Session 10

PLANNED SAFETY INSPECTION

SAFETY INSPECTIONS

HELPFUL in detecting potential causes of ACCIDENTS.

However,
INSPECTIONS alone
Can not **isolate**
Causes of **ACCIDENTS**

INSPECTIONS are most useful when integrated into the Company's SAFETY PROGRAM

Types of Inspections

Ongoing	• Part of the job • Frequent • Corrective actions- immediate
Pre-operation	• New or modified machines • Often done in shutdown
Periodic	• regular, planned • part of preventive maintenance

INSPECTIONS: whose responsibility?

	**Safety Officer**	- **Conduct inspections with or without inspection teams** - **Inspections should be at regular intervals** - **More frequent inspections where dangers are likely to appear**
	**Workers**	- Daily inspections by operators of machines and equipment - Inspection checklist should be provided - Report potential dangers immediately
	**Supervisors**	- Conduct spot inspection tours daily - Check compliance on safety protocol - Immediately address violations and deviations from standard

Should supervisors be in the team?

Advantages

- ✓ _____
- ✓ _____
- ✓ _____

Disdvantages

- ✓ _____
- ✓ _____
- ✓ _____

J3 TRAINERS & CONSULTANTS INC.

Inspection Teams

- Maintain an attitude of firmness, friendliness and fairness
- Should be easily identified (by the badge or uniform they wear
- Inspection is part of every phases of production
- Regular element of the Standard Operating Procedures

Inspection Teams

- Appointed from as many departments
- No permanent status, reconstituted at regular intervals
- As many workers are given opportunity to participate
- Inspections are planned part of the safety program

Objectives of inspections

Maintain safe work environment

Ensure that workers follow procedures

Maintain product quality and profitability

Avoid accidents

Determine compliance with standards

Inspections: Planning, Timing & Preparation

SCHEDULE

When there is much opportunity to view operations at minimum interruptions

ROUTES

Should be planned in advance.

Vary time and day to be able to check the widest possible variety of conditions

GOOD TO HAVE

Review previous accidents that happened in the area

Use the same checklist with previous inspections

What to inspect?

FLOORS

- Damaged/worn-out surfaces
- Slippery portion
- Holes, undesired openings
- Cracks, sagging, shrinking, material warping
- Deteriorated parts

What to inspect?

STAIRWAYS

- Treads & risers – uniform and in good condition
- Handrails secured
- Generally, good condition
- Lighting is sufficient
- Free of clutters

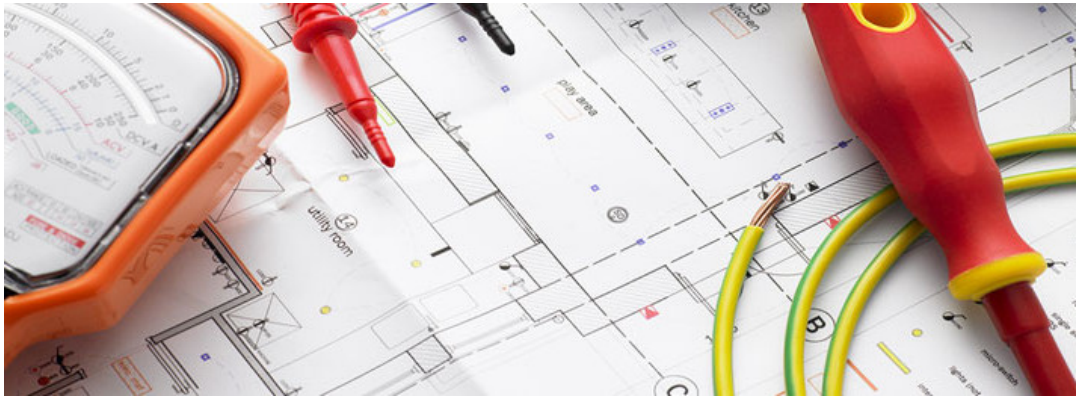
What to inspect?

HOUSEKEEPING

What to inspect?

