Health, Safety and Environment
In Project construction
Beliefs & Commitment

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

LOSSES
(Accident/Incident/Reject/Emissions/Insurance)

PROJECT TIME

Business As Usual

Business As Unusual

Saving in terms of reduced losses

Loss prevention approach is depicted with a graph showing the reduction in losses over project time. The graph illustrates the transition from 'Business As Usual' to 'Business As Unusual', indicating a saving in terms of reduced losses.
Policies

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

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

COMMUNITY AFFAIRS POLICY
We are committed to respect local customs, traditions and maintain a secular and political neutrality. At all times, we will strive to fulfill the ethical, legal and public expectations of society.

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 programme.

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 OHS regulations 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 OH&S activities as an integral part of the business.

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.
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

Graph showing India Energy with data points for Man-hours Worked and Near Miss Incidents from Jun-10 to Jun-11.
Analysis & Action plan

Results after Phase - I

Phase - I

Near Miss Incidents Analysis

- Uncovered opening 5%
- Improper Access 7%
- PPE Non compliance 8%
- Not Barricaded 9%
- Violation of safety norm 11%
- Equipment Non Compliance 17%
- Fall of material 12%
- Elect. Non Compliance 21%
- Misc - 10%
- Fall of material 24%
- Mis - 6%
- Equipment Non compliance 27%
- Barricading 6%
- Elect. non compliances 8%
- Improper Access 18%
- Fire 3%
- Uncovered 3%

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

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

**OBSERVE People's behaviour**

**Engage**
- Them to praise safe behaviors and discuss the consequences of unsafe behavior.

**Change**
- By mutual agreement, first own behaviors to safe behaviors, other people's behaviors, so that they too use safe behaviors.

**Demonstrate**
- Your strong leadership, your support for safe and your concern for people's welfare.

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### Behavioural Observation Technique

**OBSERVE** People's behaviour

<table>
<thead>
<tr>
<th>7 Steps to Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Engage the people in a non-threatening way to identify situations that are safe.</td>
</tr>
<tr>
<td>2. Put the people at ease through positive reinforcement of safe behaviors.</td>
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<tr>
<td>3. Comment on your concern for the people's behaviors that you observe.</td>
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<tr>
<td>4. Express your support for the people's behaviors that you observe.</td>
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<tr>
<td>5. Ask people to work out in real terms.</td>
</tr>
<tr>
<td>6. Continue the conversation to discuss other SHE issues, if any.</td>
</tr>
<tr>
<td>7. Thank the people.</td>
</tr>
</tbody>
</table>

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### HSE Observation Card

- **Project Name:** Punj Lloyd
- **Observer:**
- **Date & Time:**
- **Location:**
- **Context:**
- **Subject:**

#### Observation

#### Observational Areas:
- Manual Handling
  - Lifting technique
  - Material handling
  - Equipment used
  - Others
- Body Position
  - Line of load
  - Kerb edge position
  - Others
- PPE
  - Equipment fitness
  -狂欢角度
  - Others
- Personal Hygiene
  - Hair nets
  - Others
- Traffic
  - Material transportation
  - Traffic control
  - Others
- Lifting & Stacking
  - Lifting fixture
  - Others
- Personal Hygiene
  - Hair nets
  - Others
- Scaffolding
  - Material transportation
  - Traffic control
  - Others
- Cycle
  - Material transportation
  - Traffic control
  - Others
- Health & Safety
  - Health & Safety

#### Non-Safety/Health

- **Environmental**
  - Noise/contamination
  - Waste Management
  - (Suitable)
  - Others
- **Working at Height**
  - Training
  - Tool preparation and use
  - Others
- **Office Safety**
  - Material handling
  - Health & Safety
  - Others

#### Areas:
- Individual Awareness
- Tool Awareness
- Safety Statement
- Safety Poster
- Safety Training
- Waste Management
- Fire Safety
- Others

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**Follow-up & Review**

- Inform immediate superior and follow up with a copy to the HSE Team.
- Submit close out card to the HSE Team.

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**RISK ASSESSMENT:**
- To ensure that the card is closed before submitting.
- To seek the assistance from supervisors or another employees when faced with an employee that speaks a foreign language.
- To ensure that all relevant actions are completed before submitting.
- To ensure that when the employee will visit the site, the safety observation cards.
- Don’t fill out the card in front of the person being observed (this could have negative effect).
- Don’t be confrontational with the employee. It is important to have a positive attitude and good approach.
Reinforcing positive behavior contd..

**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. Gain agreement to work safely in the future
6. Continue the conservation to discuss other SHE issues, if any
7. Thank the employee

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**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 PLL HSE Team
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
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
HSE Awareness on National Safety day
WORLD ENVIRONMENT DAY

5 JUNE
Forests: Nature at Your Service
In support of the UN International Year of Forests

Punj Lloyd Limited
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