



# WORKPLACE INSPECTIONS AND LABORATORY AUDITS 101

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FRSC FRACI CChem, FACTRA  
Director and Principal Chemist and Toxicologist

# Group Exercise

FLAMMABLE

FLAMMABLE

FLAMMABLE



ACETONE

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Harmful: may cause lung damage if swallowed. Vapours may cause drowsiness and dizziness. Keep out of reach of children. Keep away from sources of ignition - No Smoking. Wear suitable protective clothing and gloves. If swallowed, do not induce vomiting. Seek medical advice immediately and show the container or label.

#### FIRST AID MEASURES

Eyes: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.  
Skin: Wash off immediately with soap and plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. Obtain medical attention.  
Ingestion: DO NOT induce vomiting. Immediate medical attention is required. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.  
Inhalation: Move to fresh air in case of accidental inhalation of vapours. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, provided a qualified operator is available. Call a physician immediately.

Facilement inflammable. Irritant pour les yeux. L'exposition répétée peut causer la sécheresse de la peau ou des gerçures. Nocif: peut provoquer une atteinte des poumons en cas d'ingestion. L'inhalation de vapeurs peut provoquer somnolence et vertiges. Conserver hors de la portée des enfants. Conserver à l'écart de toute flamme ou source d'étincelles - Ne pas fumer. Porter des vêtements de protection adéquats et des gants. En cas d'ingestion, ne pas faire vomir. Consulter immédiatement un médecin et lui montrer l'emballage ou l'étiquette.

#### PREMIERS SECOURS

Yeux: Rincer immédiatement et abondamment à l'eau, y compris sous les paupières, pendant au moins 15 minutes. Appeler un médecin.  
Peau: Laver immédiatement et abondamment avec de l'eau et du savon. Ôter immédiatement les vêtements et les chaussures contaminés. Laver les vêtements contaminés avant de les réutiliser. Appeler un médecin.  
L'ingestion: Ne pas faire vomir. Un examen médical immédiat est requis. Si le vomissement se produit naturellement, faites appuyer la victime pour réduire le risque d'aspiration.  
L'inhalation: Amener la victime à l'air libre en cas d'inhalation des vapeurs. En cas d'arrêt respiratoire, pratiquer la respiration artificielle. Si la respiration est difficile, donnez de l'oxygène, pourvu qu'un opérateur qualifié soit disponible. Appeler immédiatement un médecin.

See Material Safety Data Sheet  
VWR International 1310 Goshen Parkway, West Chester, PA 19380

Voir la Fiche Signalétique

**BDH** Acetone

Production Grade

(Meets ACS Reagent Specifications)

(CH<sub>3</sub>)<sub>2</sub>CO

CAS No 67-64-1

MEETS ACS SPECIFICATIONS

Water	0.5% max.
Residue after Evaporation	0.001% max.
Assay (GC, excluding water)	99.9% min.
Solubility in Water	Passes test
Color (APHA)	10 max.
Titrate Acid	0.3 µeq/g max.
Titrate Base	0.6 µeq/g max.
Aldehyde (as HCHO)	0.002% max.
Isopropyl Alcohol	0.05% max.
Methanol	0.05% max.
Substances Reducing Permanganate	Passes test

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\*+H351BDH1101-1LP18\*



Acetone  
UN 1090

Lot No.:

Date Opened: \_\_\_\_\_



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# HAZARD IDENTIFICATION





# WORKSITE INSPECTIONS VS SAFETY AUDITS



# SAFETY AUDITS

An examination of the procedures available at a workplace (being either operating, maintenance or emergency procedures) and evaluating the effectiveness of the procedures in line with the occupational safety and health policy.

## ORGANISATIONAL FOCUS

# SAFETY AUDITS

Often, the use of checklists focuses one away from evaluating workplace procedures. This is why workplace safety procedures audits are used to identify and evaluate existing operating, maintenance and emergency procedures:

- ✓ Are they in place?
- ✓ Are people aware of them?
- ✓ Are they being followed?
- ✓ Are they adequate?