FIRE PROTECTION

ELECTRICAL INSTALLATIONS

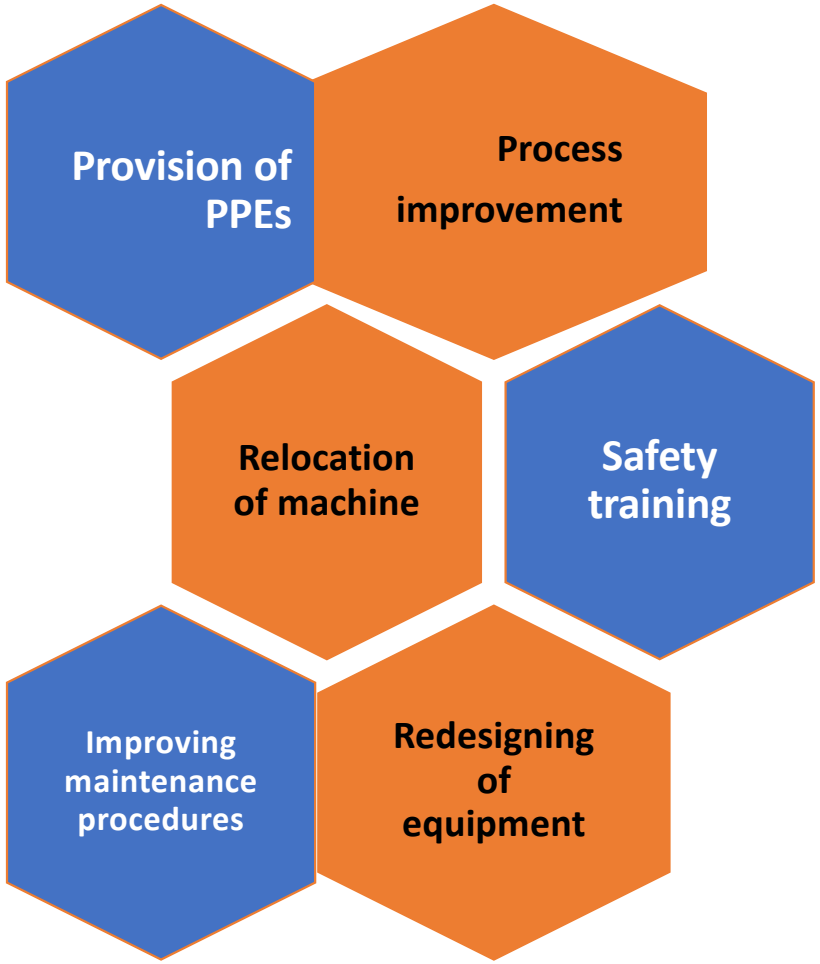


What to inspect?

