### Chemistry Local Safety Team Meeting Minutes Approved

Name of Team:	Chemistry Local Safety Team	Chair(s):	Derek Gates & Monica Clarkson
Date:	June 15, 2023		11:01 am
	,	Location:	Online Zoom Meeting

#### **AGENDA:**

- 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
  - 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)

- 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

1. ROLL CALL				
Worker Representatives	Work Location	Present	Regrets	Absent
Guillaume Bussiere	Chemistry - Teaching Faculty			☑
Karen Button	Chemistry – M&P, Stores Manager			
Ken MacFarlane	Chemistry - M&P, Director, Finance and Operations		$\overline{\mathbf{v}}$	
Mohamad Rezaei	Chemistry - M&P, Director, Technical Services			
Ben Herring	Chemistry – Research Tech			☑
Ben Nadeau	Chemistry – Graduate Student	☑		
Cameron Zheng	Chemistry – Graduate Student	☑		

Employer Representatives	Work Location	Present	Regrets	Absent
Derek Gates	Chemistry – Faculty, Co-Chair			
Monica Clarkson	Chemistry - M&P, Co-Chair & Safety Program Officer			



#### Chemistry

Faculty of Science

Resources/Guests	Work Location	Present	Regrets	Absent
Peggy Paduraru	UBC Safety & Risk Services			$\square$
Richard Wambolt	UBC Safety & Risk Services	$\square$		

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 ☑	No □		

3. ADDITIONAL AGENDA ITEMS & APPROVAL OF AGENDA		
Is the agenda adopted? The agenda was approved with minor edits.	Yes ☑	No 🗆

#### 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	С	Jul 22, 2022	<ul> <li>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.</li> <li>Lengthy discussion regarding glass waste buckets; no recommendations established.</li> <li>DG conducted a straw poll of faculty at the Sep 29 Faculty Meeting. Faculty are in favour of metal glass waste containers.</li> </ul>	DG/MC	In Progress	IP

4. REVIEW CAI	RS REPOI	RT OF ACCIDE	NTS/INCIDENTS:			
			<ul> <li>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.</li> <li>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.</li> <li>LST Comments: Chem Tech Services have provided us with a stencil for this project. We will start the spray paint the metal pails in the coming weeks.</li> </ul>			
131306/131331	С	May 11, 2023	Inhalation of Barium Hydroxide Octahydrate I did not personally witness the incident. It was communicated by a graduate student that one of the volunteers for the Science Rendez-vous event had inhaled a particle of barium hydroxide while weighing out 30 g samples of this substance for one of the demonstrations.  Summary provided by chem safety staff:  A volunteer, a couple grad students and a faculty member were preparing for a demo. Everyone was wearing full PPE,	MC/CZ	In Progress	IP



4. REVIEW CAIRS REPORT OF ACCIDEN	NTS/INCIDENTS:		
	including lab coat, safety glasses, long pants, gloves and		
	closed toed shoes. The group was going through a		
	checklist, at which time they determined that 6 aliquots of		
	40 grams of barium hydroxide octahydrate was needed to		
	be prepared for the Hot and Cold Flask Experiment. The		
	volunteer did not have any written instructions or		
	procedures available to them. Instruction was given to		
	them verbally. The SDS was not reviewed prior to the		
	incident. To weigh the 40 grams of barium hydroxide		
	octahydrate volunteer was provided with a spatula, a mini		
	dixie cup and scale to weigh out the reagent. To transfer		
	the reagent from the dixie cup to the falcon tube they were		
	provided with filter paper to make a funnel. The barium		
	hydroxide octahydrate had the same consistency of sand.		
	The bottle of barium hydroxide octahydrate had solidified		
	at the bottom, so the volunteer dug into the bottom of the		
	container with a spatula to get the remaining material out.		
	During the process of transferring the 5th sample from the		
	dixie cup into the falcon tube the volunteer felt a solid		
	object enter your throat. There was no pain or burning		
	sensation, just discomfort in the throat. At the same time a		
	graduate student came to check in on the volunteer. The		
	volunteer notified them that they inhaled the barium		
	hydroxide octahydrate. The grad student immediately		
	notified the faculty member. The faculty member called the		
	Chemistry Safety Officer to ask for instructions. The safety		
	officer notified the faculty member to refer to the first aid		
	instructions in the SDS and to call BC Poison Control. The		
	faculty member instructed the volunteer to drink water as		
	per the SDS instructions and moved the person outside to a		
	well-ventilated area. The safety officer subsequently called		
	UBC First Aid. First Aid arrived within 7 minutes and		
	provided support. BC Poison Control provided instruction		



