

Health, Safety and Environment In Project construction



Every accident, and therefore every injury, is preventable

we embed that philosophy into every PLL project through a loss prevention approach, redefining incidents, systematic evaluation, implementation and review.

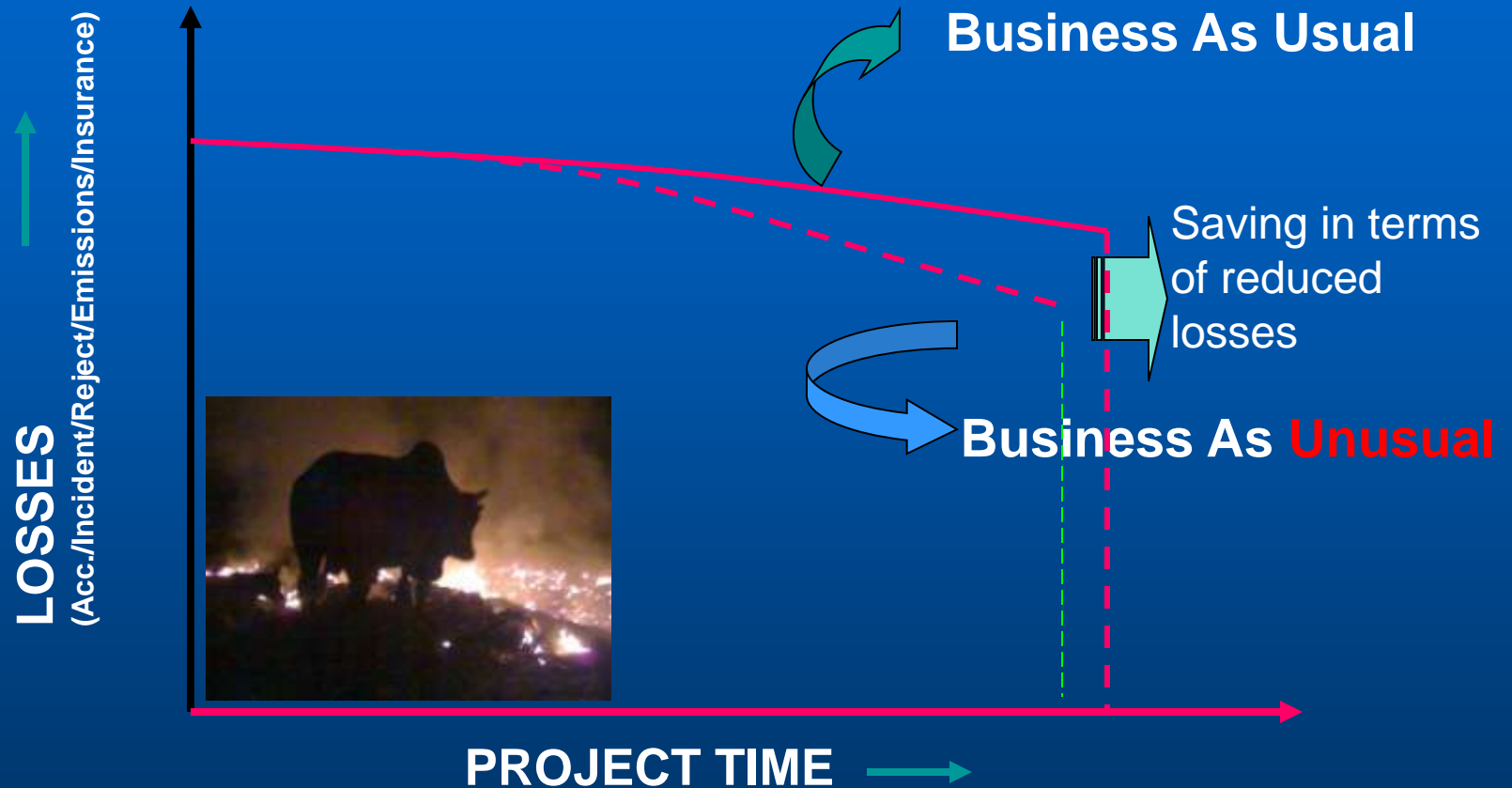
Every employee has stop-work authority

If it's not safe, don't do it. We also ask our subcontractors and partners to adopt our HSE Policy commitment to safety and health. The result is exceptional safety performance, even in hazardous work environments, severe weather, and remote locations.