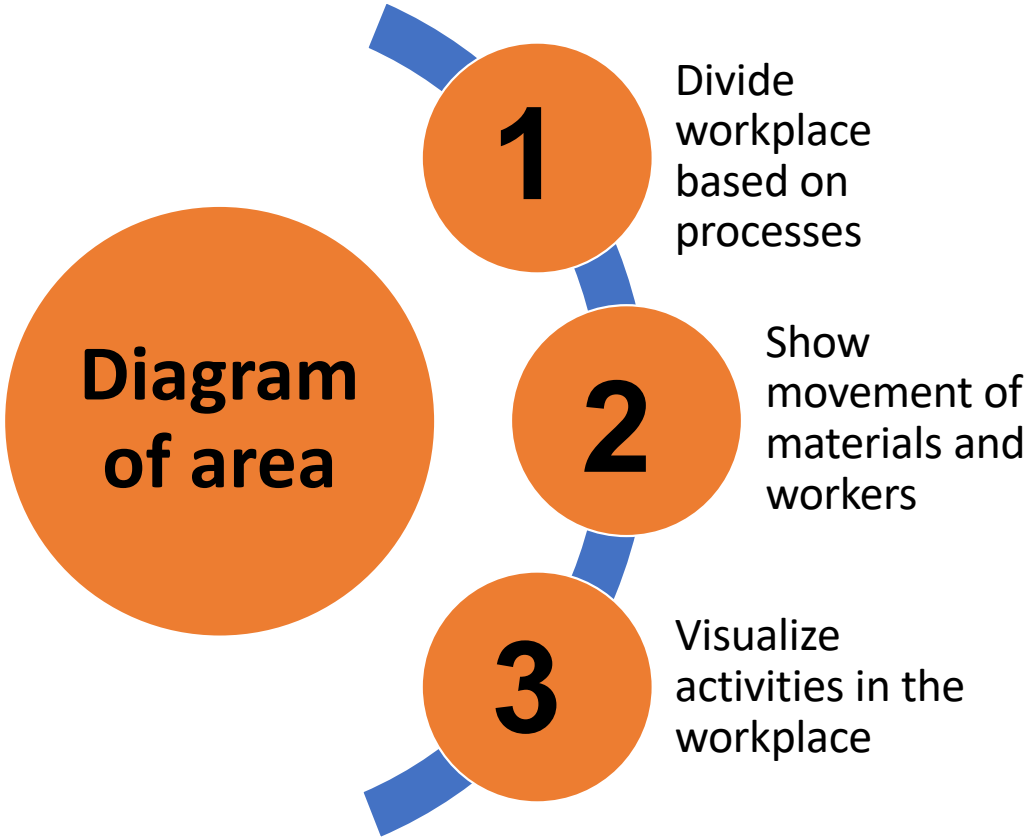
LIFTING EQUIPMENT

MACHINE GUARDING

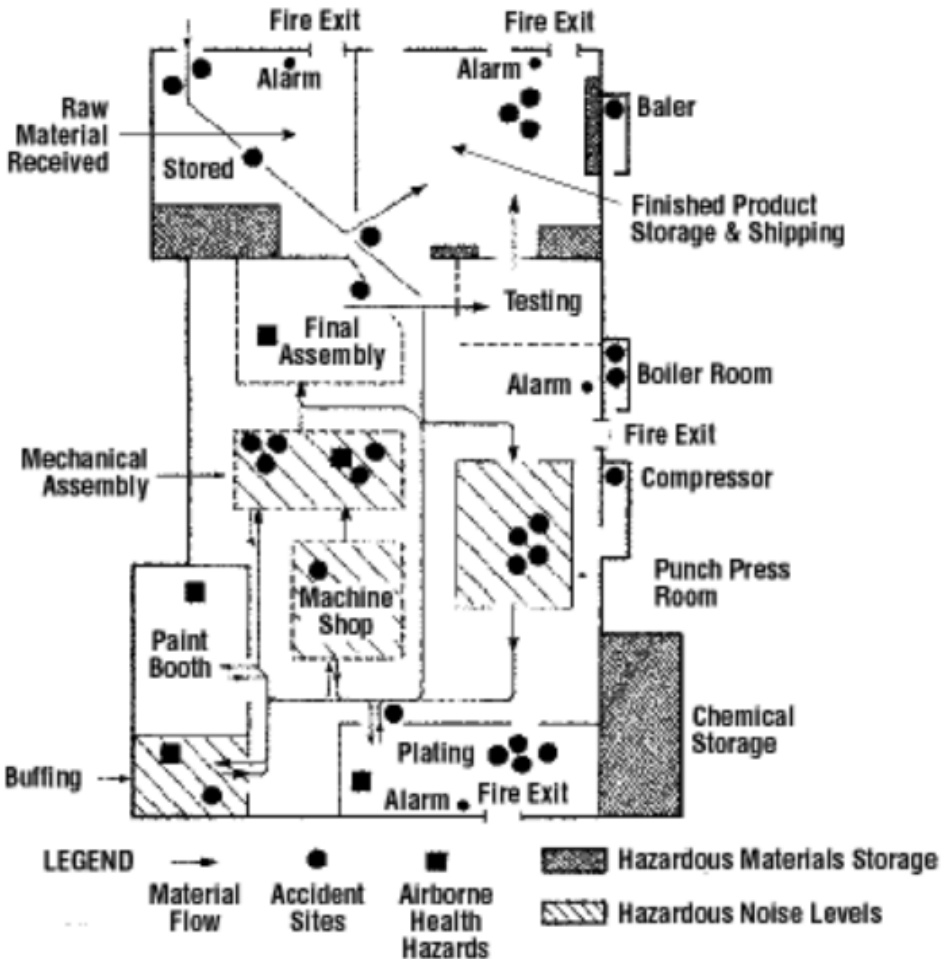

Action!


Provision of PPEs
Process improvement
Relocation of machine
Safety training
Improving maintenance procedures
Redesigning of equipment

