CONDUCT SAFETY AND HEALTH INVESTIGATIONS (S2)

RIIWHS301E

Welcome

- Introductions
- Walk Around
  - Emergencies
  - Toilets
  - Phones
  - Crib area
  - Common room
  - Smoking
- Course Outline
- Outstanding course administration

Introduction

The training course you will complete today is based on the unit of competency RIIWHS301E Conduct safety and health investigations.

Training will cover:

- Determine the objectives and develop investigation plan
- Gather information
- Evaluate information
- Identify course of action
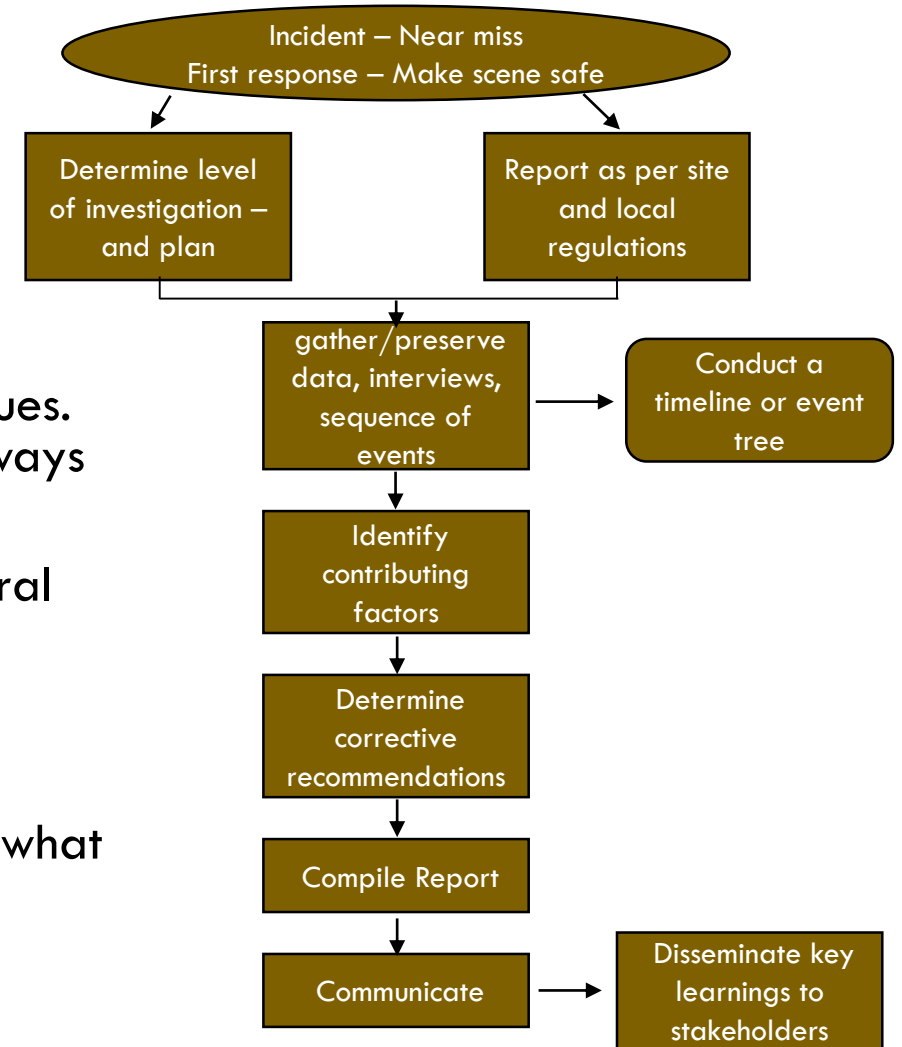- Prepare and present investigation reports

Assessment:

- Theory
- Practical – Conduct investigation

Introduction

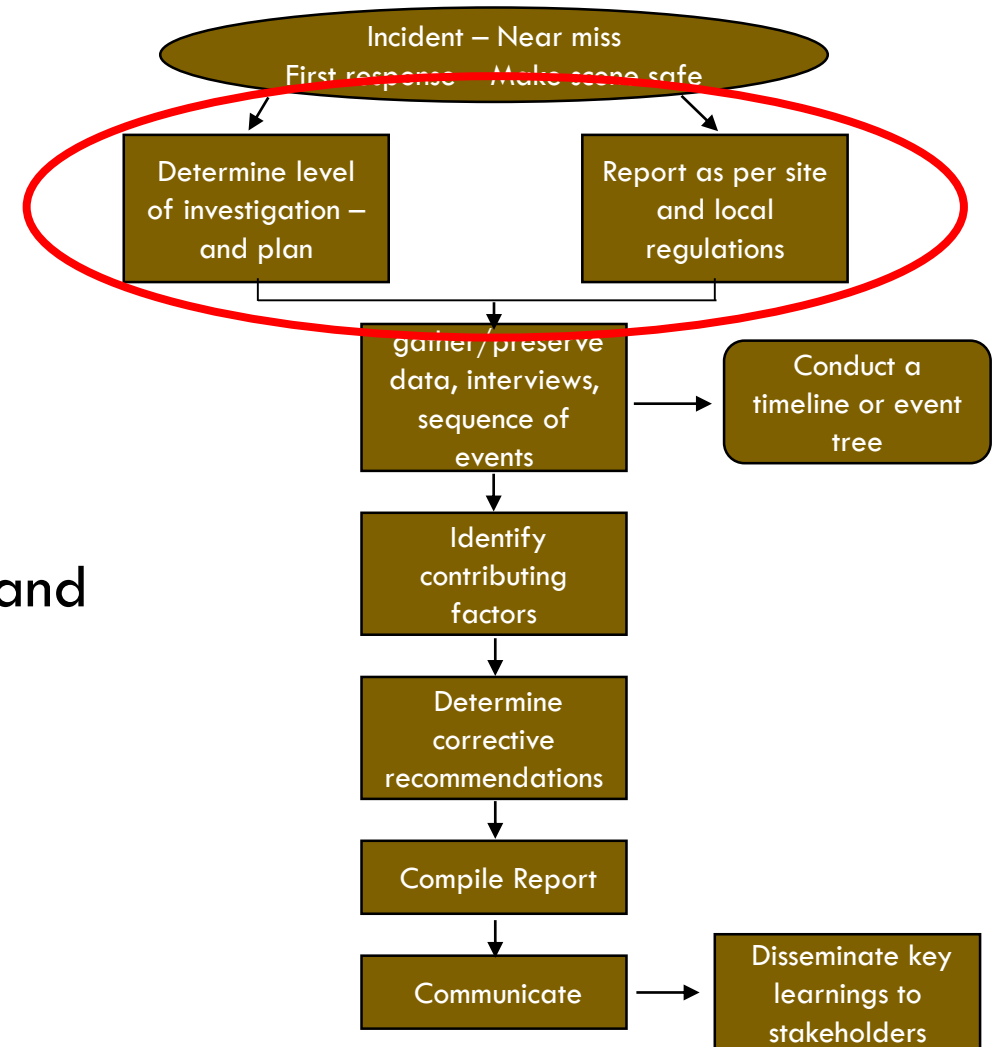## Safety and Health Investigations

- There are numerous levels and methods for investigation techniques. The process is fundamentally the same but applied in different ways according to organisational policies and procedures

- The type of investigation technique will vary depending on several factors:
  - Severity of incident (Level)
  - Organisational procedures and policies

- Most organisations have a ranking/scoring system to identify at what level and method of investigation technique is to be undertaken.

- The training will focus on the fundamentals, not necessary one particular investigative technique.

Incident – Near miss
First response – Make scene safe

Determine level of investigation – and plan

Report as per site and local regulations

gather/preserve data, interviews, sequence of events

Conduct a timeline or event tree

Identify contributing factors

Determine corrective recommendations

Compile Report

Communicate

Disseminate key learnings to stakeholders

Determine the objectives and develop investigation plan

- Identify, access & interpret work related H&S investigation documentation

- Determine scope and develop a plan

- Pre and post timeframes meet legislative requirements

- Determine need for eliminating safety hazards and address needs of people involved in incident – incorporate in plan

- Test objectives – clarify scope

- Consult

- Review and communicate plan

Incident – Near miss
First response – Make scene safe

Determine level of investigation – and plan

Report as per site and local regulations

gather/preserve data, interviews, sequence of events

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Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- Several types of documentation deal with incidents and investigations
  - Legislative
    - WHS Act
    - WHS Regulation
  - SafeWork – varies between states
    - Notification forms
    - Requirements
  - Organisation
    - Incident investigation manual/policy/procedure
    - SWI's, permits, registers, alerts etc
    - Incident/investigation forms, Witness statements, questionnaires etc
    - Report templates

Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- Legislative
  - [WHS Act](WHS Act)

Part 3 Incident notification

35   What is a "notifiable incident"

36   What is a "serious injury or illness"

37   What is a "dangerous incident"

38   Duty to notify of notifiable incidents

39   Duty to preserve incident sites

Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- Legislative
  - [WHS Regulation](#)

303 Safe work method statement must be kept

(2) If a notifiable incident occurs in connection with the high risk construction work to which the statement relates, the person must keep the statement for at least 2 years after the incident occurs. Maximum penalty:

- (a) in the case of an individual—$1,250, or
- (b) in the case of a body corporate—$6,000.

Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- Legislative
  - WHS Regulation

304 Excavation work – underground essential services information

(6) The information must be available:

    (a) if a notifiable incident occurs in connection with the excavation work to which the information relates—for at least 2 years after the incident occurs

Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- [SafeWork – varies between states](#)

If there is a serious injury or illness, a death or a dangerous incident, you must report it to us immediately on 13 10 50 as an urgent investigation might be needed.

Incidents can be notified 24 hours a day, 7 days a week by calling 13 10 50.

You must also:

- provide first aid and make sure the worker gets the right care
- take care not to disturb the incident site until an inspector arrives. You can help an injured person and ensure safety of the site.
- record it in the register of injuries
- notify your insurer within 48 hours

Determine the objectives and develop investigation plan

Identify, access & interpret work related H&S investigation documentation

- When interpreting documents it is vital that you understand the difference between words such as:

    - **Should** – Not mandatory but preferred course of action. If you take a different course of action you will need to be able to justify this in the event of an accident or incident.

    - **Consider** – you have a choice of actions and need to select the action that will give the best and safest result.

    - **Must** - the action is a mandatory or legal requirement and has to be complied with.

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

1 to 8

Determine the objectives and develop investigation plan

Determine scope and develop a plan

- Scope
    - Determine exactly what you are investigating in addition to the incident.
    - May need to include surrounding factors as fatigue etc
    - Areas within the scope will include such things as:
        - Near misses
        - Systems
        - Technical processes and procedures
        - Equipment investigations

Determine the objectives and develop investigation plan

Determine scope and develop a plan

- Plan

- Factors to consider
  - Pre and post-incident timeframes

  - Severity ranking of the incident by the organisation will dictate what type of investigation is required

  - All types of investigations need to follow a pre-defined plan

Determine the objectives and develop investigation plan

Pre and post timeframes meet legislative requirements

- This can include:
    - Legislative reporting requirements
    - Organisation/site reporting requirements
    - Investigations are completed in a timely manner
    - Extension of timeline to ensure appropriate information gathered/considered

Determine the objectives and develop investigation plan

Determine need for eliminating safety hazards and address needs of people involved in incident – incorporate in plan

- As part of the investigation process consideration needs to be given to the safety of workers, this includes such things as:
  - Preserving the scene (WHS Act Sect 39)
  - Ensuring the scene is safe
    - Identify, treat, communicate hazards
  - Wellbeing of individuals involved in the investigation
    - Medical treatment
    - Counselling
    - Personal needs

Determine the objectives and develop investigation plan

Test objectives – clarify scope

- After the initial objectives have been selected and preliminary enquiries conducted, the objectives and scope of the investigation may need to be adjusted

- Every inquiry will be different and decisions will need to be made on the ground as to what to include and exclude.

- A simple tool that will assist is P.E.E.P.O. which is also the beginning of gathering information/data
    - People
    - Environment
    - Equipment
    - Procedures
    - Organisation

People
Environment
Equipment
Procedures
Organisation

Determine the objectives and develop investigation plan

People
Environment
Equipment
Procedures
Organisation

Test objectives – clarify scope

- P.E.E.P.O

- With the information at hand, ask yourself/team some clarifying questions
    - Did it affect worker performance?
    - Did it affect environment?
    - Did it affect equipment performance?
    - Did it affect procedures?
    - Did it affect organisation?

- This will assist in defining the scope and objectives – get everything out on the table !

- As information is gathered it can also be categorised to assist in building a complete picture

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

9 to 14

Determine the objectives and develop investigation plan

Consult

- You should never assume that just because the incident or accident has occurred in your workplace that you automatically have priority over resources to investigate, or the authority to investigate.

- Other agencies that may conduct investigations, which will take priority, could include:
    - Police
    - Fire
    - SafeWork
    - Regulators i.e. Mining
    - Environmental protection authority (EPA)

- Always ensure you follow work place polices and procedures especially in consulting outside agencies, organisations.

