

Best Practices in Adopting HSE Programs

Carl Sall, CIH, CSP
Head of Industrial Safety

مؤسسة الإمارات للطاقة النووية
Emirates Nuclear Energy Corporation



Safety Value Moment

Condition Reporting is an important part of building a good safety culture.

- Questioning attitude
- Identifying procedure non-compliance
- Audit findings (corrective actions)
- Unsafe acts and conditions
- HSE incidents



Outline - Best Practices in Adopting HSE Programs

- Evaluating Current Status
- Benchmarking
- Developing/Updating a Management System
- Annual Planning
- Developing a Safety Culture



Evaluating Current Status



Evaluating Current Status

Identify Management System Structure / Compliance

- ISO 14001
- OHSAS 18001
- AD EHSMS

Review Internal System Implementation

- Integrated Policies
- HSE Manual
- Procedures
 - Can you do what you say you will?



Evaluating Current Status - Continued

Training Programs Evaluation:

- Is it Effective
 - Defined goal
 - Gain attention of students
 - Requires action (elicit practice and provide feedback).
 - Present a final challenge / evaluation of understanding
- Does it meet Regulatory Compliance
 - Current local standards
 - Compliance with international standards and best practices
- Compliance with Organizational Procedures



Evaluating Current Status - Continued

Auditing Programs

- Is it Effective
 - Procedure for auditing
 - Defined goal
 - Evaluation criteria
 - Trained auditors
 - Action to address findings

- Internal Audits – review findings

- External Audits – review findings



Evaluating Current Status - Continued

Document your findings

- What is it Effective
 - Procedural compliance
 - Regulatory compliance
 - Best practices

- Areas for Improvement
 - Missing or ineffective procedures
 - Procedural non-compliance
 - Regulatory non-compliance
 - Potential risk of regulatory non-compliance



Benchmarking



Benchmarking

Evaluation of Similar Industries:

- Participate in Industry Groups
- Perform Site Visits
 - Management involvement
 - Short and long-term planning process
 - How do they evaluate their programs
 - What unique programs do they have
- Request Audit of Your Site (external audit)



Benchmarking - continued

Evaluation of Top HSE Performers:

- How are They Similar
- What are Their Best Practices
- Perform Site Visits
 - Management involvement
 - Short and long-term planning process
 - How do they evaluate their programs
 - What unique programs do they
- Invite Them to Your Site



Developing/Updating a Management System



Developing/Updating a Management System

Once you have completed evaluating your current status and benchmarking, you are ready to update implement what you have learned.



Management System Updates:

- Are you compliant to ISO, OHSAS, or other management system? If not, consider it.
- Prioritize your work:
 - Areas of regulatory non-compliance
 - Potential non-compliance issues
 - Update polices and procedures to best practices
 - Make sure you can do what you put in your procedures
 - If not sure, leave it out and add it to your annual plan



Management System Updates:

- Do you have an electronic management system?
 - If not, develop a scope of work for the system

Modules:

- Safety Management Module
- Incident Tracking
- Audits and Assessments
- Industrial Hygiene
- Medical Management



Best Practices in Adopting HSE Programs

Annual Planning



Annual Planning

Purpose of annual plan:

- **Manage HSE program**
 - Track progress, milestones, and resources
 - Track success thorough KPIs
- **Implement programs outside of management system**
 - Safety Slogan
 - Health Fairs
- **Test potential changes to procedures**
 - Update permit-to-work
 - Implement best practices



Annual Planning - continued

Purpose of annual plan:

- Implement programs based on trends
 - Collect HSE data and look for trends (Electronic Mgt System Data)
 - Design programs to address adverse trends
- Improve Safety Culture
 - Behavior Based Safety programs
 - Reward Programs: Make sure it is behavior focused
 - Safety Culture Training



