

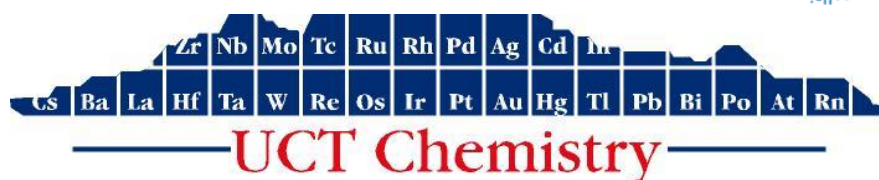
EMERGENCY RESPONSE PLAN

CHEMISTRY DEPARTMENT

PD HAHN BUILDING

UPPER CAMPUS

UNIVERSITY OF CAPE TOWN



March 2024

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ABBREVIATIONS

CFM	Chief Fire Marshal
ECC	Emergency Control Centre
ERP	Emergency Response Personnel
ERS	Emergency Response Services
LHSIS	Laboratory Health, Safety & Infrastructure Specialist
OHS	Occupational Health & Safety
OHSE	Occupational Health, Safety & Environmental
SOP	Standard Operating Procedure

FORWARD

The Chemistry Department actively tries to prevent emergencies by doing regular Health and safety inspections via our Health and safety Representatives, OHS Officer and UCT's OHSE Division and conducts risk management based on the results indicated in inspection and audit reports. In accordance to this we will:

- Place all evacuation route signage up in the relevant conspicuous places.
- Practice mock emergency SOPs at least once every 6 months and will aim to evacuate a building within 3 - 5 minutes, after evacuation orders are given. Afterwards, a review meeting will be held to discuss grey areas.
- Post emergency telephone numbers (internal or external) up at all lifts and where possible, they will be placed on speed dial.
- Review this Emergency Response Plan on a yearly basis.
- Train all personnel; not just the response team, on the basics of the Emergency Response Plan; at least once yearly on the Chemistry Department's Response procedures such as firefighting, first aid and emergency evacuation.
- Train all ERP {Fire Marshals & First Aiders} on a yearly basis or when valid certificate expires.
- Ensure that all fire marshals always have the laminated duty card with the evacuation duties of their designated area with them whilst on duty.
- Train all Health and Safety Representatives once they are newly or re-appointed, especially on how to conduct inspections and identify hazards and/or risks. They will be expected to conduct these on at least an every 2 month basis.
- Use only a LED self-charging lights in an emergency where emergency lighting may fail when there is a total power outage, fire, gas or chemical emergency incidents occur. These will be placed in strategic areas.
- Place an appropriately equipped chemical spillage kit in all laboratories and where especially large quantities of chemicals are used or stored such as chemical, flammable and solvent stores.
- Store all flammable liquids and gas properly and inspect on a regular basis to prevent any leaks or spillages that can cause a fire.
- Inspect chemical and flammable stores' ventilation regularly to ensure no High Explosive Limit buildup.
- Ensure fire sensors, red alarm activation and green door release boxes, access control and fire door release plus siren systems are regularly tested to ensure it works properly and signals are received by the ECC.
- Ensure that all fire extinguishing equipment is serviced on a yearly basis via a SABS certified company.
- Ensure that emergency exits are illuminated and are in good working order and NEVER OBSTRUCTED.
- Ensure that all emergency evacuation routes are clearly indicated via symbol signage and never obstructed inside or outside of building.
- Ensure that all mobile first aid kits are taken with by first aiders during an evacuation.

HOD: _____ Signature _____
 OHS Act 16.2 Appointee

DATE: _____

1. EMERGENCY RESPONSE PERSONNEL (ERP)

Primary Contact

Name: **Prof. ANWAR JARDINE**
Function: **HOD: Chemistry**
Other phone number: **0824462926**
E-mail: anwar.jardine@uct.ac.za

Secondary Contact 1 - Chief Fire Marshal

Name: **MONIQUE MULLER**
Function: **Laboratory Health, safety & Infrastructure Specialist (LSHIS)/Chemical Safety Officer; CEM OHSE Unit**
Telephone number: **x4549**
Cellphone number: **0836406706**
E-mail: monique.muller@uct.ac.za

Secondary Contact 2 - Deputy Fire Officer

Name: **SOPHIE REES-JONES**
Function: **OHS Officer: CEM OHSE Unit**
Cellphone number: **0836167474**

RECEPTION: x2324 or x2328

AFTER HOURS

Emergency Control Centres (ECCs):

SECURITY (CPS)

Telephone number: **X2222** or **x2223** or **x2121**

TOLL-FREE 080 650 2222

OTHER Emergency Service Contact Numbers

PD Hahn - Campus Cleaning Services:

Ntombi (Nthombekaya Vava) – x7141, ntombekaya.vava@uct.ac.za

Steven Thuthani – 0817492043 - steven.thuthani@uct.ac.za

Chemical Waste Management:

Sophie Rees-Jones sophie.rees-jones@uct.ac.za;

Monique Muller monique.muller@uct.ac.za

Chemical Waste Removal Company: WasteMart – Jeanie Seale: 0826522181;
jeanies@wastemart.co.za

Radioactive Waste Removal Company: Caretac – Ryno Botha: 0826688892

Fire Brigade Bellville HAZMAT via:

- Roeland Street Fire Brigade: 021 444 8963 (Fireman Peterson - 073 703 0289)
- Salt River Fire Brigade: 021 444 0830 / 021 444 0831

Large Chemical Spillage: Stephan Slabbert

SpillTech: stephan.slabbert@spilltech.co.za; 0634042103; 021 9484371; 0861000366;

SAPS Explosive Unit / Bomb Squad: 021 506 2362 / 2201

Properties & Services Standby Number: 065 721 2900

Maintenance Division (Nadine Adriaanse): x3153 or nadine.adriaanse@uct.ac.za

Chemistry Maintenance Issue Logs:

Manie (Abduraghman) Gamieldien (levels 4 – 5):

- x4230 or abduraghman.gamieldien@uct.ac.za

Monique Muller (levels 6 – 9) – x4549 or monique.muller@uct.ac.za

ICTS Helpdesk: x4500 or helpdesk@icts.uct.ac.za

Service Portal:

https://uct.service-now.com/sp/?id=sc_cat_item&sys_id=c9cf652e37973600c3a22ea843990e27

Toxicology Centre: 021 931 6129 (Tygerberg) or 021 6895227 (Red Cross)

UCT OHSE Division: <https://uct.ac.za/staff/occupational-health-safety-environment-ohse>

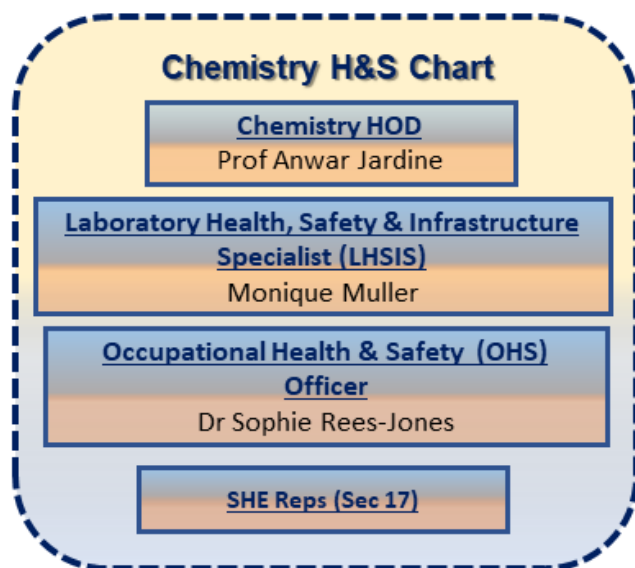
Manager – Michael Langley: michael.langley@uct.ac.za

Risk Manager – Mphikeleli Mema: mphikeleli.mema@uct.ac.za

Environmental Risk Specialist – Kim van Reenen: kim.vanreenen@uct.ac.za

Governance, Monitoring, Risk & Compliance Officer (GMRC) - Phumzile Nxumalo:
phumzile.nxumalo@uct.ac.za

CHEMISTRY'S HEALTH & SAFETY ORGANOGRAMME



Building Infrastructure Committee

Chair: HOD: Chemistry (Anwar Jardine)

Deputy Chair: Monique Muller (PD Hahn Custodian)

Manie Gamielien (Maintenance, infrastructure)

Pieter de Kock (Electrical technician, Workshop manager)

Molefi Makuebu (Security, ICTS)

Yaasien Ely (LN2 plant, Workshop & Security)

Stephen de Doncker (NMR)




Clive Oliver (XRD)

? (Space Management and Planning)

Guest: Dr Sophie Rees-Jones

AREA	SHE Representative	First Aiders	Fire Marshals
Level 4	Jonathan McCarthy	Roxanne Mohunlal	Francois Majola
		Roxanne Mohunlal	Jonathan McCarthy
		Joey Paulse	
Level 5	Claire Lawrence-Naidoo	Claire Lawrence-Naidoo	Claire Lawrence-Naidoo
	Dalielah Jappie	Dalielah Jappie	Dalielah Jappie
	Laa-iqa Rylands	Laa-iqa Rylands	Laa-iqa Rylands
Level 6	Jarid du Plooy	Jarid du Plooy	Monique Muller
	Kedibone Muguru	Monique Muller	Ronewa Tshinavhe
	Leah Amod	Nicole Teixeira	
	Lateef Nashed	Sophie Rees-Jones	
	Shannon Mispion		
	Ayabukwa Zambodia	Anwar Jardine	Anwar Jardine
Level 7	Ayanda Zulu	Christabel Hikaambo	Eswara Aratikatla
	Charlotte Mamogobo	Eswara Aratikatla (7D)	Kanyisile Mhlana
	Douglas Murima	Jessica Faure	Mziyanda Mbaba
	Ferdinand Ndubi	Relebohile Mbongo	Natalia Shakela
	Mziyanda Mbaba	Sandisiwe Mdoda	Nirvashi Devi Autar
	Nosipho Msimango	Tara Davids	Richard Gessner
	Sakeenah Jaffer		Rudy Cozett
	Sauvik Samanta		Venkata Sypu
	Sumit Kumar		
Tania Valentine			
Taryn Golding			

EMERGENCY PERSONS & TELEPHONE NUMBERS

 <p>HAZCHEM WASTE MANAGER & CHEMICAL SAFETY OFFICERS</p>	<p>SOPHIE REES-JONES - PD HAHN ROOM 6.41.1 MONIQUE MULLER – PD HAHN ROOM 6.42</p> <p>BLOMMIE FILMER – GENERAL FACULTY STORE</p>	<p>0836167474</p> <p>0836406706</p> <p>0736237089</p>
<p>SECURITY & SAPS</p> 	<p>MOSES BANGO – Campus Security</p> <p>WOODSTOCK POLICE</p>	<p>2121 / 2222/3 TOLL-FREE 080 650 2222</p> <p>021 4423117</p>
<p>MAINTENANCE & PROPERTY</p> 	<p>YAASIEN ELY – Chemistry Workshop</p> <p>ZATOEN APRIL – P&S: Manager</p> <p>GENERAL ER Number BERNARD FLOWERS – Plumbing, (Drain Blockages, Aquafer pump, LP Gas, Water plant) STEPHEN FREDERICKS – Properties & Services (Infrastructure, Water Leakage, Painting, Windows, Walls, Ceilings etc) GERCHEN HEROLD – Properties & Services (Electrical, Lights, Plugs, Generator, UPS) MARCO CROOK – Properties & Services (HVAC & Extraction, Fume Hoods, Lifts, Gas installations)</p>	<p>2533</p> <p>5381 076 351 9663</p> <p>065 721 2900 079 355 3563</p> <p>064 909 5560</p> <p>067 637 7908</p> <p>069 504 0568</p>

2. Communications with ERP

We will communicate our emergency plans to Chemistry staff, post-grad students and visitors in the following ways:

1. Yearly H&S induction sessions: a) in February that year to review relevance of emergency procedures and contact numbers of all emergency response personnel. All must attend this session, b) throughout year for new visitors, staff and VAC students it will be via online H&S induction training.
2. By a review of emergency evacuation procedures after an incident or a mock emergency was practiced and where an incident investigation indicates procedures or protocols that were not working.

In the event of a disaster, we will communicate with employees and the emergency response personnel in the following way:

1. Direct contact:
 - a. cellular phone (WhatsApp groups)
 - b. email
 - c. MS Teams
2. Internal intercom PA system at fire alarm panel
3. Alarm warning device (red alarm activation box)
4. Alarm fire panel
5. Handheld siren at fire panel

NB!!

Media Management

The authorized media spokesperson is Chemistry's HOD and Science Faculty's Dean. All communication with the media must be via the HOD's office.

Training Requirements for Emergency Response Personnel (ERP)

Type of training:

1. Fire Fighting
2. First Aid

How often: Practice drills - once every 6 months or Official training – at least 2 months before Certificates expire.

Annual Review

We will review and update this emergency response plan in January/February of each year or when new ERP are appointed.