4. REVIEW CAIRS REPORT OF ACCIDE	NTS/INCIDENTS:		
4. REVIEW CAIRS REPORT OF ACCIDE	over the phone. They notified the faculty member that		
	there was no need for the individual to seek immediate		
	medical attention, unless the individual started feeling		
	additional symptoms. The discomfort in the volunteer's		
	throat persisted until 1 pm, but other than that they felt		
	okay.		
	Actions and Resolutions:		
	(1) Update the demo procedures to use barium hydroxide		
	in the fume hood.		
	(2) Remind supervisor to provide written procedures,		
	training and SDS to volunteers before starting preparations.		
	(3) Review SDS and determine if barium hydroxide		
	octahydrate is required to be used in a fume hood. If		
	required, add this to the current procedures.		
	(4) Signage for fume hood in B150A, should include		
	instructions on who to contact to unlock fume hood.		
	(5) Chem safety staff to send emergency response		
	procedures to faculty member.		
	(6) Chem safety staff to send Volunteer Accident Insurance		
	to faculty member and to the Chem Outreach Committee.		
	LST Comments:		
	All corrective action items have been completed except for		
	item 1. The SDS indicates that barium hydroxide		
	octahydrate should be used in a fume hood.		
	During the investigation, it was found that the volunteer		
	did not have Volunteer Accident Insurance. Blossom		
	Sobrino confirmed that "volunteer accident insurance only		
	covers accidents where the risk is greater than in a class		
	room setting and covers only major accidents". Activities in		
	UBC Chem are common to be at a higher risk than in a		
	general class room setting. So, it is recommended that the		
	supervisor/faculty member provide the volunteer with		

4. REVIEW CAIRS REPORT OF				
	Volunteer Accident Insurance. The cost is \$4/year. For			
	more information, please contact <u>ugrad@chem.ubc.ca</u> This			
131343/131352 131357/131340 131356/131353 131351/131339	was discussed at the faculty meeting on May 25, 2023.  4L Dichloromethane Spill at Chemistry Stores At approximately 15:55 pm, two customers arrived at Chemistry Stores (ChemStores) at B170 of the Chemistry Department to pick up their order (Planon order 201482.00). That order included two 4L bottles of ACS grade Dichloromethane CAS: 75-09-2 (DCM).  Due to the stores closing in five minutes, storeperson helped customer collect items by gathering two of the items while the customers were picking the flammable solvents from the solvent shed outside the ChemStores loading bay. The storeperson took two 4L bottles of DCM and placed them on the floor in front of the main bench in front of aisle four. Upon re-entering the stores from the loading bay, the storeperson told the customers to pick up the bottles.  The customer picked up one bottle of DCM and immediately slipped from their hand. It hit the floor and shattered.  Upon witnessing the accident, the storeperson immediately told everyone in the ChemStores to vacate B170. At that point in time, the other people present in the ChemStores were: 4 customers total, 3 storepersons, stores manager, ThermoFisher Supply Center specialist. The customers did not react at first. The storeperson then placed on their respirator and walked over to the customers to order them to vacate the stores. Stores Manager also reiterated that	MC/BH/KB/CZ	In Progress	IP