Best Practices in Adopting HSE Programs

Developing a Safety Culture



Developing a Safety Culture

***People are fallible and even
the best make mistakes.***



Developing a Safety Culture

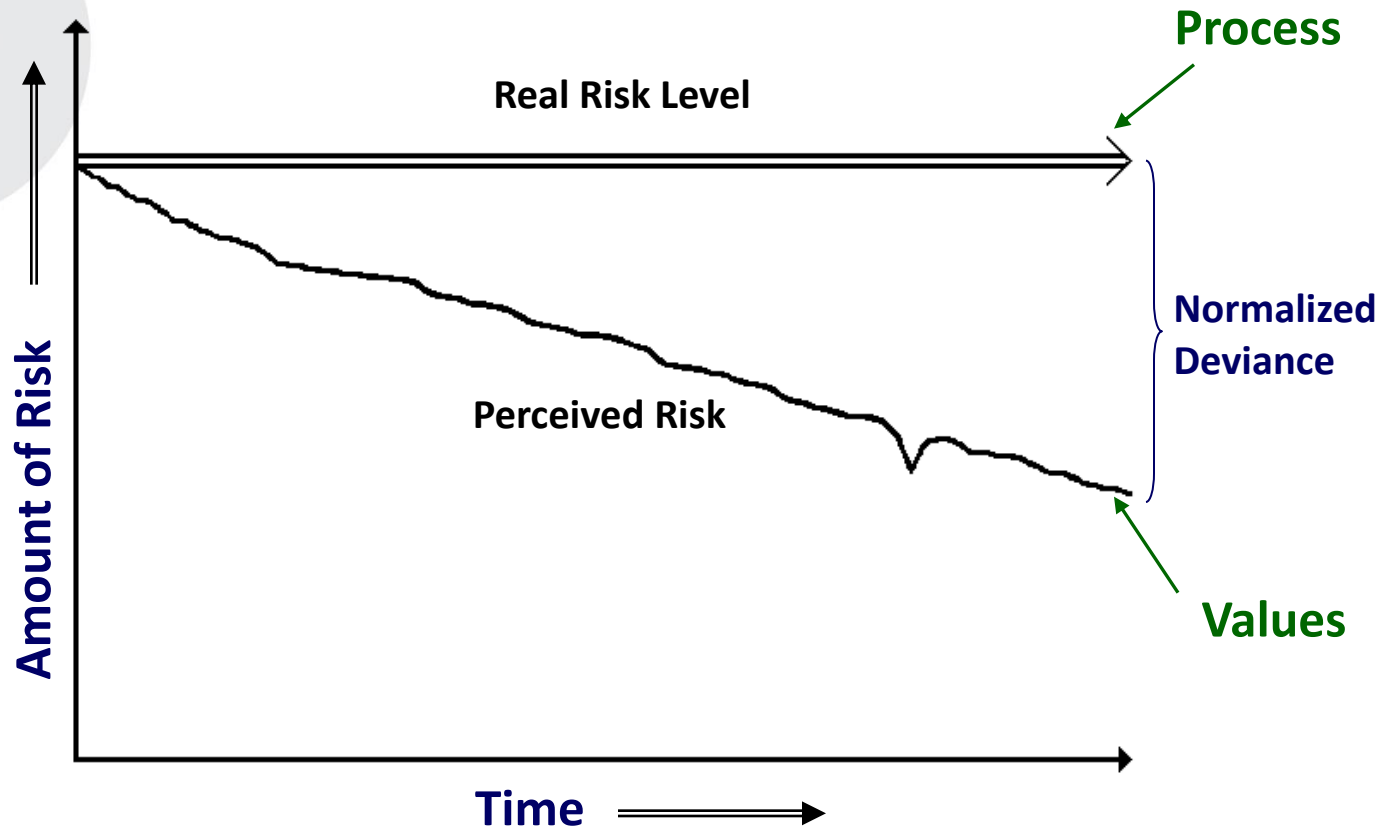


To Err is Human



Normalized Deviance

Focusing on one moment in time, you see negligence with respect to an old standard or norm.



