The Risk Management Journey

Dr Patrick J Foster
Anglo American plc Senior Lecturer in Mining Engineering
Camborne School of Mines, UK
Contents

- Overview of the Anglo American SRMP
- The 4-Layered Approach
- Safety Maturity Charts
- The Risk Management Journey
Context: The Need for Transformation

- Injury and fatality record were simply unacceptable
- Safety Framework revisited
- Zero Harm Vision
- Specific focus on: 3 Simple principles

The Safety Framework

- ZERO harm
- NO repeats
- SIMPLE non-negotiable standards
- ZERO mindset
Problems with Risk Assessment

• Carrying out a risk assessment to attempt to justify a decision that has already been made
• Using generic assessment when a site specific assessment is needed
• Not involving a team of people in the assessment Ineffective use of consultants
• Failure to identify all hazards associated with a particular activity
• No consideration of ALARP arguments
• Not doing anything with the results of the assessment
• Not linking hazards with risk controls
• Not considering control effectiveness
• Focus on legal compliance
Anglo Safety Risk Management Programme

PURPOSE

To establish and embed a world class ‘One Anglo’ safety risk management process that delivers radical improvement in safety for all our people.

VISION

All our people make the right decisions affecting safety.
Anglo SRMP University Partnership Network

- University Catholic North
- University of British Columbia
- University Sao Paulo
- Pretoria University
- University of Cape Town
- Wits University
- Camborne School of Mines

Levels:
- Level 4 – Execs
- Level 3 – Mgrs
- Level 2 – Supers
- Level 1 - All

SAFETY RISK MANAGEMENT PROCESS
Concepts & Communication

- Hazard
- Energies
- Risk
- Risk Analysis and Assessment
- Controls/Barriers
- Risk Management

Line Accountability

Leadership & Commitment

Integrated Risk Management

Journey Appreciation
Concepts and Terminology

- **Risks and Decisions**: Strategic, Tactical & Operational
- **Proactive vs Reactive Decisions**
- **Energies**: Way to look for hazards
- **Hazard**: Potential for harm
- **Unwanted Event/Incident**: Specific description
- **Risk**: Measure of Likelihood and Consequence
- **Controls/Barriers/Defences**: Attempts to reduce risk
- **Risk Management**: The total process
- **Risk Assessment tools**: HAZOP, SWIFT, WRAC, JSA etc.
- **Risk Analysis techniques**: 5 by 5 matrices and others
Minerals Industry Risk Management Process

(modified version of AS4360:2004)
Swiss Cheese Accident Model

Hazards

The Ideal

Potential Losses (Accidents)
Swiss Cheese Accident Model

Hazards

The Ideal

The Reality

Potential Losses (Accidents)
Integrated Risk Management

- Hazard
- Energies
- Risk
- Risk Analysis and Assessment
- Controls/Barriers
- Risk Management

Line Accountability

- PLAN
- Risk Assessment
- Investigation & Audit / Review
- DIRECT
- CHECK

Journey Appreciation
‘Layered’ Risk Assessment (RA)

- Major Hazard / Baseline / Full Site RA
- Project / Change / Issue RA
- Routine & Non-Routine Task Planning RA
- Individual, Continuous, ‘Face’ RA
‘Layered’ Risk Assessment (RA)

Look across entire site, find major potential unwanted incidents, analyse, establish controls, document, apply, etc.

Provide good info for a quality Risk Register and possibly Major Hazard Management Plans
‘Layered’ Risk Assessment (RA)

Review projects, changes, incidents, etc. for risks not covered above (all hazards)

Provides good info for a quality Project / Change / Issue Improvement Plan
‘Layered’ Risk Assessment (RA)

Develop effective safe work expectations (guidelines, SOPs, job plans, etc.) as well review tasks where an adequate SOP is not available

Provides safe info for a quality SOP or Job Plan
‘Layered’ Risk Assessment (RA)

Have the person Stop & Think and proceed with a task only if ‘safe’

Provides quality last minute go or no go guidance
‘Layered’ Risk Assessment (RA)

RISK ASSESSMENT TOOLS

WRAC, FTA, BTA, etc.

FMEA, HAZOP, FTA, BTA, etc.