4. REVIEW CAIRS REPORT OF ACCIDE	NTS/INCIDENTS:	
II NEVIEW CAMB NEI CAT OF AGGIST	storespersons and stores manager) was vacated in	
	approximately 1 minute.	
	approximately 1 minutes	
	Storeperson walked over to aisle 5 to pick up three spill	
	pillows and gave them to the other storeperson. They then	
	walked outside the ChemStores into the hallway to retrieve	
	the spill cart.	
	and spin such	
	15:57pm Stores Manager called Safety Officer to advise	
	what happened, directed to call 911. Exited Stores,	
	remaining two storesperson also exited Stores. Storeperson	
	left the spill cart unused in Stores and exited to the	
	hallway. Safety Officer said they were going to call Campus	
	Security. Campus Security was called at 15:58pm and was	
	directed to notify SRS pager.	
	, , -	
	15:58pm Stores Manager called 911 to report spill, request	
	hazmat team. Call lasted 2 minutes.	
	16:01pm Stores Manager called Safety Officer to update	
	and walked to front of B wing to wait for fire response. Two	
	storespersons were outside ChemStores controlling access.	
	16:05pm Stores Manager called Director, Finance and	
	Operations to advise about ongoing situation. Could hear	
	sirens of approaching fire response during this call.	
	Stores Manager met fire response on Main Mall, explained	
	situation/what spilled and showed them to Stores via the	
	outside path to shipping/receiving door. Met Safety Officer	
	there, connected them/fire response. The exterior	
	shipping/receiving door had been left open (with staff	
	person standing outside to control access). Fire response	



4. REVIEW CAIRS REPORT OF ACCIDEN	NTS/INCIDENTS:	
	took over scene and they controlled entry to building. No	
	staff reentered B-wing 170. I explained to them where the	
	broken bottle was, that the bottle had shattered and that	
	everyone had been evacuated. They asked for spelling of	
	chemical name, provided as dichloromethane and	
	methylene chloride.	
	Campus Security was also present.	
	Two storepersons and myself stayed on scene with Safety	
	Officer, Director, Finance and Operations and emergency	
	responders. Glass was cleaned up by hazmat crew. They	
	also collected the spill pillows and put them in a plastic bag,	
	and placed them in the fume hood in B170D, the bag was	
	left open to allow the solvent to evaporate. They also	
	brought out boxes of stock that had been splashed by DCM.	
	The boxes were put on the ground outside the	
	shipping/receiving area. The contents were checked and	
	the inner goods were not soaked or damaged, just the	
	exterior cardboard boxes.	
	Custodians were notified not to enter stores that evening	
	or transit through the room. Notification by Stores	
	Manager to custodian on 4th floor of A-wing, that person	
	then notified the rest of the crew that worked in those two	
	buildings not to enter Chem Stores or transit through to	
	dumpsters/recycling outside. "Do Not Enter" signage was	
	posted at both entry doors to Stores. It was also reported	
	via a service request in Planon.	
	Fire response/Hazmat crew gave all clear at 17:40pm. No	
	staff reentered B170 until this point. They used a VOC	
	detector and stated the ppm level in stores was 0ppm	
	except at the localized area of the spill right at floor level	

4. REVIEW CAIR	S REPO	RT OF ACCIDE	NTS/INCIDENTS:			
			where it measured 0.6ppm. Safety Officer, Director,			
			Finance and Operations, storespersons and myself secured			
			stock that had been removed from stores (unpacked			
			bags/inner goods from cardboard boxes that were			
			saturated – the goods were brought back into Stores, the			
			boxes were left outside overnight). Storespersons and I			
			collected personal belongings, locked up Stores/set alarm			
			and left.			
			Actions and Resolutions:			
			(1) To update procedures and to provide training for staff			
			for handling solvent bottles to emphasize that they should			
			be placed in secondary containment.			
			(2) Provide and train staff with emergency response			
			procedures.			
			(3) Train staff on spill response procedures for common			
			solvents and other chemicals held in stores as well as other			
			received chemicals.			
			(4) Setup calendar reminders for yearly fit testing of			
			respirators. Due date for next fit-test written on the			
			respirator storage location. Reminder to staff of proper use			
			for respirators. A few staff are not permitted to use their			
			respirators until they have completed the fit-test			
			recertification.			
			(6) Send updated procedures to everyone once completed.			
			LST Comments:			
			Items 2 and 4 have been completed. The rest are			
			outstanding. RW to help Chem LST with spill response for			
			Chem Stores Staff.			
		May 20	Ethyl acetate spill			
131427/131418	С	May 30, 2023	This report was submitted by an "Interim Supervisor" since	MC/CZ	In Progress	IP
		2025	the "Direct Supervisor" was unavailable to submit the			