Reinforcing Positive Behavior

Sr. Management demonstrating their HSE commitment and reinforcing positive behavior by following observation & Intervention process. Plan site visits, observe, engage & follow up.

Loss Prevention Approach



Policies

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

ENVIRONMENTAL POLICY

We are committed to protecting the environment by minimising pollution, waste and optimising our consumption for continual improvement in our environmental performance. Eco-efficient technologies will be provided. We comply with all applicable legal requirements.



Manoj Singh
Director, HR

Manoj Singh | Delhi | India

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

QUALITY POLICY

We are committed to customer satisfaction and loyalty. Our endeavour is to reduce cost and cycle times through effective and efficient use of resources. Organisational capabilities will be continually expressed to retain competitive advantage by aligning our processes, to build strong business relationships with customers and suppliers. We endeavour to be the customer's preferred choice in everything we do. Our customers will experience professional competence and a high level of service in our deliveries.



Manoj Singh
Director, HR

Manoj Singh | Delhi | India

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

COMMUNITY AFFAIRS POLICY

We are committed to respect local customs, traditions and maintain security and political neutrality.

At all times, we will strive to fulfil the ethical, legal and public expectations of society.



Manoj Singh
Director, HR

Manoj Singh | Delhi | India

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

SECURITY POLICY

We are committed to providing appropriate security measures for ensuring the well being of lives and property of all stakeholders including important records, documents and sensitive information.

Security consciousness among our workforce will be promoted through induction and orientation programmes.



Manoj Singh
Director, HR

Manoj Singh | Delhi | India

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

OCCUPATIONAL HEALTH AND SAFETY POLICY

We are committed to ensuring that no harm is caused to our employees and sub-contractors. Internationally accepted best practices are adopted by complying with applicable HSE legislation and other requirements. To ensure continual improvement, all hazards are identified, associated risks are evaluated and controls implemented and monitored. We encourage our stakeholders to adopt OHS activities as an integral part of the business.



Manoj Singh
Director, HR

Manoj Singh | Delhi | India

 **Punj Lloyd**
GROUP

We are an EPC Group delivering projects and services in the Oil & Gas, Infrastructure and Petrochemical sectors in chosen global markets across the globe.

ALCOHOL AND DRUG POLICY

We are committed to promote a work place free from alcohol, drugs and substance abuse.

Entry of employees under the influence of alcohol is prohibited at work place and they will be subjected to disciplinary action.