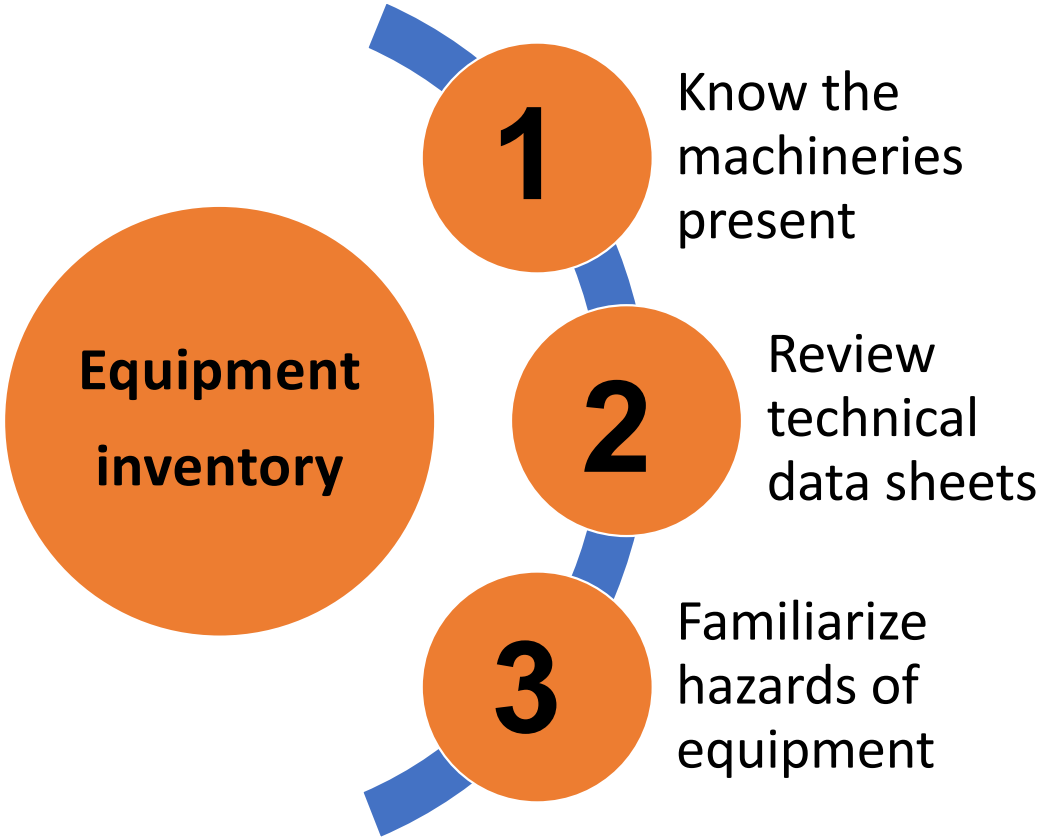
Information needed



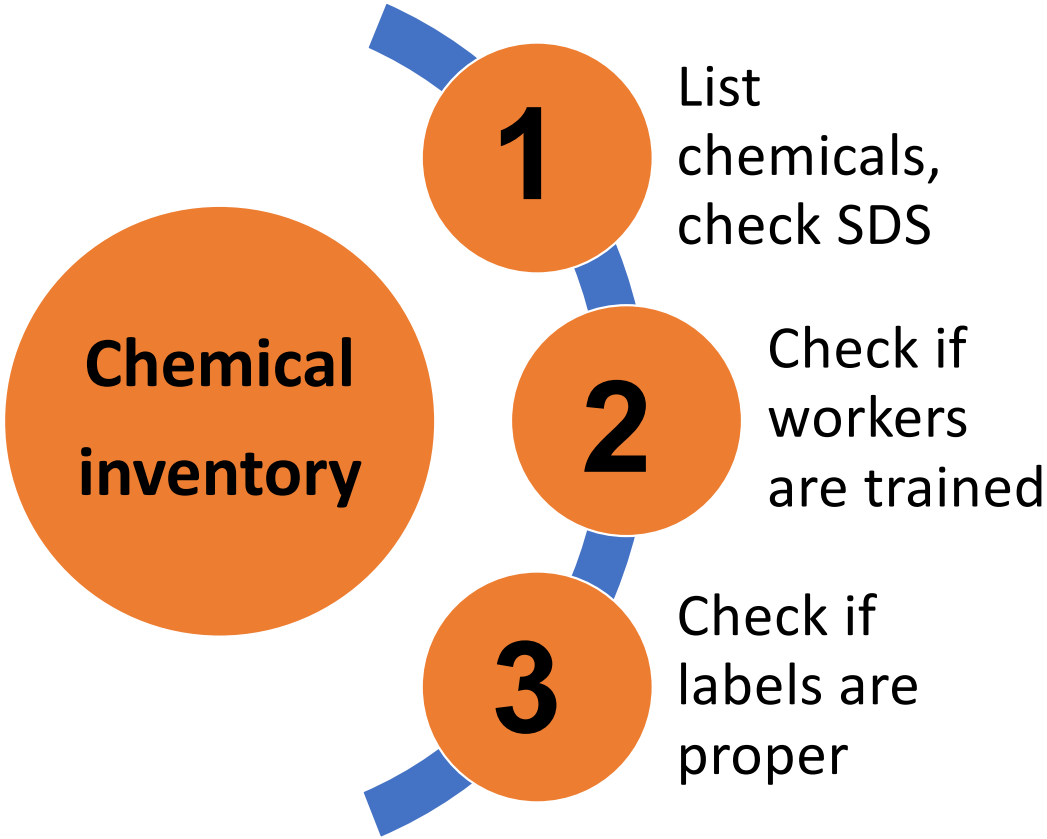
Appendix A: an example of a floor diagram



Information needed



Information needed



- ✓ **Use checklists only as basic tools**
- ✓ **Might miss other hazards**

J3 TRAINERS & CONSULTANTS INC.

Records and Reports

- important
- show what has been previously identified

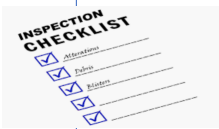
- show areas inspected/not expected before
- do not simply copy or repeat previous results