# SAFETY AUDITS

The areas covered would include the following:

- ✓ Safety equipment - performance and operator's understanding.
- ✓ Permit systems - procedures and checks.
- ✓ Emergency plans - procedures, operator's understanding and practices.
- ✓ Training - extent, levels, comprehension testing and reinforcement.
- ✓ Contractors - training, procedures, checks and performance
- ✓ Consultation
- ✓ Incident management

# SAFETY AUDITS

- ✓ Compliance against a criteria
  - ✓ AS/NZS 2243 – Safety in Laboratories
  - ✓ AS/NZS 2982 – Laboratory Design and Construction
  - ✓ AS/NZS/ISO 45001 – OHS Management Systems
- ✓ Audit Scope
- ✓ Audit Team
  - ✓ Lead Auditor
  - ✓ Technical Specialists
- ✓ Evidence
  - ✓ Physical Inspection
  - ✓ Review of relevant documents
    - ✓ Training records
    - ✓ Worksite/workplace inspection check lists
    - ✓ Incident Reports
    - ✓ Maintenance reports
  - ✓ Interviews with staff





**LisaJStevens**  
& ASSOCIATES  
HEALTH AND SAFETY CONSULTANTS

## **ISO 45001:2018 Internal Audit Checklist**

**Occupational Health & Safety Management System Compliance Auditing**

**[Organizations Name ]**

**[Location]**

**[Date]**

**COMMERCIAL-IN-CONFIDENCE**

## 5.2 OH&S POLICY

		Audit Question	Audit Findings (Score '1' per box)				Audit Evidence	Opportunities for Improvement (OFI)
		Has top management, established, implemented and maintained an OH&S policy that:					Provide reference to documented information to justify the finding	Provide suggestions for process improvement
		includes a commitment to provide safe and healthy working conditions for the prevention of work- related injury and/or ill health and is appropriate to the purpose, the size and context of the organization and to the specific nature of its OH&S risks and OH&S opportunities						
		provides a framework for setting the OH&S objectives						
		includes a commitment to satisfy applicable fulfil legal requirements and other requirements;						
		includes a commitment to eliminate hazards and reduce OH&S risks (see 8.1.2);						
		includes a commitment to continual improvement of the OH&S management system;						
		includes a commitment to consultation and participation of workers, and where they exist, workers' representatives.						
		<ul style="list-style-type: none"> <li>The OH&amp;S policy shall: <ul style="list-style-type: none"> <li>be available as documented information;</li> <li>be communicated within the organization;</li> <li>be available to interested parties, as appropriate;</li> </ul> </li> </ul> be relevant and appropriate.						

# WORKSITE INSPECTIONS

An inspection of a workplace aimed at identifying hazards.

The inspection should be performed with a checklist and be periodically reviewed.

Workplace inspections are a "**a SNAPSHOT**" of the processes and procedures occurring at a **workplace**



# PURPOSE OF WORKPLACE INSPECTIONS

Workplace health and safety inspections are a useful tool to help:

- ✓ identify hazards
- ✓ identify assess the risks
- ✓ identify maintenance issues
- ✓ identify issues that need to be reported



## Section 1 – Inspection Checklist

Ref No.	Inspection Item	Yes	No	N/A
<b>1. Preventing slips trips and falls</b>				
1.1	Entrance, doorways, and floors are kept free from obstruction e.g., boxes.			
1.2	Floors are in good condition with no cracks, dips, holes, tears, or rips.			
1.3	Floors are clean (e.g., no rubbish) and not slippery.			
1.4	Computer and other electrical leads and cables are kept clear of pathways and walkways.			
1.5	Electrical cords are kept away from traffic areas to prevent trip hazards.			
1.6	Furniture is in good condition (e.g., no damage, seating is securely fixed to chair legs/bases).			
<b>2. Manual handling and storage</b>				
2.1	Items are stored so that they are not at risk of falling.			

LABORATORY DESIGN AND CONSTRUCTION CHECKLIST			
DESIGN AND CONSTRUCTION	YES	NO	COMMENT
Is the laboratory protected from direct sunlight?			
Are the floors smooth, impervious, chemically resistant, compatible with the operations and operator comfort, slip resistant, and easy to clean?			
Are floor joints avoided or sealed against chemical penetration?			
Are floor openings or accesses designed to prevent penetration of liquids?			
Are the floors covered up the walls and other permanent structures?			
Are the walls smooth, impervious, chemically resistant (for the type of the laboratory), and easy to clean?			
Are ceilings smooth, non-absorbent, easily cleaned and with flush light fittings?			
Are the benchtops smooth, impervious, chemically resistant, scratch resistant, easy to clean, anti-static (where appropriate), glare resistant and have joints that are sealed to prevent chemical penetration?			
Are the benches and fixtures supported in such a manner as to facilitate cleaning of the floor beneath them?			
Is the shelving chemically compatible with the goods stored?			
Are the fume cupboards in accordance with AS 2243.8 — Safety in laboratories — Fume cupboards?			
Are lunch and rest rooms not included in the laboratory area?			