4. REVIEW CAIRS REPORT OF ACCIDE	ENTS/INCIDENTS:		
	report to meet the 48 hour deadline for WorkSafeBC		
	requirements. This report is based on information received		
	from the Chemistry Safety Officer. The details of the		
	incident, as I have learned them, follow.		
	A post-doctoral fellow was making a purchase at Chemistry		
	Stores at 1:10 pm. They were waiting to complete their		
	purchase, when another customer accidentally knocked		
	over a metal safety can of ethyl acetate from the top of a		
	cart (cart had a 1-inch lip). The customer who accidentally		
	knocked over the metal safety can was placing a large bag		
	(approximately 50 lbs) of dry ice on top of a cart, which		
	accidentally hit one of three metal safety cans of ethyl		
	acetate also stored on top. One of the safety cans fell from		
	the top level (approximately 3 feet high) of the cart onto		
	the floor. Approximately 10 mL of the ethyl acetate fell out		
	of the can, hit the floor, splashed up, and a drop bounced		
	into the post doc's left eye. The post doc felt a burning		
	sensation in their left eye for about 5 seconds. The clerk		
	from Chemistry Stores immediately helped the worker to		
	the eye wash station. With help the worker washed their		
	eyes for over 10 minutes. At this time the worker's eye felt		
	okay and there was no irritation. At 1:17 pm the clerk		
	notified the safety officer of the incident. The safety officer		
	recommended for the clerk to review the SDS for the first		
	aid measures. The SDS indicated, "IF IN EYES: Rinse		
	cautiously with water for several minutes." The safety		
	officer called first aid at 1:18 pm. UBC First Aid arrived		
	within 5 minutes. The worker's eyes felt okay and no		
	medical attention was needed at this time. The worker was		
	told that if they felt any irritation to their eyes to go to the		
	hospital. Also noting, PPE is not required to be worn while		

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CCIDENTS/INCIDENTS:	
shopping in Chemistry Stores, so none was being worn by the worker.	
Actions and Resolutions:  (1) Send emergency response procedures to Chemistry Stores Manager. Manager to distribute and discuss emergency procedures with all staff.  (2) Review and update procedures for dry ice transport and solvent transport. Emphasize in procedures to not overload the cart.  (3) Confirm through WorkSafeBC and with UBC SRS if safety glasses should be worn while shopping in Chemistry Stores.  LST Comments:  All corrective action items have been completed except for item 2, which is in progress.  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.  Although there are no regulatory requirements for PPE to be worn in Chem Stores while shopping. It is recommended that at minimum everyone should wear their safety glasses (new suggestion), lab coat, long pants and fully foot encompassing liquid-resistant shoes, especially in areas where solvents/chemicals are located (Solvent Shed & Chemical Room). This item will be discussed further at the next meeting. DG to discuss this at next faculty meeting.	
	the worker.  Actions and Resolutions:  (1) Send emergency response procedures to Chemistry Stores Manager. Manager to distribute and discuss emergency procedures with all staff.  (2) Review and update procedures for dry ice transport and solvent transport. Emphasize in procedures to not overload the cart.  (3) Confirm through WorkSafeBC and with UBC SRS if safety glasses should be worn while shopping in Chemistry Stores.  LST Comments:  All corrective action items have been completed except for item 2, which is in progress.  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.  Although there are no regulatory requirements for PPE to be worn in Chem Stores while shopping. It is recommended that at minimum everyone should wear their safety glasses (new suggestion), lab coat, long pants and fully foot encompassing liquid-resistant shoes, especially in areas where solvents/chemicals are located (Solvent Shed & Chemical Room). This item will be discussed further at the



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4. REVIEW CAIRS REPORT OF ACCIDEN	ITS/INCIDENTS:	
	(1) Contact the supplier and report the recent issues with	
	the 4 L bottles breaking and to ask them if they have heard	
	any similar issues with other customers.	
	(2) Remind staff that full PPE must be worn while loading	
	and unloading any solvent containers or chemicals from	
	boxes and shelves in Chemistry Stores.	
	(3) Discuss PPE requirements for customers while shopping	
	in Chemistry Stores.	
	LST Comments:	
	It was confirmed through UBC SRS that there are no	
	regulatory requirements for wearing PPE in Chem Stores	
	for shopping. However, full PPE must be worn while	
	loading and unloading any solvent containers or chemicals	
	from boxes and shelves in Chemistry Stores.	
	Although there are no regulatory requirements for PPE to	
	be worn in Chem Stores while shopping. It is recommended	
	that at minimum everyone should wear their safety glasses	
	(new suggestion), lab coat, long pants and fully foot	
	encompassing liquid-resistant shoes, especially in areas	
	where solvents/chemicals are located (Solvent Shed &	
	Chemical Room). This item will be discussed further at the	
	next meeting. DG to discuss this at next faculty meeting.	
	At the time of the initial call to SRS/Campus security the	
	person on the phone told us that "first aid did not need to	
	attend". RW to notify SRS and Campus security about this.	
	For investigation, check to see if the research group have	
	previous 4 L THF bottles and to compare the old ones with	