- use older reports to look for new issues
- note if changes have been effective

Checklists

Helps clarify inspection responsibilities

Controls inspection activities



Provides a report of inspection activities

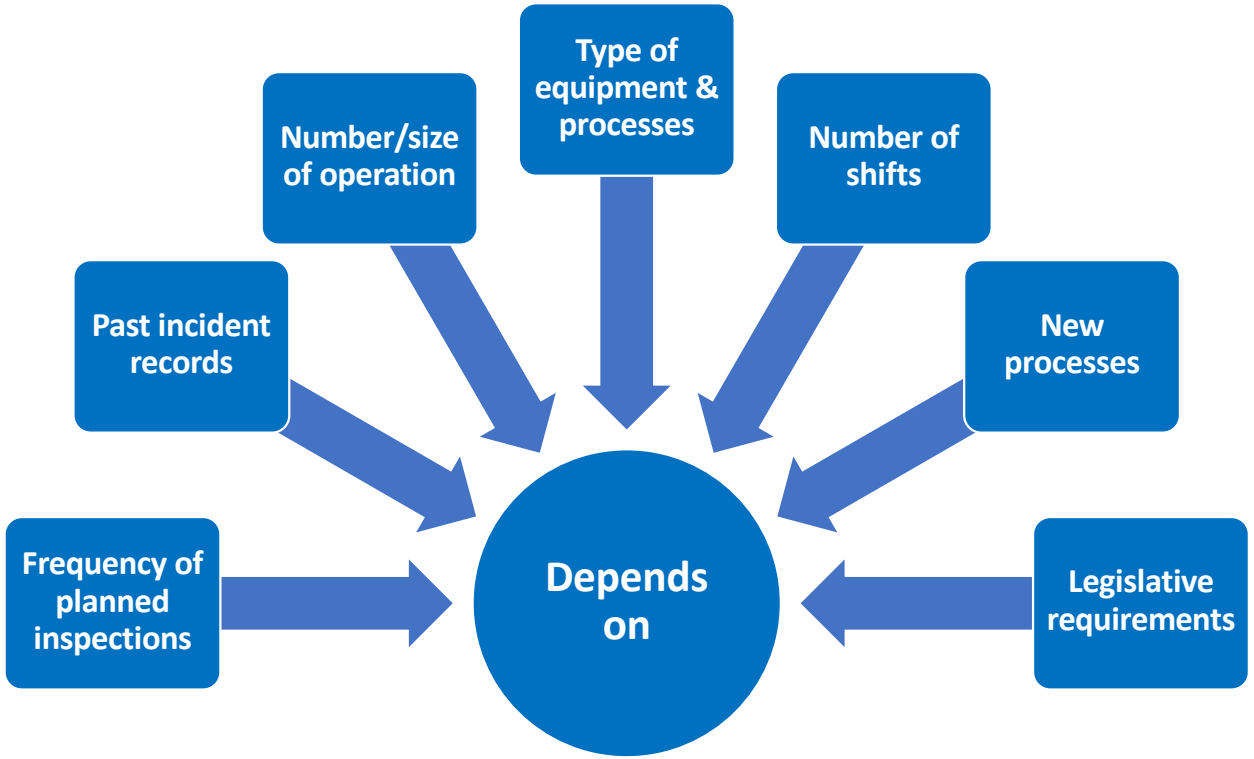
What to include in inspection checklist?

1	Environment	dust, gases, fumes, sprays, lighting, noise, ventilation
2	Buildings	windows, doors, floors, stairs, roofs, walls, elevators
3	Containers	scrap bins, disposal receptacles, barrels, carboys, gas cylinders, solvent cans
4	Electrical	switches, cables, outlets, connectors, grounding, connections, breakers
5	Fire protection equipment	extinguishers, hoses, hydrants, sprinkler alarm systems, access to equipment
6	Hand tools	wrenches, screwdrivers, saws, power tools, explosive actuated tools
7	Hazardous products	flammable, explosive, oxidizing, gases under pressure, corrosive, toxic/health hazards, biohazardous infectious, environmental

8	Materials handling	conveyors, cranes, hoists, hoppers, carts, dollies, bins, etc.
9	Personal protective equipment	hard hats, safety glasses, respirators, safety footwear, gloves, etc.
10	Pressurized equipment	boilers, vats, tanks, piping, hoses, couplings, valves, hydraulics, etc.
11	Production equipment	mills, shapers, cutters, borers, presses, lathes, robotics, etc.
12	Personnel support equipment	ladders, scaffolds, platforms, catwalks, staging
13	Powered equipment	engines, electrical motors, compressor equipment
14	Storage facilities	racks, bins, shelves, cabinets, closets, yards, floors
15	Walkways and roadways	aisles, ramps, docks, vehicle ways

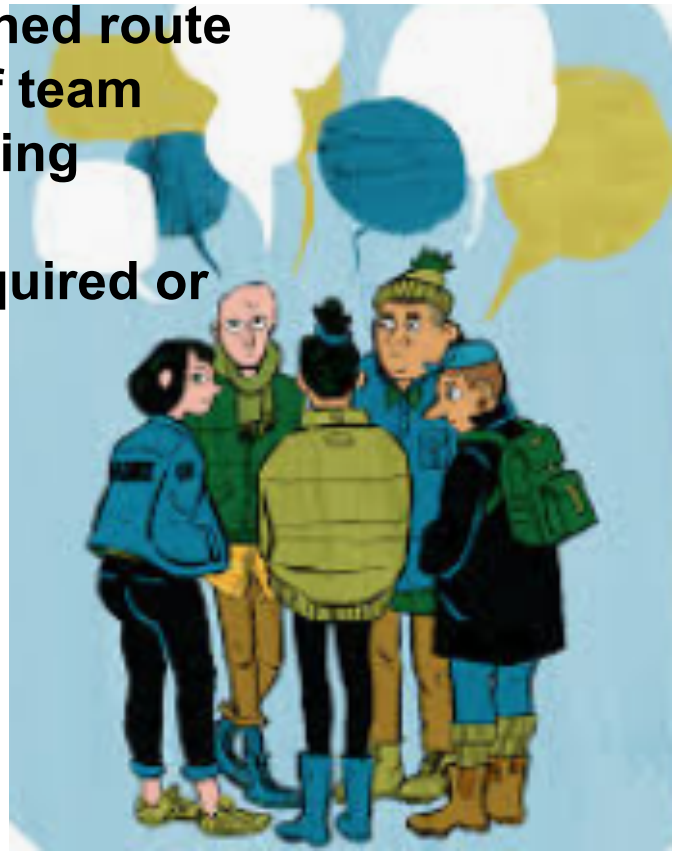
16	Protective guards	gear covers, pulleys, belt screens, work station, guards, railings, drives, chains
17	Safety devices	valves, emergency switches, cutoffs, warning systems, limit switches, mirrors, sirens, signs
18	Controls	start-up switches, steering mechanisms, speed controls, manipulating controls
19	Lifting components	handles, eye-bolts, lifting lugs, hooks, chains, ropes, slings
20	Hygiene and first aid facilities	drinking fountains, washrooms, safety showers, eyewash fountains, first aid supplies, contact list for first aid responders, etc.
21	Psychosocial hazards	discussion with or observation of employees who may mention work scheduling issues, workload (pace of work/too much/too little), hours of work, fatigue, issues that interrupt concentration, poor communication, conflicting demands, working in conflict with others, working in social isolation, or working alone

Frequency of Inspections?