# WORKSITE INSPECTIONS



# PROCEDURE

The minimum requirement is that a written procedure for inspections is developed which:

- ✓ defines responsibility;
- ✓ stipulates the frequency of inspections (which should be on a regular basis);
- ✓ gives precedence to consultation with worker safety and health representatives;
- ✓ recommends appropriate corrective action within specified timeframes;
  - ✓ sets priorities for corrective action;
  - ✓ assigns personnel for corrective action;
  - ✓ provides feedback to the safety and health committee;
  - ✓ provides feedback to work groups; and
  - ✓ has a follow-up or review of corrective action.

# DEPT OF EDUCATIONAL TRAINING REQUIREMENTS

- ✓ Schools must undertake workplace safety inspections quarterly (once per term)
- ✓ They are conducted using workplace safety inspection checklists so that known hazards are monitored and potential ones identified.
- ✓ Information from workplace safety inspections must then be discussed with the principal, their delegate, health and safety representatives and relevant school staff.
- ✓ When completed regularly, workplace safety inspections provide information on potential and identified hazards so that long term, sustainable improvements are made and monitored.
- ✓ Hazards identified recorded and managed using eduSafe Plus
- ✓ Schools must update their OHS risk register

# RESPONSIBILITIES

## Principal

- ✓ Ensure that an effective, participative inspection process is developed for each work group/area.
- ✓ Participate in the inspections on a regular basis.
- ✓ Ensure action plans and the follow-up process are completed.

## Supervisors

- ✓ Ensure that the inspection process is implemented within the respective work group.
- ✓ Participate in
  - ✓ the development of inspection checklists for each area.
  - ✓ inspections and ensure remedial action is prompt.
- ✓ Monitor recommended action to ensure resolution.

## Employees:

- ✓ Participate in inspections and their development and implementation.
- ✓ Recommend practical solutions to identify risks

## Health and Safety Representative

- ✓ Tag a long!

# IMPORTANT TOOLS AND SKILLS

**CHECKLIST**

**LISTEN**

**OBSERVE**

**ASK QUESTIONS**

**RECORD**

**CONSIDER**



# CHECKLIST

- ✓ Relevant to the area you are inspecting
- ✓ Logical order
- ✓ The checklist considers the:
  - ✓ Access/egress
  - ✓ Electrical safety
  - ✓ Chemical safety
  - ✓ Environment including
    - ✓ noise,
    - ✓ vibration,
    - ✓ lighting,
    - ✓ temperature and
    - ✓ ventilation
- ✓ Equipment, including tools and materials
- ✓ Work processes, including how the worker interacts with elements



**Workplace Safety Inspection Checklist**

General Safety

	Not Satisfied	Somewhat Satisfied	Comments
The workplace is clean and orderly.	<input type="radio"/>	<input type="radio"/>	
Floors are clear and aisles, hallways, and exits are unobstructed.	<input type="radio"/>	<input type="radio"/>	
Floor surfaces are kept dry and free of slip hazards.	<input type="radio"/>	<input type="radio"/>	
Stairways, sidewalks, and ramps are free of defects (e.g. damaged treads, frayed carpet).	<input type="radio"/>	<input type="radio"/>	