Determine the objectives and develop investigation plan

Review and communicate plan

- Review looking for:
  - Level of authority
  - Level of investigation
  - Resources.
  - Timeframes.
  - Workplace.
  - Legislative or regulatory restraints.
  - Scope
  - Objectives

Determine the objectives and develop investigation plan

Review and communicate plan

- Communicate
  - Stakeholders
    - Internal
      - Director/GM/SSE
      - Managers
      - Health and Safety
    - External
      - Regulators
      - Police

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

15 to 19

Gather information

- Maintain security and integrity of evidence
- Plan and prepare for systematic collection of information
- Schedule information collection
- Confirm methods used to collect and examine information
- Collect, test and organise information
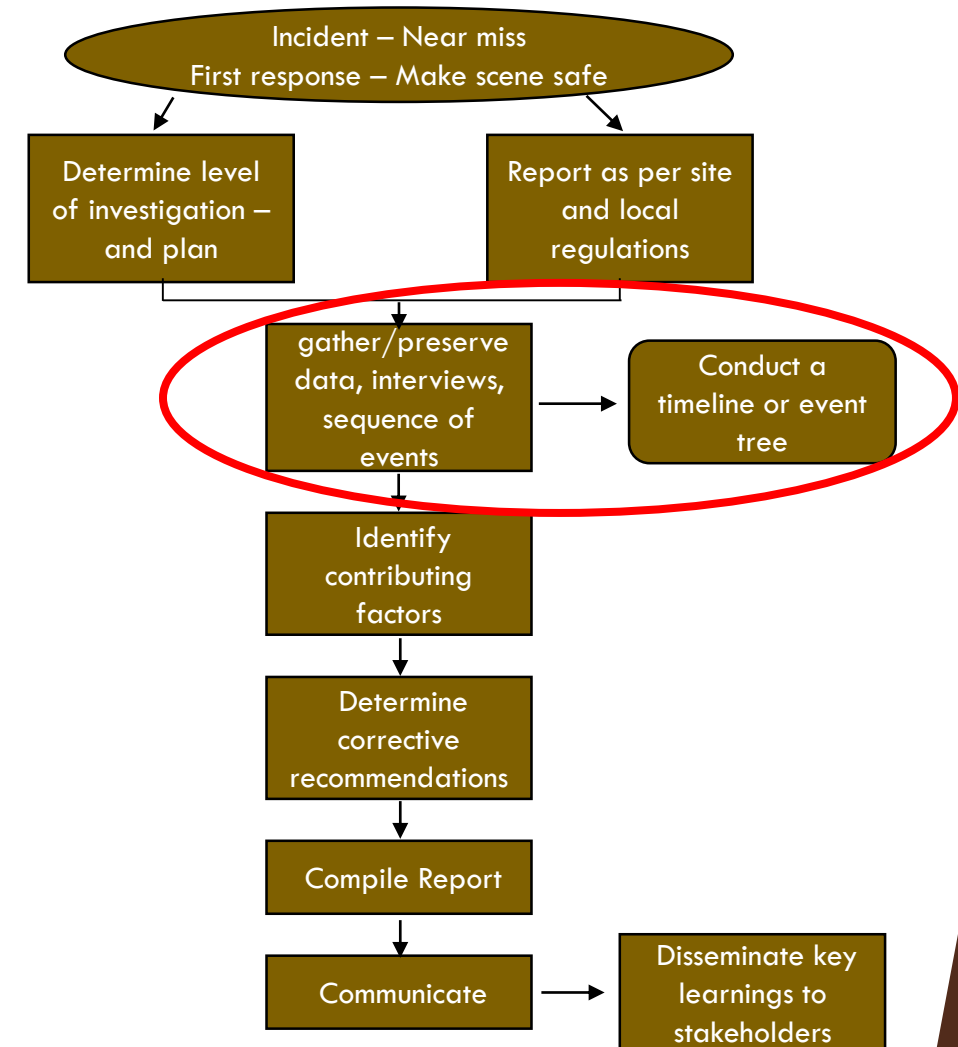
Gather information

Maintain security and integrity of evidence

- Scene
    - Secure/preserve the scene (protect evidence & legislative requirement)
    - May not be able to be release without external authorisation
    - Until gathering of evidence is completed
    - Might need to station a sentry/guard

- Collected evidence
    - Photos, statements, diagrams etc
    - Keep secure – investigation team only
    - May need to isolate the evidence depending on what it is
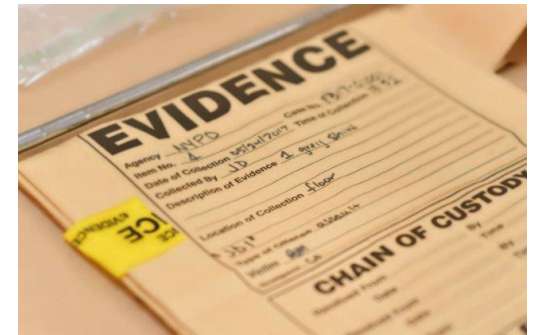
Gather information

Plan and prepare for systematic collection of information

- Depending on the complexity of the incident, may need to conduct a formal planning stage prior to collecting data and interviewing personnel. The planning stage would normally commence with the following considerations:
    - Select a suitable, secure room as the investigation team headquarters.
    - Obtain administrative assistant.
    - Decide when to visit and photograph incident scene.
    - Obtain written statements (to the company and external authorities) that may have been requested of individuals at the incident scene.
    - Arrange to interview participants, witnesses, management staff, support staff, or anyone who may have useful information.
    - Obtain maps, diagrams, and photographs that may be helpful to the investigation.

Gather information

Plan and prepare for systematic collection of information

- Continued
    - Brainstorm the scope of the investigation
    - Outline a plan of action and allocate tasks
    - Identify any additional specialists required to assist in the investigation
    - Set up control and recording procedures for gathered evidence
    - Select a date to start preparing the incident report
    - Minute the meeting
    - Set the date, time, and place for the next meeting

Gather information

Schedule information collection

- The collection of Information and data should be scheduled in a systematic process to avoid the need to backtrack and needs to consider such things as:
  - Timings
  - Weather
  - Reporting obligations / legislative requirements
  - Shift / rosters
  - Further testing / concurrent activities (might need to test evidence) allow time for results
  - Availability
  - Organisational / Operational demands

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

20 to 25

Gather information

Confirm methods used to collect and examine information

- Referring back to P.E.E.P.O.

- Conditions, actions or deficiencies in each of the five main areas may be identified as contributing factors to the subsequent incident.

- To ensure that all the facts are uncovered, ask the broad questions such as "who? what? when? where? why? and how?"

Gather information

Confirm methods used to collect and examine information

- **People**
  - Interview
    - Explain in their own words what happened, taking care not to ask leading questions.
    - Explain their actions immediately prior to the incident.
    - Explain any actions taken to reduce risk in the task being conducted.
    - Whether they knew of any safety features or PPE required for the task.
    - Whether they knew of any previous incidents or near misses associated with conducting the task.
    - What could have been done differently to prevent the outcome.

Gather information

Confirm methods used to collect and examine information

- **People**
  - What experience in the task did those involved in the incident have?
  - What training had they received?
  - What physical limitations may have affected the way they conducted the task?
  - What was the status of their health?
  - What do you know about the period of time they have been at work or previously had off?
  - Are you aware of any stress or time pressures (work or personal) that may have affected them?

Gather information

Confirm methods used to collect and examine information

- **Environment**

- The physical environment, and especially sudden changes to that environment, are factors that need to be identified.

- The situation at the time of the incident is important, not what the 'usual' conditions were. For example, incident investigators may want to know:

  - What were the weather conditions?

  - Were any housekeeping issues involved?

  - What were the workplace conditions?

  - What surrounding noises were present?

  - What were the light conditions?

  - Were toxic or hazardous gases, dusts or fumes present?

Gather information

Confirm methods used to collect and examine information

- **Equipment**

- Pay particular attention to the condition of equipment e.g. abnormal stress, modifications, substitutions, distortions, fractures etc. Identify any design flaws, mismatched components or confusing labelling or marking. Ensure that the equipment was appropriate for the task being conducted.

- To seek out possible causes resulting from the equipment and materials used, investigators might ask:
    - How did the equipment function?
    - Were hazardous substances involved?
    - What identification did they have?
    - Were any alternative substances available?
    - What was the state of the raw material?
    - What personal protective equipment (PPE) was being used?

Gather information

Confirm methods used to collect and examine information

- **Procedures**

- Examine the work procedures and the scheduling

- Examine the availability, suitability, use and supervisory requirements

- Look for answers to questions such as:
    - What work procedure was used?
    - Was a Job Safety Analysis conducted as part of the planning prior to the task?
    - Had conditions changed that would have effected the way the normal procedureworked?
    - What tools and materials were available?
    - Were they used?
    - How did the safety devices work?
    - What lockout or isolation procedures were used?

Gather information

Confirm methods used to collect and examine information

- **Organisation**

- The role of supervisors and management must always be considered in an incident investigation. Answers to any of the preceding types of questions logically lead to further questions such as:
  - What applicable safety rules were communicated to employees? When?
  - What written procedures were available?
  - How were they enforced?
  - What supervision was in place?
  - What training was given? When? Is it still valid and current?

Gather information

Confirm methods used to collect and examine information

- **Incident scene**

- The investigation team should verify the following:
  - Positions of injured workers.
  - Materials being used.
  - Position of all equipment in relation to other equipment.
  - Position of valves, switches, controls etc.
  - Condition of the load bearing surface.
  - Safety devices in use.
  - Position of appropriate guards.
  - Damage to equipment.
  - Accessibility and evidence of congestion.

Gather information

Confirm methods used to collect and examine information

- **Incident scene – cont**
  - Illumination, visibility and noise levels at the site.
  - State of housekeeping at the site.
  - Condition of the facility and equipment.
  - The effects of weather.
  - Presence and location of witnesses.
  - •Presence of unauthorised personnel.
  - Evidence of safety equipment failures.
  - Evidence of loss of containment.
  - Witness marks (gouges, scratches, smears, discolouration, burn marks etc.).
  - Evidence of excessive force.
  - Presence or absence of warning signs or barriers.
  - Results of other inspections by company representatives or external authorities.

Gather information

Confirm methods used to collect and examine information

- **Photography**

- A photograph without a proper caption is confusing and of little value.

- Photographs taken at the accident scene should include the following:
  - An overall view of the incident site (wreckage) taken from a minimum of four directions.
  - Eight photographs taken at 45-degree angles is recommended.
  - A view of the path of the equipment from point of initial and major impact to the place where it came to rest. Impact marks are vulnerable to rain and traffic; therefore, a photographic record of this type of evidence should be obtained.
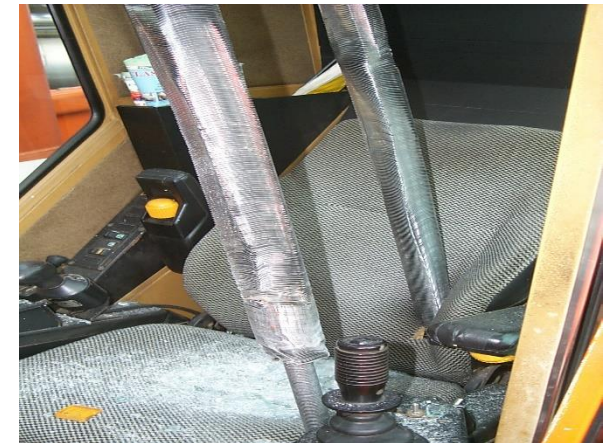
Gather information

Confirm methods used to collect and examine information

- **Photography – cont**
  - Aerial views of the accident scene (equipment and weather permitting).
  - Photos of objects struck by the equipment.
  - Larger portions of the equipment wreckage.
  - Detailed photographs of suspected failed parts that contributed to the accident.
  - Photos of failed personal protective clothing and equipment and the agents causing the failure or injuries.
  - Photograph and measure skid marks, ground scars etc.
  - Any other photographs deemed of interest to the investigation team
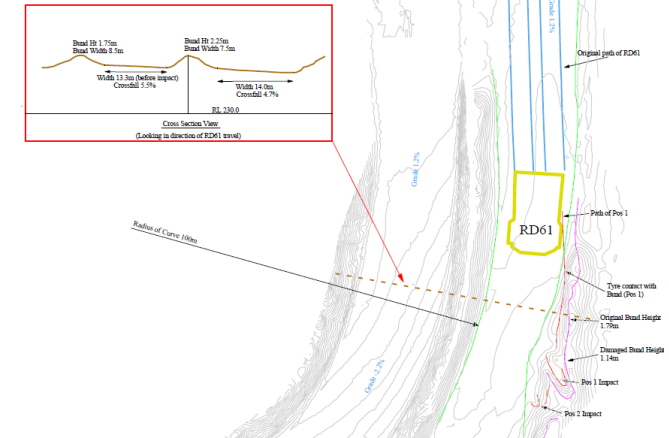
Gather information

Confirm methods used to collect and examine information

- **Organisation**
  - How were hazards identified?
  - What procedures had been developed?
  - How were unsafe conditions corrected?
  - Was regular maintenance of equipment carried out?
  - Were regular safety inspections carried out?
  - Were there any changes to equipment, environment, people or procedures?
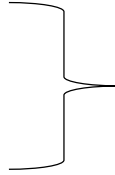
Gather information

Collect, test and organise information

- Collect information as previously discussed

- Test the information by asking the clarifying questions – did it contribute to the incident?
  - You are looking to start culling information gathered to ascertain if it had an impact on the incident (pre or post)

- If it is identified as a contributing factor, they can be organised and placed accordingly (PEEPO)
  - This is why sticky notes are useful

Gather information

Collect, test and organise information

- To assist with the organising of information and now that you have identified contributing factors the information can be organised further.