How are inspections done?

- ✓ **Determine the planned route**
- ✓ **Area assignment of team**
- ✓ **“Huddle” before going to noisy areas**
- ✓ **Wear PPE when required or needed**

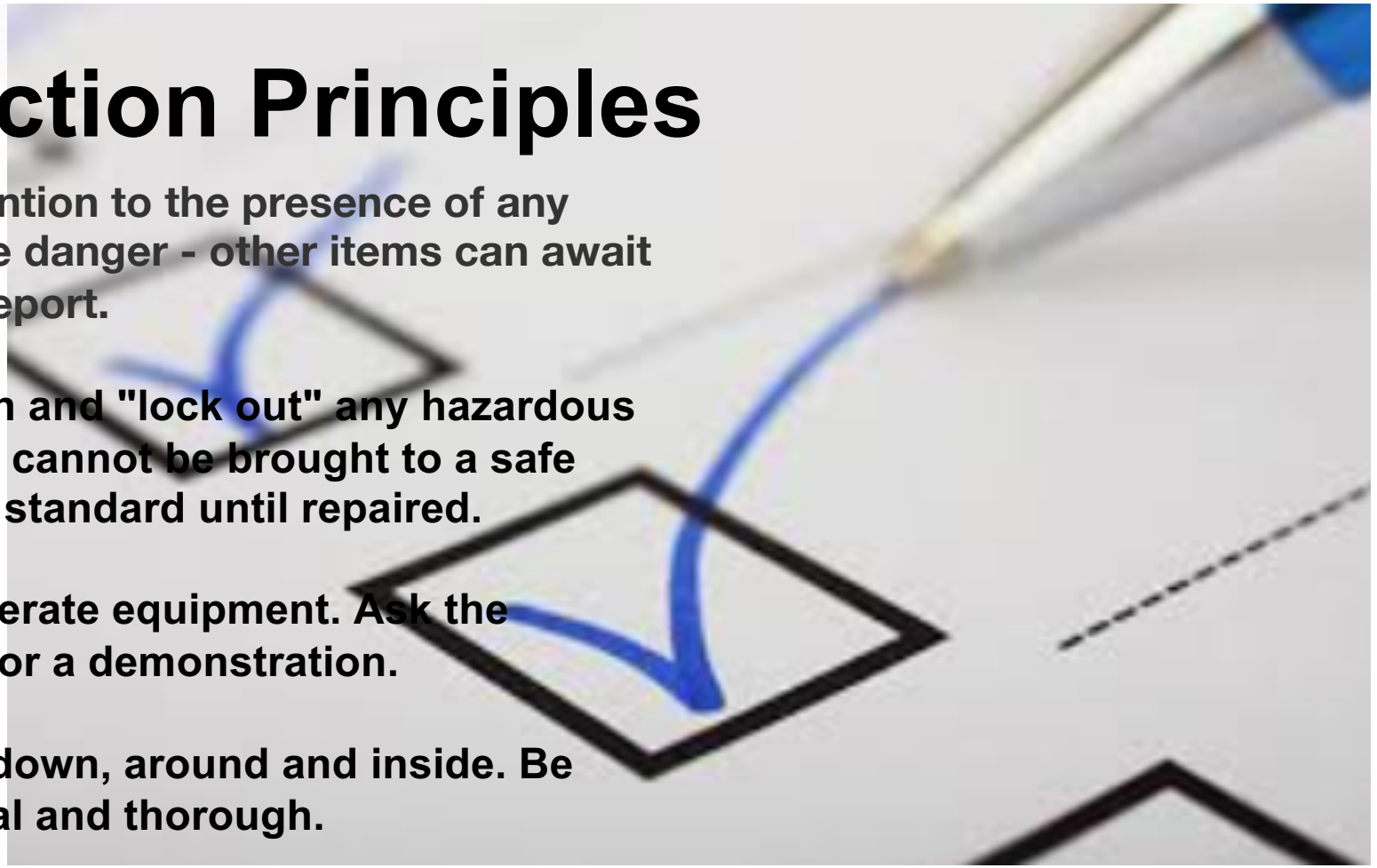


Look for deviations from accepted work practices

Common poor practices

- ✓ Using equipment without authority
- ✓ Operating at unsafe speed
- ✓ Removing guards/safety devices
- ✓ Using defective tools
- ✓ Standing/working under suspended loads
- ✓ Overloading
- ✓ Improper lifting
- ✓ Poor housekeeping