The CEM OHSE Unit = Emergency Planning Committee (EPC).

The purpose of the EPC is to implement, maintain and review the emergency plan and to ensure that staff & students with designated emergency roles have been appointed and trained in accordance with the plan. The EPC has the power to co-opt and to call upon specialist advisers, technicians and P&S: Maintenance as required.

WHEN FIRE ALARM TRIGGERS SIREN AND/OR ON FIRE ALARM PANEL

NORMAL WORKING HOURS

Once the fire alarm is triggered either via a fire sensor or a red alarm activation box: all the fire doors in building close and all emergency and secure doors release, lab fume hood extraction will discontinue, and an automatic voice message will start indicating that this is an emergency and persons must evacuate immediately.

STEP 1: CONTACT CPS AT 080 650 2222 CHECKING THAT FIRE ALARM HAS REGISTERED

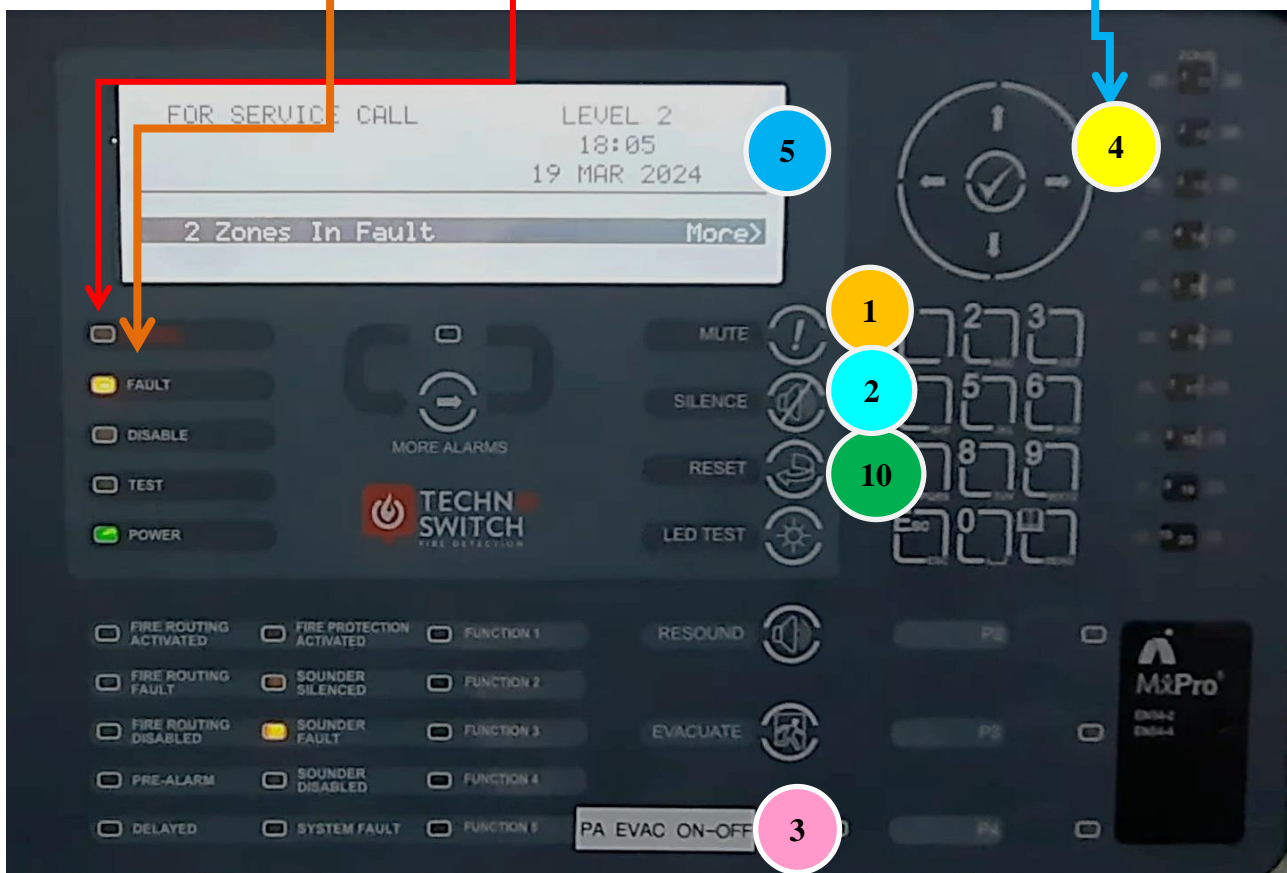
STEP 2: GO TO THE FIRE ALARM PANEL – LEVEL 4

The fire alarm panel is situated in the LOBBY on level 4 at the P9 entrance. It is connected to smoke, fume, dust, steam and heat detection sensors throughout the building as well as red alarm activation boxes (BGUs) (as indicated on evacuation routes in ANNEXURE 1) throughout the building.

In case of a fire alarm the RED **"FIRE"** light will be blinking. All security access of building will be released and all fire doors in passageways and entrances will close.

If it is a fault the **"ORANGE"** "FAULT" light will blink.

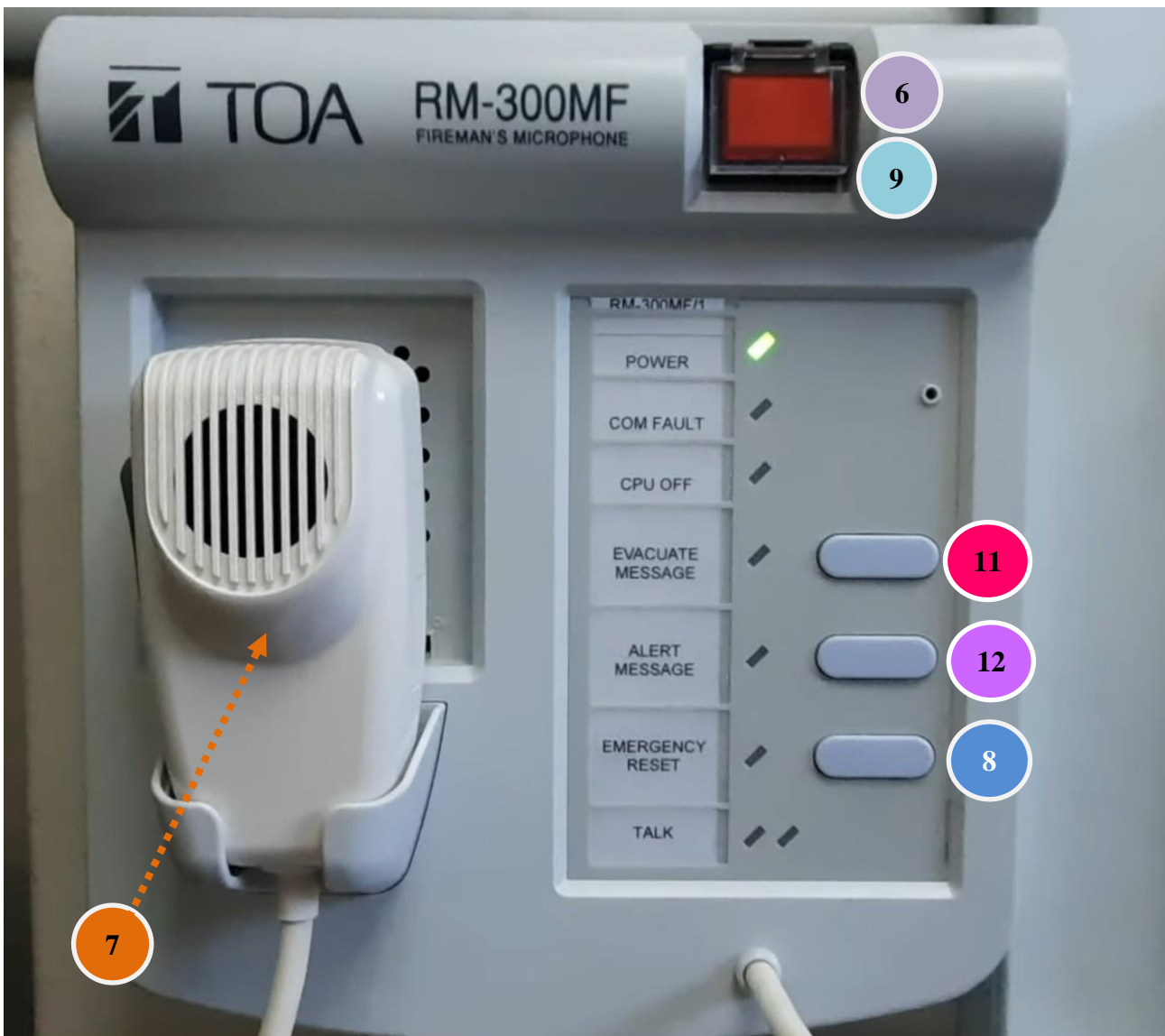
To view the area, break or fire sensor number push right arrow to **VIEW POINTS** to scroll through to see more information on fire sensor or BGU points & locations.



- 1 Press MUTE – to silence panel buzzer
- 2 Press SILENCE – to silence voice activated message
- 3 Press PA EVAC ON-OFF – to silence evacuation siren
- 4 Press RIGHT arrow to view activated point/s
- 5 View point number, zone & location on LED screen.
Can use building plan & sensor layout on wall to double check location

STEP 3: MAKING PA ANNOUNCEMENTS

The PA system is on an ALL CALL system. No zones programmed yet.



- 6 Press RED Button Before Speaking
- 7 REMOVE MIC from position, push in GREY button & speak into MIC. When done place MIC back in place.

- 1) ATTENTION! *(this is a fire drill)*
- 2) LECTURES, EXAMS, TESTS TO CONTINUE UNTIL FURTHER NOTICE!
- 3) ALL OTHER PERSONS PLEASE EVACUATE IMMEDIATELY! Take the nearest evacuation route & emergency exit and assemble as far as possible from the building.
- 4) *ATTENTION FIRE MARSHALS: Fire sensor = "Point"/Break Glass Unit = "BGU" no _____ on level _____ in room/lab _____ went off. Please investigate & send info to FM WhatsApp group.*

Take Picture of Panel Screen & WhatsApp to FM Group

Communicate further details & findings via the Fire Marshal WhatsApp group!

- 5) *I Repeat: Fire sensor = "Point"/Break Glass Unit = "BGU" no _____ on level _____ in room/lab _____ went off. Please investigate & send info to FM WhatsApp group.*
- 6) *Fire marshals please evacuate your area.*

ANNOUNCEMENT WHEN RESOLVED

- 7) *Thank you, the issue is resolved. Fire marshals please notify persons to re-enter the building.*
- 8) *Fire Marshals meet up at Fire Panel on level 4.*
- 9) Send messages also to FM WhatsApp group.

IF FALSE OR FAULT ALARM

WhatsApp this info to the FM Group!

ANNOUNCEMENT: AFTER DRILL COMPLETE OR FAULT IS INVESTIGATED

- 10) *Thank you, the exercise is complete. Fire marshals please notify persons to re-enter. (x2)*

OR

- 11) *Thank you the issue is resolved. Fire marshals please notify persons to re-enter. (x2)*

WhatsApp this also to the FM Group!

WHEN COMPLETED ON PA

8 Press EMERGENCY RESET Button

9 Place MIC back & Press Red Button

STEP 4: “RESET” BGU and fire panel – all will return to normal operating condition & lab extraction will go back on.

