Task Risk Assessment

Guide

STEP CHANGE IN SAFETY®

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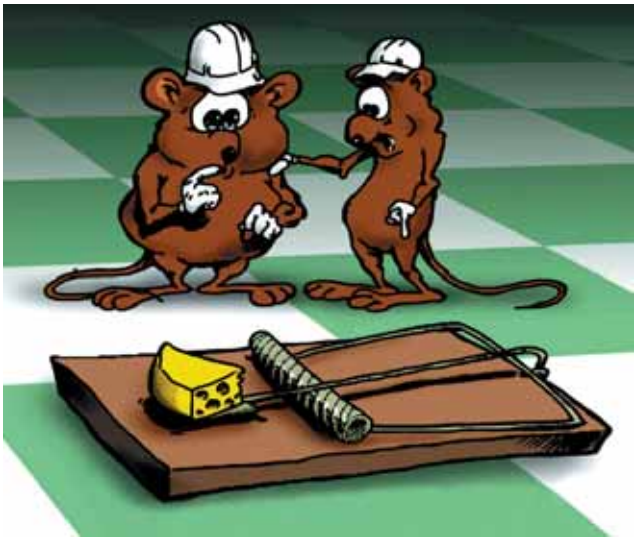
Preface

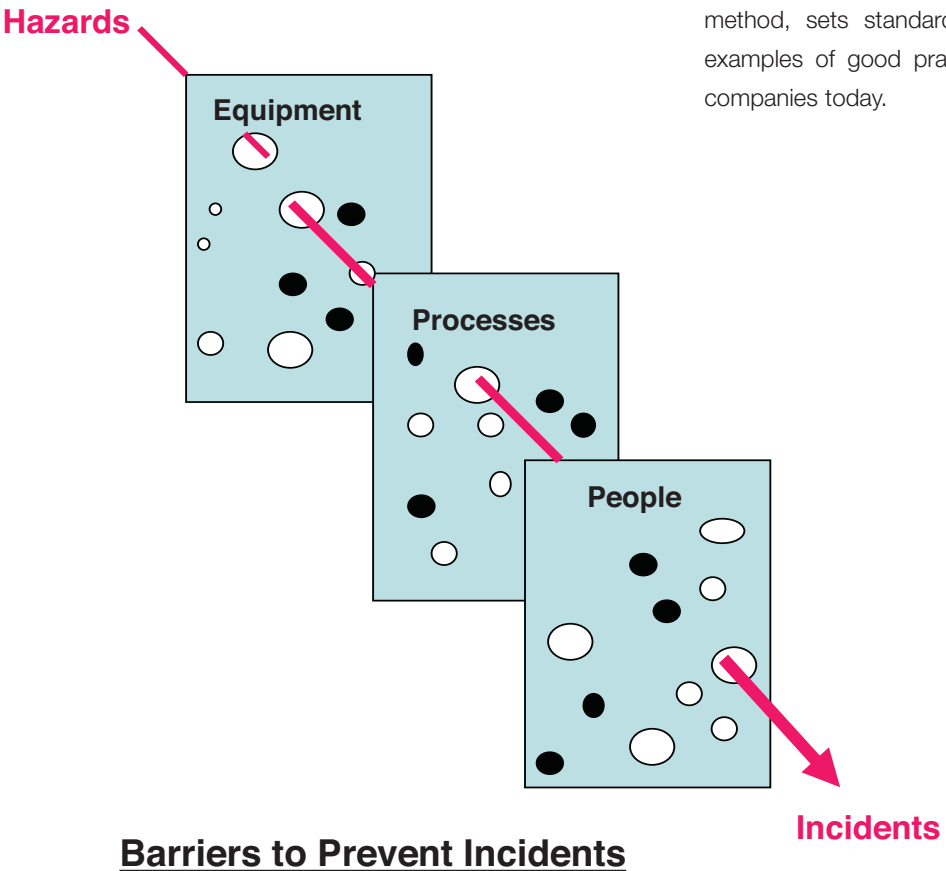


Focus on the **TRA**p...not the cheese!

