the CHEM LST has had a lack of support from UBC Waste Management Services. This item has been flagged to be discussed at the FOS JOHSC.</p> <p>LST Comments: No updates at this time.</p>			
132233	C	Oct 20, 2023	<p>Cut with Broken Mercury Thermometer</p> <p>A student was removing a thermometer from a still-head adaptor. The student said it was tight, pulled hard, and broke the thermometer, cutting the student's index finger in the process. The affected area was washed immediately and UBC First Aid was called. It is unknown whether the mercury had contact with the skin or area that was cut. Campus security responded to the first aid call around 10:50am, and escorted the student to the hospital to get tested for heavy metal poisoning, and to see if the wound needs further attention (it has stopped bleeding by the time campus security arrived). There was a drop of mercury, which spilled out of the broken thermometer. The spill was cleaned up immediately.</p> <p>During the investigation it was noted that the thermometer should be removed from the distillation apparatus once it has cooled. When removing the thermometer from the apparatus while it is warm, the thermometers have a tendency of getting stuck at the position of the ground glass joint.</p> <p>Actions and Resolutions:</p> <p>(1) Lab instructor to check if lab manual has instructions to indicate if the distillation apparatus and thermometer should be cooled before dismantling it.</p> <p>(2) Lab instructor to remind students not to use excessive force when handling glassware</p>	MC/CZ/DG	In Progress	IP



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>(3) Staff to check if alcohol thermometers can effectively replace the mercury thermometers being used in the lab.</p> <p>(4) Provide mercury spill cleanup procedures to lab instructor and lab technician.</p> <p>(5) Print and place mercury spill cleanup procedures into the existing mercury spill kits. Label the spill kit with appropriate signage</p> <p>(6) Properly dispose of brush that may have been contaminated with mercury.</p> <p>(7) Identify the joint of the distillation apparatus and check to see if any further recommendations are required (ie. Use of grease).</p> <ul style="list-style-type: none"> • It has been suggested to the instructor to update the lab manual with a note to not use excessive force and to wait for the apparatus to cool down before dismantling the distillation apparatus. • It was discussed that if the joints of the still head and the thermometer are ground glass, it is recommended to use grease or a Teflon sleeve. Generally, if ground glass joints are heated without grease or a Teflon sleeve, they may fuse together. MC and DG to further investigate. • Corrective actions items 1 through 6 have been completed. Item 7 is in progress. The CHEM LST will be working with lab directors to recommend greasing the ground glass joints. <p>LST Comments: No updates at this time.</p>			
134496/134500	C	May 29, 2024	<p>Needle Stick Student worker was withdrawing 5 mL acetonitrile (clean, no sample dissolved) from a stock bottle with a new syringe and needle. When moving to dispense they stuck themselves in the thumb. The student was wearing gloves and did not</p>	MC/CZ	Complete	C



4. REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:						
			<p>dispense any material but may have been exposed to solvent from the needle tip. The SDS was consulted and the student worker washed their hands for 10 minutes, and then first aid was called. Unfortunately, UBC First Aid was unable to respond to the worker. They walked to UBC Urgent Care with another student to be checked out.</p> <p>UBC First Aid was called, however due to the protests on campus, the first aiders were unable to attend. Instead, the student went to UBC Urgent accompanied by another student worker.</p> <p>Actions and Resolutions:</p> <p>(1) Review procedures on how to safely handle syringes at next group meeting.</p> <p>(2) Notify research group that an alternate tool could have been used to transfer the acetonitrile, such as a Pasteur Pipette or a micropipette. In addition, a blunt needle could have been used as well.</p> <p>(3) Notify Dustin Szeto that UBC First Aid was not able to attend to a worker's first aid needs and that emergency response from Campus Security was not followed.</p> <p>LST Comments:</p> <p>All corrective action items have been completed. The incident was reviewed in group meeting. All group members were made aware of the item and we reviewed both the correct syringe usage, methods to mitigate the risk of needle sticks and procedures to take when an incident happens. In addition, Dustin Szeto discussed this incident with Campus Security and ask for their procedures to be reviewed.</p>			
134557/134569	C	June 6, 2024	Acetone Fire	MC/JH	In Progress	IP

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

		<p>Acetone from the Dewar flask bubbled over when more dry ice was added to the acetone. This bubbled onto a standard temp block set at 95 deg Celsius. This then caught fire and a worksheet and paper towel that were nearby, and which had absorbed the acetone also caught fire.</p> <p>Another student noticed the fire and informed everyone in the lab and told everyone to evacuate. The student who had loaded the dry ice into the acetone bath along with the second student who had noticed the fire extinguished the fire with the 2.5 lbs. ABC powder fire extinguisher. This use of extinguisher successfully put out the fire. After the fire was successfully extinguished, the students then unplugged all the electronics and opened the window before evacuating the personnel into the hallway. Since the fire was extinguished, the fire alarm was not activated. Students called the Chem Safety Officer, who told us to report the incident to Campus Security. Then they called Campus Security to report the incident and the other colleagues called the principal investigator. No one was injured.</p> <p>Actions and Resolutions:</p> <p>(1) We're investigating the cause of a possible arc and we've relocated the temp block equipment away from the vicinity of the acetone Dewar.</p> <p>(2) Incident will be discussed with the group and all members of the group will be asked to assess if their work spaces and materials are at risk of brining flammables in contact with heat sources or other electrical equipment that has the potential for arcing.</p> <p>(3) Assess emergency egress for A352.</p> <p>LST Comments: In progress.</p>			
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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 KM	On hold In Progress	IP IP
Feb 2024		CHEM Shops & Services The remaining shops (CHEM D116/118) and services (CHEM D315) areas were recently inspected in February. Only one deficiency was noted. Mar 2024: No updates Apr 2024: No updates LST Comments: Chemical inventory is in progress.	MR/TC	In Progress	IP
May 2024		CHEM A Research Labs All of the research labs in CHEM A were inspected in May. LST Comments: The reports are still in progress.	MC	In Progress	C