10 Press RESET Button

TO SOUND ALARM FROM PANEL

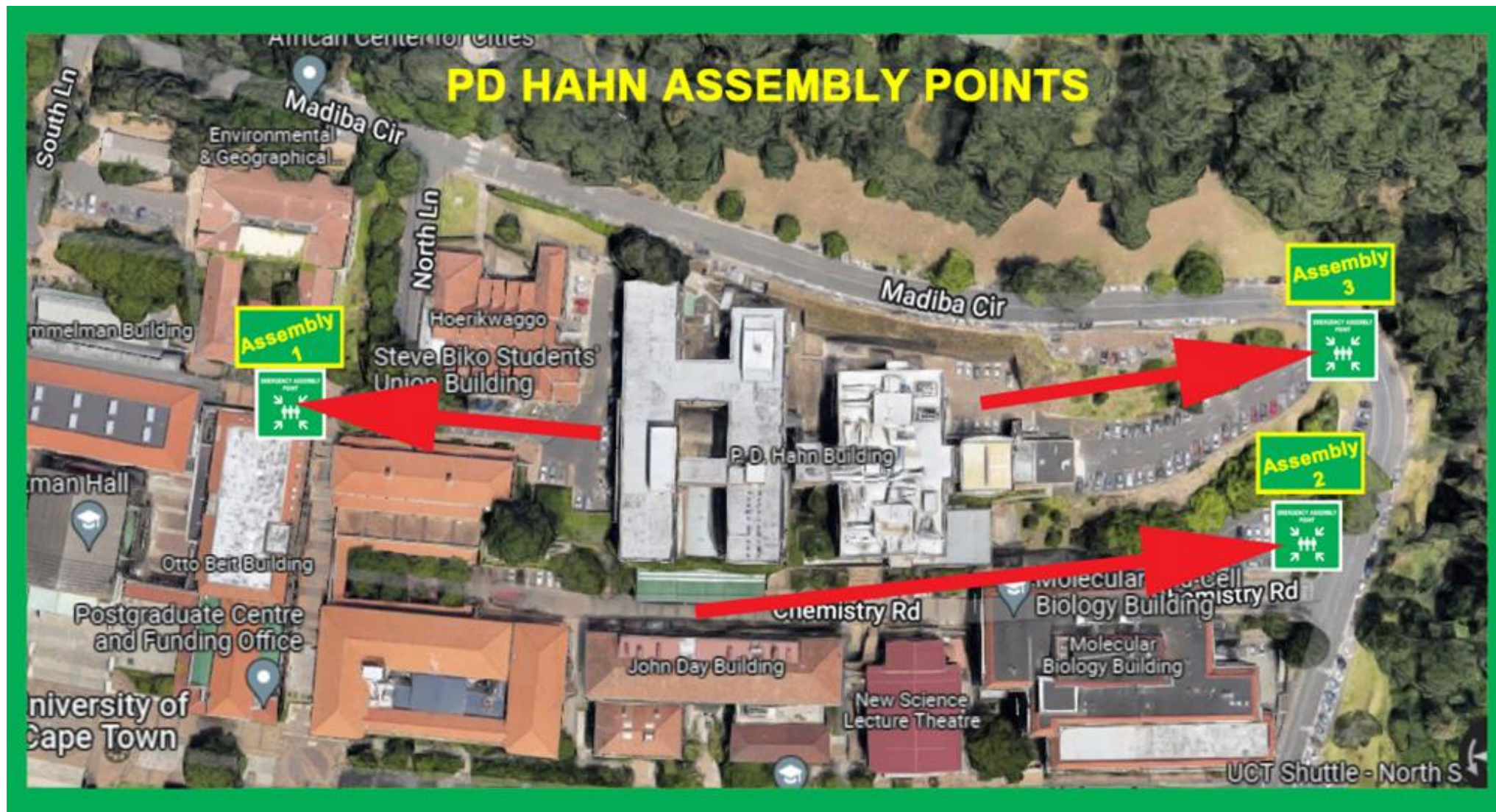
11 To sound EVACUATION MESSAGE – Repeat steps Press 6 & 7 & PRESS EVACUATE MESSAGE BUTTON

12 To sound ALERT MESSAGE – Repeat steps Press 6 & 7 & PRESS ALERT MESSAGE BUTTON

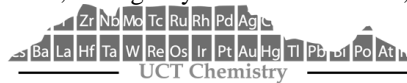
When done follow 8 & 9 !

Entrances: Fire Marshals need to Secure Entrances after Evacuation.
FM to keep persons from entering building until given the OK via WhatsApp Group by the Chief Fire Marshal.

LEVEL 4 South (P9 – side)	LEVEL 1 (LT1 & LT2)	LEVEL 4 North (P8 – side)	Psychology (P8 – side)
Assembly Point 1 EGS Bldg. P9 Parking	Assembly Point 2 MCB P7 Parking	Assembly Point 3 Entrance @ Madiba Circle P8 Parking	Assembly Point 2 MCB P7 Parking
Claire	Gerhard	Eswara	Wazi
Dalielah	Nirvashi	Francois	Rosalind
Laa-iqa	Richard G	Kanyisile	
Monique	Ronewa	Mziyanda	
Thomas	Rudy	Natalia	
		Venkata	



Chemistry Department, Emergency & Evacuation Plan, UCT, March 2024



Fire extinguisher/s and fire hoses:

SEE ON EMERGENCY EVACUATION PLANS IN ANNEXURE 1.

OHS Division ensures for the inspection & servicing of fire hoses & extinguishers annually.

3. PROCEDURES FOR RESCUE AND EVACUATION

ALWAYS CONTACT EMERGENCY CONTROL CENTRE {CPS} FIRST IN ANY EMERGENCY @ x2121/2222/3!!!!

**ALWAYS REMAIN AS CALM AS POSSIBLE!
DO NOT SCREAM AND SHOUT!**

REMEMBER: if BGU was used it need to be reset before one can reset fire panel.

Potential Emergencies

The following potential emergencies have been identified in hazard assessments:

1. Bomb scare
2. Disturbance e.g. Intruder or a Criminal act
3. Fire
4. Flammable liquid spillage
5. Flooding (natural or man-made)
6. Hostage situation
7. Medical emergency (e.g. injury, burns, heart attack, disease)
8. Natural disasters (storm, earthquake)
9. Power outage
10. Structure failure
11. Suicide
12. Transport accident

Potential Evacuation Situations

- Natural gas leak
- Building structure failure
- Flammable liquid spill and/or release
- Bomb threat
- Power line failure
- Hostage situation
- Hazardous chemical spill and/or release
- Tornadoes
- Flooding
- Winter storms

Emergency Evacuation Plan (see Annexure 1)

- We have developed these plans in collaboration with the H&S Representatives, Fire Marshals & First Aiders.

- We located and copied the original site plans and posted the evacuation routes; which are based on these routes which were revised to fit the current building/s layout, in various strategic locations.
- We will ensure that emergency exits and evacuation routes are clearly marked with unambiguous signage.
- We will ensure that emergency exits and evacuation routes are never obstructed.
- We will practice the evacuation procedures at least once every 6 months. The emergency procedures are set out in Annexures 4 and 5.
- If we must leave the workplace quickly, we will follow the evacuation procedure as set out in Annexure 5 for "FIRE":

Fire Alarm Warning & PA / Intercom System

The warning system will be tested at least 4 times a year. **Firespec** maintain and test the fire alarm system, sensors, alarm audibility, release mechanisms and red alarm activation boxes. Any issues: should be logged with Barry Platen via Manie.

Assembly Sites (see page 16)

Person/s Responsible for Issuing the All Clear (Chief Fire Marshal/s):

DAYSHIFT

1. Anwar Jardine
2. Monique Muller
3. Sophie Rees-Jones
4. Dalielah Jappie
5. Claire Lawrence-Naidoo
6. Laa-iqa Rylands

NIGHTSHIFT

1. CPS

The Chief Fire Marshal is the only person who can give the **All Clear** declaration, and then ONLY AFTER consultation with the relevant ERP & Emergency Services.

A debriefing session will be held soon after any evacuation to discuss any problems and to gather feedback from all staff, students and participating members of the Emergency Services to facilitate possible improvement on procedures.

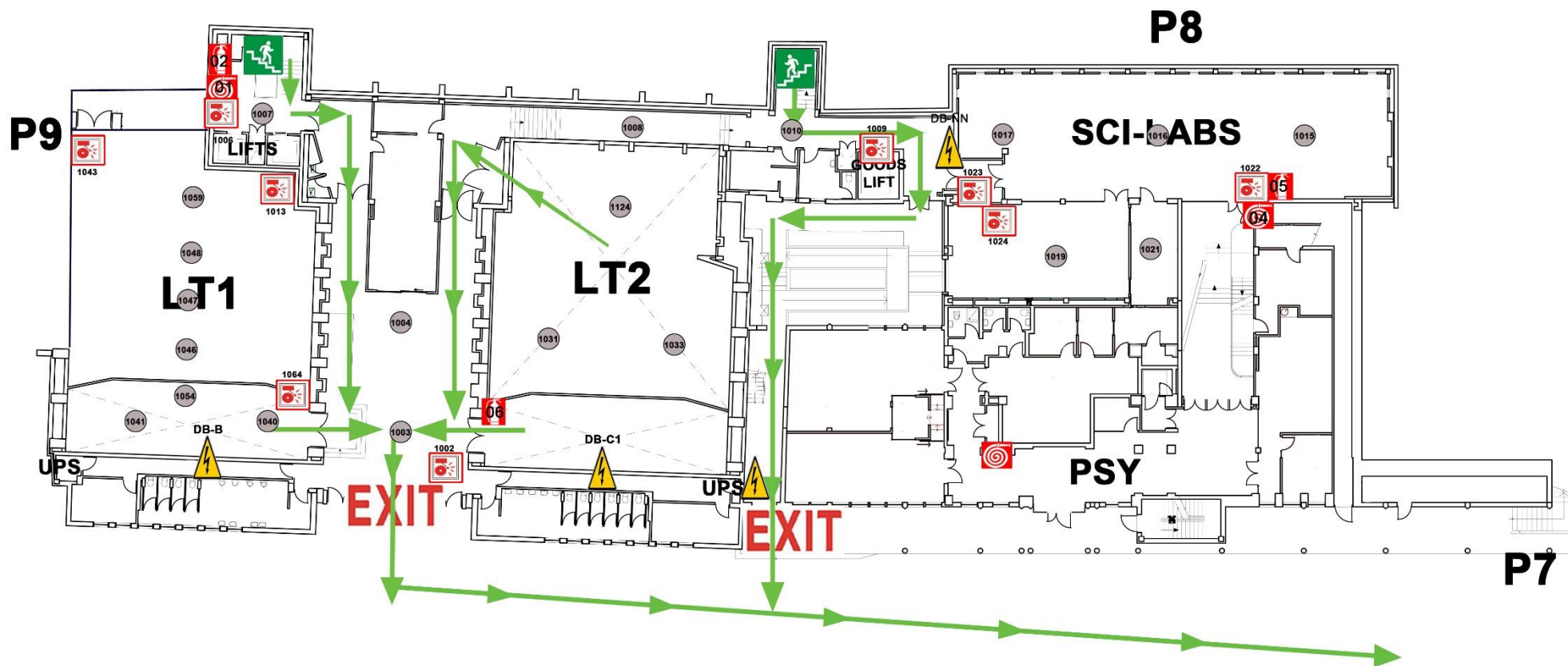
Following each drill, the Chief Fire Marshal will conduct a de-briefing session and prepare a report detailing any corrective actions required. This will be sent to UCT's Risk Manager.

Log in on to Vula Site to watch the 2024 PD Hahn Fire Panel & PA System Training Video.