Task Risk Assessment (TRA) is fundamental to reducing the likelihood of accidents at work and it has been identified as a key area to be addressed to promote safety improvement in the offshore oil and gas industry.

The guidance contained in this document revises the Task Risk Guidance published by Step Change in Safety in 2004. It has been produced after extensive analysis of current practices across industries in the UK and is intended as an aid to assist companies and individuals in developing effective TRA practices and supporting the key barriers to prevent incidents. Widespread adoption of this approach will result not just in a new standard for the industry, but in improved risk awareness by all those involved, promising the realistic expectation of fewer incidents.

This guidance expands upon the ideas of dynamic risk assessment, situational awareness and the assessment of consequences. It also emphasises the key steps of hazard identification and risk assessment as well the need for improved communications. The document illustrates a method, sets standards and expectations, and provides examples of good practice that are being used by some companies today.



Barriers to Prevent Incidents

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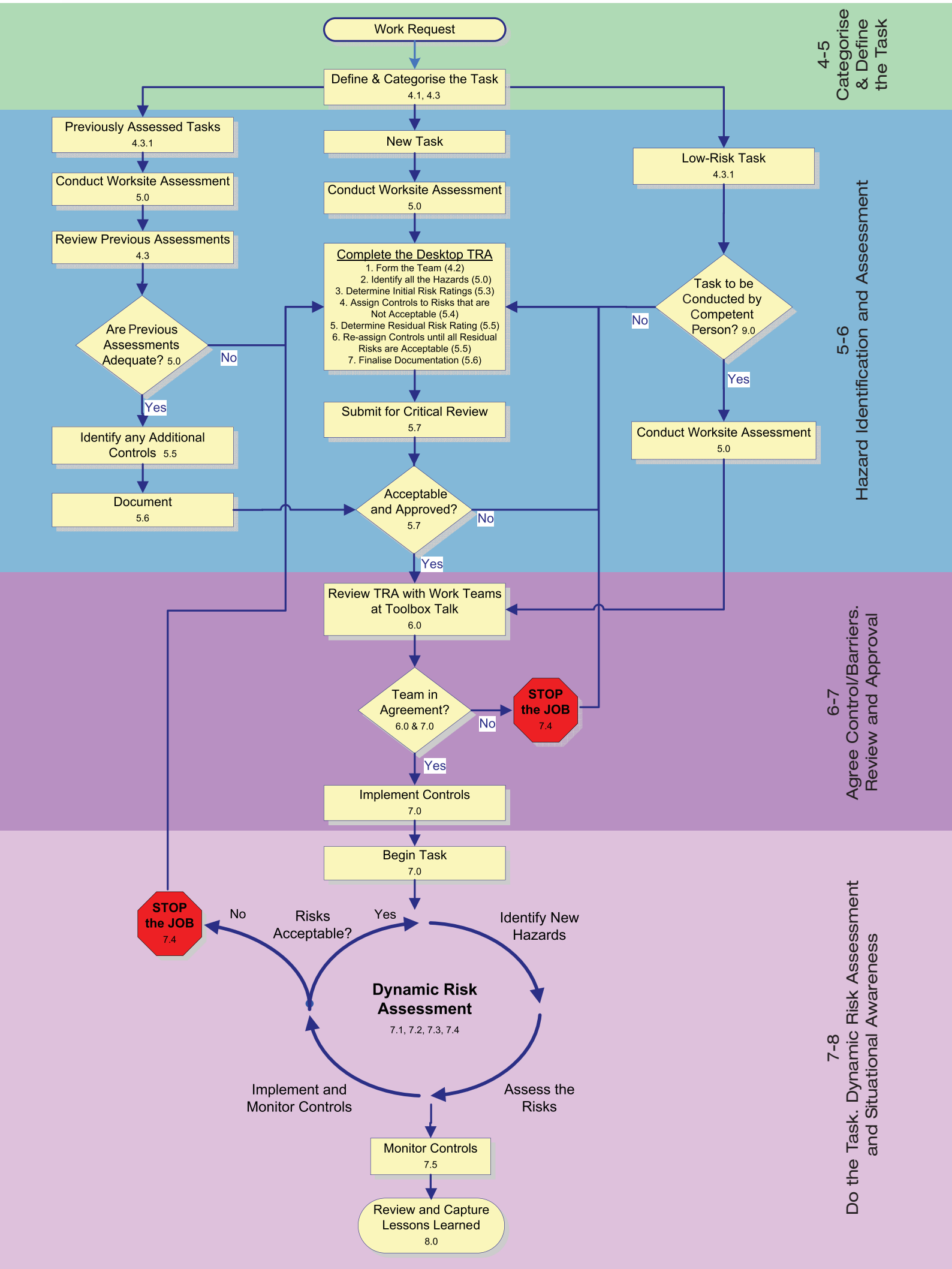