4. REVIEW CAIRS REPORT OF ACC	REVIEW CAIRS REPORT OF ACCIDENTS/INCIDENTS:					
	the new ones for imperfections and/or changes in the bottles.					
	Wait for instructions from RW to see what to do with the other bottles (2 x 4 L THF) that came in with the shipment.					
	RW noted that emergency response was followed and that staff immediately evacuated the area. It was also noted, for extra safety measures to evacuate all the people in Chem Stores.					

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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	С	<ul> <li>Demo Lab Areas</li> <li>BH will oversee day-to-day processes</li> <li>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</li> <li>Jose has a TA organizing the Demo Kits         <ul> <li>Lab Tech &amp; TA working on Demo Kits</li> </ul> </li> <li>Inspection of the demo areas have been completed. All items listed above are on hold or in progress as follow up items.</li> <li>LST Comments: No updates at this time.</li> </ul>	BH/KM KM	On hold In Progress	IP IP
Mar/Apr 2023	С	Chem D & E Research Spaces All designated research labs and research related office spaces within Chem D & E block have been inspected in March and April 2023.  The items that were noted in the Lab Safety Inspections were mainly low risk items such as updating outdated signage and providing misplaced signage for chemical fridges. A couple higher risk items were also noted, including a compressed gas cylinder that was being stored on a cylinder cart and peroxide-forming chemicals were not being signed, dated or tested. The higher risk items were addressed immediately with lab visits from MC. A compressed gas cylinder holder was installed within 24 hours and training was provided to lab personnel about proper labelling, storage, and testing of peroxide-forming chemicals.  May update - 80% of the deficiencies have been completed.  LST Comments:  95% of the deficiencies have been completed.	MC	In Progress	ΙP

Chemistry

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or safety of	WOIKEIS	Cham B. C. Toaching Spaces and all of Cham's Spill Kits			
		Chem B & C Teaching Spaces and all of Chem's Spill Kits All teaching spaces within Chem B and C, and all spill kits were inspected this May, with the exception of C324 & 326. C324 & 326 inspections have been scheduled for June 12, 2023.			
May 2023	С	LST Comments: All deficiencies in labs were mainly low risk. There were a couple bottles of chemicals that were not labelled properly and have been already addressed. The spill kits were missing a few items which will be replenished this month.	MC	In Progress	ΙP
		It was noted that non-contaminated metal waste bins were not being used in the teaching spaces. Labs B470 & 472 do use air sensitive materials. Is it required for these labs to have non-combustible metal waste bins as research spaces do? It was confirmed that it is required to have non-combustible waste bins. MC to notify technician.			
		Chem Shops and Service Spaces Chem shops and service spaces (E214, E215, E313, D112, D124, D116, D118, D120, D128, & B460) were inspected this May.			
May 2023	С	LST Comments: The noted deficiencies included, labels/signage were missing and items were being stored on the floor.	MR	In Progress	IP

<sup>\*</sup> 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	4	E	Next UBC CHEM Fire Extinguisher Training session has been scheduled on June 20 <sup>th</sup> at 1:30 pm. In addition, training for the new fall semester has been scheduled for August, September and October.	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		
Ongoing	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	С	<ul> <li>Develop review process for SWPs before being posted onto Safety webpage;</li> <li>SWP to have Risk Assessment information incorporated</li> <li>Include resources about compatibility and storage of chemicals</li> <li>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.</li> <li>LST Comments:</li> <li>The student worker has drafted an SWP for handling alkyl lithium</li> </ul>	DG	Ongoing	IP		
		compounds, which are in the first stages of development. They will be contacting DG soon for next steps.					