WRAC, JSA

Take 5, SLAM, Take Time, Take Charge
‘Layered’ Risk Assessment (RA)

MAJOR HAZARD / BASELINE / FULL SITE RA

PROJECT / CHANGE / ISSUE RA

ROUTINE & NON-ROUTINE TASK PLANNING RA

INDIVIDUAL, CONTINUOUS, ‘FACE’ RA

MOSTLY DESIGN & ENGINEERING

MOSTLY BEHAVIOURAL
Safety Maturity Charts

PATHOLOGICAL
Who cares as long as we don’t get caught

REACTIVE
Safety is important, we do a lot every time we have an accident

CALCULATIVE
We have systems in place to manage all hazards

PROACTIVE
We work on problems that we still find

GENERATIVE
SHE is how we do business round here

Increasing Trust
Increasingly Informed
Minerals Industry Risk Management (MIRM) Ladder

<table>
<thead>
<tr>
<th>Culture</th>
<th>Risk Assessment</th>
<th>Investigation</th>
<th>Auditing</th>
</tr>
</thead>
<tbody>
<tr>
<td>“No Care” Culture</td>
<td>No Proactive</td>
<td>No auditing</td>
<td>Limited</td>
</tr>
<tr>
<td></td>
<td>Risk Assessment</td>
<td></td>
<td>investigation</td>
</tr>
<tr>
<td></td>
<td>Poor Investigation</td>
<td></td>
<td>Ad hoc</td>
</tr>
<tr>
<td></td>
<td>No auditing</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Reactive Risk</td>
<td>Regular</td>
<td>Open</td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td>Risk Assessment</td>
<td>Causal</td>
</tr>
<tr>
<td></td>
<td>Limited</td>
<td>Investigation</td>
<td>Investigation</td>
</tr>
<tr>
<td></td>
<td>Investigation</td>
<td></td>
<td>Investigation</td>
</tr>
<tr>
<td></td>
<td>Ad hoc</td>
<td></td>
<td>Targeted</td>
</tr>
<tr>
<td></td>
<td>auditing</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Proactive Risk</td>
<td>Regular</td>
<td>Targeted</td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td>Risk Assessment</td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Proactive</td>
<td>Investigation</td>
<td>External</td>
</tr>
<tr>
<td></td>
<td>Risk Assessment</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Proactive</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Risk Assessment</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td></td>
<td>Resilient</td>
<td></td>
<td>auditing</td>
</tr>
<tr>
<td>Minerals Industry Risk Management (MIRM) Maturity Chart</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No care culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Apathy/resistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Near misses not considered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Negligence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Dishonesty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Hiding of incidents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No or little training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Poor or no communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blame culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Accept need to care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Some near miss reporting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Some window dressing e.g. pre-inspection cleanups and light duty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Disciplinary action</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Minimum / inconsistent training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Some communication on a need to know basis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compliance culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Some participation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Near miss discussions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Acceptable training/awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Established and good communication channels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Regular people involvement and focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ownership culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Involvement at all levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Near miss involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High level of training/awareness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Communication at a high level hiding nothing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reaction culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Reactive approach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No risk assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Legal non compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Accept equipment / process decay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Superficial incident investigation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Poor investigation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No monitoring/audits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Permit non-compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Potential illegal practices</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compliant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- OH&amp;S Coord. driven</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- OH&amp;S stds system and ISO 9002 or equivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Risk assessment through existing systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Total legal compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Strictly enforce the use of PPE where required (knowing risk)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Causal incident analysis based on event potential</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Info sharing from events</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Planned occupational hygiene / environmental monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Periodical medical examinations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Planned monitoring/audits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Safety meetings &amp; talks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Some task observations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proactive</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Line driven systems improvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ISO 14001 and OHSAS 18000 or equivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pro-active formal risk asmt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Beyond legal compliance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Seek to actively engineer out process/equipment inadequacies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Incident learnings shared with all levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Well designed plans/procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Focus on adhering to site plans and procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Integrated audits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Peer evaluation and discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Resilient</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Individually internalised</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Integrated management systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Risk assessment integrated into all systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Self regulating style</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Eliminate problems before they occur</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- All threats considered in decision-making</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Systems enhancement through external evaluation / auditing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Accept that incidents happen**

**Vulnerable**

**Prevent a similar incident before they occur**

**Reactive**

- Administrator driven
- Loose systems, elements of a HS Management System
- Re-active risk assessment
- Minimum legal compliance
- Apply PPE as a way of eliminating exposure
- Incident investigation but limited analysis
- Focus on what happened
- No systems focus
- Human fault focus
- Ad hoc monitoring/audits
- No occupational hygiene or health initiatives
- Reactive medical monitoring
- Monitoring as per regulations