- Common methods are:
    - Incident Timeline
    - Incident Fault Tree
    - Event and conditions chart

Commonly used for more complex incidents where higher level investigations are required i.e. ICAM etc

- 5 Whys — *Commonly used by the supervisor for lower level incidents*

Gather information

Collect, test and organise information

- Incident Timeline – Cable Management (Injured worker)
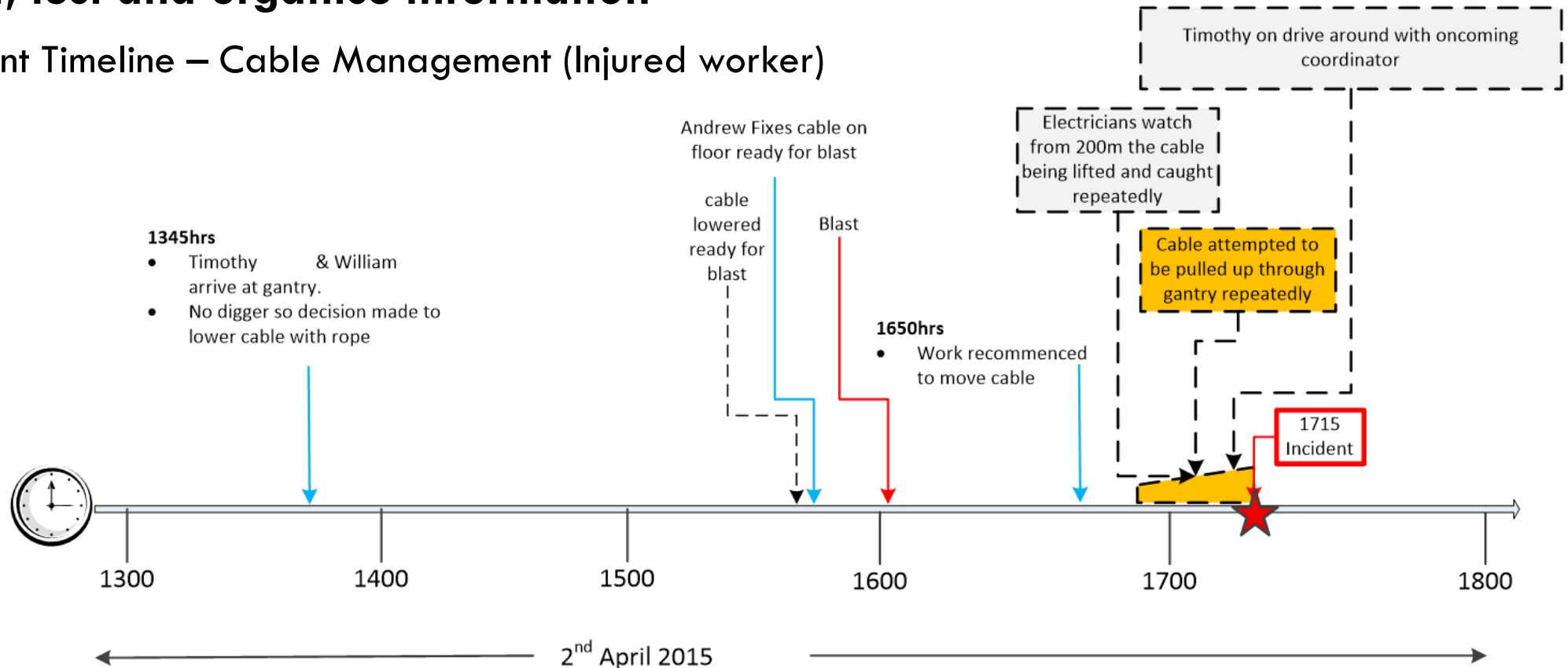
Gather information

Collect, test and organise information

- Incident Timeline – RD Through bund at Tip Head

Jason notified OCE

Jason called for 2nd Dozer

2150hrs – Incident Operator called saying he was bogged

Jason and OCE inspecting dump. Decision made to change direction of dumping

Group hooked sling to Dozer to stabilise

While waiting for 2nd Dozer, Goup conducted JSEA

1800hrs Start of shift

Truck operators notified not to hit the bunds on the dump

Hooked up second Dozer, then all read the JSEA and truck recovered

GCOM 1750 hours

Post Incident – Unknown Times

1800   1900   2000   2100   2200   2300   2400   0100

8th March 2015 Night Shift

Gather information

Collect, test and organise information

- Incident Timeline – RD Unplanned Movement (Operator Fell Asleep) - overview
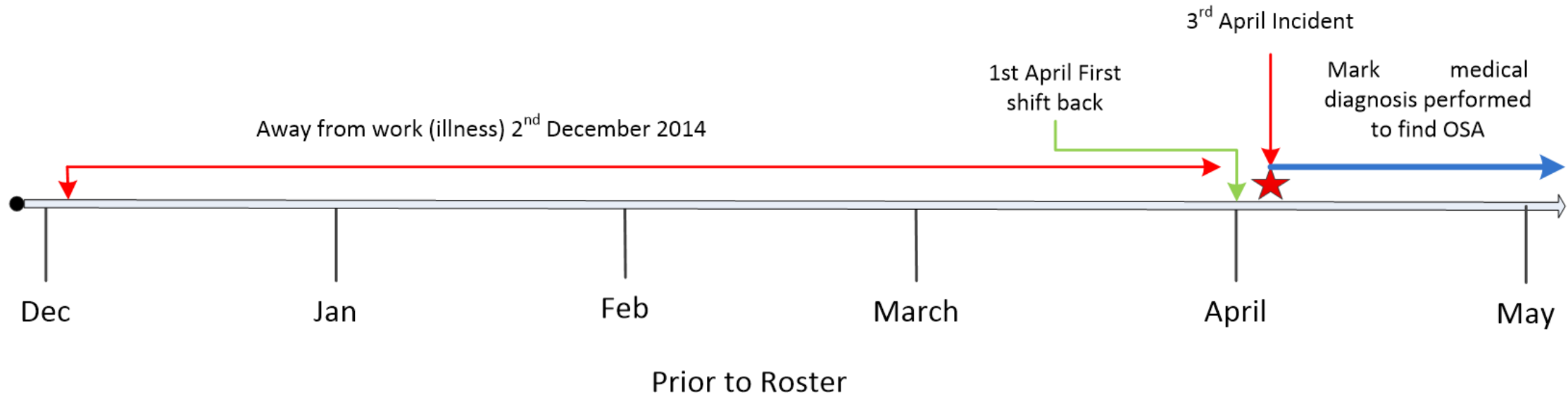
Gather information

Collect, test and organise information

- Incident Timeline - RD Unplanned Movement (Operator Fell Asleep) cont

Roster
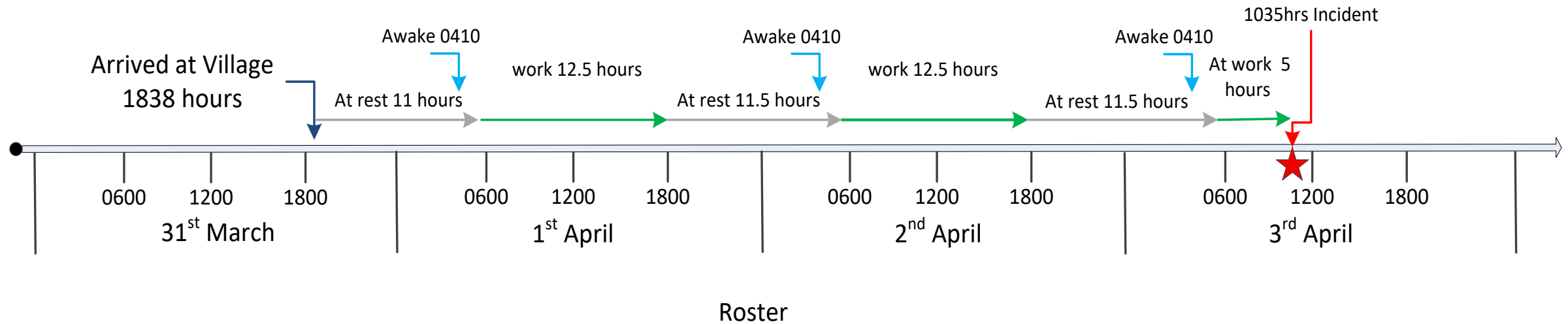
Gather information

Collect, test and organise information

- Incident Timeline - RD Unplanned Movement (Operator Fell Asleep) cont

Gather information
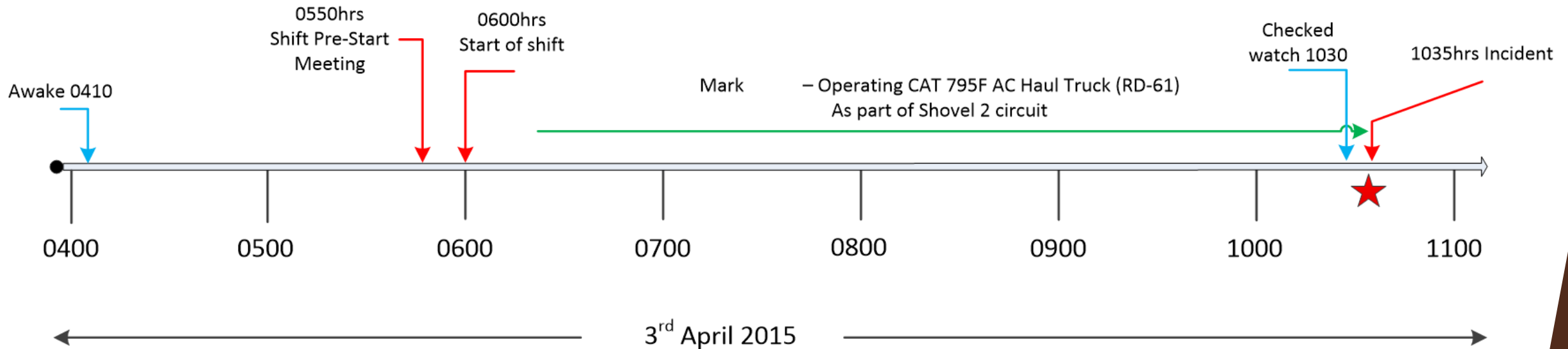
Collect, test and organise information

- Incident Fault Tree
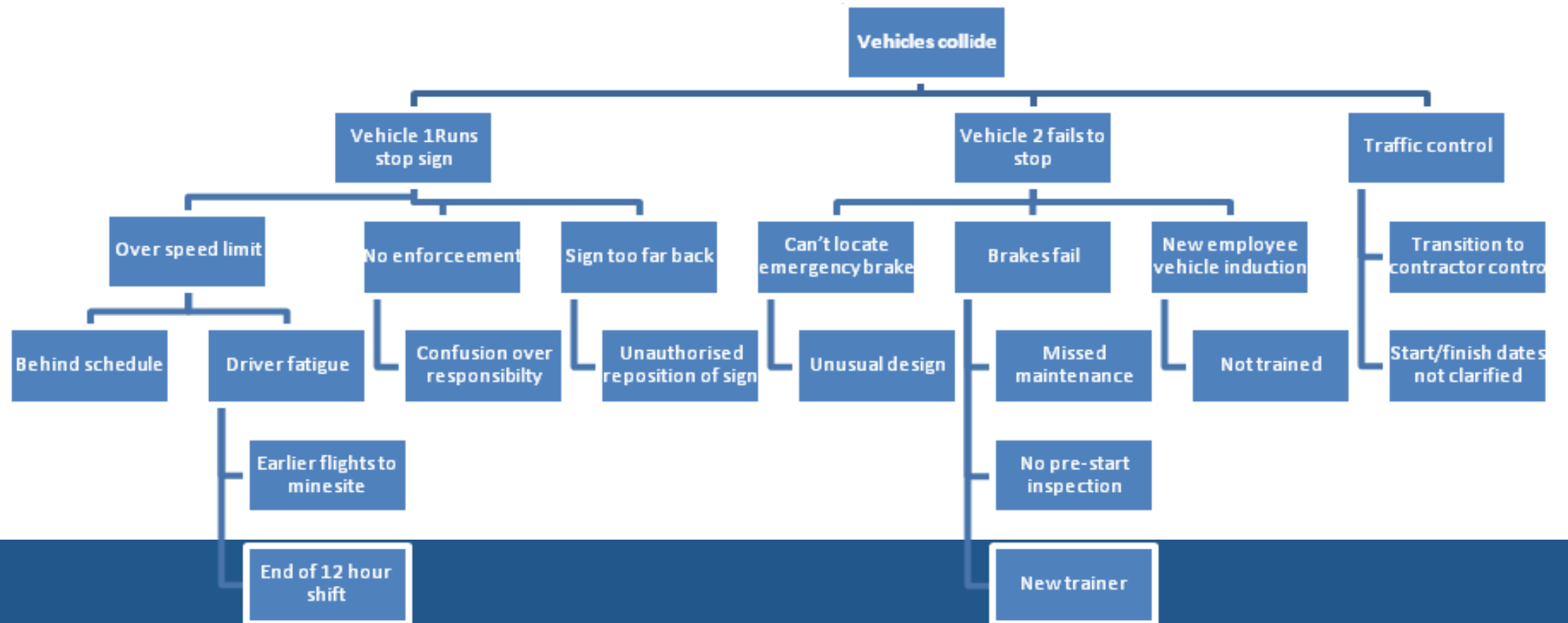
Gather information