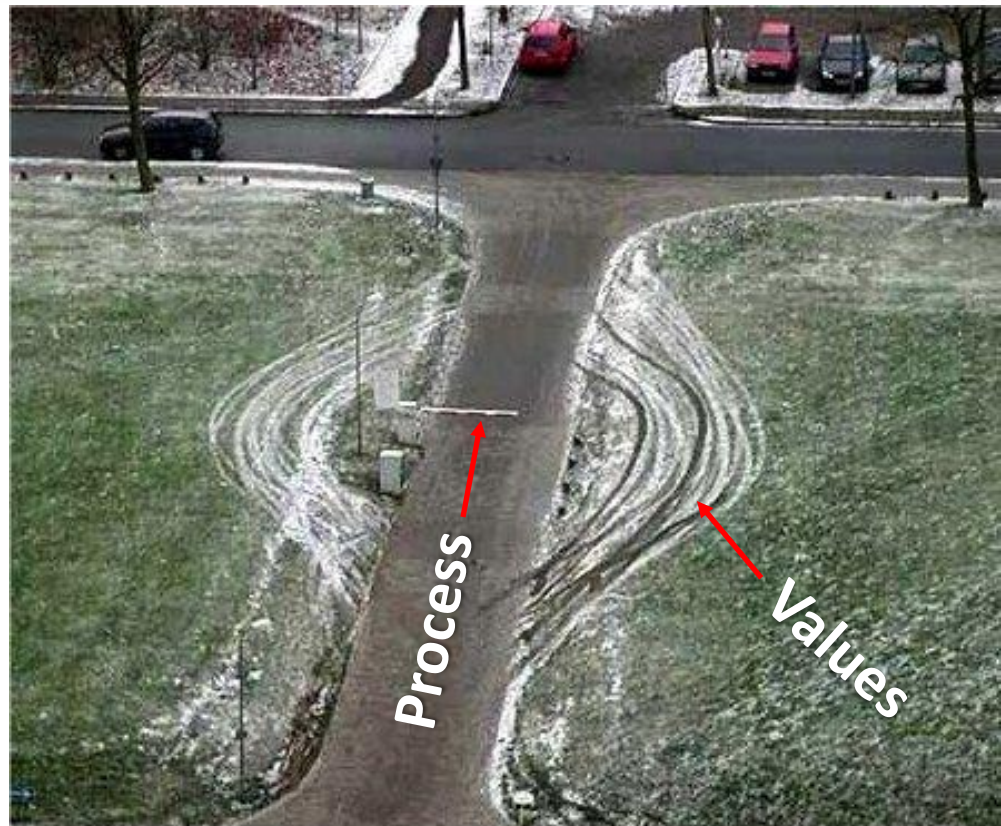
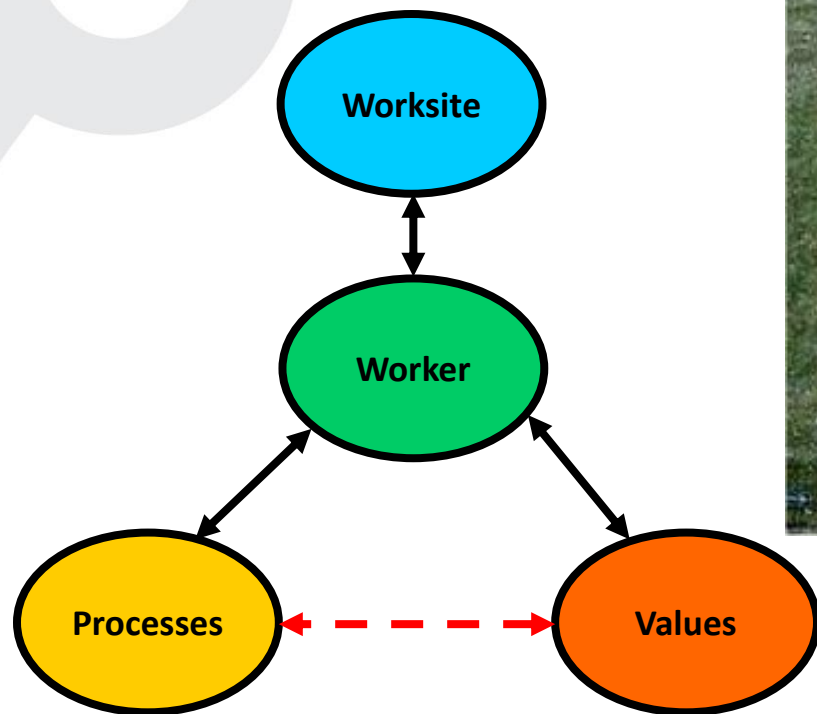
Common Error Precursors