Manoj Singh
Director, HR

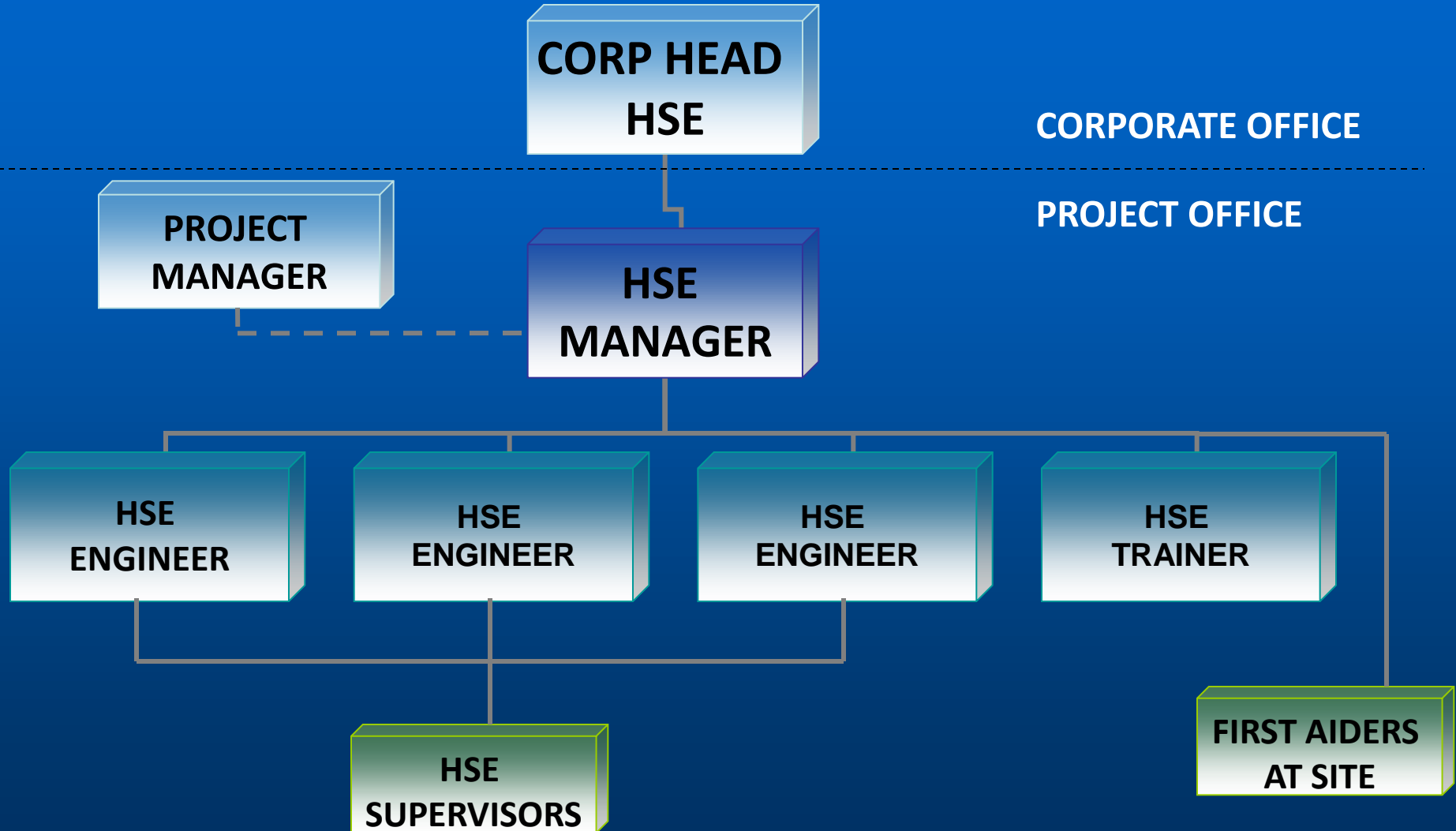
Manoj Singh | Delhi | India

Accreditation



- **OHSAS 18001:2007**
Occupational Health & Safety
- **ISO 14001:2004**
Environmental Management
- **ISO 9001:2008** Quality
Management

Project HSE Organization (TYP)



HSE Management System – Objectives

- Zero recordable injuries and environment incidents.
- Reduce risk as low as reasonably practicable
- Comply with applicable legal requirements, AERB , BOCW act, Environmental regulations & Project HSE requirements
- 100% incident recording and reporting.
- 100% adherence of usage of appropriate PPE's at work