7. ONGOING B	BUSINESS – S	tatus of Action Items (includes review of previous meeting minutes)			
Dec 2021	С	<ul> <li>Earthquake Securing straps for large Dewars; and, Lab installations for Compressed Gas Cylinder tie-downs</li> <li>TM advised that Bldg E completed as at Sept 15/22;</li> <li>Due to new equipment installation in C224 they will be installing the straps there next; and</li> <li>TM is reviewing Bldg D – Knuckle compile list and that will be next</li> <li>A proposal for securing compressed gas cylinders for D240 has been established. If approved, the upgrades will occur by the end of February.</li> <li>Parts have been ordered for the items remaining in Chem D's knuckle.</li> <li>Buildings Chem B and E have been completed.</li> <li>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.</li> <li>Buildings Chem C and D have been completed. Inspections of Chem A have begun and are currently in progress.</li> <li>LST Comments:</li> <li>No updates at this time.</li> </ul>	MR	In Progress	ΙP
Feb 2021	С	LN2 Safety Training – TM working on setting this up as an actual course with a quiz and certificate  TM is working on the processes required for this course  LST Comments: This item has been referred forward.	MR	Referred Forward	RF

2023. Updates on halogenated solvents were discussed.	Nov 9, 2022	C	<ul> <li>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.</li> <li>First year labs have been moved off of the bench and into the fume hoods going forward.</li> <li>Air changeovers were discussed for each lab. Preliminary calculations were also presented. MC to request for SRS to double check the proposed calculations.</li> <li>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.</li> <li>We are discussing all of the available options with teaching faculty and staff.</li> <li>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.</li> <li>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.</li> <li>For one of the experiments the 3<sup>rd</sup> and 4<sup>th</sup> 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 regents in a trace amount, which is loaded in a fume hood and then transferred into the MS</li></ul>	KM/MC/ DG/BH	In Progress	IP   Page
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7.	7. ONGOING BUSINESS – Status of Action Items (includes review of previous meeting minutes)						
			Lab Safety Concerns – Continued				
			<b>LST Comments:</b> No updates at this time. This item is still in progress.				

#### 8. NEW & OTHER BUSINESS General discussion items (list actionable items below) Date to be **Discussion and/or Action Items** Item# **Priority Assigned To Status** Completed CHEM Faculty Meeting - May 25, 2023 The following items list below were discussed at the Chem Faculty meeting: 1. UBC Chem Ergonomics Team The Chemistry Department has recently established the UBC CHEM Ergonomics Team, who can help individuals with an office ergonomic assessment. If you wish to sign up for an assessment, please email Monica at safety@chem.ubc.ca. 2. 4L DCM bottle broken in Stores Remind your group members to always use secondary containment when handling/transporting liquids. May 2023 DG N/A N/A Review emergency spill response procedures with your group (spill >1 L Flammable, Toxic or Hazardous solvent; clear area and call 911). Remind group members to follow SOP for transport of hazardous chemicals on website. 3. Ba(OH)2 inhalation by 1 day volunteer - Science Rendezvous Please be reminded that any volunteers working in your lab, even for 1 day, should have "Volunteer Accident Insurance" insured (cost is nominal - \$4 per year). • They also must sign the waiver "Assumption of Risks" form.



8. NEW & OTI	HER BUSINE	SSS STATE OF THE S			
		<ul> <li>These can be obtained from Molly (<u>ugrad@chem.ubc.ca</u> . Alternatively, contact Monica for questions about volunteers/safety/insurance (<u>safety@chem.ubc.ca</u> .</li> <li>This applies also to former Ugrad, MSc, and PhD students who return to finish up a project or train a new student.</li> <li>We are working to develop procedures to simplify these processes. Email Derek (<u>dgates@chem.ubc.ca</u>) if you have suggestions.</li> </ul> LST Comments: These items were discussed and can be closed.			
May 2023	Е	Preventative Maintenance – Fume Hood Sash/Cable Audit 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.  LST Comments: The audits for buildings A, D and E have started and are in progress.	MC	N/A	IP
N/A	E	CHEM LST Member Updates and Concerna Are there any safety concerns or updates that were not discussed?  LST Comments:  RW – It was suggested that tracking and having improved awareness for concerns with items such as defective glassware and solvent bottles should be noted. Currently all feedback for any purchases and items have been provided to KB. KB has been providing feedback to the suppliers.	N/A	N/A	N/A