# LISTEN

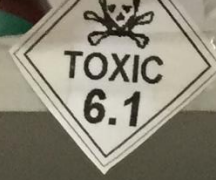
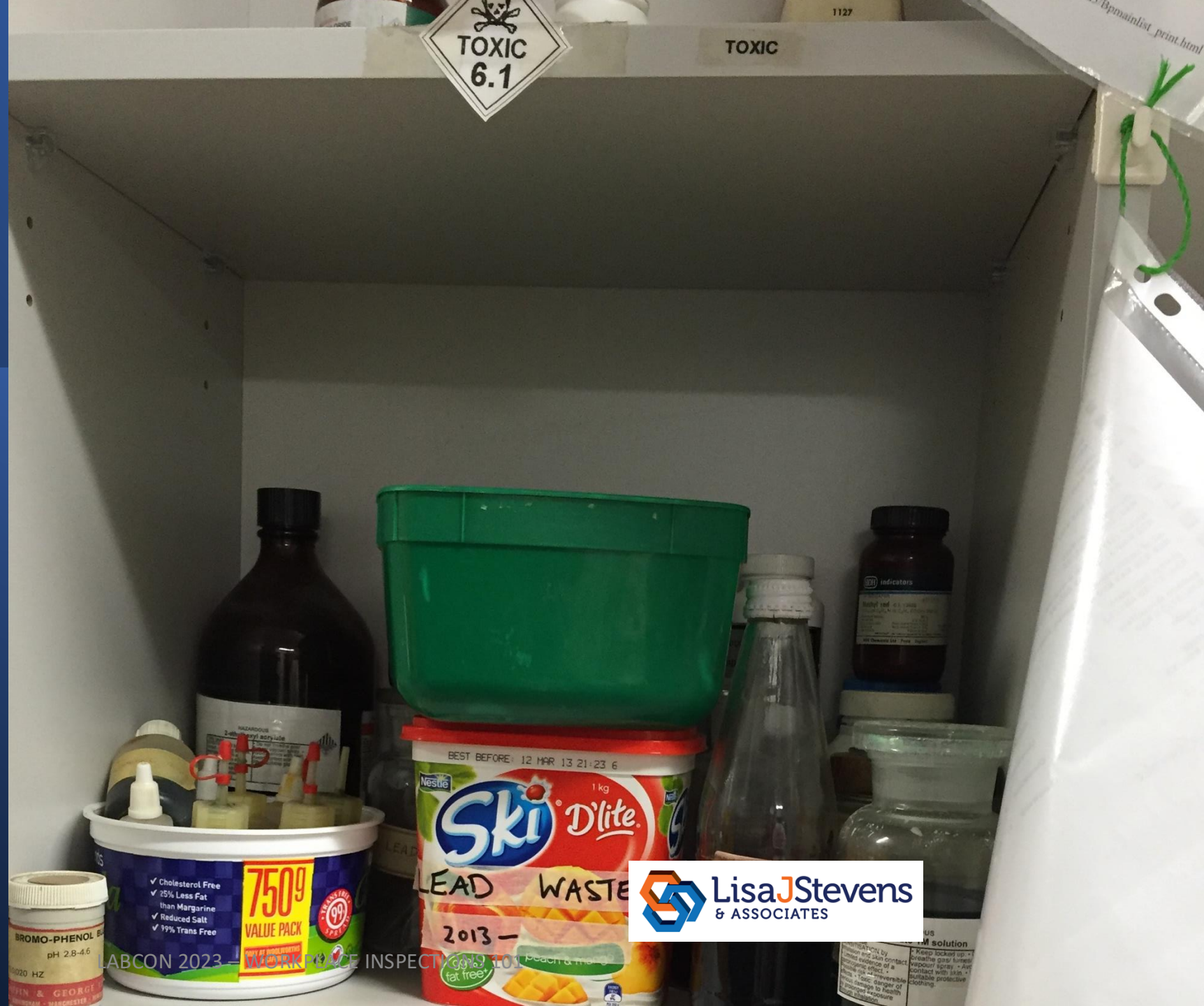
- ✓ Is it a noisy environment
- ✓ What are staff members telling you?
- ✓ What are they not telling you?

# OBSERVE

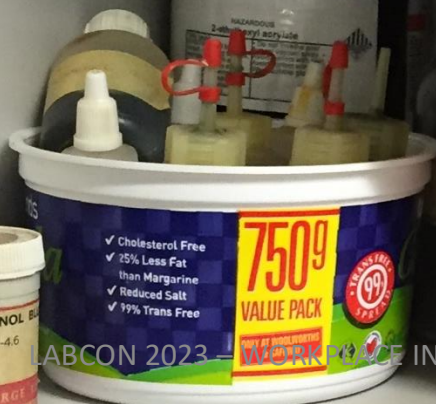
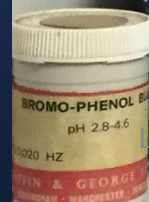