Task Demands	Individual Capabilities
<input type="checkbox"/> Time pressure (in a hurry)	<input type="checkbox"/> Unfamiliarity w/ task / First time evolution
<input type="checkbox"/> High Workload (high memory requirements)	<input type="checkbox"/> Lack of knowledge (mental model)
<input type="checkbox"/> Simultaneous, multiple tasks	<input type="checkbox"/> New technique not used before
<input type="checkbox"/> Repetitive actions / Monotony	<input type="checkbox"/> Imprecise communication habits
<input type="checkbox"/> Irrecoverable acts	<input type="checkbox"/> Lack of proficiency / Inexperience
<input type="checkbox"/> Interpretation requirements	<input type="checkbox"/> Indistinct problem-solving skills
<input type="checkbox"/> Unclear goals, roles, & responsibilities	<input type="checkbox"/> "Unsafe" attitude for critical tasks
<input type="checkbox"/> Lack of or unclear standards	<input type="checkbox"/> Illness / Fatigue
Work Environment	Human Nature
<input type="checkbox"/> Distractions / Interruptions	<input type="checkbox"/> Stress
<input type="checkbox"/> Changes / Departures from routine	<input type="checkbox"/> Habit patterns
<input type="checkbox"/> Confusing displays or controls	<input type="checkbox"/> Assumptions
<input type="checkbox"/> Workarounds / OOS instruments	<input type="checkbox"/> Complacency / Overconfidence
<input type="checkbox"/> Hidden system response	<input type="checkbox"/> Mind-set
<input type="checkbox"/> Unexpected conditions	<input type="checkbox"/> Inaccurate risk perception
<input type="checkbox"/> Lack of alternative indication	<input type="checkbox"/> Mental shortcuts (biases)
<input type="checkbox"/> Personality conflicts	<input type="checkbox"/> Limited short-term memory

OOS – out of service

Violations occur...