**Compliant**

- OH&S Coord. driven
- OH&S stds system and ISO 9002 or equivalent
- Risk assessment through existing systems
- Total legal compliance
- Strictly enforce the use of PPE where required (knowing risk)
- Causal incident analysis based on event potential
- Info sharing from events
- Planned occupational hygiene / environmental monitoring
- Periodical medical examinations
- Planned monitoring/audits
- Safety meetings & talks
- Some task observations

**Proactive**

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk asmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion

**Resilient**

- Individually internalised
- Integrated management systems
- Risk assessment integrated into all systems
- Self regulating style
- Eliminate problems before they occur
- All threats considered in decision-making
- Systems enhancement through external evaluation / auditing

**Way we do business**

- Way of life
  - Comes natural
  - Personal involvement by all to prevent incidents
  - Complete understanding
  - All informed at all times about everything

**Prevent incidents before they occur**

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk asmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion

** Improve the systems**

**Resilient**

**Way we do business**

- Way of life
  - Comes natural
  - Personal involvement by all to prevent incidents
  - Complete understanding
  - All informed at all times about everything

**Prevent a similar incident before they occur**

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk asmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion

**Vulnerable**

**Prevent incidents before they occur**

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk asmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion

**Compliant**

- Line driven systems improvement
- ISO 14001 and OHSAS 18000 or equivalent
- Pro-active formal risk asmt
- Beyond legal compliance
- Seek to actively engineer out process/equipment inadequacies
- Incident learnings shared with all levels
- Well designed plans/procedures
- Focus on adhering to site plans and procedures
- Integrated audits
- Peer evaluation and discussion
Minerals Industry Risk Management (MIRM) Ladder

- Vulnerable
- Reactive
- Compliant
- Proactive
- Resilient

- Regulations
- Corporate Requirements
- Personal Line Mgmt Commitment

Site Level Drivers
The Anglo Safety Risk Management Process

**PEOPLE**
- P1. Personal Risk Attitude
- P2. Caring & Recognition
- P3. Management Leadership and Commitment
- P4. Safety Accountability
- P5. Employee Involvement and Consultation
- P6. Coaching and Mentoring

**SYSTEMS**
- S1. Risk Management Adoption
- S2. Strategic Planning
- S3. Project & Process Design Management
- S4. Major Hazard/Priority Risk Identification and Management
- S5. Change Management
- S6. Job and Task Planning
- S7. Hazard Identification and Reporting
- S8. Training and Competency
- S9. Communications
- S10. Knowledge Management

Compliant does NOT refer to legal compliance

THE ROAD TO ‘ZERO HARM’ - CREATING A CARING CULTURE IN ANGLO
The Anglo SRMP – Self Assessment Tool

<table>
<thead>
<tr>
<th>BASIC</th>
<th>REACTIVE</th>
<th>COMPLIANT</th>
<th>PROACTIVE</th>
<th>RESILIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little formal interest, exposed, regressive, vulnerable, starters,</td>
<td>Responsive, awareness</td>
<td>Preventative, compliance, understanding</td>
<td>Competent</td>
<td>Generative, creative, excellence</td>
</tr>
</tbody>
</table>

**P1. Personal Risk Attitude**

- **“caring for myself”**

  The safety risks in the mining industry are accepted as a necessary consequence and the person has a fatalistic outlook. This is often expressed as “mining is tough, people get killed”.

  Risks and the need to control them are recognised, but the person doesn’t perceive themselves to be exposed. They tend to state “It won’t happen to me”.

  The person will follow specified procedures except when production is at stake. There is an acceptance of shortcuts, as long as nothing happens. “I follow the procedures and rules when I know someone is watching me”.

  The person doesn’t wilfully put themselves in danger, and follows procedure at all times. Shortcuts are not seen as an option. “I follow the procedures because I want to”.

  The person will not carry out a task if unsafe, even if procedure allows it. Safety is a value; it is no longer seen as a competing priority. All people express this as “This is just the way I do things”.