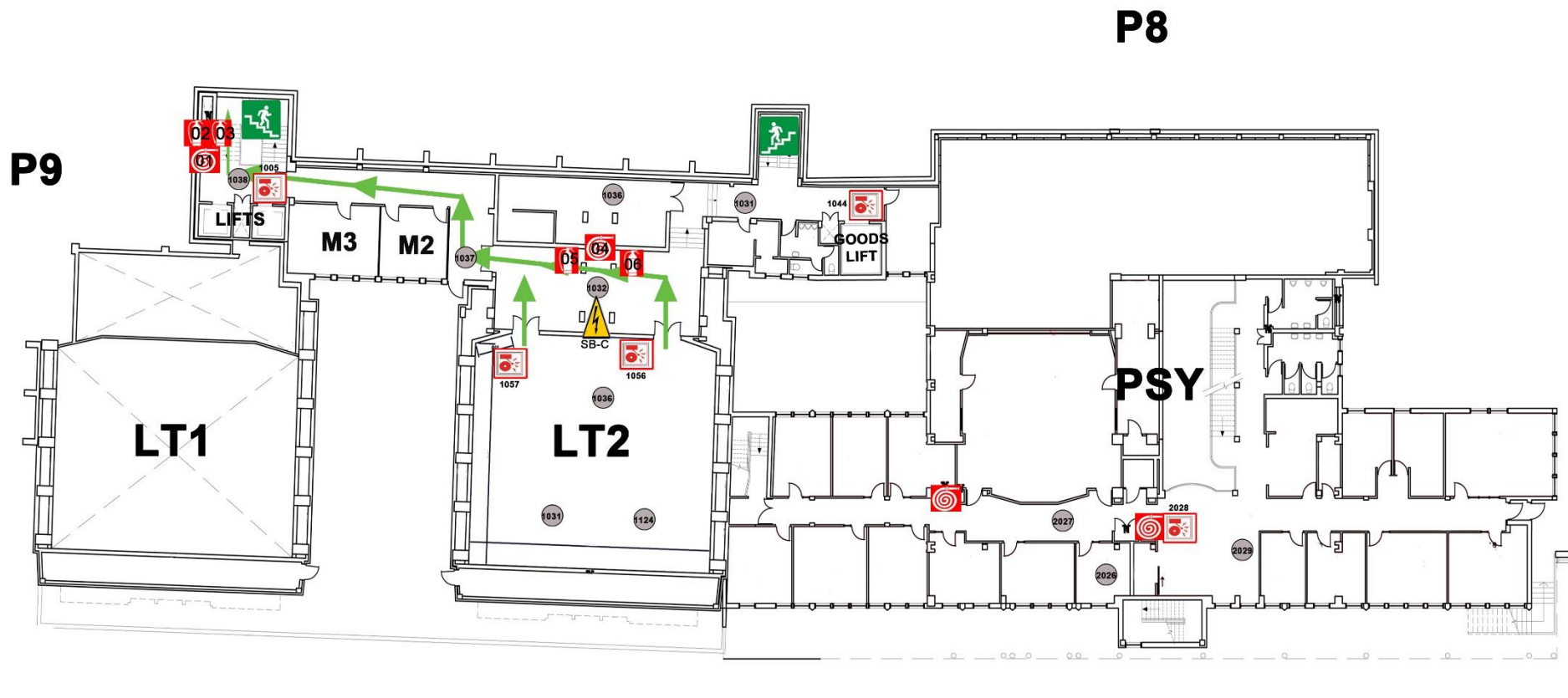
<https://vula.uct.ac.za/x/aPEsdf>

ANNEXURE 1: EMERGENCY EVACUATION ROUTES

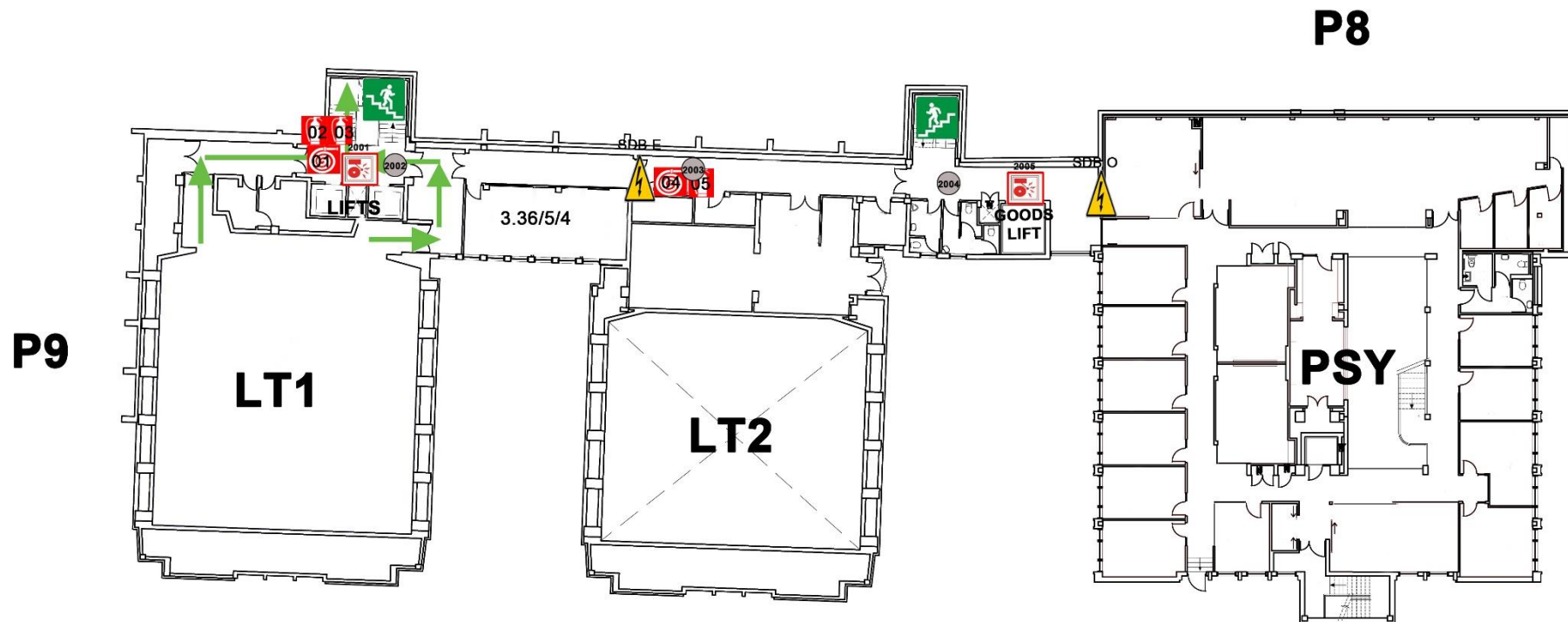
PD HAHN LEVEL 1



PD HAHN LEVEL 2

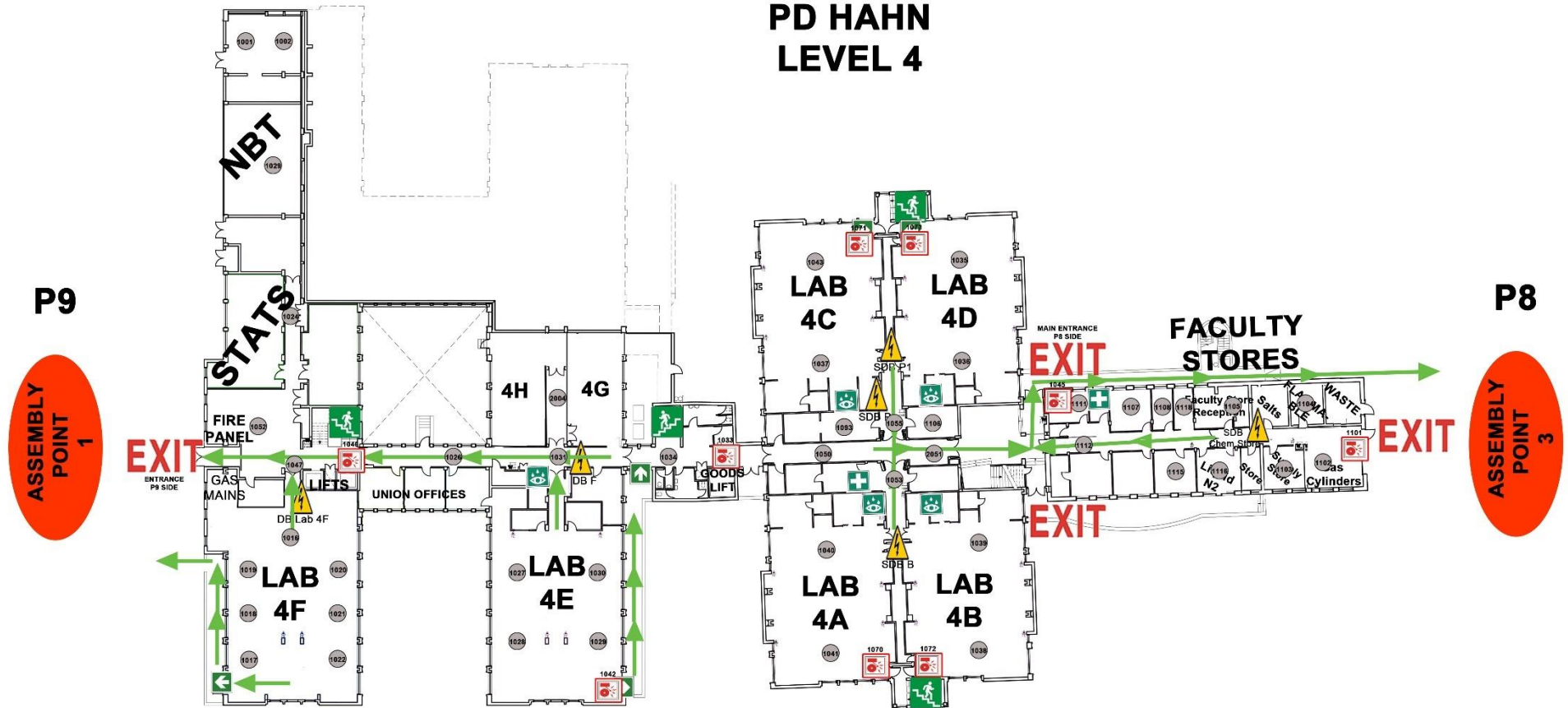


PD HAHN LEVEL 3



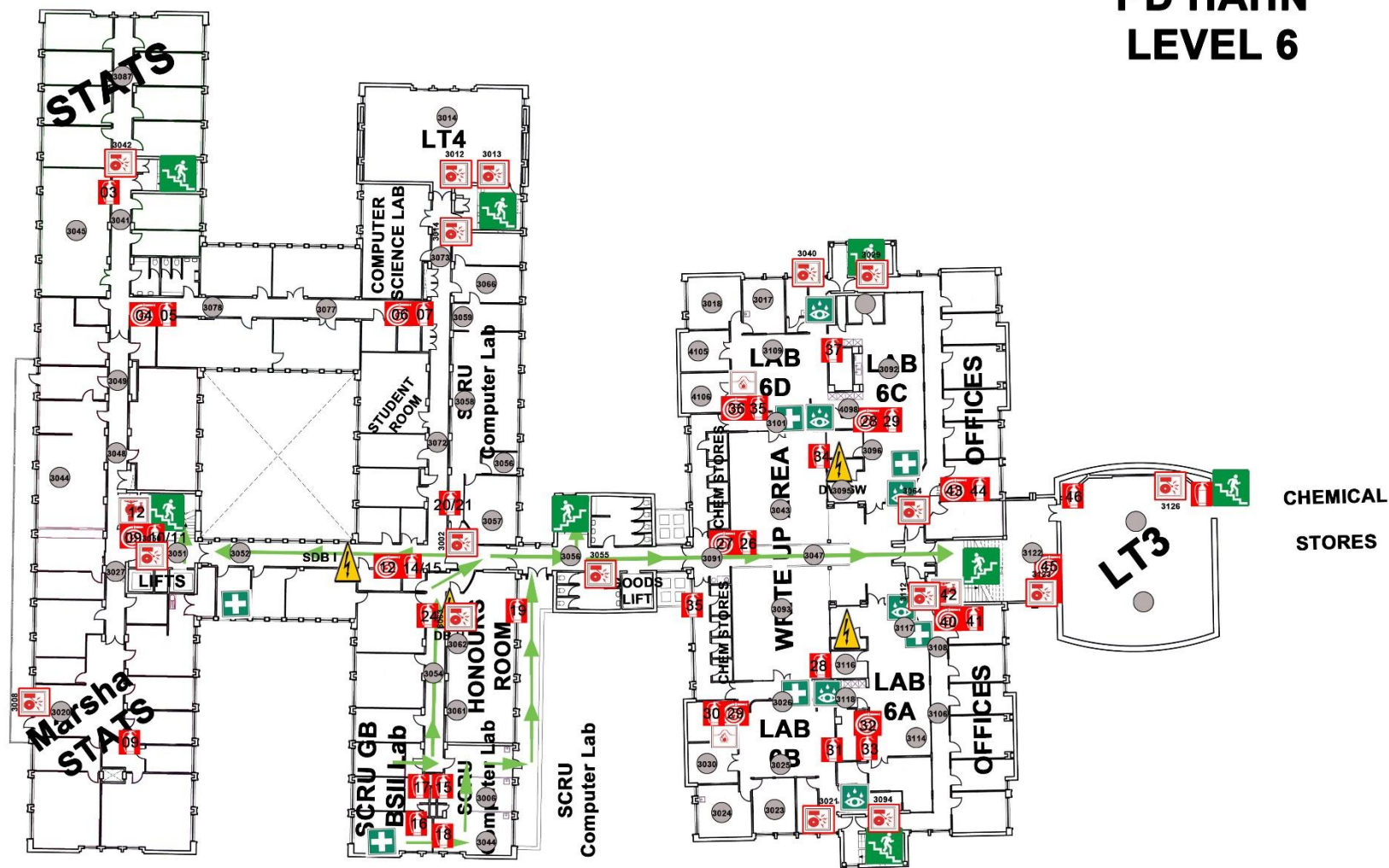
PD HAHN LEVEL 4

PD HAHN LEVEL 4



PD HAHN LEVEL 6

PD HAHN LEVEL 6



ANNEXURE 2: EMERGENCY RESPONSE PERSONNEL DUTIES

Chief Fire Marshal Duties (CFM)

- a. To take charge when an emergency situation arises
- b. Ensure the appropriate response is initiated
- c. Ensure the emergency is inspected by the appropriate Emergency Response Personnel (ERP) to ascertain the nature and scope of the emergency and bring it under control
- d. Control and/or communicate the Fire panel, WhatsApp and PA/intercom system messages
- e. When the situation arises and when needed, ensure that the Emergency Services/Security are notified
- f. Establish communications with the appropriate ERP and give instructions
- g. Liaise with Floor Fire Marshals and/or First Aiders
- h. Co-ordinate and monitor the response to the emergency
- i. For partial evacuation: instruct that section to evacuate to the Assembly Points
- j. Ensure Fire Marshalls all wear identifiable visible vests during any evacuation procedure
- k. For total evacuation: instruct evacuation of all sections to the Assembly Points
- l. Co-ordinate the shutting down of building services (power supplies, ventilation) {*when needed*}
- m. If evacuation was necessary – ensure Roll Call of Fire Marshals is taken at the Assembly Points
- n. Give the all clear when the emergency is over and it is safe to go back into building
- o. Ensure that all fire extinguishers have been refilled after use

