Owner Involvement in Contractor Safety

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Presentation Outline

- What is PM HSE and where are the risks?
- Calibrate with incident/injury probability
- Contractor & Client Safety Cultures
- Research on latest HSE cultural alignment efforts
- Gaps & concerns in the Contractor Industry
- Continuous Improvement strategies & results YTD
- Questions
HSE Background

- Phillips HSE upstream (4) assignments, MT, WY, OK, MT/Canada (6-7) years
- Safety Manager Billings Refinery (7) years
- Corporate Significant Incident Planning (3) years
- Malaysia 28’s Petronas Corporate ERP TSA (2) years
- Malaysia SE Asia HSE regional manager: Malaysia, Thailand, India, Singapore, etc. (4) years
- Czech Republic HSE Lead Risid Cracker (1) year
- Corporate Downstream PDPM HSE Houston (2) years
- COP Global Downstream PM HSE since merger
Project Development & Management
HSE Overview

FEL-1
APPRAISE
Project & Select Concept

FEL-2
OPTIMIZE
Concept & Select Alternatives

FEL-3
DEFINE
Requirements & Finalize Plans

EXECUTE

Opportunity Identified to proceed to FEL-1?

Proceed to FEL-2 (AFD)?

Proceed to FEL-3?

Full Funding (AFE)?

Operations Acceptance?

PROJECT AUTHORIZATION GUIDELINES
Risk & Uncertainty

PROJECT AUTHORIZATION GUIDELINES

Inherent Risks Associated with Handover, Commissioning and Start-up

Inherent Risks Associated with Project Execution

Inherent Risks Associated with Project design

Project Development & Management

HSE Overview

PROJECT AUTHORIZATION GUIDELINES

Inherent Risks Associated with Handover, Commissioning and Start-up

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Our Safety Vision

Injuries, Illnesses & incidents
Understanding Injury/Incident Probability

- Injury severity
- Injury reporting and classification
- Behavior Vs. probability
- System approach bottom line is “ZERO”
Incident / Injury Probability

- Predictable Zone
- Injury severity is luck
- Injurious behavior

1. Recordable (Medical treatment)
   - Near miss
   - Restricted work day
   - LTI lost work day
   - Fatality

2. Predictable zone

3. Unsafe behavior

4. Safety
   - Occupational health
   - Environmental
Incident / Injury Probability

- Predictable Zone
- Injury Severity
- Fatality
- Near Miss
- Unsafe Behavior
- PREDICTABLE ZONE
- SAFETY
- OCCUPATIONAL HEALTH
- ENVIRONMENTAL
Understand Individual HSE Mgt. Systems

OWNERS JVs

PMT

EPC

Sub Contractors

Sub/Sub Contractors
**Lessons Learned**

- Strategic project planning is key to preventing initial spikes.
- Need early pre-planning and project team mobilization, including safety.

**Next Challenges**

- Bridging the gap through external involvement: labor groups, owners, contractors.
Total Recordable Incident Rate (TRIR)

Cultural Alignment of HSE management Systems and “Zero”
Contractor Issues Facing Owners Today

• Changing roles between owners and contractors.
• Shortages of trained craft personnel due to demographics and industry image
• Contractors don’t understand HSE Management Systems and don’t use them to improve safety
• Line management (i.e., contractors) don’t understand their HSE responsibilities and accountabilities
• Primary Contractors do not take responsibility for all sub-contractors HSE performance
Benchmarking and Project Reviews

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DEFINE
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EXECUTE

OPERATE

Peer Assist

Peer Review

Execution Phase Review
Downstream PM HSE Project Strategy

- Get PMT HSE manager on board
- Develop PMT HSE management system
- Develop for bid HSE RFQ/RFP
- Complete “bridging process” for project site HSE policy and procedure development
- Implement Project HSE management system and site specific policies and procedures before contactor mobilization to site.
- Implement leading & trailing metrics for monthly reporting
COP Project Management YTD 2004
Large Capital Project HSE

Owners Influence Divided By Incident Probability Is (LII)
COP Project Management YTD 2004
Large Capital Project HSE
Recordable Incident Rate Summary
COP Project Management YTD 2004
Large Capital Project HSE
*Leading Indicator Index (LII) & TRIR Combined*
Begin Process of Site HSE Mgt. System Alignment (FEL)
“Continuous Alignment”

ACCEPTABLE SHE MANAGEMENT SYSTEM ALIGNMENT

1. RESULTS
2. WORKERS
3. HSE
4. LINE
5. MID-LEVEL
6. MANAGER