Key HSE Management System



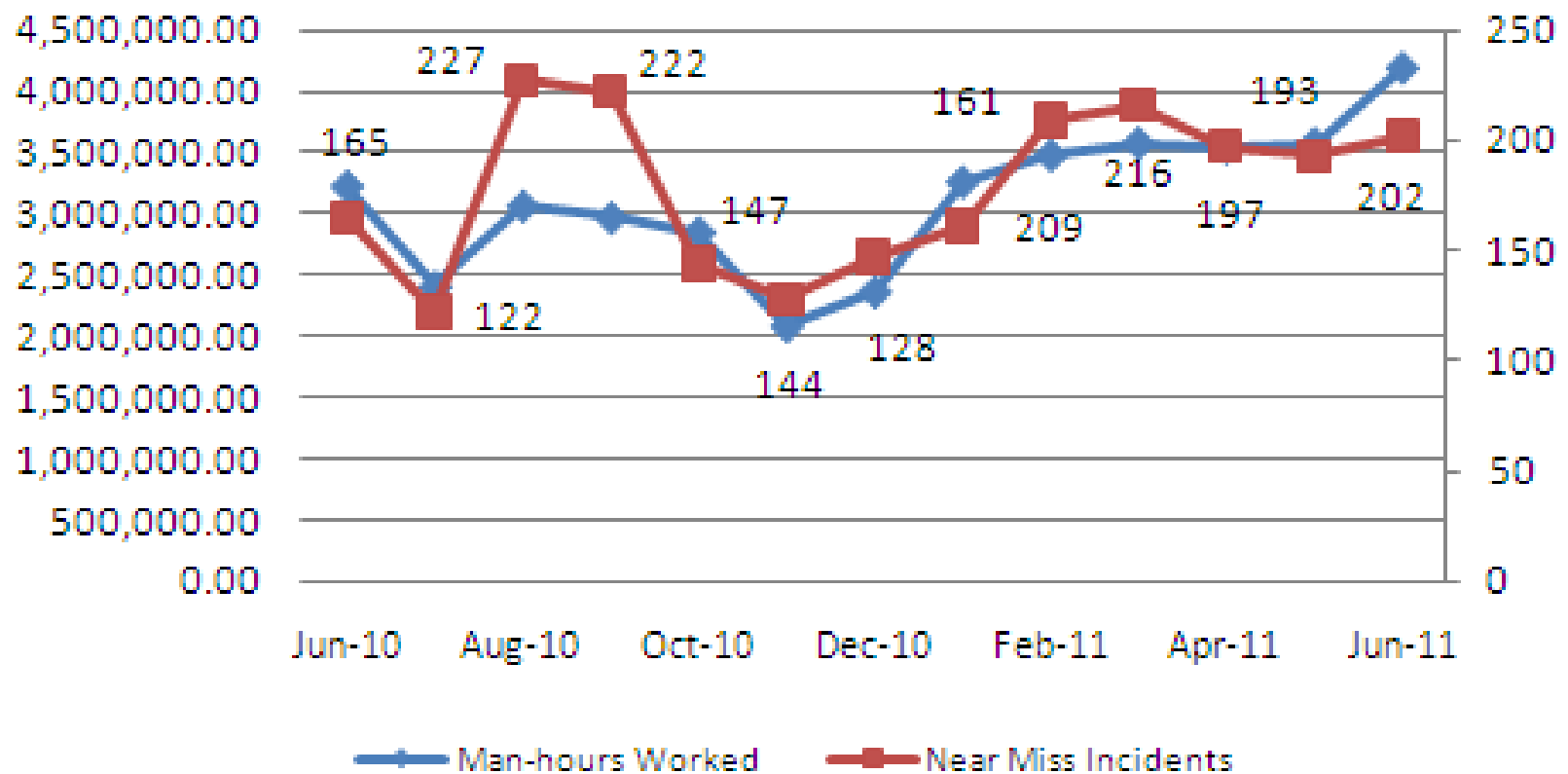
- Strong Leadership & Commitment to HSE
- Policy & Strategic Objectives
- Legal compliance
- Organization, Responsibilities & Resources
- Risk , Aspect & impact identification , Evaluation & Management
- Planning, Standards , Procedures & Training
- Implementation & Monitoring
- Reporting of Incidents
- Audit and Review
- Management Review

Near Miss Incident Program - Initiative

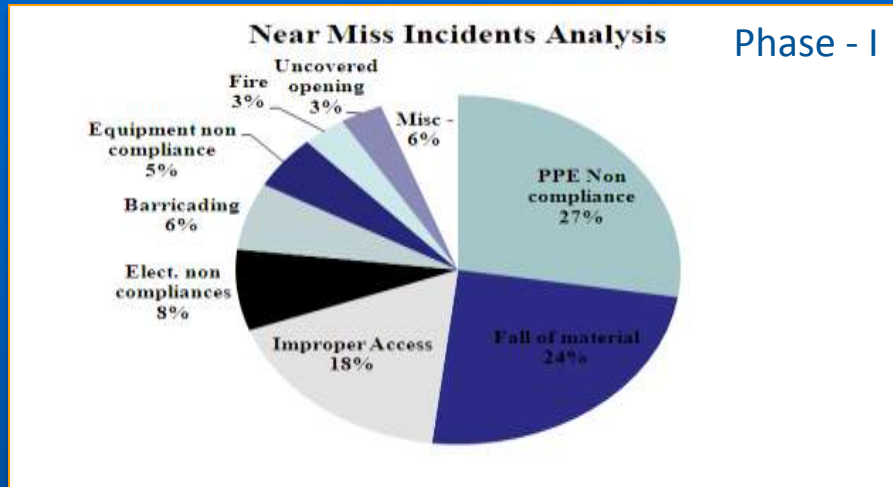
- No punishment policy – to get rid of fear
- Making every incident as a “Learning Experience” not a failure or fault of individual
- Re-defining near miss incidents
- Incident Reporting Process familiarization with expectations
- Structured process for validating, analyzing, prioritizing, and tracking identified Near Miss incidents
- Feedback mechanism – “who participate in the process”
- Sharing lessons learned and significant actions taken
- Understanding power of recognition to reinforce positive behavior