Floor / Zone Fire Marshal Duties

1. Ensure that all fire fighting equipment within their area is clear and unobstructed.
2. Ensure that on inside and outside all evacuation routes, exit doors, gates and stairways (with sturdy handrails) in are unobstructed and where appropriate doors release properly and are easy to open from inside.
3. Make sure that everyone in the area is aware of their appointment as the Fire Marshal.
4. FM's principal aim is to prevent fires and to notify the Chief Fire Marshal if and when a fire or other emergencies occur.
5. In general FM's duties are:
 - a. Wear the prescribed Fire Marshal identification at all times during an evacuation
 - b. Take their cellphone with you
 - c. Stay calm in an emergency – DO NOT shout & yell
 - d. Immediately respond to an emergency alarm or a PA system notification
 - e. Follow the Chief Fire Marshal's (CFM) instructions at all times
 - f. In case of evacuation follow duties as set out on your Emergency Duty Card
 - g. Assist any person in immediate danger (when safe to do so)
 - h. Close all doors and windows, switch off the power supply and air conditioners/extraction/ventilation and close gas stop valves (if appropriate and safe to do so)
 - i. Report to the CFM when your area has been evacuated and everyone is at the Assembly Point

- j. Report any issues such as evac or fire doors not opening/closing – before/after fire alarm trigger or if PA audio is inadequate

First Aider Duties

Is the holder of a valid first aid certificate, and designated as a first aider, to perform the following general duties as part of their appointment:

1. Ensure that they are familiar with all aspects of General Safety Regulations 3.
2. Ensure that first aid certificate remains valid. The OHS Officer will assist in ensuring that certificate remains valid and with any other training deemed necessary.
3. Attend all prescribed training/information sessions and any other necessary training.
4. To stay calm in an emergency.
5. Be responsible for all first aid treatment activities within FAs area of responsibility.
6. Ensure that the first aid box is always adequately stocked.
7. Ensure that the first aid box is inspected and restocked at least on a monthly basis.
8. To inform the LHSIS (Monique Muller) if any items need to be ordered for restocking.
9. To take the first aid box/kit with, in case of an emergency or evacuation.
10. Ensure to log all first aid incidents – near-misses as well as serious injuries at online incident form.
11. Report all injuries and/or treatments to Monique Muller via completing the HS02 form.



*Scan me
with you phone's camera!*

ANNEXURE 3: FIRE MARSHALL DUTY CARDS

FIRE MARSHAL DUTIES

EMERGENCY EVACUATION

1. Once the fire alarm sounds immediately move to your area of responsibility/appointed for
2. Place your yellow fire marshal over jacket on
3. Grab your cell phone
4. Listen to the orders given via the PA system – given by Chief Fire Marshall (CFM)
5. In case of an evacuation announcement: Loudly & assertively give the order for persons in vicinity to start evacuating to the designated assembly points through the evacuation routes immediately
6. If it's in your area: investigate the red activation box or fire sensor **as announced** that triggered the alarm – the device number (on device) and room will be announced
 - a. Take a fire extinguisher with
 - b. First look & smell for smoke, listen to burn/crackling sounds or smell for chemicals
 - c. Before opening a closed door feel for heat with back of hand, check for puffs of smoke at bottom of door
 - d. If there is heat on door and/or smoke puffing underneath door report on the FMarshal WhatsApp group or x2121
 - e. If no heat or puffs of smoke or crackling or muffling sounds - proceed to open door by standing to one side – out of door's opening
 - f. If a small fire (1m²) – report this first to the FMarshal WhatsApp group or x2121 before attempting to extinguish fire
 - g. If not possible to report or get through – re-activate evacuation alarm by pushing on the white/black middle dot of the nearest red activation box
7. Start checking if all persons evacuated – starting from furthest point from your evacuation exit.
 - a. Close sashes of fume hoods – if in labs
 - b. Close all windows & doors to areas
 - c. Go to Assembly Checkpoint via your evacuation route
8. Stop all incoming persons
9. Once all the persons are safe at Assembly Point – you need to report to the CPS representative at that point and/or on FMarshal WhatsApp group
10. Afterwards assemble on level 4 at fire panel & give report/feedback to the CFM

ANNEXURE 4: EMERGENCY STANDARD OPERATING PROCEDURES (SOP)

These are the current quick steps to follow in an emergency - fire, chemical spill, medical/injury, intruder:

QUICK STEPS:

STEP 1 – Immediately tell/shout out for someone in your area (if possible) to assist

STEP 2 - Inform security of incident (especially if no one else is around or after hours to assist) @ **x2222 / 3** or **x2121**

STAY CALM - give as much details as possible

a) Intruder - call security @ **080 650 2222**; **x2222 / 3** or **x2121**;

b) Medical - call for a **FIRST AIDER** (see **PAGE 8**)

IF AN AMBULANCE IS NEEDED CALL SECURITY @ x2222 / 3 WHO WILL ARRANGE AMBULANCE TO COME OUT!!!

c) Chemical Spillage - WhatsApp the Chemistry ER/HAZMAT and/or OHS Officer (**0836167474**) and/or Lab H&S Specialist **x4549** or **0836406706** or if need to evacuate immediately & push nearest **RED ACTIVATION BOX**

d) Fire - call **FIRE MARSHAL** (see **PAGE 8**).

**IF NEED TO EVACUATE IMMEDIATELY ACTIVATE ALARM
PUSH NEAREST RED ALARM ACTIVATION BOX**

e) Maintenance - call Manie (Abduraghman) Gamielien 4.01.5 (Level 4) @ **x4230**

STEP 3 - a) Personnel/staff if you need to go to hospital - ensure that a **WCL2 form is completed by your line manager & that Section B of the WCL2 Form + your ID/passport + copy of payslip + medical aid card** goes with you to the nearest medical facility - a copy of WCL2 form is under H&S Docs on Chemistry Health & Safety on Vula.

Staff members follow INJURY ON DUTY FLOW CHART on page 35.

STEP 3 - b) Students if you need to go to hospital → Contact Security @ **080 650 2222**, **x2222 / 3** - ensure you take your student card & ID/passport with

STEP 4 - Complete a **HS02 form** – send to Lab H&S Specialist **x4549** or **0836406706** (monique.muller@uct.ac.za)

**ALL FORMS ARE AVAILABLE UNDER Emergency Procedure Docs: Incident Forms
ON CHEMISTRY Health & Safety VULA Site**

1. FIRE FIGHTING

1. NORMAL WORKING HOURS

1. Evacuate immediately upon hearing alarm and evacuation announcement.
2. Chemistry staff/students - close fume hood sash and evacuate.
3. Listen to Fire Marshal's instructions.

Fire but no alarm:

1. If you see a fire, smoke or smell smoke and the fire alarm did not trigger, trigger alarm by:
 - a. going to a red break glass unit,
 - b. lifting plastic lid and
 - c. pushing in middle on black or white dot.
2. Evacuate immediately thereafter through the nearest evacuation route, move away from building and go to nearest assembly point as indicated on map (page 16).

2. AFTER HOURS

1. Evacuate immediately through nearest evacuation route upon hearing alarm and evacuation announcement.
2. Chemistry staff/students - close fume hood sash and evacuate.
3. Go to fire panel in lobby on level 4 on P9 side and meet CPS staff there to find out if it was false alarm and/or to get the all clear to go back into building when emergency is over or under control.

Fire but no alarm:

1. If you see a fire, smoke or smell smoke and the fire alarm did not trigger, trigger alarm by:
 - a. going to a red break glass unit,
 - b. lifting plastic lid and
 - c. pushing in middle on black or white dot.
2. Evacuate immediately thereafter through the nearest evacuation route, move around to fire panel in lobby on level 4 on P9 side and meet CPS staff there to inform them of what you see or smelled and to get the all clear to go back into building when emergency is over or under control.

3. WHEN FIGHTING A FIRE

1. See PASS METHOD – HOW TO EXTINGUISH A FIRE on **PAGE 32**.
2. Stay low / crawl if need to and do not breathe in any more vapours than is necessary – if possible place wet cloth over mouth & nose
3. Avoid exposure to extreme heat, thus do not get too close to the fire – within 3 – 5 meters
4. Do not stay in any room or area where there is any significant amount of smoke or where other toxic vapours may be present and overcome you
5. Keep at least a distance of 3 meters or more from fire when attempting to extinguish fire
6. Start a distance away and move slowly in towards fire when attempting to extinguish it
7. Aim the extinguisher at the fuel or base of fire, rather than at the flame
8. Stay between the fire and the exit to avoid getting trapped
9. Be aware that when extinguishing a liquid on fire, it may spray and spread which makes matters worse as the fire can also spread quicker or may cause electrocution.
10. Use extinguishers as follows:
 - a. Powder/DCP extinguisher for a chemical, especially a liquid fire – colour **RED & BLUE**
 - b. Use a carbon dioxide extinguisher for electrical fire – colour **RED & BLACK**
 - c. Use any of above for electrical fire
11. **NEVER** use water for electrical or oil or chemical fire

12. Or use the fire blanket installed at entrance of lab or closest fire extinguishing equipment: can extinguish a small {< 1m²} fire
13. Report all fires to LHSIS and OHS Officer, even if the fire was extinguished or if there was no fire alarm activated.

4. CLOTHING ON FIRE

1. **DO NOT RUN!**
2. If a shower is closeby, get under the shower and let the water flow over the burned area until medical help arrives
3. Otherwise, the universal instruction is STOP, DROP AND ROLL. Immediately drop to the floor and roll repeatedly to extinguish the flames, holding your hands over your face to protect it from the flames
4. A fire blanket wrapped around you will assist in smothering the fire
5. Get burned areas under cool water as soon as possible – flush for 15 minutes
6. Afterwards - use **ONLY Burnshield from First Aid Kit** on burnt area/s

Log in on to Vula Site to watch the Chemistry's Fire Fighting & Evac Marshal Training Video.

<https://vula.uct.ac.za/x/aPEsdF>

5. PASS METHOD – HOW TO EXTINGUISH A FIRE

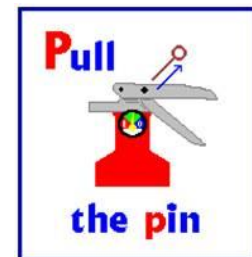
An important part of fire safety is to know where to find fire extinguishers and how to use them. It is easy to remember how to use a fire extinguisher if you can remember the acronym **PASS**, which stands for

Pull, **A**im, **S**queeze, and **S**weep.



Pull the pin.

This will allow you to discharge the extinguisher.



Aim at the base of the fire.

If you aim at the flames (which is frequently the temptation), the extinguishing agent will fly right through and do no good. You want to hit the fuel.



Squeeze the top handle.

This depresses a button that releases the pressurized extinguishing agent in the fire extinguisher.



Sweep from side to side.

Until the fire is completely out. Start using the extinguisher from a safe distance away, and then move forward. Once the fire is out, keep an eye on the area in case it re-ignites.



2. MEDICAL

If someone has an injury or becomes suddenly ill and requires emergency medical attention:

- Call First Aider (see page 8)
- First Aider - analyze the scene and situation using minimum exposure time and maximum distance from source in case of a chemical e.g. poison etc.
- Undergrad labs follow CEM's OHSE Incident Flow Diagramme (page 34)
- In case of SERIOUS medical emergency, dial **x2222 / 3 FIRST**
- Send **WhatsApp message to First Aider WhatsApp group.**
- If necessary, put the correct PPE on before trying to rescue – *Chemical Spill Kit*
- **DO NOT** attempt to move person unless person's life is in an immediate danger and/or if you have a valid first aid certificate and know how to do so!
- If you can go to person safely - try to keep person calm and as comfortable as possible without moving person until medical assistance arrives
- Once medical services or first aider arrives tell them everything you have observed and done until now.
- First aider will give instructions – follow his/her instructions and give feedback and report back to first aider as soon as possible with information needed.
- Assist First aider.