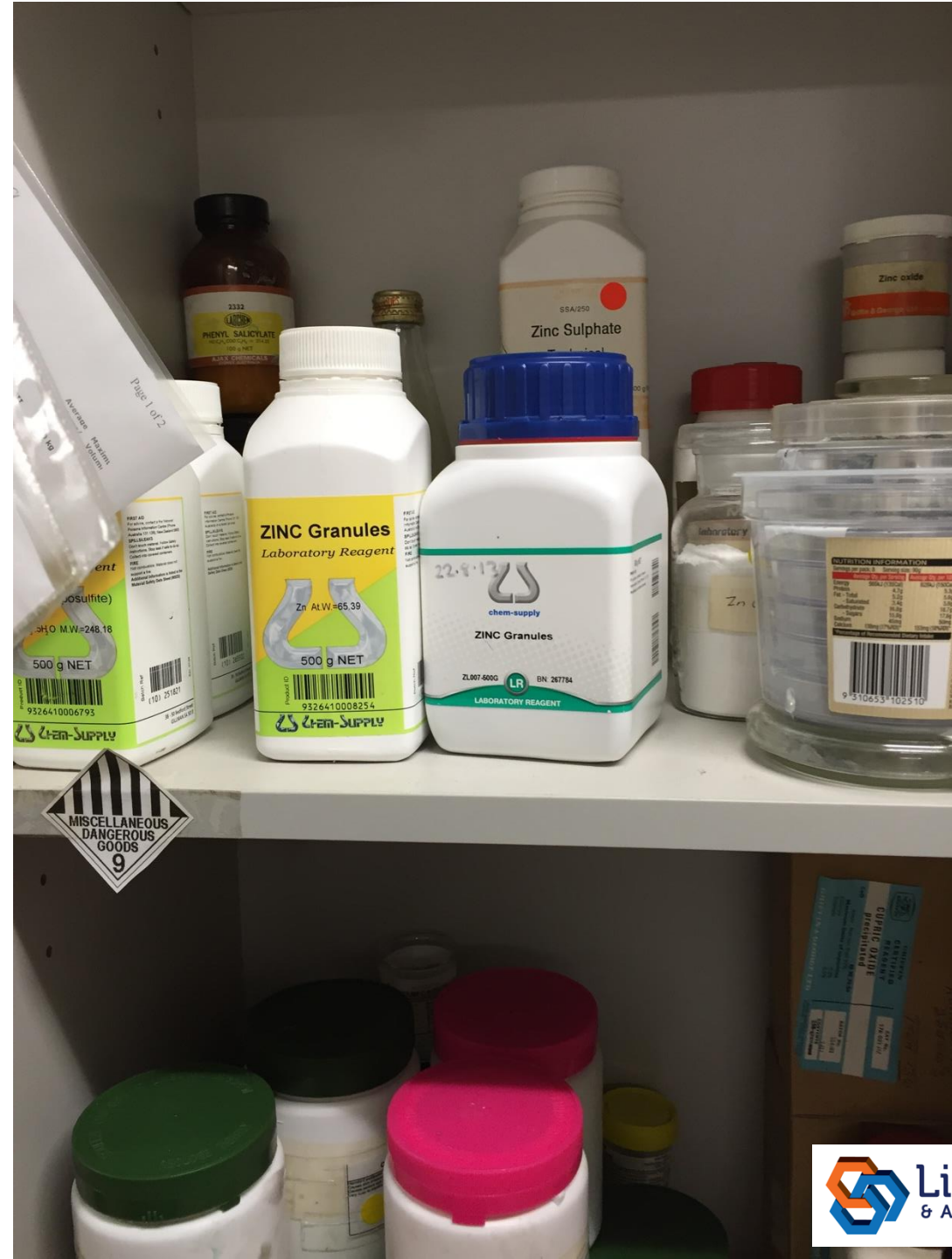


TOXIC




Lisa J Stevens  
& ASSOCIATES





## Group Excercise

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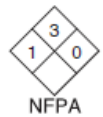
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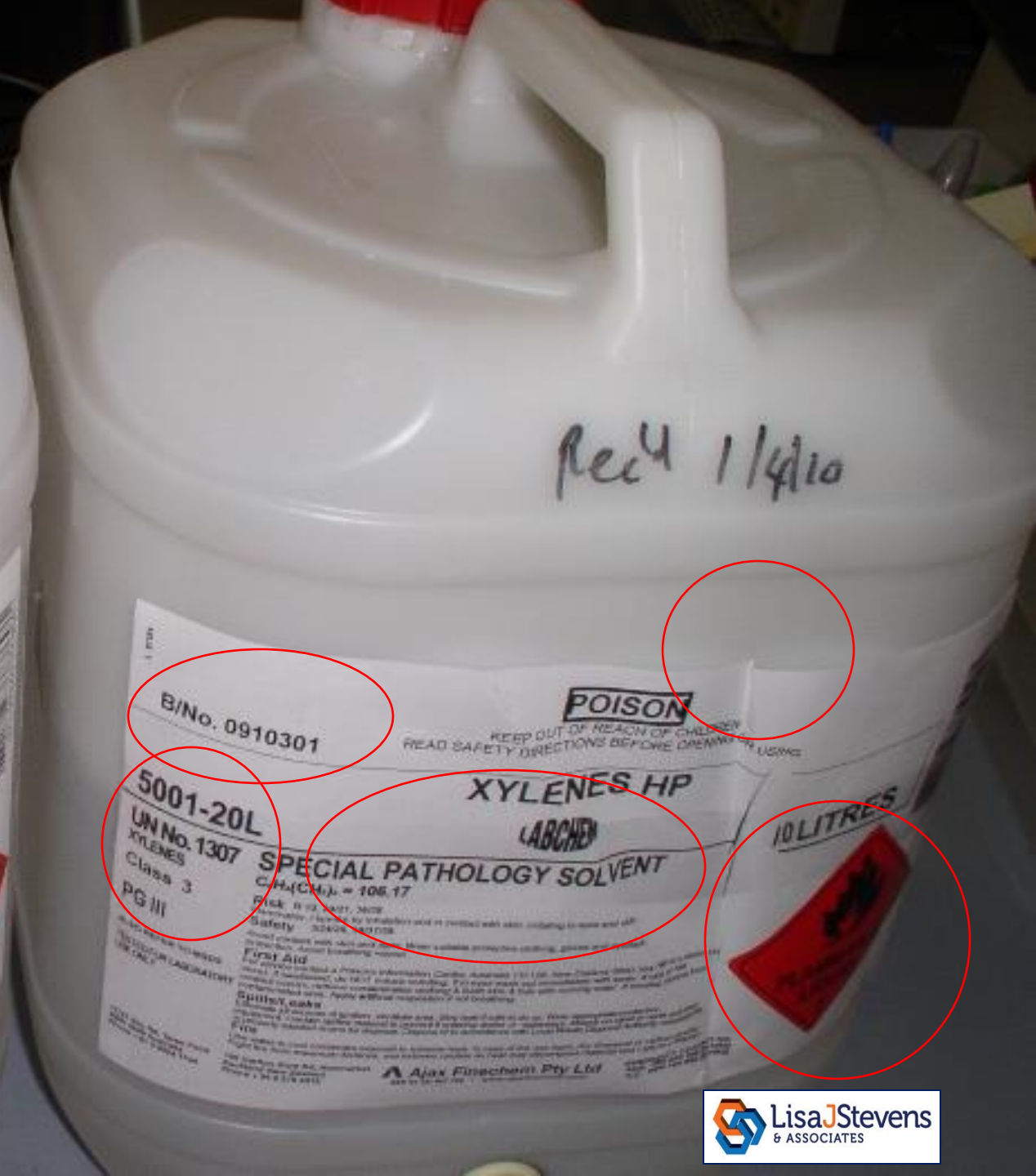
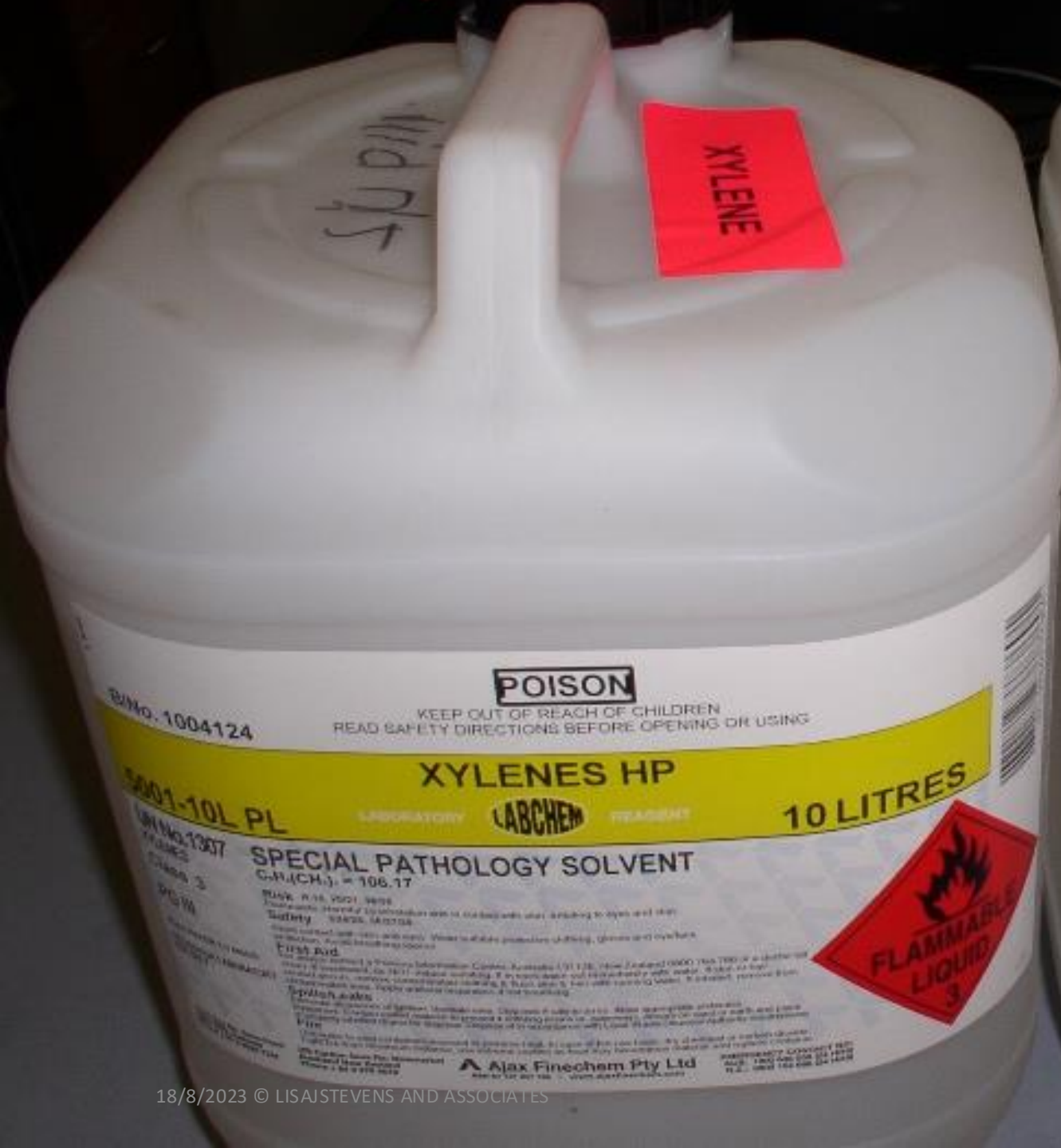
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# ASK QUESTIONS

If you don't know,  
can't see it, or not  
sure...

ASK!



# REPORTING BACK



# THINGS TO CONSIDER AFTER A WORKPLACE INSPECTION

- ✓ How the findings and corrective actions are being tracked, managed and completed.
- ✓ Who is responsible for ensuring findings are closed out in a timely manner.
- ✓ Whether the findings and corrective actions were discussed with the relevant work group.

## **If you identify a serious danger**

- ✓ If you identify an immediate danger during a workplace inspection, immediately inform management.
- ✓ Depending on the level of risk, work may need to stop until the risk is eliminated or adequate controls are implemented.



# AUDIT TOOLS

- Measuring tape
- Camera/Mobile phone
- Nitrile Gloves



.... AND ON TO THE PRACTICAL ACTIVITIES



# THANK YOU



## POSTAL ADDRESS

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NEWPORT, VIC, 3015



## CONTACT NUMBERS

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Lisa Stevens	0417843798



## WEBSITE

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[info@labsafety.com.au](mailto:info@labsafety.com.au)



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& ASSOCIATES

Chemical Management and Laboratory Safety Specialist

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