Collect, test and organise information

- Event and conditions chart
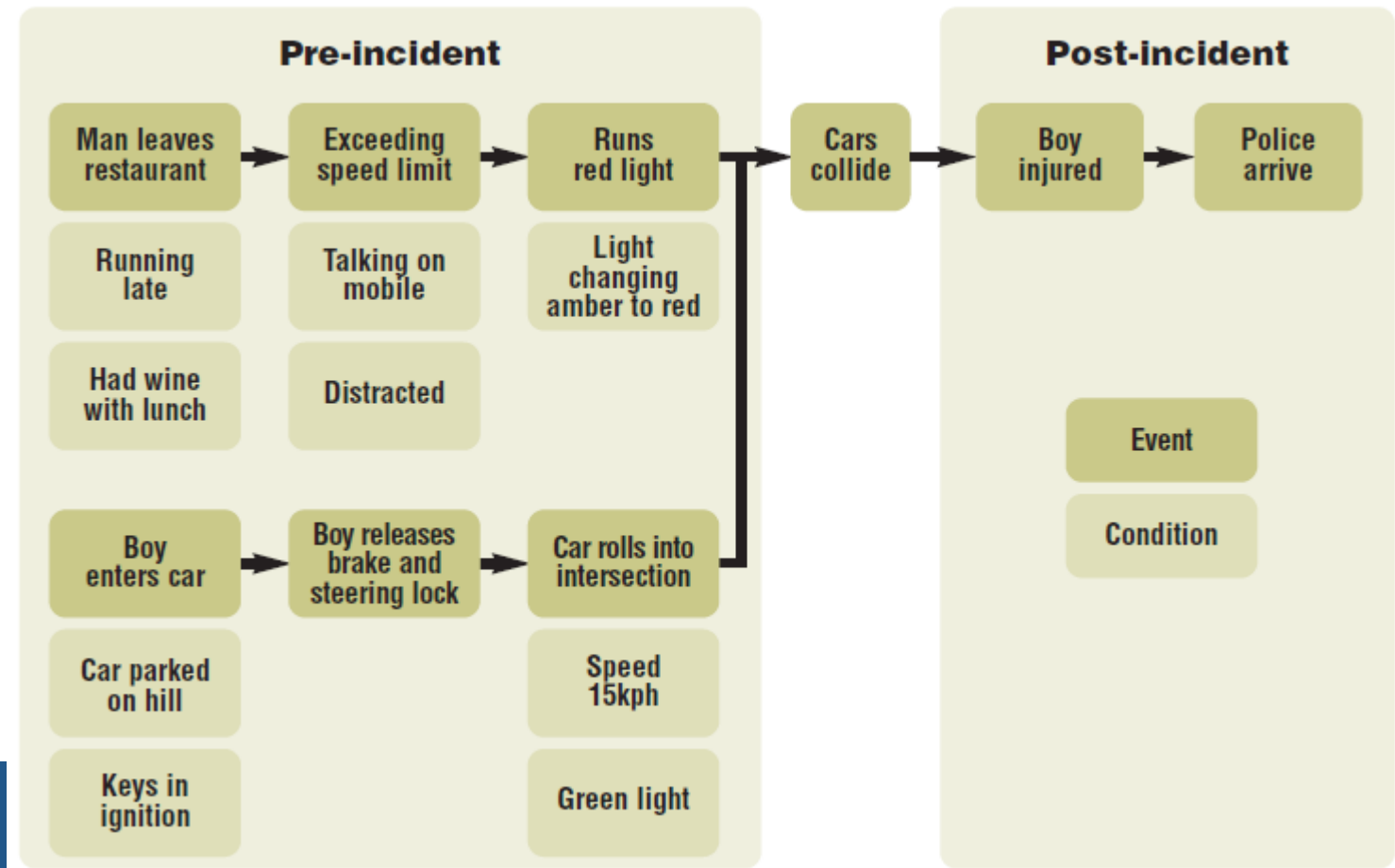
Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

26 to 28

Evaluate information

- Access and evaluate information for validity and reliability

- Undertake further research

- Analyse the evidence to determine causes of the incident

- Draw conclusions

- Confirm findings
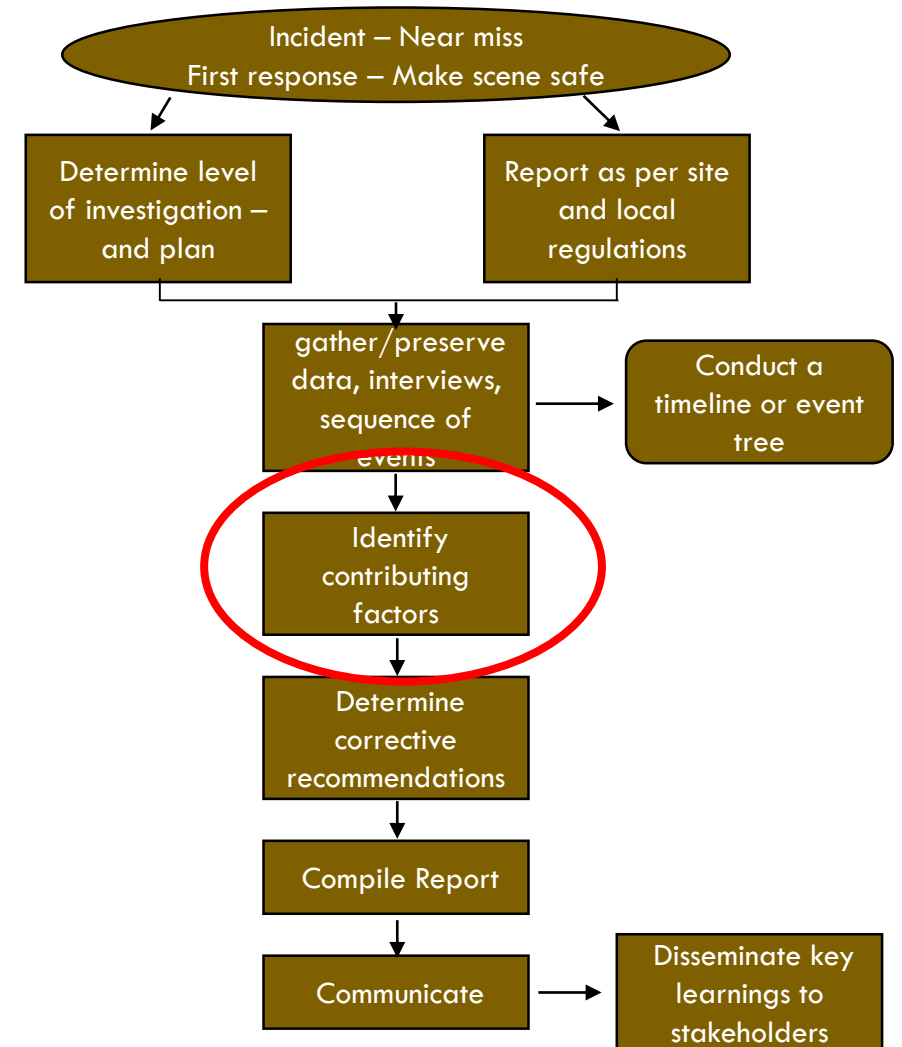
Evaluate information

Access and evaluate information for validity and reliability

- It is important that the team differentiates between fact and opinion. The tables below provide guidance on fact versus opinion and objective versus subjective information.

Fact	Opinion
A fact is the statement of a thing done or existing	An opinion/analytic information is a personal view or judgement based on what seems to be true, or an interpretation of fact.
e.g. Australia won the 1999 Cricket Work Cup	e.g. The 1999 Australian cricket team were as good as the Bradman Invincible.

Evaluate information

Access and evaluate information for validity and reliability

Objective	Subjective
Not an interpretation – based on a factual description.	*Interpretations* – based on personal interpretations/biases.
Observable – based on what is seen or heard.	*Non-observable* – based on events not directly observed.
Reliable – two or more people independently agree on what they observed.	*Unreliable* – two or more people don't agree on what they observed.
Measurable – a number is used to describe behaviour or situation.	*Non-measurable* – a number isn't used.
Specific – based on detailed definitions of what happened.	*General* – based on non-detailed descriptions.

Evaluate information

Access and evaluate information for validity and reliability

- Another useful tool is to use 'SMART' indicators

Specific in that it relates directly to what is measured

Measurable in that data is accurate, complete and it can be quantifiable for comparison

Actionable in that it is easy to understand as well as implement

Relevant in that it measures what is important

Timely in that it can be collected when needed and reflects up to date information

Evaluate information

Undertake further research

- Whilst compiling information it may come to light that further investigation/information is required.

- This is not strange and should be treated in the same fashion as the previous information.

Note: Ensure you keep focused on the objectives of the investigation to ensure you do not go off track.

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

29 to 35

Evaluate information

Analyse the evidence to determine causes of the incident

- There are many analytical techniques and investigators will choose the ones they think are most useful.

- There is no system that is the best; they all have particular strengths and weaknesses.

- The following is a series of steps or tips that may be useful to the investigation team as they analyse the information:
  - Apply an applicable analysis model (Six Thinking Hats, Change Analysis and Decision Making Matrix)
  - Create links between information- use cause, effect and conditions arrows on your charts and diagrams
  - Try to fix any discrepancies early in the process; it lightens the load later when you have eliminated leads early
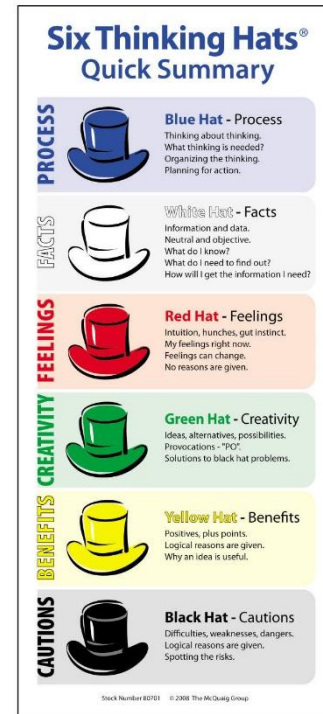
Evaluate information

Analyse the evidence to determine causes of the incident

- The following is a series of steps or tips that may be useful to the investigation team as they analyse the information: cont
    - Only include relevant facts- narrow your focus
    - Exclude all irrelevant facts- they only add confusion
    - Try to avoid repeating data; even when valid, the extra elements add confusion to the process
    - Choose realistic conclusions, but continue to search for other possibilities until they can be ruled out
    - Use analysis tools to organise and reason by argument based on a consensus of probabilities. If it stands up to argument then it is likely to be valid and probable

Evaluate information

Analyse the evidence to determine causes of the incident

- The following is a series of steps that may be useful to the investigation team as they analyse the information: cont
    - Finish with a clear analysis that differentiates fact from opinion. If you are certain that the conclusions are complete and clear-cut state this. If there are areas where you are uncertain, state this and reasons why
    - If a conclusion is not completely supported by the available evidence, state this and why.
    - Any pathway that was not investigated needs to be included and reasons why.
    - Leave the analysis for a few days and review with fresh eyes

Evaluate information

Analyse the evidence to determine causes of the incident

- 5 Why's

- You can use 5 Whys for troubleshooting, quality improvement, and problem solving, but it is most effective when used to resolve simple or moderately difficult problems.

  - Assemble a Team
  - Define the problem
  - Ask the first 'Why?"
  - As 'Why?' four more times
  - Know when to stop
  - Address the root causes
  - Monitor your measures
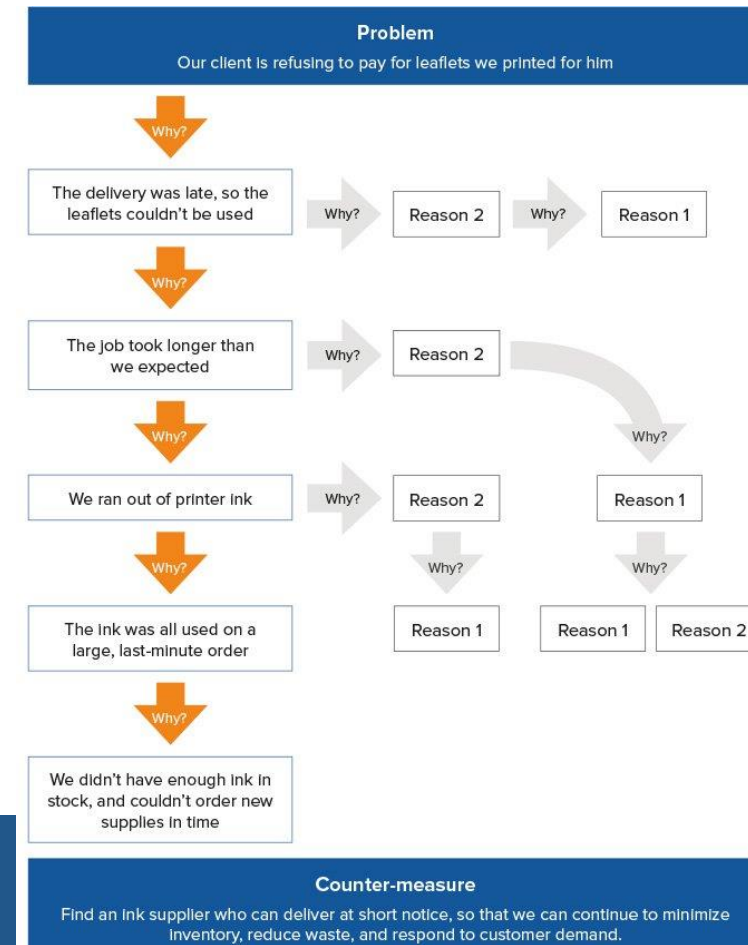
Evaluate information

Analyse the evidence to determine causes of the incident

- Six Thinking Hats

- Each "Thinking Hat" is a different style of thinking.
  - **Blue Hat**   - Process
  - **White Hat**   - Facts and data
  - **Red Hat**   - look at the problem using your intuition, feelings
  - **Green Hat**   - Creativity
  - **Yellow Hat**   - Positive thinking, benefits
  - **Black Hat**   - Cautious, critical thinking

Six Thinking Hats® Quick Summary

PROCESS — **Blue Hat** - Process. Thinking about thinking. What thinking is needed? Organizing the thinking. Planning for action.

