

PSC HAND SAFETY INDIA PRIVATE LIMITED

BECAUSE EVERY HAND MATTERS

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**WHY TASK REDESIGN MUST BE OWNED BY LEADERSHIP —
NOT LEFT TO THE SAFETY DEPARTMENT**

ENGINEER THE HAND OUT OF HAZARD.

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With insights from Managing Director Satish Agrawal

EXECUTIVE SUMMARY

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Across Indian industry, hand injuries remain stubbornly persistent. Not because organisations lack awareness, not because they lack products — but because the response to every hand injury is almost always the same: **upgrade the glove.**

This whitepaper makes one central argument: the Hierarchy of Controls does not fail because of ignorance. It fails because **no one is assigned to own each level.** Elimination, substitution, and engineering controls belong to no one — so everything cascades to the single lever that safety officers can actually control: PPE.

Drawing on field observations across metal manufacturing, oil and gas, and infrastructure sectors, PSC Hand Safety India Pvt. Ltd. presents a clear framework: **assign ownership to every level of the Hierarchy of Controls.** Empower unit heads, plant heads, and operations leaders to redesign tasks so that hands are never in the line of fire.



In the plants where we see zero hand injuries, leadership is not just informed about safety — they are accountable for it. The moment a unit head takes ownership of engineering controls, budgets appear, tasks get redesigned, and the injury rate drops to near zero. When leadership is involved, risks get mitigated at the source — not managed at the skin surface. It also sends a powerful message to every engineer, operator, and safety professional on the floor: the unit head wants us to solve the problem, not just reach for another glove. That single shift in expectation changes everything.

— Satish Agrawal, Managing Director, PSC Hand Safety India Pvt. Ltd.



The hierarchy of controls does not fail because of ignorance.

It fails because no one is assigned to own each level — so action always defaults to PPE.

01

THE PROBLEM WE DON'T QUESTION

India's manufacturing, infrastructure, and process industries share one challenge: hand injuries top the incident charts year after year. Cuts, crush injuries, pinch-point entrapments, and impact events account for the majority of recordable injuries across sectors. The response, almost universally, is to review the glove specification. A Level C glove becomes Level E. An impact-rated glove is added. The action is documented — and the same incident recurs — because **the exposure has not changed**.

The Line-of-Fire Blind Spot

When 'Line of Fire' is discussed in Indian industry it is understood broadly — awareness that energy can be released and harm can result. But this awareness rarely translates into hand-specific task redesign. A safety officer who understands Line of Fire conceptually still defaults to improved PPE, because they lack either the process knowledge or the authority to redesign the task.

The Questions We Rarely Ask

- Why was the hand near the hazard in the first place?
- Is the task designed so that direct hand contact is unavoidable?
- Has anyone with authority to redesign the task ever reviewed it?
- Who owns the responsibility to eliminate this exposure — not just manage it?

These are not safety questions. They are engineering and operations questions — and they must be answered by people who have both the authority and the process knowledge to act on the answer.