Case study on Near Miss Incident

India Energy



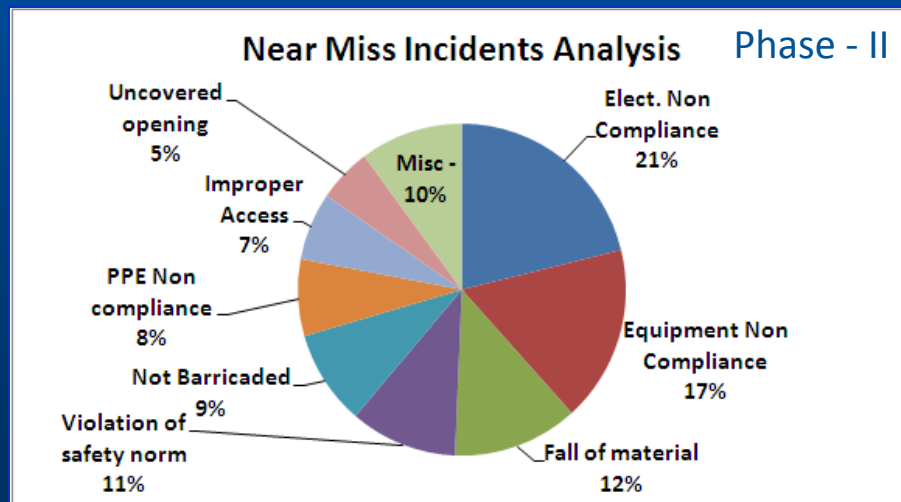
Analysis & Action plan



Actions taken – Phase I

- HSE performance review in monthly CEO Review Meeting
- Scaffolder's certification by recognized third-party
- Audio visual training on fall protection
- Standardization of PPE's


Results after Phase - I



On going actions – Phase II

- Training & certification of Electrician
- Focused campaigns on electrical safety
- Certification and inspection of hired and subcontracted equipments
- Electrical and Construction Equipment safety compliance focus area during HSE Internal Audits.