First Aid Personnel shall:

- On becoming aware of a medical emergency, collect the closest first aid kit.
- Grab cell phone.
- Attend to the injured person and administer first aid if safe to do so.
- If serious WhatsApp CEM First Aider WhatsApp group.
- If an ambulance or any other emergency service is required, **FIRST** contact the **CPS @ x2222 / 3** and inform them.
- Ensure you inform CPS of the following info:
 - Your & the injured or ill person/s name/s & staff number (if have)
 - Short summary of medical emergency plus
 - Building name + exact location of emergency
 - Which entrance + parking area (P7, 8 or 9) most likely will give access to the affected area
 - A contact phone number – *best your cellphone number*
- CPS must immediately contact the relevant Emergency Service/s
- Arrange with a security employee to meet the ambulance at the entrance and to direct the Emergency Service/s to where the injured or ill person/s and incident is located.
- If further medical assistance is deemed necessary by the First Aid Personnel, but the injured person is unwilling to be attended to by ambulance staff, the First Aid Personnel should advise the injured person to seek further medical attention.
- **FIRST**; if possible - alert the OHS Officer.
- If an ambulance has already been called, alert the OHS Officer of details and which hospital the injured person was taken to.
- **Note:** If the incident is a notifiable incident, it must also be reported to CEM OHSE Unit who will complete the various forms and log it on online CiiMS system.
- **Log incident online.**



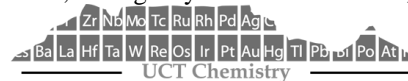
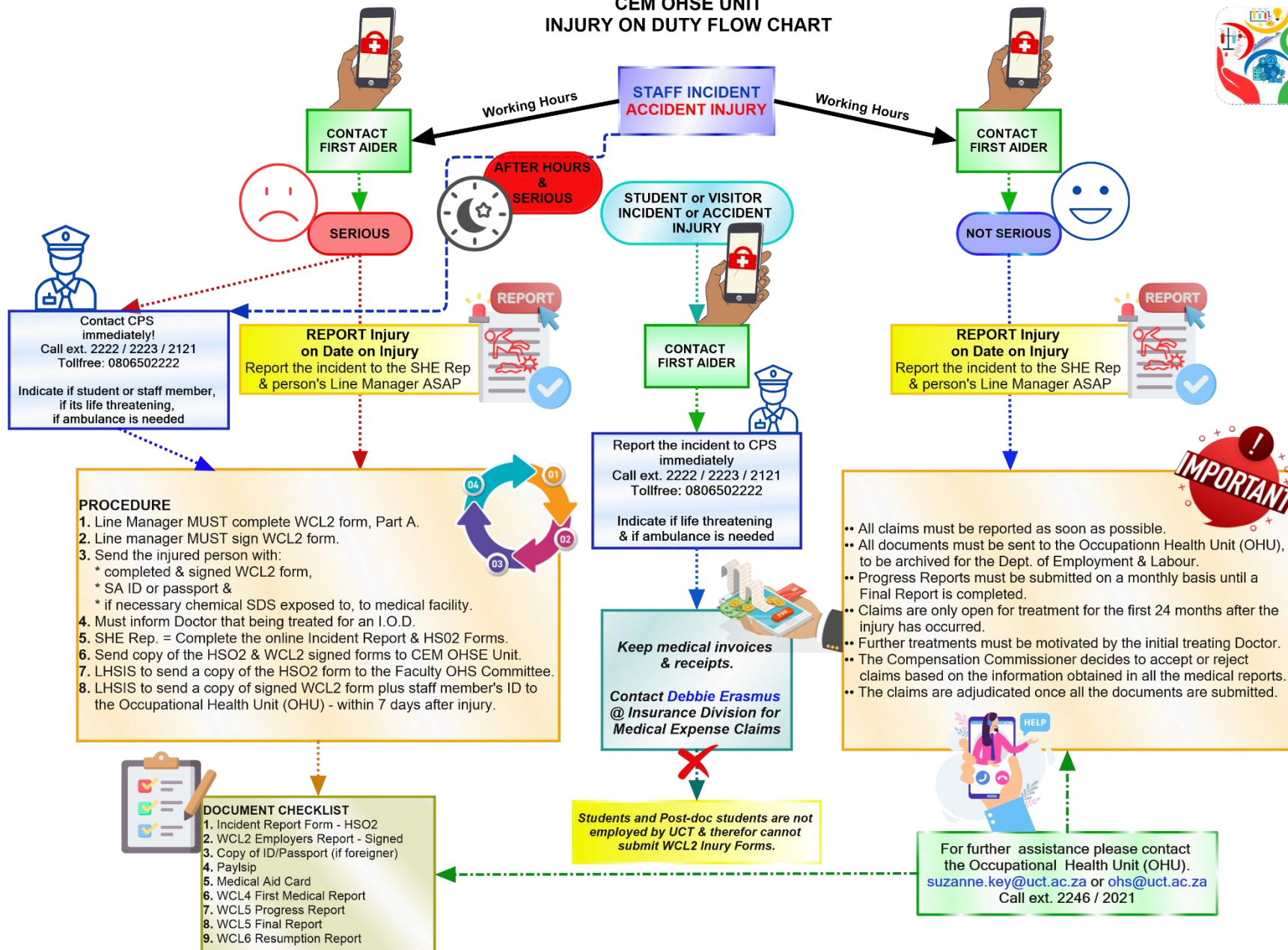
*Scan me
with your phone's camera!*

If a person is poisoned contact the Poison Centre at **080033344!**

Use the SDS First aid instructions to know what initial response must be followed!



CEM OHSE UNIT INJURY ON DUTY FLOW CHART



IMPORTANT:

- 1) To complete the Disclosure of Overseas Travel Form – HS15 form when travelling overseas
- 2) Vital to **complete HS02 form** with full details of incident & injury
- 3) Send it through to CEM OHSE Unit
- 4) **DO NOT send student or staff to Student Wellness**
- 5) **DO NOT** be the Good Samaritan & take patient to hospital in own car – insurance/liability complications when in an accident
- 6) **DO Contact CPS immediately – x2121**
 - CPS will contact ambulance when serious
 - CPS contact OHSE Health Unit for COID Claim Number when it is a staff member
- 7) **Staff - & Supervisor Complete & Sign W.CL.2 Form** in the meantime
- 8) Ensure the hospital or GP treats IODs – **ONLY registered health practitioners accepted**
- 9) For ER treatment – can go to e.g. Grootte Schuur or Vincent Palotti
- 10) **When patient going to ER or doctor – he/she must take with:**
 - ✓ Completed & signed by Supervisor WCL2 form (keep printed copies of UCT WCL2 forms closeby – is on Chemistry Health & Safety on Vula)
 - ✓ SA ID or passport if foreign
 - ✓ Medical aid card/details
 - ✓ SDS – in case of chemical involved
- For CLAIM to UCT Health Unit:**
 - ✓ *Certified copy of SA ID*
 - ✓ *Salary slip – if staff*
 - ✓ *Certified copy of Work permit – if foreign staff*
- 11) Foreign staff - <12months in SA claim from own Government
- 12) **Good idea to keep copies of all relevant above documents in your drawer or cupboard at work**
- 13) Send copies of forms & documents ASAP to CEM OHSE Unit to forward to UCT's Health Unit
- 14) **Students (post-docs included), visitors & staff keep all invoices/receipts for claim purposes – not paid by medical aid - for COID, Insurance & Student Insurance Fund claims**

3. BOMB THREAT

A bomb threat is either a phoned in or mailed threat.

INITIAL RESPONSE:

- At the time a threat is received, there are three possible options:
 - a. Inform **CPS x 222 / 3**, WhatsApp the **CEM OHSE Unit: OHS Officer (0836167474)** and/or Lab H&S Specialist **x4549 or 0836406706**
 - b. Evacuate immediately
 - c. Search and evacuate if warranted
- Telephone Threat:
 - i. Remain calm
 - ii. The bomb threat caller is the best and maybe the only source of information. When the bomb threat is called in:
 - a. Keep the caller on the line as long as possible. Ask him/her to repeat the message. Record the conversation if possible.
 - b. If the caller does not indicate or volunteer the location of the bomb or the time of possible detonation, ask for that information.
 - c. Inform the caller that the building is occupied and detonation could result in injury or death.
 - d. Pay particular attention to background noises such as motors running, music playing and any other noises that may give a clue as to the location of the caller
 - e. Listen closely to the voice of the caller, male or female, calm or agitated, accent, etc.
 - iii. Remain available; law enforcement personnel will want to interview the staff member receiving the threat
- Call the security company, police and fire departments; they will notify the nearest bomb disposal unit at their discretion
- The Security Service Providers need to assist in securing and evacuating the area if necessary
- Evacuate the area if necessary.
- Start searching for device. **DO NOT TOUCH OR DISTURB DEVICE OR SUSPICIOUS PACKAGE**
- Provide floor diagrams to all the relevant emergency services on arrival.
- **CAUTION: THE USE OF THE RADIO SYSTEM OR CELULAR COMMUNICATION DURING A SEARCH CAN CAUSE PREMATURE DETONATION OF AN ELECTRICAL BLASTING CAP**

TELEPHONE BOMB THREAT CHECKLIST:

KEEP CALM: DO NOT GET EXCITED OR GET OTHERS EXCITED

1. Time Call is received:
2. Time Call is terminated:
3. Exact words of the caller
4. Delay: Ask caller to repeat the message
5. QUESTIONS YOU SHOULD ASK:
 - i. What time is the bomb set to explode?
 - ii. Where is the bomb located? Building/Floor/Area:
 - iii. What kind of bomb is it?
 - iv. Description of bomb.
 - v. Why has the bomb been planted?
6. VOICE DESCRIPTION:
 - i. Male/Female
 - ii. Young, Old, Middle-aged
 - iii. Calm/Nervous
 - iv. Rough/Refined

- v. Accent: yes/no Describe:
 - vi. Speech impediment: yes/no Describe:
 - vii. Unusual phrases:
7. BOMB THREAT CHECKLIST:
- i. Do you recognize the voice?
 - ii. Who do you think it was?
 - iii. Background noises:
 - a. Music
 - b. Running Motor (type)
 - c. Traffic
 - d. Whistles
 - e. Bells
 - f. Horns
 - g. Aircraft
 - h. Machinery
 - i. Other
 - j. Tape recording
8. ADDITIONAL INFORMATION:
- i. Did caller indicate knowledge of the facility? If so, in what way?
 - ii. On what line did you receive the call?
 - iii. Is the number listed?
 - iv. Signature
 - v. Date

MAIL BOMB THREAT:

- When a written threat is received, save all materials including the envelope or container.
- Once the material is recognized as a bomb threat, further unnecessary handling must be avoided. It is imperative that personnel involved in the search be instructed that their only mission is to search for and report suspicious objects.
- UNDER NO CIRCUMSTANCES SHOULD ANYONE MOVE, JAR OR TOUCH A SUSPICIOUS OBJECT or anything attached to it

ERP must:

- On becoming aware of a bomb threat being made to someone, encourage them to keep the caller talking and support the recipient of the call as best as can be
- Inform CPS x2121 / 2222 / 3, WhatsApp the **CEM OHSE Unit:** OHS Officer (0836167474) and/or Lab H&S Specialist x4549 or 0836406706
- Alert any other ERP in the vicinity.
- If safe to do so, restrict entry to the building or secure areas within the building or confine or isolate the building's occupants from threat.
- Report to the OHS Officer regularly regarding the status of the occupants' safety.
- If evacuation is decided upon, commence evacuation of occupants to the Primary Evacuation Assembly Area.
- Open windows and close doors.
- Switch off all electricity and gas, if appropriate and safe to do so.
- Report to the OHS Officer when the area has been evacuated.

The CEM OHSE Unit shall:

- On receipt of a call advising of a bomb threat, reassure the caller, remind them of the need to remain calm, do not do or say anything that may encourage irrational behavior and advise that support will be received from the Emergency Services e.g. Police will be with them as soon as possible.
- When a suspicious object is discovered, the following procedures are recommended:
 - Inform CPS x2121 / 2222 / 3, WhatsApp the Chemistry ER/HAZMAT group.
 - Report the location and an accurate description of the object

- If you are isolated and cannot get out of the area, bags, furniture etc. (never metal or chemicals shields) around the object
- Do not attempt to cover the object
- Identify the danger area and block it off with a clear zone of at least 150m, including floors above and below the area
- Establish communications with the relevant ERP to shut down electricity or gas if appropriate and safe to do so.
- Ensure that all cellphones and other two-way radio communication are turned off.
- If appropriate, evacuate the affected area or buildings.
- Liaise with Emergency Services and if appropriate assign an ERP to assist in the conduct of a search based on the available information.
- When Emergency Services recommend evacuation follow the procedures as set out in Annexure 2.
- Notify the all clear once the emergency has passed and on advice from the Emergency Services.
- Update the ER/HAZMAT group.

4. SUSPICIOUS PERSON/ARMED INTRUDER

ERP and any other person shall:

- Not do or say anything that may encourage irrational behaviour and avoid contact with the intruder
 - a. Notify **CPS @ x 2121 / 2222 / 3**, WhatsApp the **CEM OHSE Unit: OHS Officer (0836167474)** and/or Lab H&S Specialist **x4549 or 0836406706**
- Alert any other ERP in the vicinity.
- If safe to do so, restrict entry to the building or secure areas within the building or confine or isolate the building's occupants from the intruder.
- Report to the OHS Officer regularly regarding the status of the occupants' safety.
- OHS Officer will update the ER/HAZMAT group.
- Follow the instructions of relevant Emergency Services Personnel closely.
- Evacuate only if safe to do so and on order of Police, Security Providers or the OHS Officer.
- If need to evacuate follow the procedures set out in Annexure 2.
- Note the names of anyone who has seen the offender and at the earliest opportunity and have them provide a description of the offender to the Emergency Services
- Complete an Incident Online.