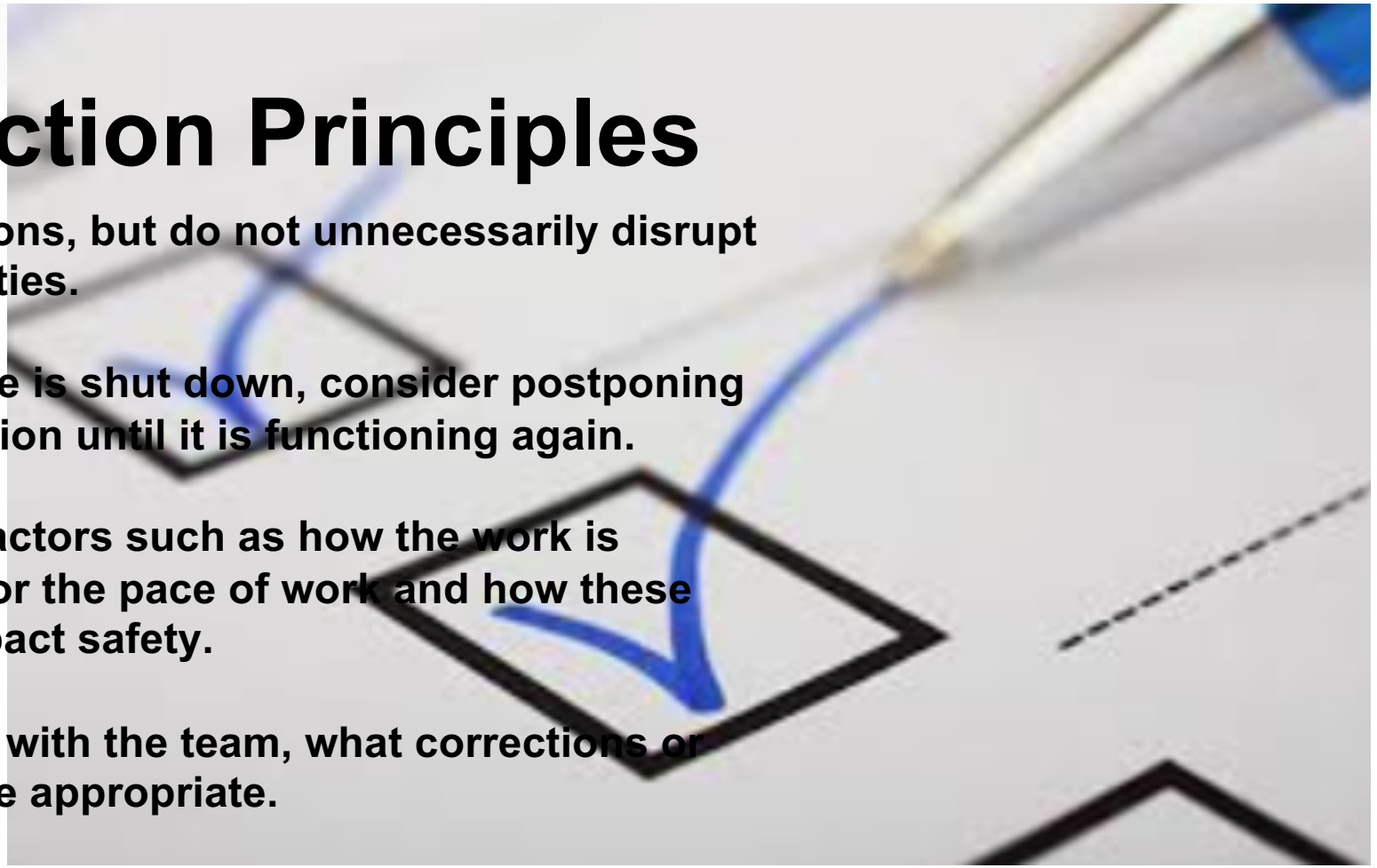
Inspection Principles



- ✓ Draw attention to the presence of any immediate danger - other items can await the final report.
- ✓ Shut down and "lock out" any hazardous items that cannot be brought to a safe operating standard until repaired.
- ✓ Do not operate equipment. Ask the operator for a demonstration.
- ✓ Look up, down, around and inside. Be methodical and thorough.
- ✓ Clearly describe each hazard and its exact location in your rough notes.

J3 TRAINERS & CONSULTANTS INC.

Inspection Principles



- ✓ Ask questions, but do not unnecessarily disrupt work activities.
- ✓ If a machine is shut down, consider postponing the inspection until it is functioning again.
- ✓ Consider factors such as how the work is organized or the pace of work and how these factors impact safety.
- ✓ Determine, with the team, what corrections or controls are appropriate.
- ✓ Take a photograph if you are unable to clearly describe or sketch a particular situation.

The Inspection Report

- ✓ write down the observed unsafe conditions and behaviors
- ✓ recommended methods of control
- ✓ Enter the department or area inspected, the date and the inspection team's names and titles on top of the page

Inspection Location: _____ Date of Inspection: _____

Department/Areas Covered: _____ Time of Inspection: _____

The Inspection Report

- ✓ State exactly what has been detected and accurately identify its location.