* *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	UBC CHEM Fire Extinguisher Training 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	CHEM LST Safety Minutes Prepare meeting minutes, post approved minutes to the Chemistry website, and upload a copy to the FOS JOHSC SharePoint site.	MC	Ongoing	N/A
2020	C	Development of Departmental SWPs Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes. LST Comments: Referred Forward.	DG	Referred Forward	N/A



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
Dec 2021	C	<p>Earthquake Securing Straps for Large Dewars and Compressed Gas Cylinders Previous discussions and notes can be found at https://chem.ubc.ca/safety/chemlst within the January 18, 2024 CHEM LST minutes.</p> <ul style="list-style-type: none">Nov 2023 Update - The scope of the project has been re-defined and is in progress. The Mech Shop will continue to work with Building Operations to complete this project.Feb 2024 Update - Proposal was drafted for CHEM C, and was sent to Building Operations as a service request for carpenters.March 2024 Update – In progress.April 2024 Update – CHEM C upgrades have been completed.May 2024 Update - A four-cylinder rack was missed during the upgrades. However, it has since been identified and is on a list to be secured. <p>LST Comments: No updates at this time.</p>	MR	In Progress	IP
Feb 2021	C	<p>Dispensing LN2 Safely - Training It would be useful to have an informational course and quiz available to the department as a training tool for dispensing liquid nitrogen.</p> <p>LST Comments: This item has been referred forward.</p>	MR	Referred Forward	RF



7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)					
July 2023		<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>Oct 2023 Update: 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> <p>A subcommittee was established and are in the process of collecting information related to wearing personal (non-PPE) earbuds in the workplace.</p> <p>March 2024 Update: The use of earbuds, earphones and/or headphones will be prohibited in lab and shop areas. The existing one ear bud policy will be terminated and a new policy will be implemented. A first draft has been made. Picture of hearing devices will be added to the policy.</p> <p>The previous earbud document was written as a policy.</p> <p>LST Comments:</p> <p>The updated earbud policy was distributed to the entire department on June 6, 2024.</p>	BH/ MC/ DG/CZ/ ZH	Closed	C
Oct 2023	C	<p>Diethyl Ether Use</p> <p>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.</p> <p>LST Comments:</p> <p>The individuals in the teaching labs mentioned they do not have any exposure concerns at this time. If in the future they do have any concerns they will reach out the CHEM LST. This can be closed.</p>	MC/DG	Closed	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	<p>CHEM LST Member Updates and Concerns – Round Table Are there any safety concerns or updates that were not discussed?</p> <p>LST Comments: No comments</p>	N/A	N/A	N/A
N/A	E	<p>SRS Updates</p> <p>Recommended items to discuss at JOHSC/LST Meeting Safety Day 2024 – Save the Date – Wednesday, Oct 16 We are delighted to announce that Safety Day 2024 has been scheduled for Wednesday, October 16. Building on the overwhelming positive response from previous years, we have secured the spacious Great Hall in the AMS Student Nest as our venue. We are looking forward to hosting another exciting day with speakers, vendors, food, prizes, and more. More information regarding registration and the agenda for the day will be sent out in mid-June as we are in the final stages of confirming the details.</p> <p>Heat Stress Exposure Control Plan Feedback Prior to the publication of the Heat Stress Exposure Control Plan, Safety & Risk Services is seeking input from the UBC community to ensure the content of this document considers the working conditions where there is a risk of heat stress and offers the information needed to keep you safe at work. To provide your feedback, please complete this Qualtrics Survey by July 15th, 2024. The Heat Stress Exposure Control Plan can be found using the link on the first page of the survey.</p> <p>Staying safe around coyotes We have had a few reports of coyotes on campus and wanted to provide tips for any encounters you might have. First and most importantly, do not approach or</p>		N/A	N/A



8. NEW & OTHER BUSINESS				
		<p>interact with coyotes (or any wild animals), including taking close photos or feeding them.</p> <p>Never feed or leave food out for a coyote. Coyotes hunt their natural prey self-sufficiently and do not require human handouts for survival. Feeding a coyote (directly or indirectly) can cause a dependence on humans that will put both the animal and people at risk. This practice can be detrimental to the coyote over the long term.</p> <p>Coyotes tend to be curious but not aggressive and will usually mind their own business if left alone. If they approach you or seem aggressive, follow the advice from the BC Conservation Officer Service (COS):</p> <ul style="list-style-type: none">• Make yourself look as large as possible.• Wave your arms and shout at the coyote in a loud, aggressive voice.• If the coyote continues to approach, don't run or turn your back. Continue to exaggerate the above gestures and slowly back away to safety.• If you are walking your dog, make sure to keep it on a leash. Follow the steps above while moving yourself and your dog away from the coyote. Pick up small dogs if possible. <p>If a coyote poses an immediate threat or danger to public safety, call the COS Call Centre at 1-877-952-7277.</p> <p>Informational Items</p> <p>LST Training You can register LST training here.</p> <p>WorkSafeBC Inspection Reports (IR)</p> <p>There were no inspection reports received this month.</p>		



9. NEXT MEETING	
Date:	July 18, 2024
Time:	11:00 am
Location:	Online Zoom Meeting

10. MEETING ADJOURNED	
Time:	11:11 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