8. NEW & OTH	ER BUSINE	SS					
		SRS Updates					
June 2023	E	Recommended items  Safety Day 2023 – Save We are delighted to ann Tuesday, October 3. Buil previous events, we hav Nest as our venue. We a speakers, vendors, food, registration and the age the final stages of confir  COVID-19 Signage In light of the recent ann COVID-19 no longer qua disestablished the COVII community during the p to assist in the removal of areas. Please spare a few outdated signage. Shoul	the Date – Tuesday Ocounce that Safety Day ding on the overwhelr e secured the spacious re looking forward to prizes, and more. Monda for the day will be ming the details.  Souncement by the Wolfies as a global emerged D-19 Campus Rules whandemic. We kindly enor COVID-19 related sign moments to walk three dyou or any staff in you hesitate to contact safe	2023 has been scheduled for ming positive response from our so Great Hall in the AMS Student hosting another exciting day with the information regarding sent out mid-June as we are in a sent out mid-June as we are in a subsequently suich provided vital guidance for our incourage all JOHSC/LST members gnage within their respective rough your areas and remove any our area have questions or sety.risk@ubc.ca for assistance.	SRS Updates	N/A	N/A
		LST Tra	ining				
		Part 2a	Part 2b				
		June 7th	June 12th				
		11:00am – 12:30pm	12:30pm – 2:00pm				
		August 16th	August 18th				
		11:00am – 12:30pm	1:00pm – 2:30pm				

#### WorkSafeBC Inspection Reports (IR)

There were three 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) APRIL 27, 2023 - IR# 202318447049A

#### Description:

On April 27, 2023, a worker fell into the access opening for a storm sump located outside the building.

- The worker reported the incident to their supervisor who attended the scene.
- The worker received first aid and was transported to the hospital by UBC first aid.
- There were zero (0) orders issued to the University.

#### JOHSC/LST General Learnings/Discussion Points:

As a reminder, an incident believed to have resulted in a serious injury, such as life-threatening conditions, as well as incidents that had the potential for causing serious injury (near miss) must be reported to Campus Security at 604-822-2222 as part of the incident response following the necessary emergency responses.

- Information regarding what to do in the event of a serious incidents or possible serious incident can be found on the SRS Website.
- Following the preliminary investigation, the employer must, without undue delay, undertake any corrective action determined to be necessary

#### 2) MAY 1, 2023 – IR# 202316973047A

#### Description:

On April 28, 2023, a worker was walking on the sidewalk when they fell and sustained fractures to both wrists.

• The worker received first aid and was transported to the hospital by UBC first aid.



8. NEW & OTHER BUSIN	ESS		
	There were zero (0) orders issued to the University.		
	JOHSC/LST General Learnings/Discussion Points: As a reminder, an incident believed to have resulted in a serious injury, such as life-threatening conditions, as well as incidents that had the potential for causing serious injury (near miss) must be reported to Campus Security at 604-822-2222 as part of the incident response following the necessary emergency responses.  • 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  3) MAY 10, 2023 – IR# 202316973048A  Description: This Inspection Report documents the receipt and acceptance of the employer's full Incident Investigation Report (EIIR), relating to an incident which occurred on April 13, 2023 when a worker fell and hit their hit.  • There were zero (0) orders issued to the University.  JOHSC/LST General Learnings/Discussion Points: Reminder that incident investigations must be completed within 30 days, with description, unsafe conditions, contributors, causes, corrective actions, and worker rep participation.		



9. NEXT MEETING
Date: July 20th, 2023
Time: 11:00 am
Location: Online Zoom Meeting

10. MEETING ADJOURNED				
Time:	11:56 am			

#### **LEGEND**

PRIORITY	STATUS:		
Α	<b>High Risk, Immediate Response within 1-2 days:</b> Potential for causing loss of life, body part and/or extensive loss of structure, equipment or material.	N	New
В	<b>Moderate Risk, response as soon as possible within 1 week:</b> Potential for causing a serious injury, illness or property damage.	R	Repeat
С	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.	С	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