FACTS — **White Hat** - Facts. Information and data. Neutral and objective. What do I know? What do I need to find out? How will I get the information I need?

FEELINGS — **Red Hat** - Feelings. Intuition, hunches, gut instinct. My feelings right now. Feelings can change. No reasons are given.

CREATIVITY — **Green Hat** - Creativity. Ideas, alternatives, possibilities. Provocations - "PO". Solutions to black hat problems.

BENEFITS — **Yellow Hat** - Benefits. Positives, plus points. Logical reasons are given. Why an idea is useful.

CAUTIONS — **Black Hat** - Cautions. Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks.

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Evaluate information

Analyse the evidence to determine causes of the incident

- Accidents are complicated processes. It follows that causes are multiple and can be confusing. A system of classifying accident/incident causes, divides them into three categories for better understanding:

  - Basic Causes

  - Contributing Factors

  - Root Causes

REASONS 'SWISS CHEESE' MODEL
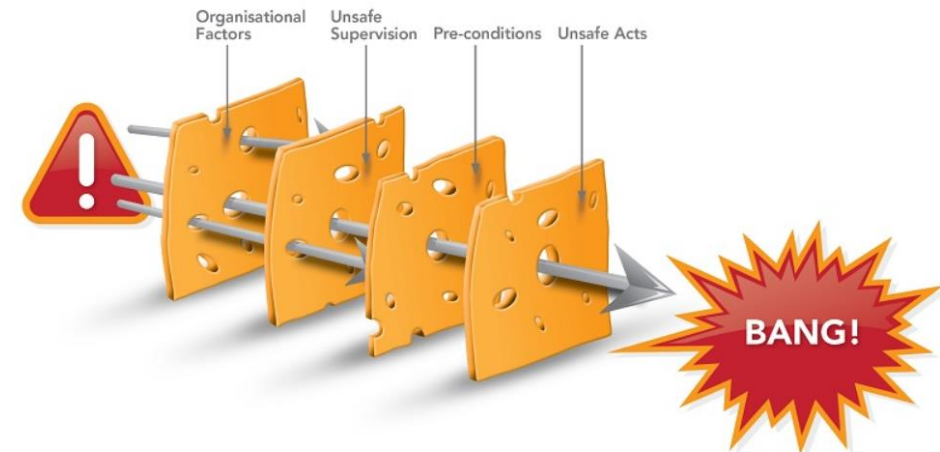
Evaluate information
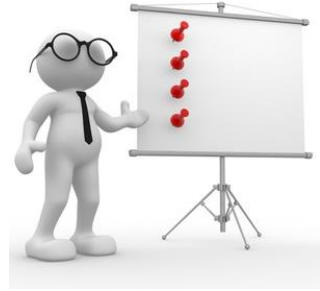
Draw conclusions

- Don't assign blame – it is to continually improve our work systems to ensure a safe and healthy environment.

- Look deeper to identify causes that could lead to further accidents.

- There are some general points to remember when drawing conclusions:
    - Every error a person makes has a prior cause
    - Diverging from procedures have a prior cause
    - Reports and statements must show clear links between cause and effect
    - Failures or deficiencies must be linked to an actual duty to act
    - Avoid negative language while defining causes
    - Prioritising Accident Causes

Evaluate information

Draw conclusions

- One process of drawing conclusions is to use a Decision Making Matrix

Investigation Topic _____			
	Important Factors		
Possible Causes	**Basic, contributing or root cause?**	**What are the 'chances' this cause will contribute to an accident again?**	**If we eliminated this cause, will we be sure it will reduce accidents?**
Worker fatigue			
Equipment 'out to maintenance'			
Scheduling conflict			

Evaluate information

Confirm findings

- Compare with investigation objectives ?
  - Have we followed it back as far as possible?
  - Was this condition rare, common or?
  - Is it supported by facts or was there some conjecture?
  - Any gaps in the causation chain?
  - What are the 'consequences'
  - Does it need to work in combination with other possible causes?
  - If we controlled it, might it control other causes and events as well?

Evaluate information

Confirm findings

- When confirming investigation findings, consider:

    - Objectivity

    - Confidentiality

    - Validity

    - Accuracy

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

36 to 38

Identify courses of action

- Frame options and articulate findings
- Options are provided in a form that meets audience requirements
- Collate courses of actions
- Confirm courses of action are implemented
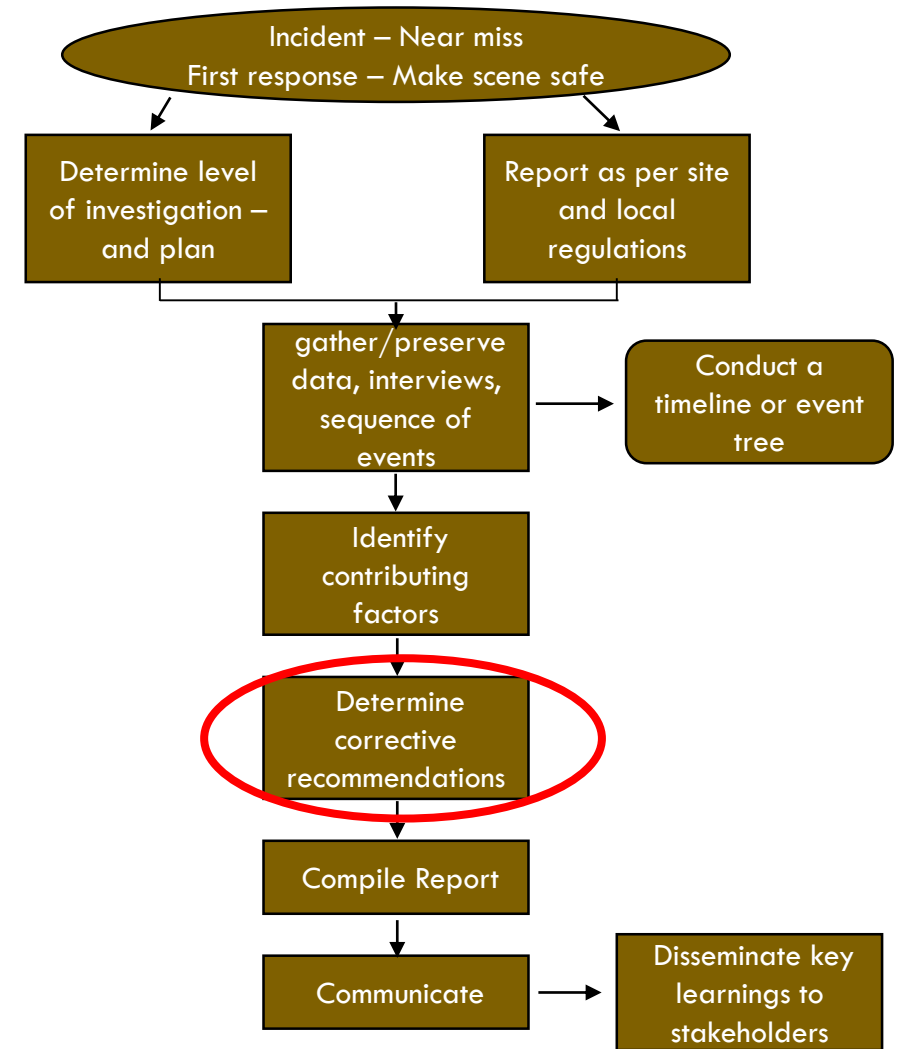
Identify courses of action

Frame options and articulate findings

- A good framework to review recommendations is **SMARTER:**

    Specific in that it relates directly to what occurred

    Measurable in that data is accurate, complete and it can be quantifiable for comparison

    Actionable in that it is easy to understand as well as implement

    Relevant in that it measures or states what is important

    Timely in that it reflects up to date information and can be implemented quickly

    Effective in that what it sets out to do, it accomplishes

    Reviewed in that it can be tested for effectiveness in the future and changed if necessary
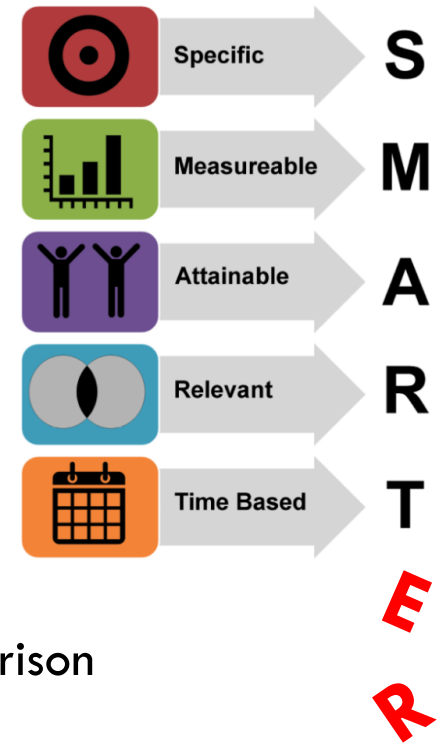
Specific   **S**

Measureable   **M**

Attainable   **A**

Relevant   **R**

Time Based   **T**

E

R

Identify courses of action

Options are provided in a form that meets audience requirements

- There is no one way to deliver the information - Organisations may have specific formats to follow

- While writing recommendations it is important to:
  - State recommendations that will reduce the likelihood of a factor contributing to future accidents
  - State short term corrections that may need to be implemented for safety before more effective longer term corrections are put in place
  - State possible positive and negative outcomes of recommended actions
  - Recommendation should correct 'system' deficiencies, not just a one off fix

Identify courses of action

Options are provided in a form that meets audience requirements

- The format for each recommendation may include:
  - A summary of the contributing factors causation chain with links to recommendations
  - A selection of options for correction clearly linked to the Hierarchy of Control
  - The investigation team's recommended control/s with a brief summary of reasons; use the SMARTER framework
  - Resources needed for implementation
  - Timeframe for implementation
  - Who would be responsible for corrective actions
  - Monitoring and review of corrective actions

Identify courses of action

Options are provided in a form that meets audience requirements

- Use the Hierarchy of Control when developing recommendations / actions.
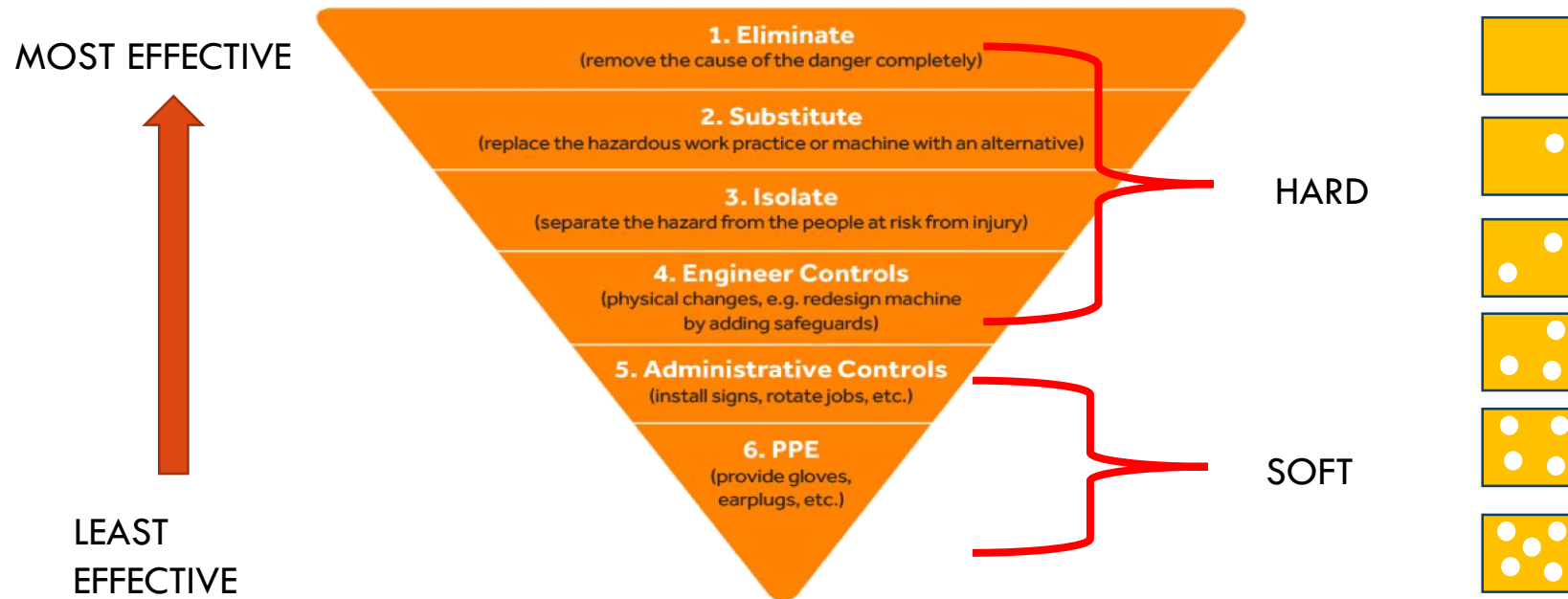
Identify courses of action