* - ‘employees’ refers to Anglo American and contractor personnel
The Anglo SRMP – Self Assessment Tool

<table>
<thead>
<tr>
<th>BASIC</th>
<th>REACTIVE</th>
<th>COMPLIANT</th>
<th>PROACTIVE</th>
<th>RESILIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little formal interest, exposed, regressive, vulnerable, starters,</td>
<td>Responsive, awareness</td>
<td>Preventative, compliance, understanding</td>
<td>Competent</td>
<td>Generative, creative, excellence</td>
</tr>
</tbody>
</table>

**P1. Personal Risk Attitude**

- "caring for myself" - The safety risks in the mining industry are accepted as a necessary consequence and the person has a fatalistic outlook. This is often expressed as "mining is tough, people get killed".

- Risks and the need to control them are recognised, but the person doesn’t perceive themselves to be exposed. They tend to state "It won’t happen to me".

- The person will follow specified procedures except when production is at stake. There is an acceptance of shortcuts, as long as nothing happens. "I follow the procedures and rules when I know someone is watching me".

- The person doesn’t wilfully put themselves in danger, and follows procedure at all times. Shortcuts are not seen as an option. "I follow the procedures because I want to".

- The person will not carry out a task if unsafe, even if procedure allows it. Safety is a value; it is no longer seen as a competing priority. All people express this as "This is just the way I do things".

**INCREASING**

- Care and respect
- Involvement
- Communication
- Openness
- Development
- Empowerment
Anglo Safety Risk Management Journey Guidance

PEOPLE

P1. Personal Risk Attitude
P2. Caring & Recognition
P3. Management Leadership and Commitment
P4. Safety Accountability
P5. Employee Involvement and Consultation
P6. Coaching and Mentoring

SYSTEMS

S1. Risk Management Adoption
S2. Strategic Planning
S3. Project & Process Design Management
S4. Major Hazard/Priority Risk Identification and Management
S5. Change Management
S6. Job and Task Planning
S7. Hazard Identification and Reporting
S8. Training and Competency
S9. Communications
S10. Knowledge Management
S11. Maintenance
S12. Procurement
S13. Contractor Management
S14. Incident Investigation and Analysis
S15. Emergency Response
S16. Safety Performance Measurement
S17. Auditing and Monitoring

THE ROAD TO ‘ZERO HARM’ - CREATING A CARING CULTURE IN ANGLO
The Anglo SRMP – Self Assessment Tool

- "employees" refers to Anglo American and contract or personnel

Little formal interest, exposed, regressive, vulnerable, starters, Responsive, awareness
Preventative, compliance, understanding Competent Generative, creative, excellence

P1. Personal Risk Attitude
"caring for myself"

The safety risks in the mining industry are accepted as a necessary consequence and the person has a fatalistic outlook. This is often expressed as "mining is tough, people get killed".

Risks and the need to control them are recognised, but the person doesn't perceive themselves to be exposed. They tend to state "It won't happen to me".

The person will follow specified procedures except when production is at stake. There is an acceptance of shortcuts, as long as nothing happens. "I follow the procedures and rules when I know someone is watching me".

The person doesn't wilfully put themselves in danger, and follows procedure at all times. Shortcuts are not seen as an option. "I follow the procedures because I want to".

The person will not carry out a task if unsafe, even if procedure allows it. Safety is a value; it is no longer seen as a competing priority. All people express this as "This is just the way I do things".

S Y S T E M S

INCREASING

- Safety system definition
- Integration of risk assessment
- Line management ownership
- Focusing of RA, AI and auditing

SYSTEMS

- Safety system definition
- Integration of risk assessment
- Line management ownership
- Focusing of RA, AI and auditing
The Road to ‘Zero Harm’

The Journey Model is a way to assess whether we have both the right culture and the right systems that we need to Achieve increased safety maturity and therefore safe business performance.
Concepts & Communication
- Hazard
- Energies
- Risk
- Risk Analysis and Assessment
- Controls/Barriers
- Risk Management

Line Accountability
- PLAN
- ACT
- DIRECT
- CHECK

Leadership & Commitment

Integrated Risk Management
- Major Hazard / Baseline / Full Site RA
- Project / Change / Issue RA
- Routine & Non-Routine Task Planning RA
- Individual, Continuous, "Face" RA

Journey Appreciation
Anglo Safety Risk Management Programme

PURPOSE

To establish and embed a world class ‘One Anglo’ safety risk management process that delivers radical improvement in safety for all our people.

VISION

All our people make the right decisions affecting safety.