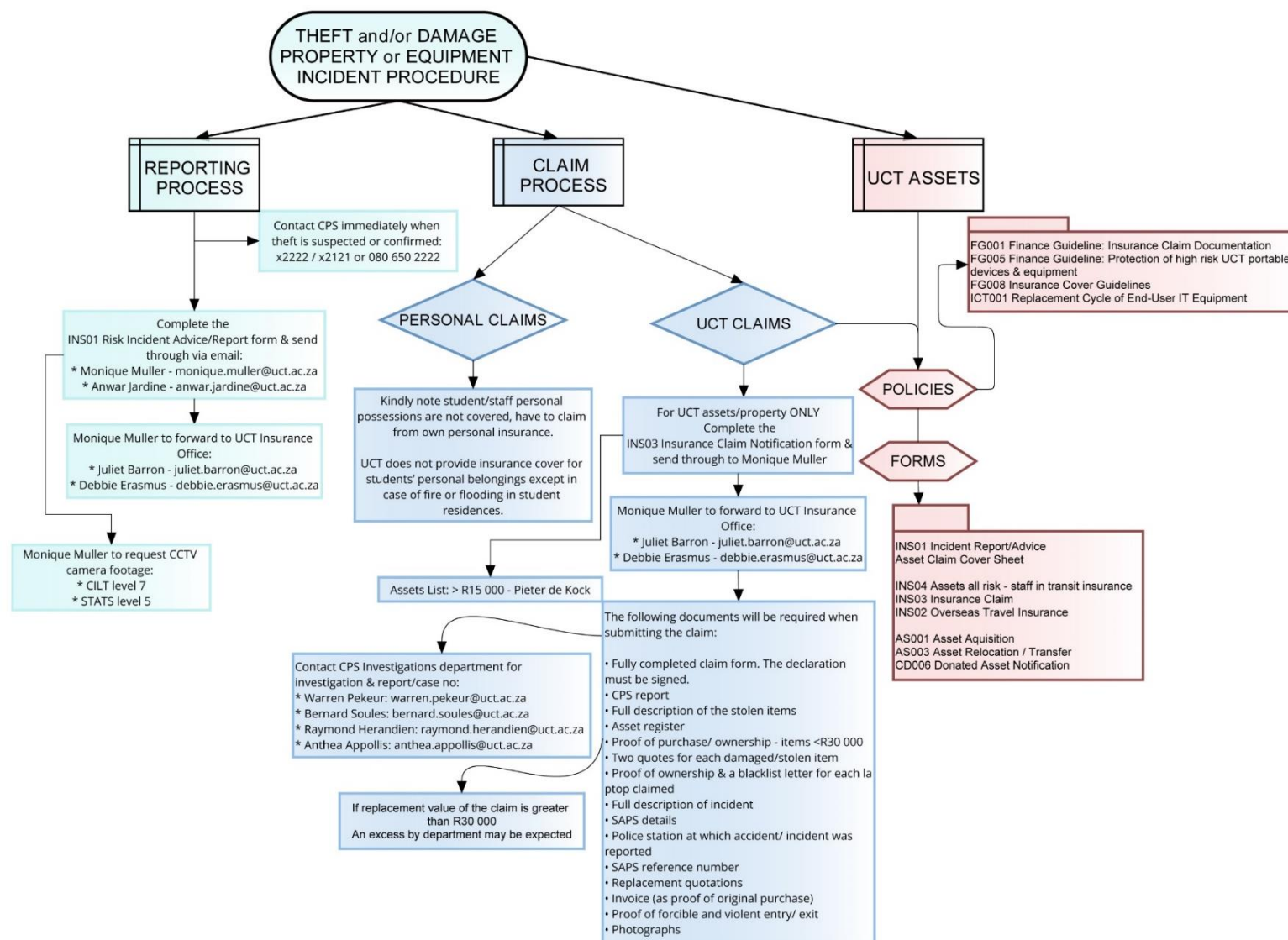
*Scan me
with you phone's camera!*

The CEM OHSE Unit shall:

- On receipt of a call advising of an armed and dangerous intruder, reassure the caller, remind them of the need to remain calm and not to do or say anything that may encourage irrational behaviour and advise the caller to avoid contact with the intruder and that support will be with them as soon as possible.
- Inform **CPS x 2121 / 2222 / 3**; WhatsApp the Chemistry ER/HAZMAT group.
- Upon arrival, the Security Services Provider and Police will take command of the incident.
- Note carefully any instructions given by the Emergency Services.
- Maintain communications with Security on site

- Initiate procedures by e.g. phoning the ERP to alert them or by using the intercom system to advise all persons to stay out of sight of the intruder or to remain in their work areas or rooms (if safe to do so)
- Liaise with the Police and if appropriate assign an ERP to provide support to Emergency Services Personnel
- When Emergency Services recommend evacuation follow the procedures as set out in Annexure 2
- Notify the all clear once the emergency has passed and on advice from the Emergency Services or Security.
- Update the ER/HAZMAT group.

THEFT & DAMAGE + INSURANCE CLAIM PROCEDURE



5. HOSTAGE SITUATION

One or more of the persons on the premises are held against their will. The assailant may or may not be a member of the organization. Assailants may also be working single or as a team

ERP and any other person on premises shall:

- Take cover – protect yourself and those near you.
- Inform **CPS x 2121 / 2222 / 3**, WhatsApp the **CEM OHSE Unit: OHS Officer (0836167474)** and/or Lab H&S Specialist **x4549 or 0836406706**
- Be prepared to answer the following:
 - Where exactly is the incident taking place?
 - How many hostages?
 - How many assailants?
 - Type of weapons?
 - Demands?
- You can also push the red emergency button in any room to signal Security Provider of a situation
- Analyze the situation – follow instructions of the H&S Officer and/or Security or Emergency Services Personnel

The CEM OHSE Unit must: Follow Procedures set out in previous section 3 & 4.

ERP must:

- Secure the scene/premises
- Evacuate persons when instructed to do so by H&S Officer or Emergency Services
- Until instructions are received, use your best judgement to determine whether immediate evacuation away from the threat area – or remaining in place under cover – is the most prudent course of action
- When law enforcement or security officials are engaging with perpetrators, keep low and immobile – do not make yourself a target of opportunity
- Maintain extreme vigilance until “all clear” is sounded
- If you are a first aider render First Aid assistance to casualties in your immediate area and follow the MEDICAL EMERGENCY SOP
- Observe and note events carefully – your timely and accurate information when relayed to emergency services and the police can have a significant impact on the resolution of the emergency
- Complete an Online Incident Report



*Scan me
with you phone's camera!*

6. STORM / FLOOD / EARTHQUAKE

Flooding caused by domestic water system or by rivers and/or streams overflowing their banks. We will regularly inspect any external water piping for any defects and fix it and any other defects, cracks or leaking pipes and taps immediately.

The CEM OHSE Unit shall:

- On receipt of a call ascertain the location and/or extent of the incident:
 - Notify the Maintenance Services - and/or where appropriate the Municipality – Waterworks - **086 010 3054** and advise them of the nature of the emergency if known
- **After Hours Notify CPS**
- Depending on the nature of the emergency:
 - If evacuation of the building is appropriate, commence an evacuation of the affected building and adjacent buildings and coordinate the evacuation. Follow procedures in Annexure 2.
 - If the primary evacuation area is unsuitable, nominate an appropriate assembly area.
 - If the threat is external to the building, advise all persons to remain in the building and to keep away from windows.
- Where necessary to evacuate also inform CPS to assist with evacuation.
- Establish communications with the ERP and give instructions.
- Notify the all clear once the emergency has passed and on advice from Emergency Services

ERP or any person shall:

- On becoming aware of the emergency.
- Inform **CPS x 2121 / 2222 / 3**, and/or CEM OHSE Unit: OHS Officer (**0836167474**) and/or Lab H&S Specialist **x4549 or 0836406706**
- Assist any person in immediate danger.
- Switch off all electricity, close windows and doors, if appropriate and safe to do so.
- If evacuation is decided upon follow procedures as set out in Annexure 2.
- Complete an online Incident Report.

7. GAS/FUME LEAK

Any gas cylinder, LP Gas or chemical fume leak or in atmosphere (in- or outside).

Anyone who is aware of a gas leak by e.g. smelling it or when sensor sounds shall:

- On becoming aware of a fume/gas leak analyze situation using minimum exposure time and maximum distance from the source
- Where asphyxiant gas may be present **DO NOT** enter unless with correct PPE or self-breathing apparatus
- Be aware that you will not smell LP gas after a while or at all; that does not mean it is not there or has not stopped it may only mean that you became sensitised against it or it is odourless.
- b. Inform **CPS x 2121 / 2222 / 3**, Call/WhatsApp the CEM OHSE Unit: OHS Officer (**0836167474**) and/or Lab H&S Specialist **x4549 or 0836406706**
- If emergency - evacuate persons in immediate vicinity and/or building
- Open all windows
- Close all doors
- Switch off lighting and power supply to area (if possible)
- Assist ERP

The CEM OHSE Unit shall:

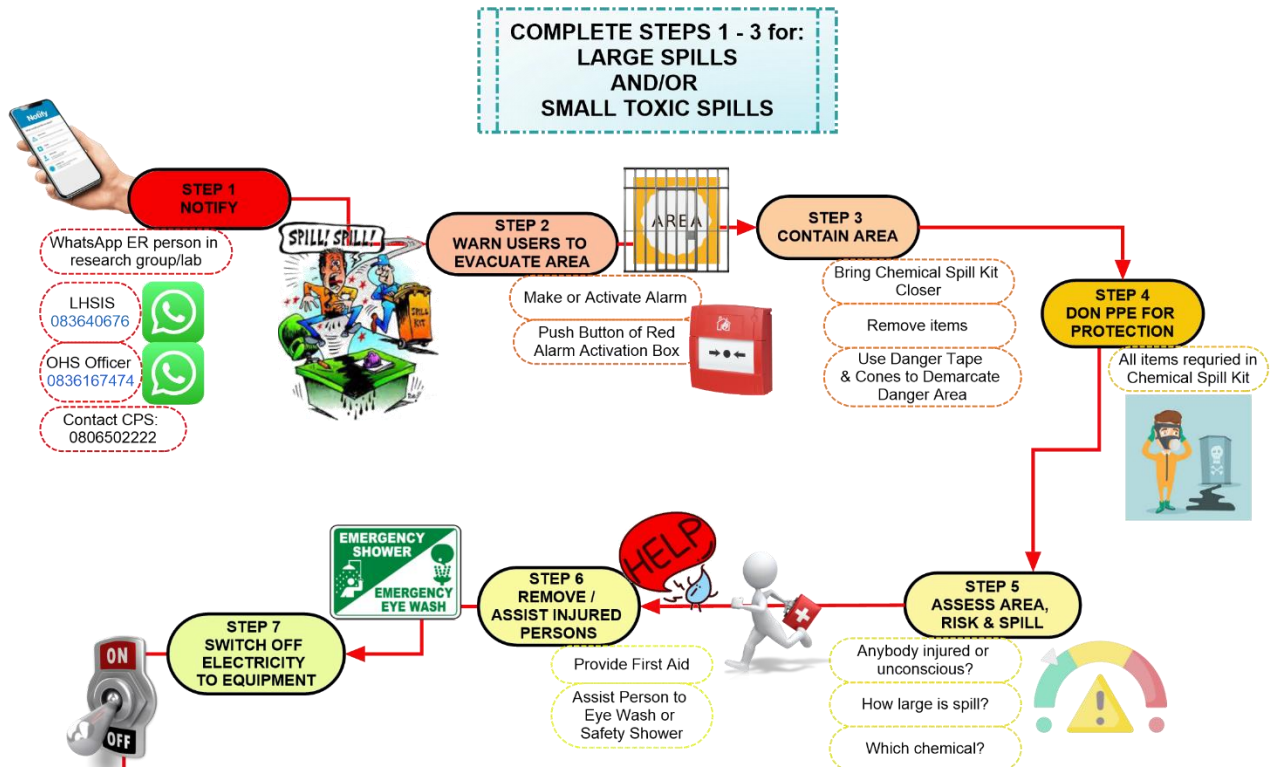
- On receipt of a call, proceed to the and scope of the emergency
- In case of emergency contact Maintenance Division
- Advise them of the location of the gas/fume leak if known
- Continue communications with the relevant ERP
- In case of fire follow the FIRE SOP
- Give evacuation orders to ERP of the affected building and adjacent buildings (if appropriate to do so) and coordinate the evacuation
- It might be that fumes come from outside, then it might be safer to stay within building and to seal all windows and doors

ERP shall:

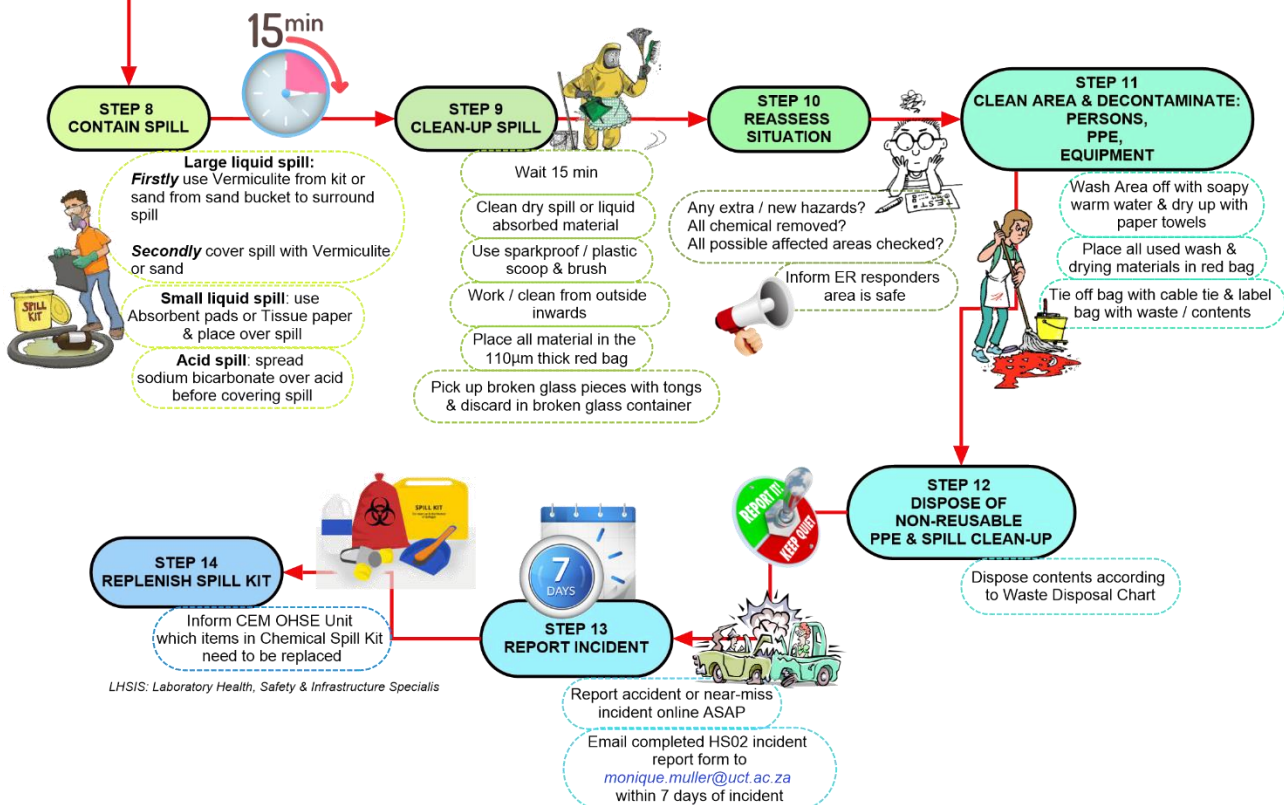
- Follow the CEM OHSE Unit's instructions
- Ensure you wear the appropriate respiratory protection such as a cartridge mask respirator/, before embarking in an area where gas or fume leak is detected or suspected – *Chemical Spill Kit*
- Close off all gas valves to area or at cylinders itself
- Switch off air conditioning
- Close of all drains – if possible
- Assist any person/s in immediate danger
- In case of fire follow the FIRE SOP
- If fumes are from inside building close all doors and open windows and switch off lights and the power supply to that area, if safe to do so
- If fumes are from outside, close doors & windows and switch off lights and the power supply to that area, if safe to do so
- If anyone has been overcome by the gas remove them only if you have correct PPE on and it is safe to do so and follow the MEDICAL EMERGENCY SOP
- If evacuation is decided upon, commence evacuation of occupants by following procedures in Annexure 2.

8. CHEMICAL SPILLAGE

SOP: CHEMICAL SPILL CLEAN-UP



SOP: CHEMICAL SPILL CLEAN-UP cont.



Anyone who is aware of a chemical spill by e.g. smelling or observing it shall:

- Analyze situation using minimum exposure time and maximum distance from the source
- Be aware that you will not smell the chemical or it may be colourless and look like water.
- c. If large spillage > than 2.5 Litres: inform **CPS x 2121 / 2222 / 3**, Call/WhatsApp the OHS Officer (**0836167474**) and/or Lab H&S Specialist **x4549 or 0836406706**
- Evacuate persons in immediate vicinity and/or building – Follow Annexure 2
- Open all windows
- Close all doors
- Switch off lighting and power supply to area (if possible)
- Place orange cones (*Chemical Spill Kit*) in front of area doors and place note: **DANGER: NO ENTRY** on door
- Tape Danger Tape (Chemical Spill Kit) as a cross across the door/s
- Assist ERP

The OHS Officer/Lab H&S Specialist shall:

- On receipt of a call, proceed to that location and ascertain the location and scope of the emergency
- In case of emergency contact CPS (**x2121 / 2222 / 3**) and/or Maintenance Division (**x4233**)
- Advise them of the location of the chemical spill if known
- Continue communications with the ERP involved
- In case of fire follow the FIRE SOP & push on black dot of white middle of the emergency red activation box to start evacuation procedures
- Give evacuation orders to ERP of the affected building and adjacent buildings (if appropriate to do so) and coordinate the evacuation
- It might be that fumes come from outside, then it might be safer to stay within building and to seal all windows and doors

Chemical Spill Procedures

1. Open CHEMICAL SPILL KIT
2. Put on PPE – labcoat, closed shoes, gloves & respirator with cartridges
3. Contain the spillage by either placing vermiculite or tissue paper all around spill
4. Cordon off the area WITH CONES & DANGER TAPE
5. Switch off all electrical equipment that may cause heat or sparks – if possible
6. Close doors to area
7. Stick a Note of: **DANGER - NO ENTRY** + Danger Tape as a cross X over entrance door
8. Place the chemical soaked vermiculite and tissue paper by scooping it or picking it up & place in red bag & tag it
9. In case of small spillage < 500ml & only tissue paper were needed. Place soaked tissue paper in RUC.
10. Carefully place broken container with tongs into broken glass or RUC container for plastics
11. Take red tagged bag down to waste store & place in an empty 50L BLUE lever drum & label drum with spilled contents
12. Refill or replace items where completely used up

ERP shall:

- Follow the Chemical Safety Officer's instructions
 - If available put on the appropriate PPE, especially respiratory protection such as a cartridge mask or self-contained respirator system, overcoat and gloves before embarking on scene – the appropriate equipment should be in the chemical spillage kit
 - Try not to touch or step into spillage
 - Is it coloured substance spilled or a liquid spillage?
 - Check details on containers with contents (if possible) e.g. hazard symbols, label of container, hazard ID code
 - Evaluate how large and serious the spill is
 - Unexplained odours
 - Do areas look different from others in same vicinity?
 - Sickness/illness of people in area – are they contaminated?
 - Are medical and/or first aid needed?
 - Is there a fire hazard?
 - Does the building need to be evacuated?
 - Is public health and safety threatened?
 - Will the incident endanger the environment?
 - Is the material a hazard to other persons e.g. can it circulate or re-circulate through air conditioning?
 - Can spill be cleaned up without putting anyone in danger and at risk?
 - Where is the nearest chemical spill kit?
- Warn and/or evacuate employees/persons in the area and adjacent areas
- Place a notice or sign at the entrance or on door to area: **DANGER - NO ENTRY** + Danger Tape as a cross X over door
- Remove all sources of ignition (if possible)
- Interview persons/employees of that working area (if available) to find out what happened
- Interview persons concerned in incident (if possible) to find out what was spilled and approximately how much, plus concentration of spilled material
- Check Safety Data Sheet (SDS) covering contents of containers (if possible), which will give an idea how to deal with material
- Inform the Chemical Safety Officer of what type of spillage (chemical or chemicals), the seriousness and/or quantity of spillage, if there are any contaminated persons, if more chemical spill kits will be needed etc.
- Prevent the spread of fumes or aerosols by switching off air conditioning (where possible)
- Switch off lighting to areas (if possible)
- Switch off all power supply to area (if possible)
- Contain the spill or leak
- Close all gas valves & cylinders in vicinity
- Windows should be opened (as appropriate)
- Doors should be closed
- In case of fire follow the FIRE SOP
- In case of any fumes follow the GAS/FUME LEAK SOP
- In case of someone being injured or overcome by the chemical or its fumes follow the MEDICAL EMERGENCY SOP
- Assist in moving any injured or contaminated persons to a safe place and provide medical or first aid (if trained & possible) or ask H&S Officer to send first aider/s
- Assist contaminated persons to emergency shower and eye wash stations
- If evacuation is decided upon, commence evacuation by following the procedure in Annexures 2

EMERGENCY SOP: CHEMICAL SPILL ON PERSON AND/OR ON FLOOR
PROCEDURE

- 2) Call out for help and assistance
- 3) ***First aiders*** help person to the safety shower
- 4) Help person to take off lab coat and any other clothing
- 5) Pull shower handle and ensure person gets flushed for at least 15min
- 6) In ER Shower Kit is a clean bath sheet towel & lab coat – it should be stored close to shower for person to dry off & put on
- 7) Visit a medical doctor immediately
- 8) ***Staff MUST take their ID and a completed WCL2 form - completed and signed by him/her and his/her supervisor with to the doctor or hospital.***

- 9) **SHE Reps Duties:**
 - a. Evacuate everyone in lab immediately
 - b. Call/WhatsApp the OHS Officer (**0836167474**) and/or Lab H&S Specialist **x4549 or 0836406706**
 - c. Cordon off the spill area with cones and hazard tape (Chemical Spill Kit)
 - d. If CSO is not available - put on all the necessary protective clothing: lab coat, safety goggles, nitrile gloves and respirator (the latter two in Chemical Spill Kit)

 - e. ***If it's a liquid:***
 - Take absorbent material vermiculite (Chemical Spill Kit) or absorbent towel paper - place it all around the spill to keep it from spreading.
 - Now throw the rest of the vermiculite (Chemical Spill Kit) over spilled chemical itself. Leave it to absorb the chemical for approximately 5 minutes.
 - If it's an acid - throw the sodium carbonate (Chemical Spill Kit) over the spill
 - If it's mercury - throw the sulphur (Chemical Spill kit) over it.
 - Sweep up everything and place it in the thick red bag (Chemical Spill Kit).

 - f. Tag the bag and place it in a 50L blue open head plastic drum inform the Chemical Safety Officer of incident and chemical waste.
 - g. Write the name/s of chemical/s spilled on drum.
 - h. Wait for the CFO's instructions on when to bring drum to waste store.

Items needed in lab for this event:

- 1) Stocked Chemical Spill Kit
- 2) Bath sheet towel
- 3) Clean lab coat

ANNEXURE 5: CHEMICAL SPILLAGE KIT

Contents of Spill Kit		Items Outstanding in Kit
1	50L Blue Open Lid Drums	
2	Bogey for Drum (wheels)	
3	Fire Blanket x1 (if not in lab already)	
4	Red Biohazardous Bag (100µm) halfway filled with Vermiculite x1	
5	Spark proof (plastic) Scoop/brush x1	
6	Nitrile Gloves (Small/Medium) x1	
7	Safety Goggles x1 (if not have already)	
8	Red Biohazardous Bag (100um) x1	
9	Tongs x1	
10	Tags for Red Biohazardous Bags x2	
11	Respirator + cartridges {Small/Medium 3M respirator that fits with 6059 3M cartridges; 2 x Cartridges 6059 (twin pack)} – check expiry dates on cartridges	
12	Sodium Bicarbonate (Acid spills) - 500g	
13	Charcoal Activated (Flammable spills) - 500g	
14	Sodium Bisulphate (Peroxide spills) - 500g	
15	Kimdri Paper Towels (pk of 20)	
16	Cones to cordon off area x 4	
17	Danger Tape x1	
18	Absorbent Pads x 3 (from chemicals ordered)	
19	Bag containing Vermiculite	

ANNEXURE 6: FIRST AID KIT CHECKLIST

Item		Quantity per kit	TO ORDER: Outstanding items
1	Burnshield (50ml)	1	
2	Cotton wool for padding	1x 100 g	
3	CPR mouth pieces or similar devices	2	
4	Crepe Roller bandages (100mm x 5m)	2	
5	Crepe Roller bandages (75mm x 5m)	2	
6	First aid dressing (75mm x 100mm)	2	
7	First aid dressings (150mm x 200mm)	2	
8	Ice pack (instant)	1	
9	Logbook	1	
10	Mercurochrome	1	
11	Non-allergenic adhesive strip (25mm x 3m)	1	
12	Packet of adhesive dressing strips (minimum quantity 10 assorted sizes)	1	
13	Pair of forceps (for splinters)	1	
14	Pair of scissors (minimum size 100mm)	1	
15	Pairs large and pairs medium disposable latex gloves	4 (2 x L and 2 x M)	
16	Roll of elastic adhesive (25mm x 3m)	1	
17	Set of safety pins	1	
18	Small Hand Sanitizer Bottle	1	
19	Surgical Masks	2	
20	Sterile gauze (minimum quantity 10)	1 x 10 pack or 2 x 5 pack	
21	Straight splints	2	
22	Swabs for cleaning wounds – alcohol or cotton “make-up” removal pads	1	
23	Triangular bandages	2	
24	Wound cleaner / antiseptic	1 x 50 mL	