Current Thinking vs. The Shift Needed

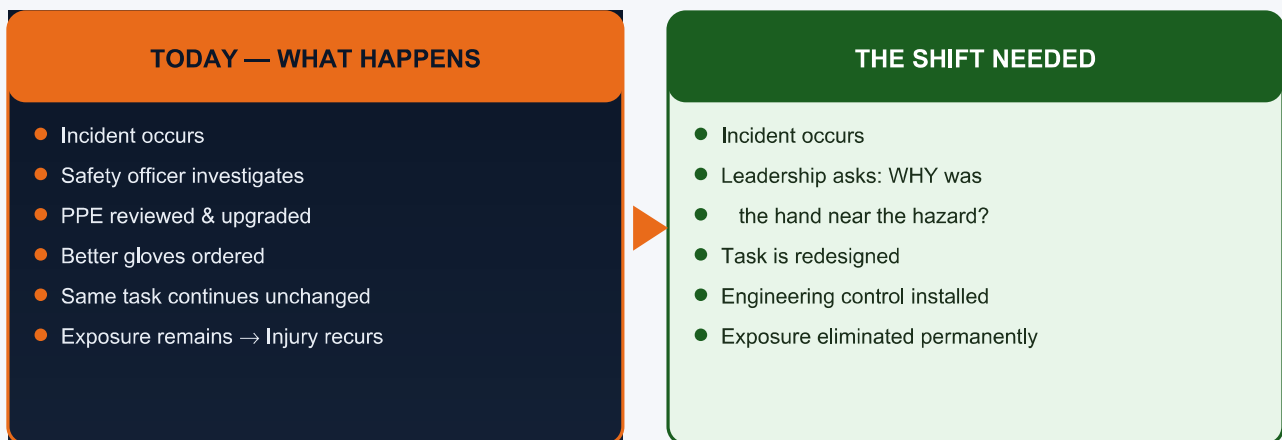


Figure 1: The shift from protection-first to elimination-first thinking.

02

THE STRUCTURAL REALITY

The persistence of PPE-first thinking is not a failure of character or competence. It is a **predictable consequence of how safety responsibility is structured** in most Indian organisations.

The Safety Officer's Reality

Consider a safety officer without prior production or maintenance experience. They investigate a hand injury. The organisation expects corrective action. But this officer:

- Does not control how the task is performed — that authority belongs to operations.
- Cannot redesign the process — that requires engineering sign-off.
- Does not own the capital budget — engineering controls require approvals above them.
- May lack the shop-floor knowledge to visualise safer alternatives.
- Has no authority to stop and redesign a task — that sits with the unit or plant head.

So what does the safety officer do?



They change the gloves — because that is the only lever they control.
This is not a failure of the individual. It is a failure of the system.

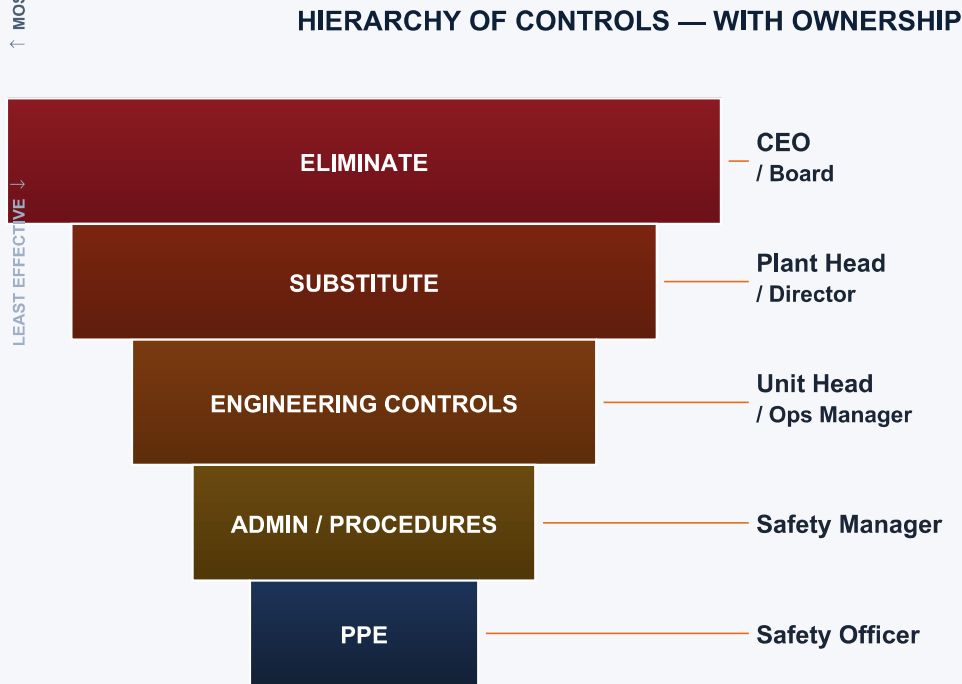
The Budget Reality

Engineering controls require capital expenditure. Safety teams rarely own capital project budgets. Controls that would eliminate hand exposure are simply absent from budgets because no one with budget authority has raised the case.

When a unit head or plant head joins a safety review, the conversation changes. The same solution that was 'impossible' for a safety officer becomes 'done by next quarter.' And the team now understands that leadership expects task redesign — not just another glove.