Collate courses of actions

Recommendations for Corrective Action						
Investigation Subject _____						
Deficiencies	Options for Correction	Recommended Correction/s	Resources	Timeframe	Who Implements	Monitor and Review

Identify courses of action

Confirm courses of action are implemented

- This is not always part of the investigations teams roles or responsibilities

- Follow your organisations or site procedures, this may include:
    - Adding to management/tracking systems such as 'Site Safe'
    - Post investigation review to ensure are appropriate
    - Follow on risk assessments for the updating of polices and procedures

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

39 to 44

Prepare and present investigation reports

- Prepare investigation reports

- Present reports

- Communicate outcomes
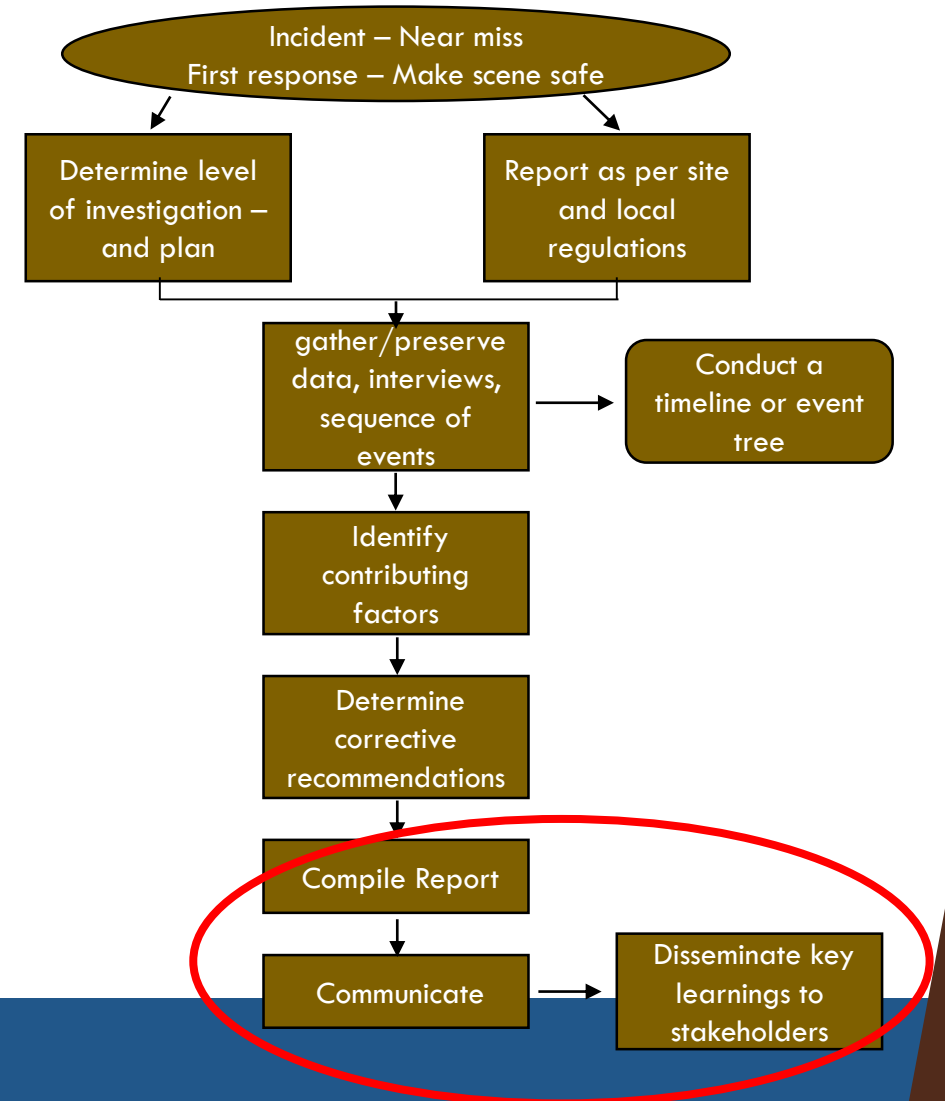
Prepare and present investigation reports

Prepare investigation reports

- Organisational process, severity of the incident and audience will determine the report format

- As a minimum Incident reports should include:
    - Incident
    - Circumstances
    - Findings
    - Conclusions
    - Key learnings, recommendations and actions
    - Outcomes

Incident Report

To be completed by staff within 12 hours of incident/accident

Incident Date: _____ Incident Time: _____
Injured Person Name: _____
Address: _____
Phone Numbers: _____
Male/Female: _____ Date of Birth: _____

Details   of   Incident:
_____
_____
Who was injured person? _____
Injury Type: _____

Does Injury require Hospital/Physician? Yes: _____ No: _____
Hospital Name: _____
Address: _____
Hospital Phone Numbers: _____
Injured person/Party Signature/Date: _____ /_____

Important Notes and Instructions:
_____
_____
_____
_____
_____

Prepare and present investigation reports

Present reports

- The following should be considered when preparing an investigation report:
  - Factual, concise and conclusive
  - Interpretations based on fact
  - Causes should be based on the investigation method used
  - Clearly identify contributing factors
  - Readable as a stand alone document
  - Strict document control procedures followed
  - Reference all relevant documents and associated records
- Visual representations is always a good idea for the quick interpretation of information
  - Photo's, graphs, timeline's etc

Prepare and present investigation reports

Communicate outcomes

- Organisational procedures and severity will dictate the audience for communication

- It may be required to have a close out meeting where preliminary findings are shared with the formal report to follow. This allows the organisation to review, comment and commence corrective actions prior to final report.

- Some key areas to be considered for communication are:
    - Those involved in the incident
    - Work teams
    - Management (Supervisors, Managers, CEO, Chairmen etc)
    - Safety Reps
    - Wider industry preforming similar tasks

Prepare and present investigation reports

Communicate outcomes

Legal review

- Depending on organisational procedures and severity it is advisable that an inspection and revision of the investigative report, depending on circumstances, should be completed by the legal department to ensure it complies with all legislative requirements, industry standards and general duty of care.

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

45 to 50

QUESTIONS

"If you keep doing what you always did, you'll keep getting what you always got"

Yogi Berra (catcher New York Yankees)

If Safety is Everyone's Responsibility, no one will be accountable for it.

8/7/1999

Learn from the mistakes of others. You won't live long enough to make all of them yourself.

It is a good thing to learn caution from the misfortunes of others.

Publilius Syrus

The pessimist sees difficulty in every opportunity. The optimist sees the opportunity in every difficulty.

~ Winston Churchill ~

Every accident, no matter how minor, is a failure of the organisation.
Jerome Lederer

The desire for safety stands against every great and noble enterprise.

-Cornelius Tactitus (AD 56)

15/10/2003
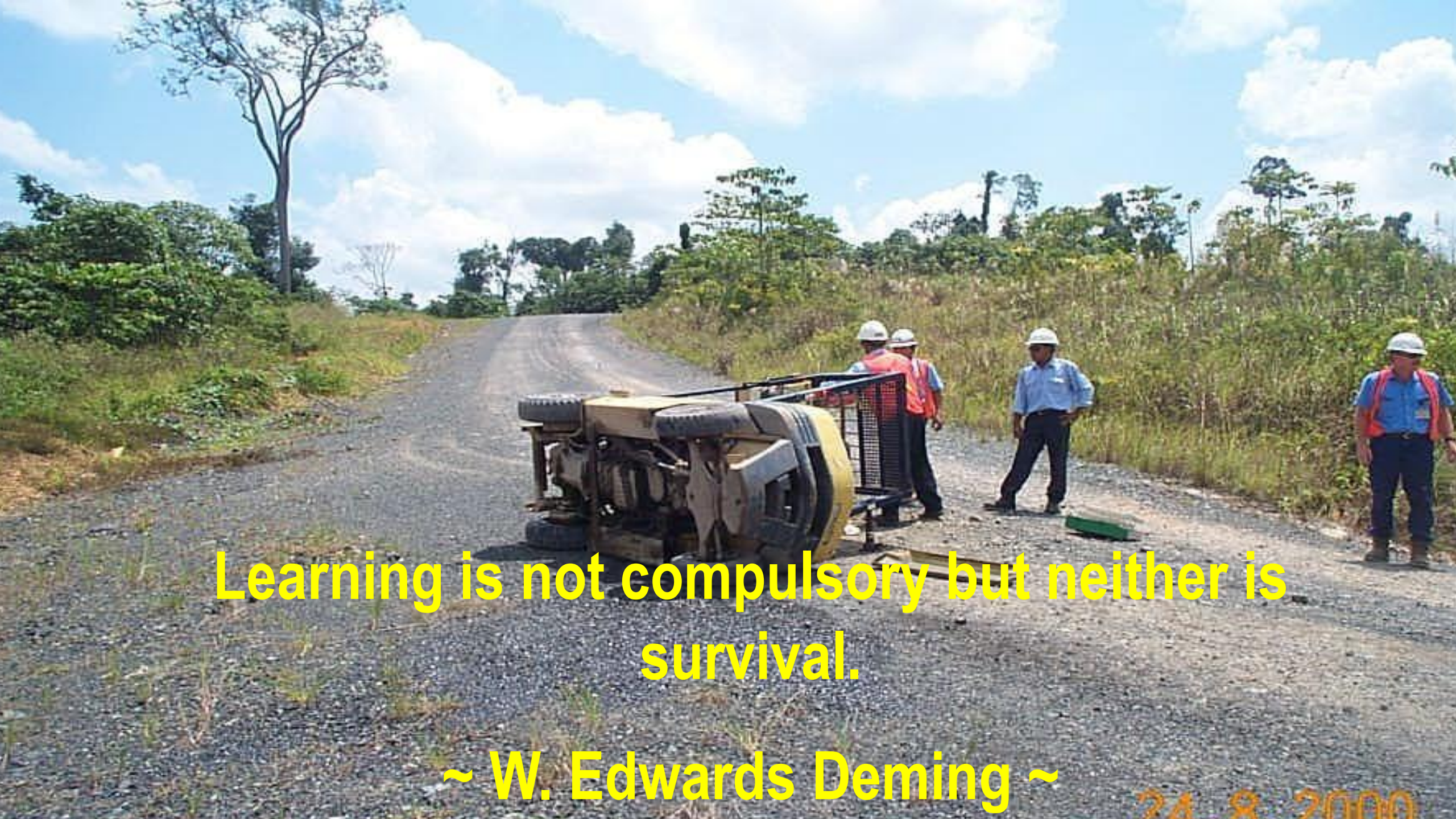
Learning is not compulsory but neither is survival.

~ W. Edwards Deming ~

Experience is a hard teacher.
First comes the test, then the lesson.

There are no new
types of accidents --
only people with short
memories.

There is no problem so complex that it cannot simply be blamed on the driver

— *Dr Earl Weiner*
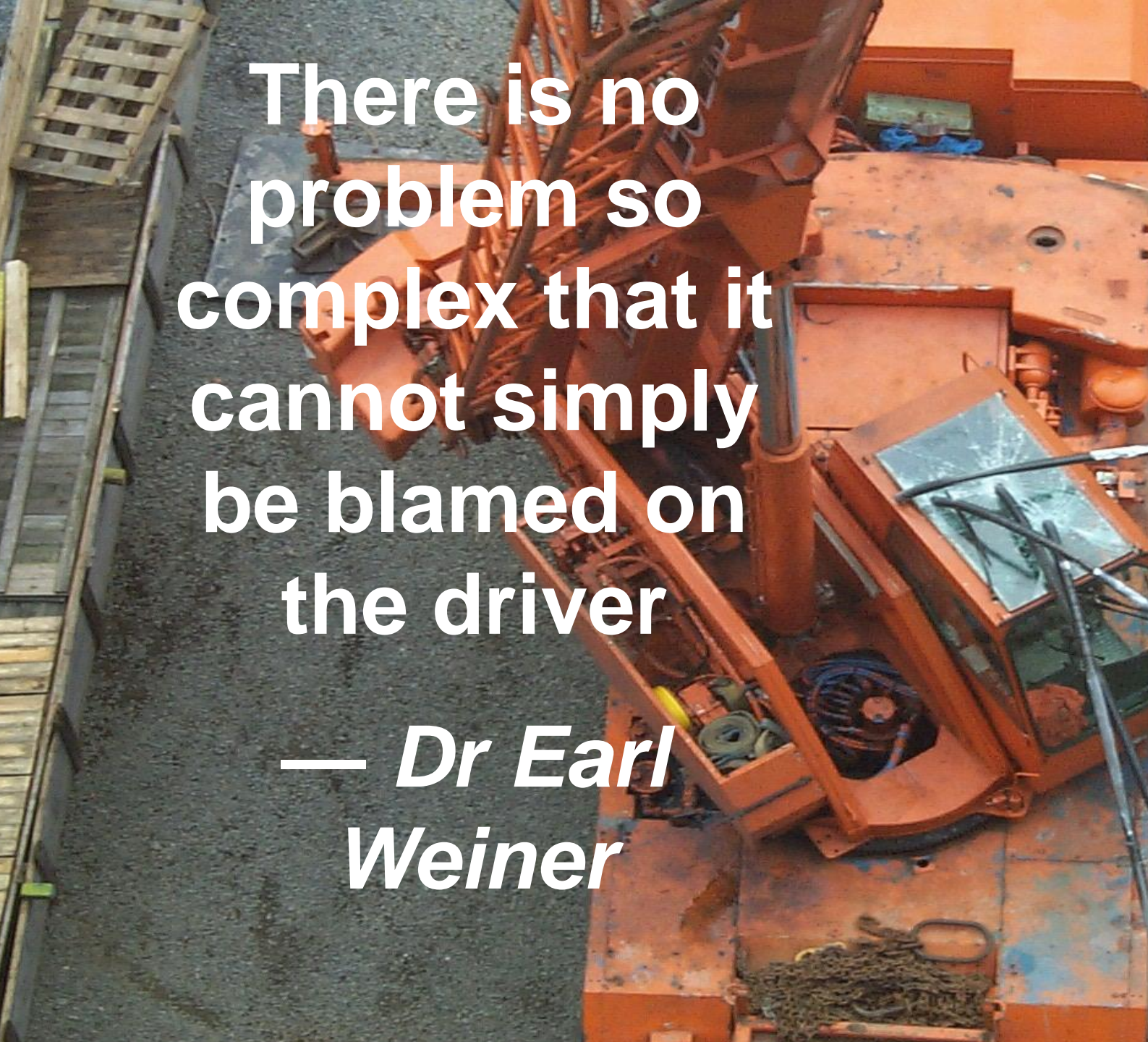
The things which hurt, instruct.