  Instead of stating "machine unguarded," state "guard missing on upper pulley #6 lathe in North Building."

- ✓ Assign a priority level to the hazards observed to indicate the urgency of the corrective action required.

  For example:

A	Major	requires immediate action
B	Serious	requires short-term action
C	Minor	requires long-term action

The Inspection Report

- ✓ Report issues in a concise, factual way.
- ✓ Management should be able to understand and evaluate the problems, assign priorities and quickly reach decisions.
- ✓ After each listed hazard, specify the recommended corrective action and establish a definite correction date if possible and appropriate.
- ✓ Review for accuracy, clarity and thoroughness.

SAMPLE INSPECTION REPORT FORM

Inspection Location	
Date of Inspection	
Time of Inspection	
Department/Area Covered	

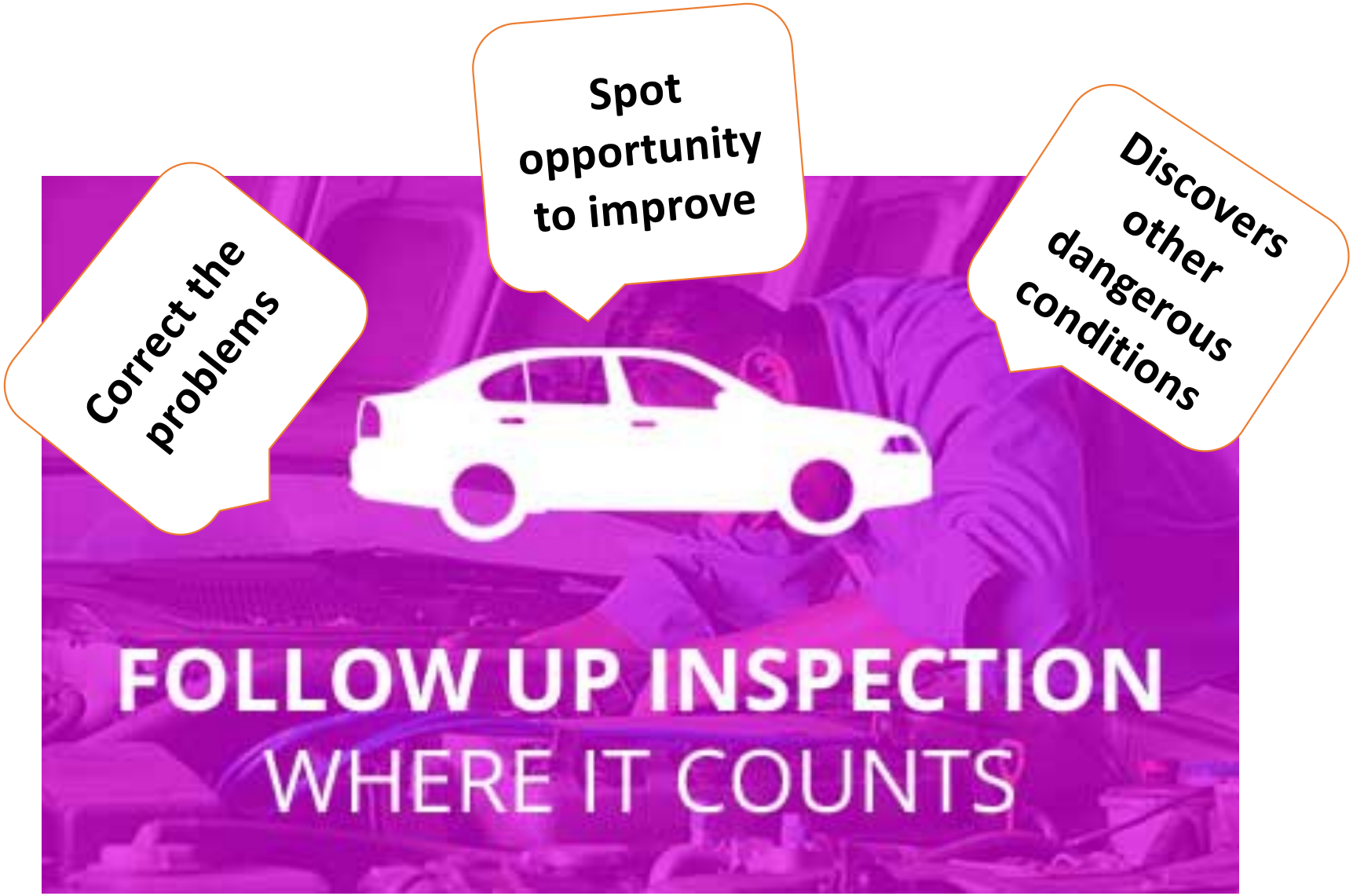
OBSERVATIONS

FOR FUTURE FOLLOW UP

Item & Location of Item	Hazard(s) Observed	Repeat		Recommended Action	Responsible	Action Taken	Date
		Yes	No				

Copies to	
Inspected by	

J3 TRAINERS & CONSULTANTS INC.


Correct the problems
Spot opportunity to improve
Discovers other dangerous conditions
FOLLOW UP INSPECTION
WHERE IT COUNTS


Do you have any Questions?