Reinforcing positive behavior by Top Management



Project Name : _____

Observer : _____

Date & time: _____

Contractor : _____

Location: _____

OBSERVATION Safe Unsafe

Access/Egress <input type="checkbox"/> Inadequate <input type="checkbox"/> Obstruction/blockad <input type="checkbox"/> Wrongly placed <input type="checkbox"/> Unauthorised entry/exit <input type="checkbox"/> Others	Manual Handling <input type="checkbox"/> Lifting technique <input type="checkbox"/> Receipts <input type="checkbox"/> Excessive load <input type="checkbox"/> Others	Body Position <input type="checkbox"/> Line of load <input type="checkbox"/> Awkward position <input type="checkbox"/> Others	Covered Spaces <input type="checkbox"/> Equipment fitness <input type="checkbox"/> Access/Egress <input type="checkbox"/> Isolation <input type="checkbox"/> Gas Testing & Monitoring <input type="checkbox"/> Ventilation <input type="checkbox"/> Permits <input type="checkbox"/> Stand by person / BSP <input type="checkbox"/> ELOI / 24 v supply <input type="checkbox"/> Others
Electrical Tools <input type="checkbox"/> Proper / fit <input type="checkbox"/> Defective <input type="checkbox"/> Loose wires <input type="checkbox"/> Inspection <input type="checkbox"/> Right for the job <input type="checkbox"/> Others	Excavations <input type="checkbox"/> Slope/shoring <input type="checkbox"/> Storage of soil <input type="checkbox"/> Manual/ mechanical <input type="checkbox"/> Ladder / Access <input type="checkbox"/> Others	ToHo <input type="checkbox"/> Road Signs/Signals <input type="checkbox"/> Seat Belts <input type="checkbox"/> Speed limit <input type="checkbox"/> Drivers / vehicle fitness <input type="checkbox"/> Others	Lifting Operations <input type="checkbox"/> Lifting Supervisor/ training <input type="checkbox"/> Lifting gear fitness <input type="checkbox"/> Barcodes & sign <input type="checkbox"/> Document/ permit <input type="checkbox"/> People caution <input type="checkbox"/> Colour code <input type="checkbox"/> Tag line / overhead protection <input type="checkbox"/> Others
Hand Tools <input type="checkbox"/> Defective/Home made <input type="checkbox"/> Improper usage <input type="checkbox"/> Right for the Job <input type="checkbox"/> Inspection <input type="checkbox"/> Others	Hot Works <input type="checkbox"/> Fire Fighting equipment <input type="checkbox"/> Spark Containment <input type="checkbox"/> No leak in gas cylinders <input type="checkbox"/> Document/ Permit <input type="checkbox"/> Machine/ables <input type="checkbox"/> Others	Housekeeping <input type="checkbox"/> Waste management <input type="checkbox"/> Storage area for materials <input type="checkbox"/> Trip, Slip and Fall <input type="checkbox"/> Cables management <input type="checkbox"/> Adequate illumination <input type="checkbox"/> Designated area for storage <input type="checkbox"/> Others	Health & Welfare <input type="checkbox"/> First Aid/First Aid kit <input type="checkbox"/> Hygiene <input type="checkbox"/> Test for drinking water <input type="checkbox"/> Camp cleanliness <input type="checkbox"/> Eye/Face <input type="checkbox"/> Others
Plant & Equipment <input type="checkbox"/> Inspection/ TPI Certified <input type="checkbox"/> Bar/ie man provided <input type="checkbox"/> Maintenance checklist <input type="checkbox"/> Oil Spill Containment <input type="checkbox"/> Others	Bar/ie/ade/Signs <input type="checkbox"/> Type <input type="checkbox"/> Placement <input type="checkbox"/> Adequacy <input type="checkbox"/> Others	PPE <input type="checkbox"/> Defective <input type="checkbox"/> Double protection <input type="checkbox"/> Hand <input type="checkbox"/> Ear/Waif <input type="checkbox"/> Eye/Face <input type="checkbox"/> Others	Office safety <input type="checkbox"/> Hand rails <input type="checkbox"/> Trip & slip <input type="checkbox"/> Electrical <input type="checkbox"/> Ecb <input type="checkbox"/> Hazardous work area <input type="checkbox"/> no supervision <input type="checkbox"/> Others
Work Environment <input type="checkbox"/> Tripping hazard <input type="checkbox"/> Protruding Object <input type="checkbox"/> Documents/permits <input type="checkbox"/> Working below load <input type="checkbox"/> Hazardous work area <input type="checkbox"/> no supervision <input type="checkbox"/> Others	Environmental <input type="checkbox"/> Soil/ Water contamination <input type="checkbox"/> Waste Management <input type="checkbox"/> Spill/leak <input type="checkbox"/> Slag/ hot water <input type="checkbox"/> Hazardous work area <input type="checkbox"/> no supervision <input type="checkbox"/> Dry traps <input type="checkbox"/> Label/Signage <input type="checkbox"/> Pests/Vector Control <input type="checkbox"/> Others	Working at Height <input type="checkbox"/> Training <input type="checkbox"/> Fall Protection/Rope grab <input type="checkbox"/> Work Planning <input type="checkbox"/> 100% Tie-Off <input type="checkbox"/> Hazardous work area <input type="checkbox"/> no supervision <input type="checkbox"/> Unsafe Platform/opening, no rails <input type="checkbox"/> Others	Follow Up & Review <input type="checkbox"/> Inform immediate supervisor and follow up agreed action item <input type="checkbox"/> Submit closed out card to the PUL HSE Team

DISCUSSION/ AGREED ACTIONS: (Action must be discussed and agreed with individual)

<input type="checkbox"/> Individual Awareness	<input type="checkbox"/> Risk Assessment	<input type="checkbox"/> Toolbox Talk	<input type="checkbox"/> Weekly Inspection
<input type="checkbox"/> Method Statement	<input type="checkbox"/> Permit system	<input type="checkbox"/> Plans & procedures	<input type="checkbox"/> Mentoring
<input type="checkbox"/> Group Awareness	<input type="checkbox"/> Additional Competency/Awareness training		<input type="checkbox"/> Reporting of Near Miss Closed

1 _____ Yes No

2 _____ Yes No

3 _____ Yes No



Behavioural Observation Technique

OBSERVE People's behaviour

Engage Them to praise safe behaviours and discuss the consequences of unsafe behaviour

Change By mutual agreement, their own behaviours to safe behaviours, other people's behaviour, so that they too use safe behaviours

Demonstrate Your visible leadership, your support for SHE and your concern for people's welfare.