~ Benjamin Franklin ~

28/11/1999

Any experience can be transformed into something of value.~ Vash Young ~
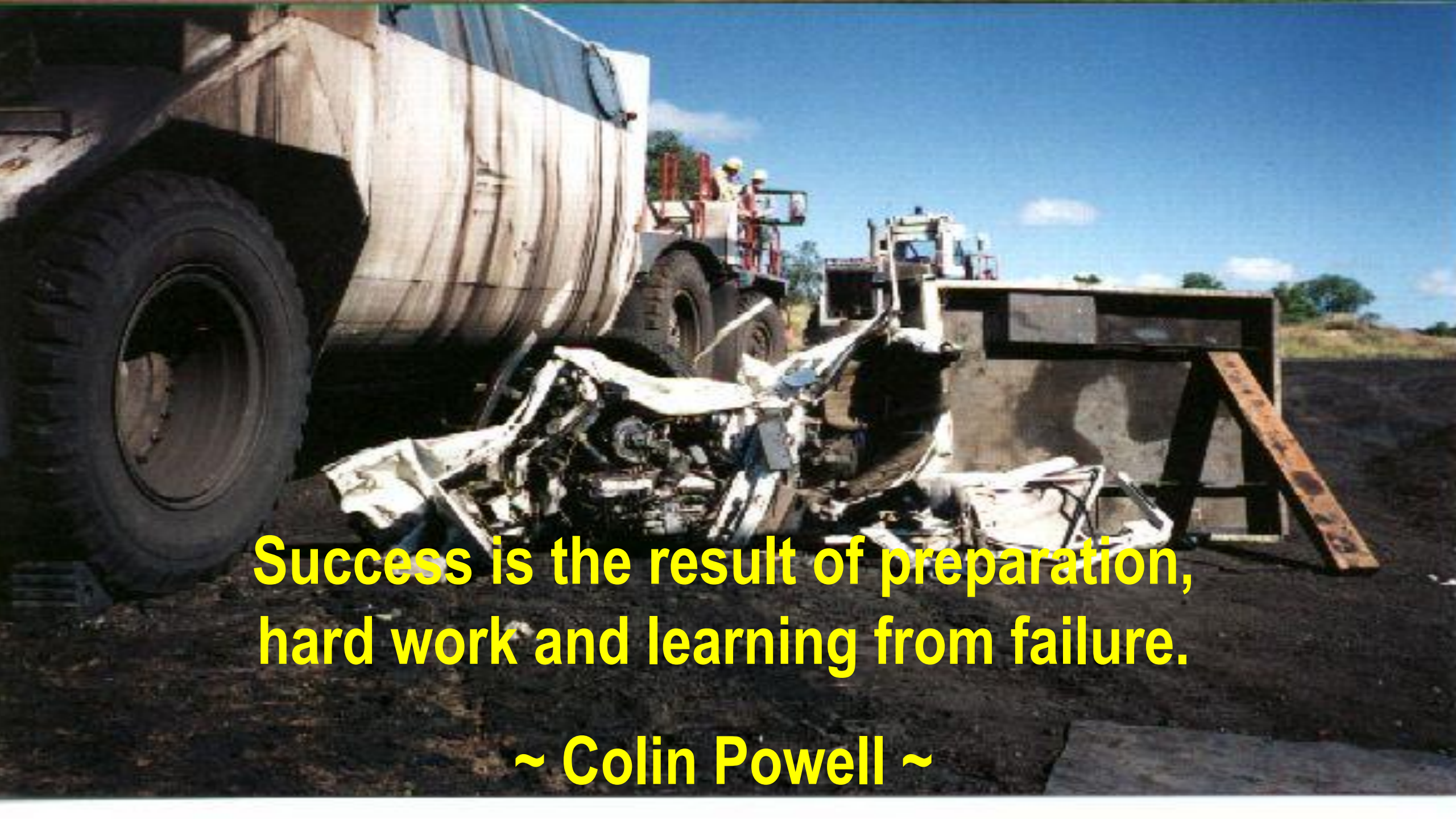
Success is the result of preparation, hard work and learning from failure.

~ Colin Powell ~

"There is no more important an issue than that of ensuring zero fatalities at our operations."
Hugh Morgan, MD WMC

"Safety is a barometer for the success of the Company" ~ DuPont

Report the near miss, occurrence or incident ... Prevent the accident!

Man's journey through life is sustained by the power of his knowledge, yet we live and do not learn."

Sir Winston Churchill

Bugger!!!
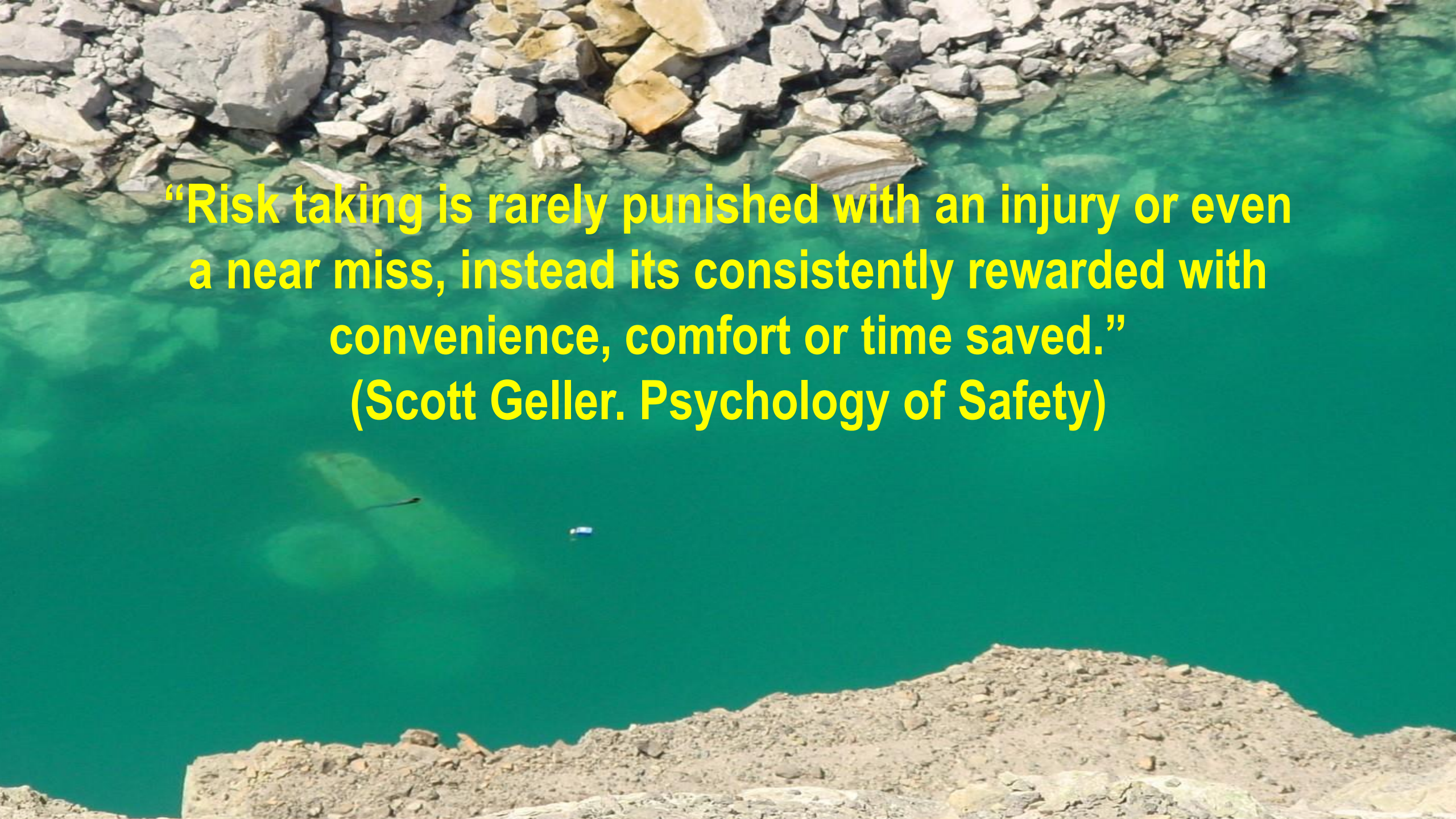
"To have an accident is unfortunate. To have an accident and learn nothing from it is unforgiveable."

Flight Safety Digest

"Risk taking is rarely punished with an injury or even a near miss, instead its consistently rewarded with convenience, comfort or time saved."
(Scott Geller. Psychology of Safety)

Make the mistakes of yesterday your lessons for today.

~ Oscar Wilde ~

"To achieve progress every accident and incident, no matter how minor, must be considered as a failure of the system or organisation and not simply as the failure of a person, or of people."

Dan Maurino, ICAO

Nothing is so simple that it cannot be misunderstood.

~ John Milton ~

Errors, no matter how popular, carry the seeds of their own destruction.

~ John W. Scoville ~

06/04/2002

It is easy to dodge our responsibilities, but we cannot dodge the consequences of dodging our responsibilities.

~ Sir Josiah Stamp ~

There is nothing certain except the unforeseen.

~ Fraude

Take away the cause,
and the effect ceases.

~ Miguel de Cervantes

Death always waits. The door of the hearse is never closed.

~ Joseph Bailey ~

Failure is an event, never a person.

~ William D. Brown ~

Fast is fine, but accuracy is everything.

~ Wyatt Earp ~
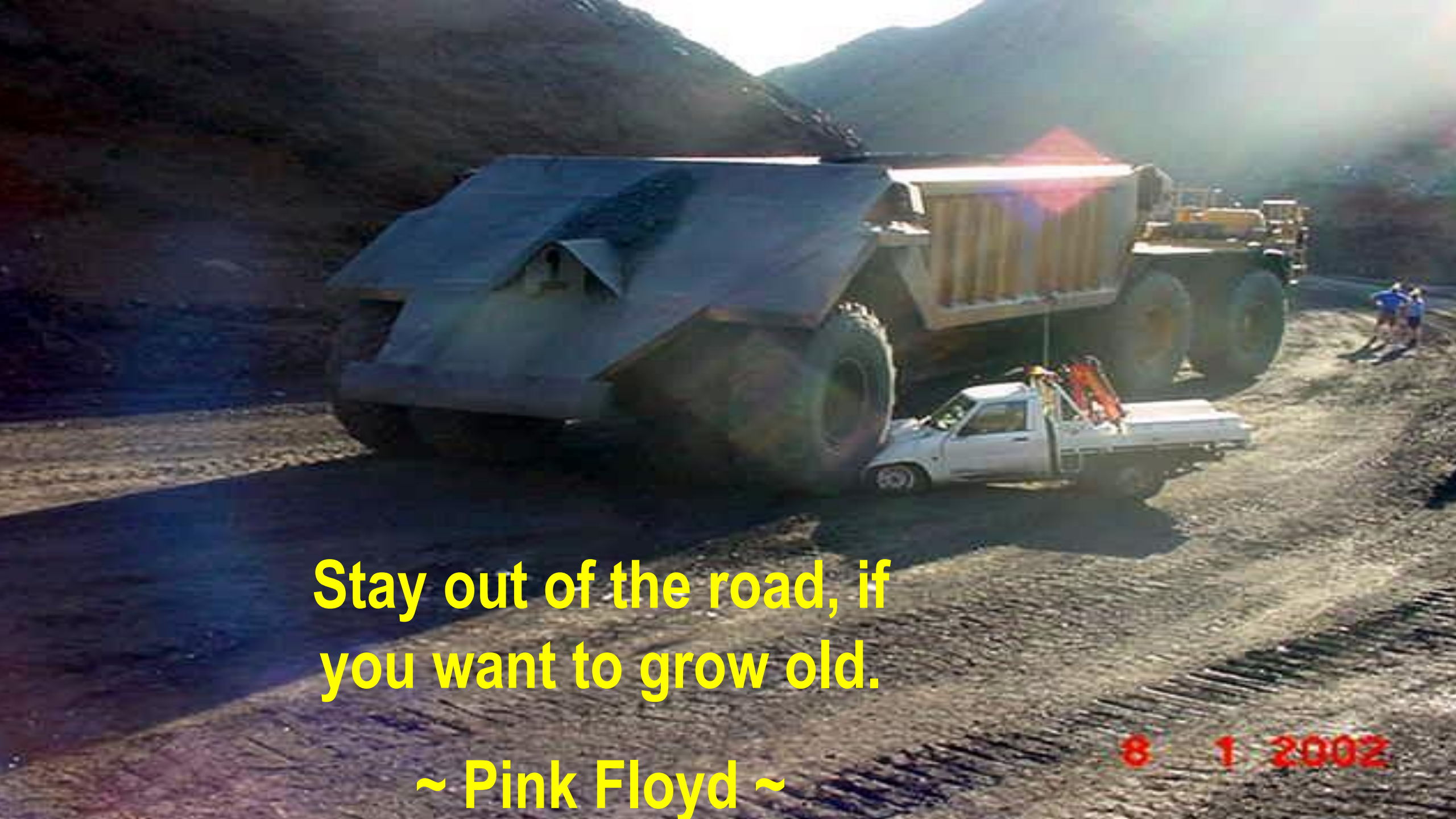
Stay out of the road, if
you want to grow old.