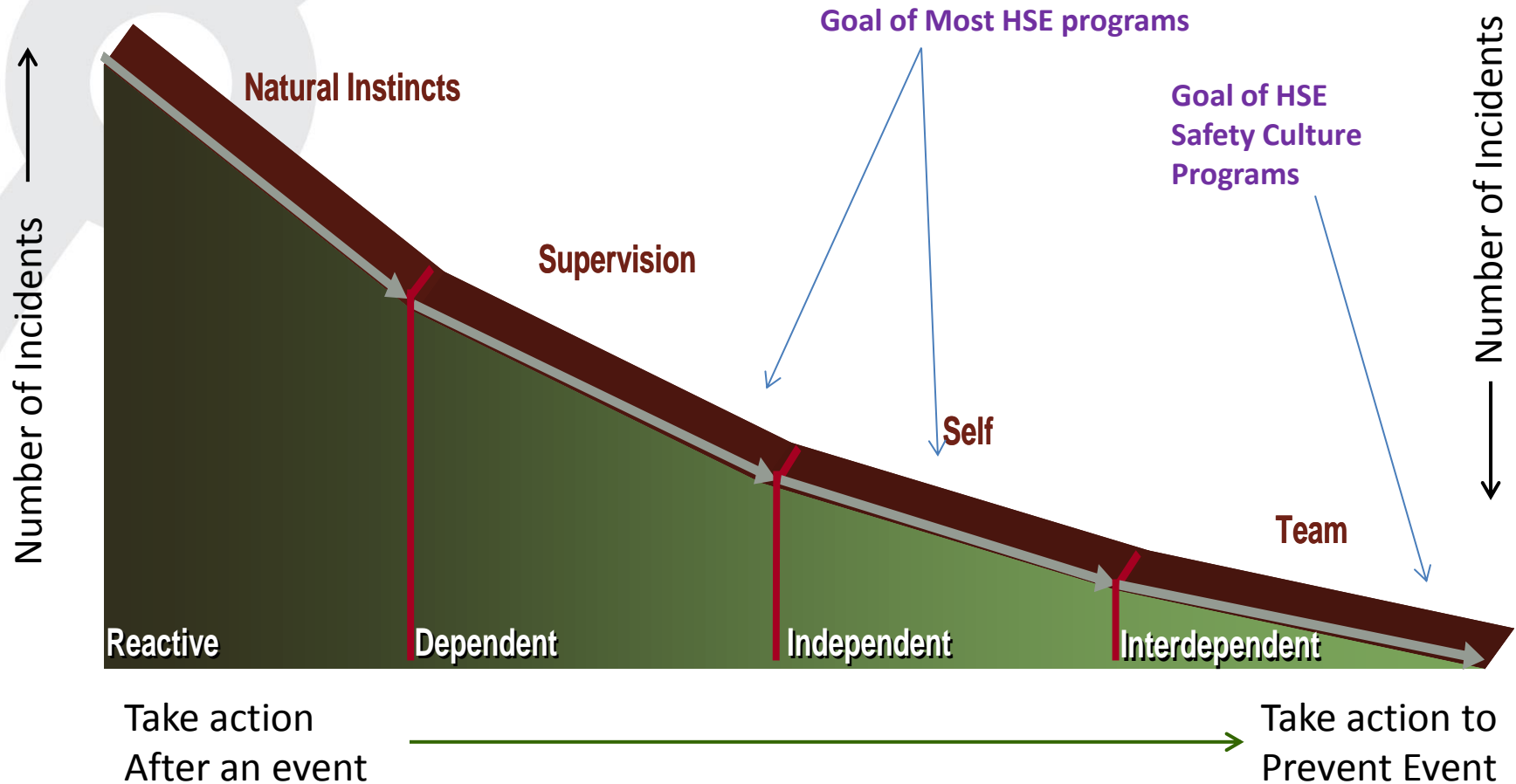
...when there is a disconnect between processes and values



Source: *Computer Security: From Theory to Implementation*, Sebastian Lopienski, CERN



Goals of a Safety Culture



Questioning Attitude/Stop When Unsure



Questioning Attitude

- Should become a habit of behavior
- A healthy sense of uneasiness about what could go wrong
- Fosters thought before action...alerts us to potential problems
- Promotes a preference for facts over assumptions or opinions

Stop When Unsure

- The best course of action, when unsure, is to **stop**
- When confronted with confusion or uncertainty, the chances for error are particularly high
- Stop, notify your supervisor, and get help.
- Everyone has the responsibility and the authority to ***Stop When Unsure!***





Condition Reporting:

- Procedure Non-Compliance
- Unsafe Acts / Unsafe Conditions / Near Misses
- Incidents
- Conditions Adverse to Quality or Safety
- Audit / Self Assessment Findings



Review - Best Practices in Adopting HSE Programs

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Carl O. Sall, CIH, CSP
Head of Industrial Safety
carl.sall@enec.gov.ae