PLAN

↓

OBSERVE

↓

ENGAGE

↓

FOLLOW UP & REVIEW

PLAN Understand the work process

OBSERVE Observe people
Stop an unsafe act / Unsafe condition immediately

ENGAGE Put people at ease
Explain what you are doing and why
Ask what job they are doing and what stage they are at

→ Praise Safe Behaviour
Ask why the unsafe behaviour occurred

→ Ask if they understand the potential?
Ask what corrective action is required

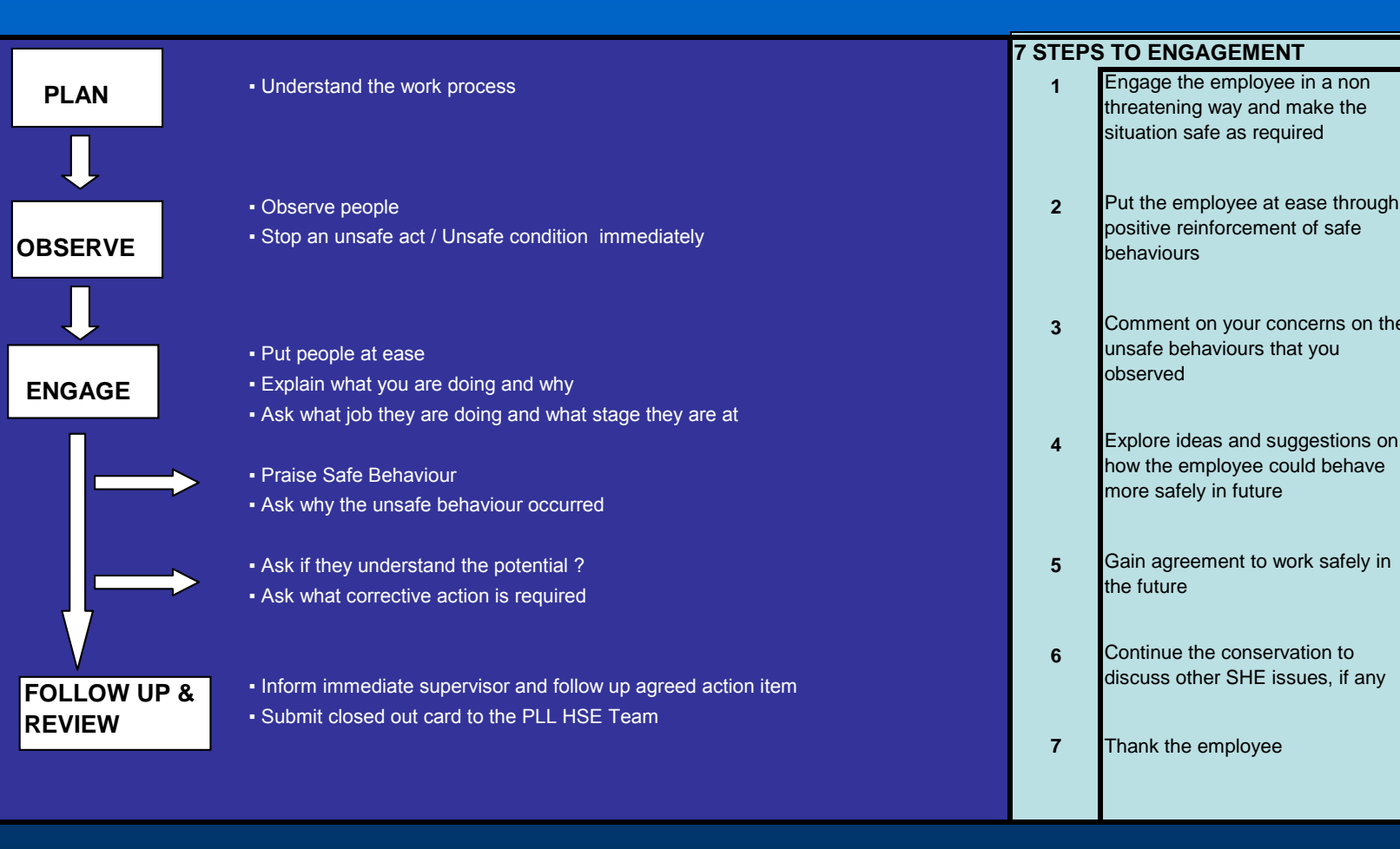
FOLLOW UP & REVIEW Inform immediate supervisor and follow up agreed action item
Submit closed out card to the PUL HSE Team