~ Pink Floyd ~

The roots of learning are bitter, but the fruit is sweet.

~ Aristotle ~

Use the losses and failures of the past as a reason for action, not inaction.

~ Charles J. Givens ~

Experience is something you get too late to do anything about the mistakes you made while getting it.

~ Source Unknown
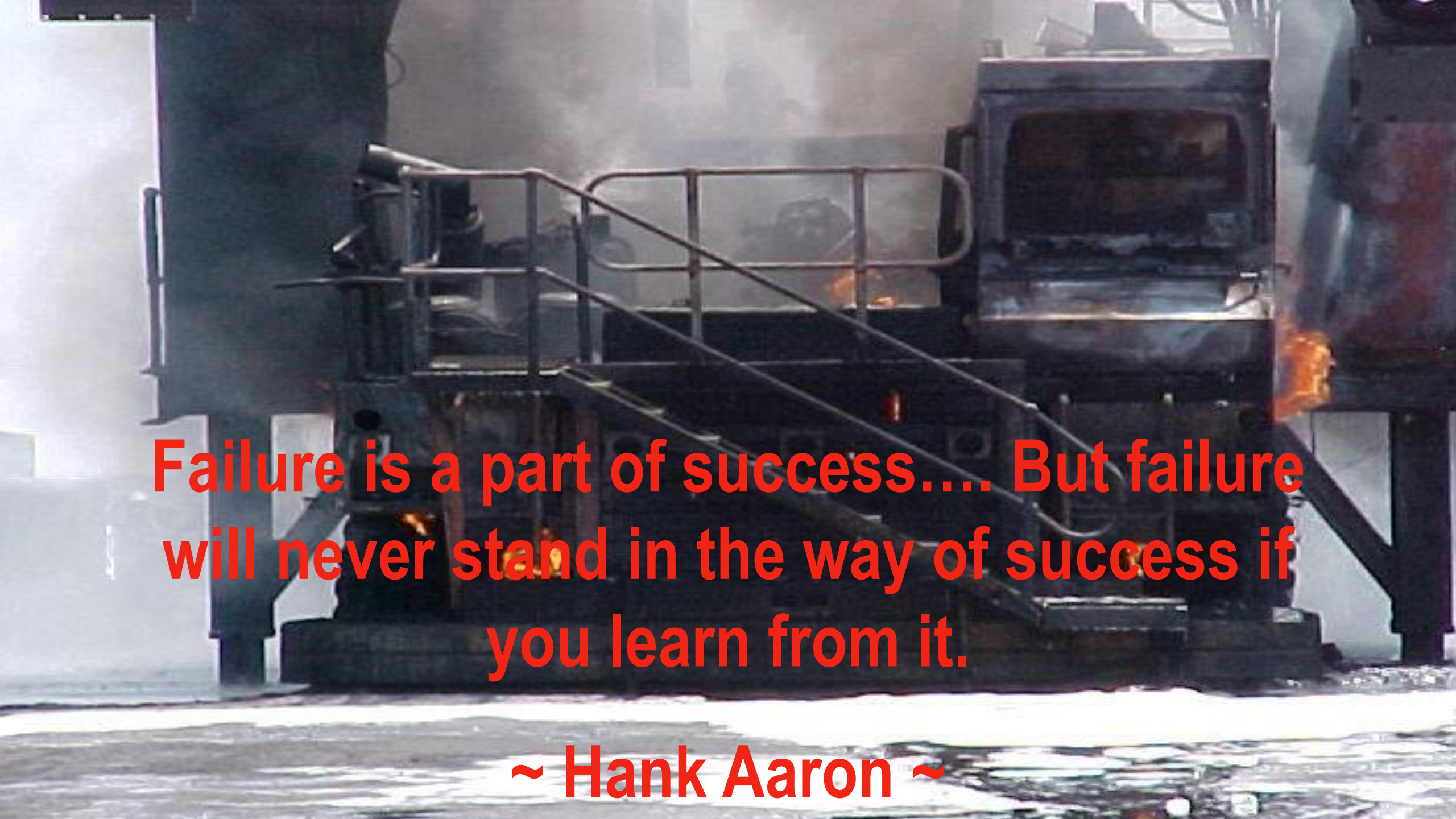
If you can't afford to do something right, then be darn sure you can't afford to do it wrong.

Charlie Nelson

Failure is a part of success.... But failure will never stand in the way of success if you learn from it.

~ Hank Aaron ~

A common mistake people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools.

~ Douglas Adams ~
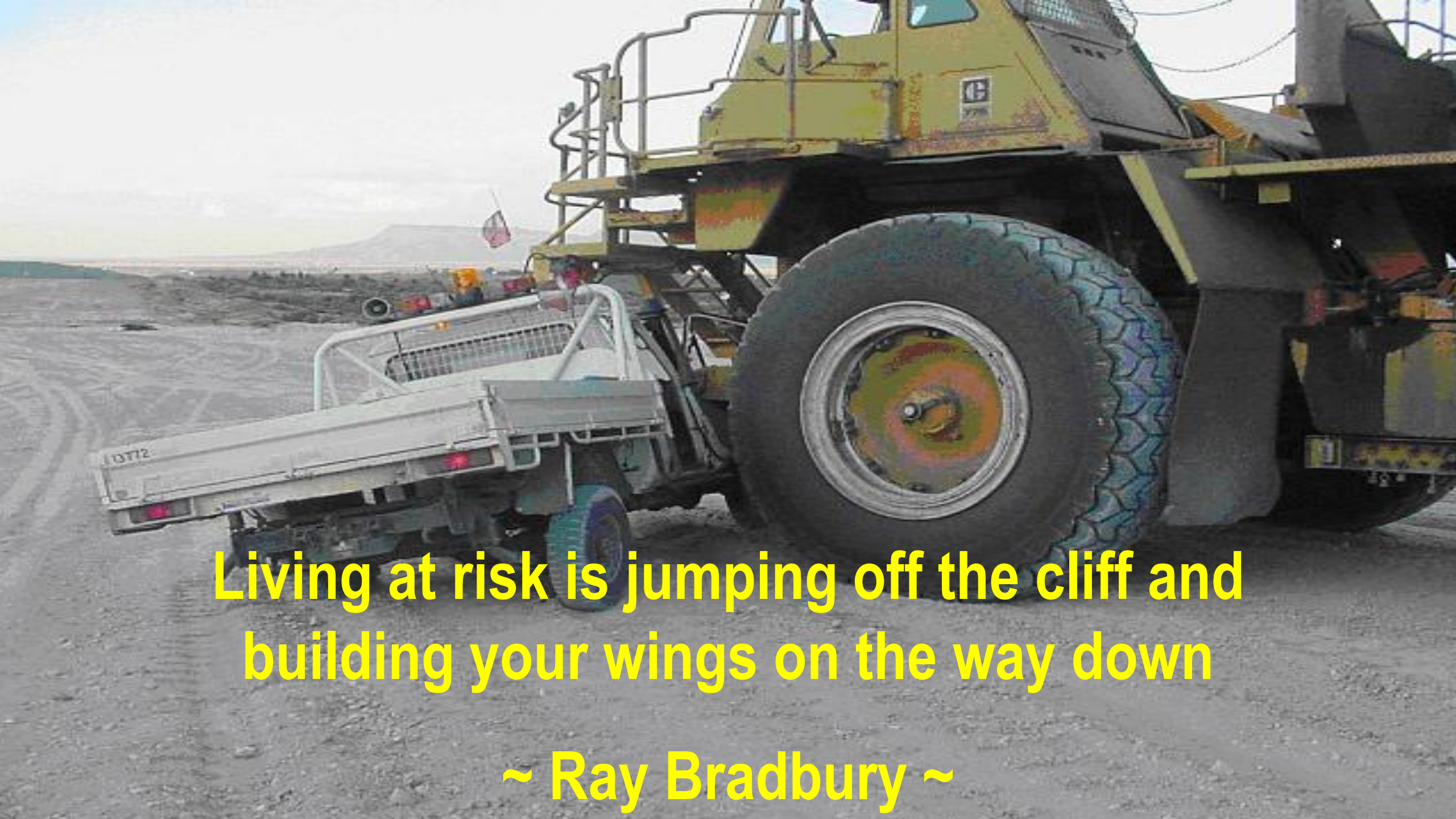
Living at risk is jumping off the cliff and building your wings on the way down

~ Ray Bradbury ~

The achievements of an organization are the results of the combined effort of each individual.

~ Vince Lombardi ~

2002/ 4/13   4:43pm

What we do not understand, we cannot control.

~ Charles Reich ~
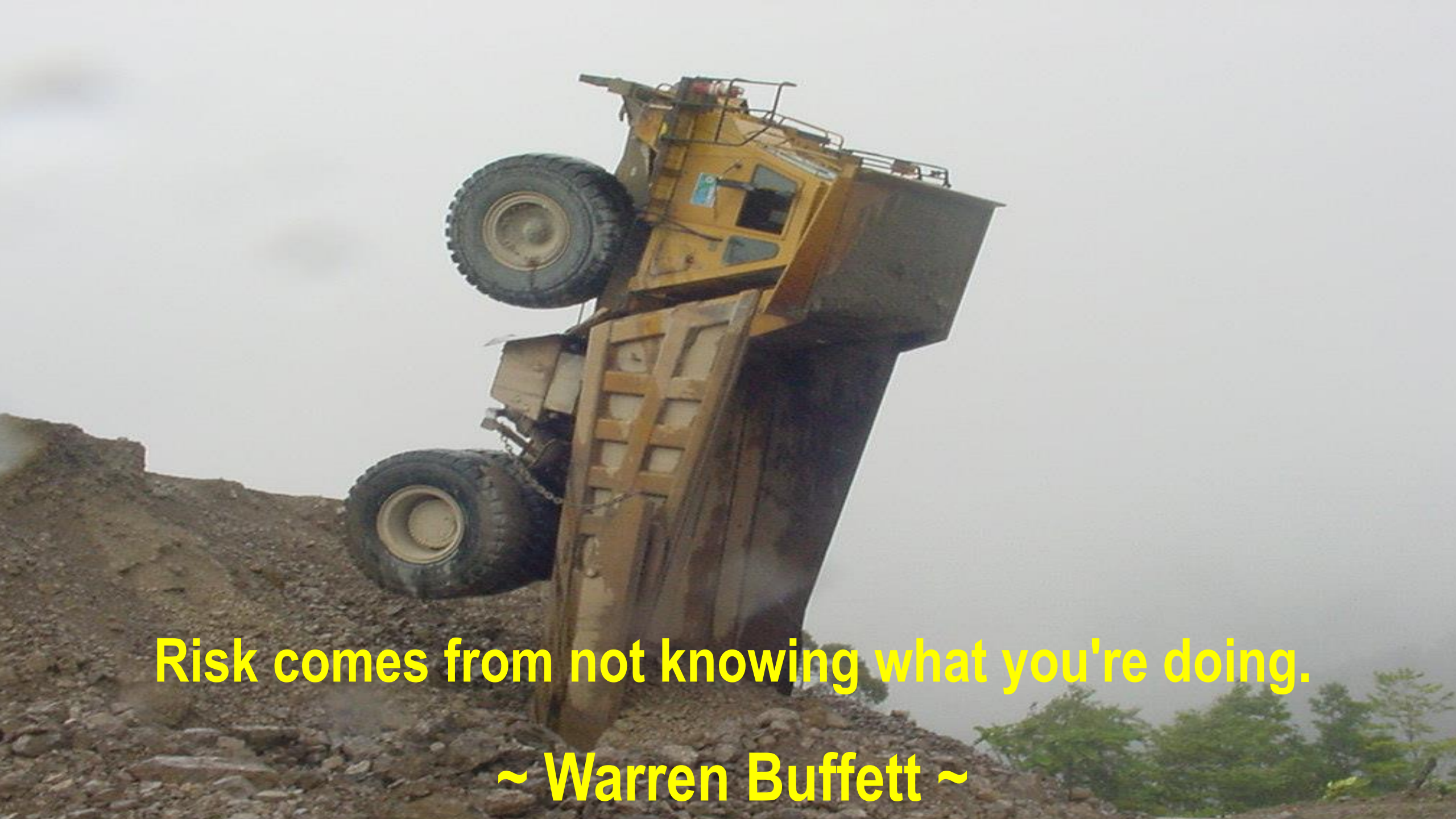
Risk comes from not knowing what you're doing.

~ Warren Buffett ~

Manage the risks or they will end up managing you

Learner Assessment Record

COMPLETE ASSESSMENT QUESTIONS

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