03
THE MISSING FRAMEWORK: OWNING THE HIERARCHY

The Hierarchy of Controls is well-established: Eliminate → Substitute → Engineering Controls → Administrative Controls → PPE. Every safety professional knows it. But as typically presented it has a critical omission: **it does not specify who owns each level**. It tells us *what* to do — not *who* is responsible for doing it. In the absence of clear ownership, every level above PPE is unassigned — and therefore unactioned.



Bold text on right = organisational role with ownership and decision authority at each control level

Figure 2: Every level of the Hierarchy of Controls must have an explicit organisational owner.

When ownership is explicitly assigned, three things change:

- Accountability is clear — a unit head cannot disclaim responsibility for engineering controls.
- Decisions are made at the right level — someone with process knowledge and budget authority is in the room.
- Action is resourced — the person who owns the level has the authority to make it happen.

04

WHO OWNS WHAT: A CLARITY FRAMEWORK

The framework below translates the Hierarchy of Controls into clear organisational accountabilities. Embed this as a defined responsibility matrix — reviewed at every incident investigation and every safety leadership meeting.

LEVEL	WHO OWNS IT	WHAT THEY MUST DO
Eliminate	CEO / Board / MD	Sanction task removal or full automation
Substitute	Plant Director / VP Ops	Approve safer process or method alternatives
Engineering Controls	Unit Head / Ops Manager	Budget & implement guards, barriers, mechanical aids — remove hand from hazard
Admin / Procedures	Safety Manager	Design safe work procedures, permit systems, training protocols
PPE	Safety Officer	Select PPE as last resort — never as the first response

Table 1: Hierarchy of Controls — Organisational Ownership Framework

When a hand injury occurs, the investigation must ask: **‘Which level of control failed, and who owns that level?’** This shifts the corrective action from ‘change the glove’ to ‘redesign the task.’



The investigation question must change:

Not ‘What PPE failed?’ — but ‘Which control level failed, and who was accountable for it?’

05

WHAT PROGRESSIVE PLANTS DO DIFFERENTLY

At PSC Hand Safety India Pvt. Ltd. the team has worked across metal manufacturing, oil and gas, power generation, and infrastructure — and the pattern is unmistakable.

SAFETY AS A SAFETY TEAM FUNCTION	SAFETY AS A LEADERSHIP FUNCTION
PPE standards improve incrementally	Hazardous tasks are eliminated or redesigned
Incident rates plateau year after year	Incident rates trend toward zero
Engineering budgets discussed after injuries	Engineering controls proactively budgeted
Safety officer drives all corrective actions	Unit head chairs safety reviews; owns actions
Root cause: 'PPE not used correctly'	Root cause: 'Task design created exposure'
Correction: upgrade gloves	Correction: redesign task; add engineering guard

Table 2: Comparative outcomes — PSC field observations across Indian industry.

In the most progressive plants, no corrective action is considered complete until the question has been asked: *Can this task be redesigned so that hands are not in the line of fire?* Only then does the organisation consider what PPE remains appropriate.

06

A CALL TO INDUSTRY

PSC Hand Safety India Pvt. Ltd. calls on plant heads, unit heads, operations directors, and CEOs across Indian industry to make three commitments:

STOP	Thinking of hand safety as a PPE procurement exercise. It is a process design challenge that requires engineering and operational leadership.
START	Assigning ownership to every level of the Hierarchy of Controls. Elimination is a leadership responsibility — not a safety team task.
DEMAND	That every hand-injury investigation asks ‘Why was the hand there?’ — before it asks ‘What glove should we use?’

An Invitation

We have seen what is possible when leadership owns safety at every level of the hierarchy. We would welcome a one-hour conversation to share what progressive plants have done — specific task redesigns, engineering interventions, and organisational changes that have permanently reduced hand injuries.

CONTACT PSC HAND SAFETY INDIA PRIVATE LIMITED

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We are open to a one-hour conversation at your convenience.

07

CLOSING THOUGHT

Hand safety will not improve by adding another layer of protection.

It improves when we redesign work so hands are never in the line of fire.

ENGINEER THE HAND OUT OF HAZARD

Because Every Hand Matters

About PSC Hand Safety India Private Limited

PSC Hand Safety India Pvt. Ltd. works with plant heads and unit heads to embed the Hierarchy of Controls as an ownership framework — not just a training concept. We combine task redesign consulting, engineering solutions, and leadership capability building to permanently eliminate hand injuries.

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