7 Steps to Engagement

1. Engage the employee in a non-threatening way and make the situation safe as required
2. Put the employee at ease through positive reinforcement of safe behaviours
3. Comment on your concerns on the unsafe behaviours that you observed
4. Explore ideas and suggestions on how the employee could behave more safely in future
5. Set agreement to work safely in the future
6. Continue the conversation to discuss other SHE issues, if any
7. Thank the employee

- Do ensure that the card is closed before submitting
- Do ask for assistance from supervisors or another employee when faced with an employee that speaks a foreign language
- Do ensure that all relevant sections are completed before submitting
- Ensure that when senior management visit the site, he fill the safety observation card.
- Don't fill out the card in front of the person being observed (this could have negative affect)
- Don't be confrontational with the employee, it is important to have a positive attitude and good approach.

Reinforcing positive behavior contd..



HSE Challenges in Construction

- Hazardous work environment due to tough terrain, severe weather, and remote locations
- Illiterate labour or at best semi literate
- Lack of availability of trade competency
- Limited certified bodies/system for trade competency development
- Dearth of Qualified and competent HSE professionals
- Lack of authorized infrastructure and facilities to meet HSE legal requirements
- Lack of environmental awareness

Power of recognition



Power of recognition

Performance
Passion Team Work
Reliability
Agility

THANK
YOU

FOR A JOB
WELL DONE!

 Punj Lloyd
GROUP

I appreciate
YOUR EFFORTS.

Thanks
for a job
well done!

Where We Grow with You

 Punj Lloyd
GROUP

Kudos
for a job well done!

Your Ability is Our Strength

 Punj Lloyd
GROUP

Smile safety card

Name :

Designation :

Date / Time :

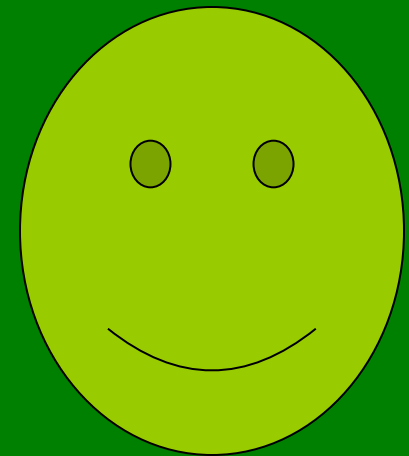
Location :

What went well :

How an accident /

Incident was prevented :

Remarks :



Signature of the Supervisor;

Cry safety card

Name :

Designation :

Date / Time :

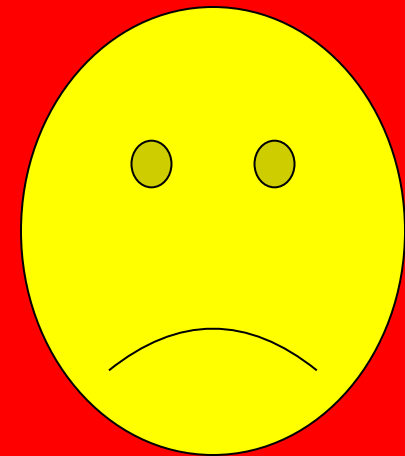
Location :

What went wrong :

How near miss accident /

Incident happened :

Remarks :



Signature of the Supervisor;

HSE recognition / reprimands

- **Smile Safety card:**

- Three smile cards = 1 Award
- Highest smile card in category = Best of the category
- Eligibility = All workmen including sub contractor
- Time frame = Monthly

- **Cry Safety card:**

- Three cry cards = Penalty as per the list
- Eligibility = All workmen including sub contractor
- Time frame = Monthly

Project facilities

Standard office at Projects



Workers Accommodation Camp



Project Site – Standard Workmen Accommodation



Health care -Malarial prevention at camp



Emergency and regular health services for employees at site



Awareness & Motivation

Mock Drill conducted at Project



HSE Training



World Aids Day Awareness at Project



World Environment Day Celebration at Projects





HSE Awareness on National Safety day







Prize distribution at Paradip LSTK Project Site



Tree Plantation at DVPL -II & MUPL



Quiz Competition at Bhogat Tankage Project



Awareness Program at Dahej Linde Project



Prabhat Phery On Environment Day At DIL Chandrapur Site



Flag Hoisting Ceremony at GVK Site



Tree Plantation at DBPL Project



Drawing Competition held at Paradip INDMAX Site



Tree Plantation at Ennore



Questions & Answers

Thank You