2 Introduction to risk assessment

All work tasks must be subject to an evaluation in order to identify the hazards and the associated hazards, identify the controls, recognise and understand the barriers and precautions required and to demonstrate that the risks have been reduced to an acceptable level. This level is defined 'as low as reasonably practicable' or ALARP. ALARP involves weighing risks against the effort, time and money needed to control them and therefore describes the level to which we expect to see workplace risks controlled.

The Management of Health and Safety at Work Regulations give details under the Health and Safety at Work Act, which relate to the controls of work activity and risk assessment. These regulations apply to all work places in the UK, including offshore installations. Other legislation also makes reference to task-based risk assessment. Some examples include Control of Substances Hazardous to Health (COSHH), Manual Handling, Lifting Operations and Lifting Equipment (LOLER).

The model of TRA presented here is based on good practices identified both within and outside the oil and gas industry. It has been designed to be practical and easy to use. The Flow Chart in Section 1 provides an overview of the process to be followed.

This document is designed to provide guidance in two important ways:

1. To enable you to assess your current risk and hazard assessment system against the standard principles put forward in this document.

2. To allow you to adopt a new system of TRA, based on current best practices.

This guide recognises that many locations already have systems in place that work well and have identified and implemented barriers to prevent incidents and accidents. With this in mind, this guide does not try to prescribe a single best system, but instead offers guidance to industry on how any robust system can be used to its greatest effect. However, regardless of the system that is being used, it is essential that full on-site visits should be conducted when assessing a TRA for new tasks.

3 Responsibilities

Everyone has overriding responsibility to minimize risk. This includes ensuring that health and safety, their own and others, is not compromised during the execution of their work duties; that the environment is not damaged; that identified hazards are immediately reported; and that control measures or barriers are adopted, recognized and adhered to in order to reduce risk levels.

Specific responsibilities are defined in the following paragraphs.

3.1 Employers and Managers

The principle responsibilities of managers and employers are to:

Eliminate and reduce risks; combat risks at source.

Ensure suitable and sufficient assessment of all risks to the health and safety of their employees, or any third parties, caused by work activities.

Ensure that risk assessments are conducted, recorded, reviewed and maintained appropriately.

Ensure that an appropriate TRA approval process is in operation.

Give appropriate information, instruction and training to employees and ensure the competence of involved personnel.

Ensure that work equipment provided is safe and suitable for its intended purpose.

Ensure that there is adequate supervision during the work activity.

3.2 Supervisors

The principle responsibilities of supervisors are to:

Review each task and determine what level of risk assessment is required.

Ensure that all tasks undertaken in their areas of responsibility are appropriately assessed.

Ensure that identified control measures are effectively implemented.

Reject or redefine any activity where residual risk is too high after implementation of control measures.

Determine to what extent supervision will be required during the work activity.

Communicate details of the TRA to the work team and allocate responsibility for job tasks and control measures.

Ensure that all members of the work team have the opportunity to identify further hazards and controls.

Ensure that before work commences that all members of the team are in agreement with the details of the TRA and the proposed control measures.

Ensure that any potential improvements highlighted during the assessment process are reviewed, actioned and implemented prior to commencing the task.

Ensure that any lessons learned are captured to improve the task or TRA.

3.3 TRA Team Leader

The principle responsibilities of the TRA leader are to:

Lead the team in performing the risk assessment.

Ensure that the team understands the assessment process and what it is trying to achieve.

Take responsibility for the quality of the TRA.

Ensure that the assessment team includes personnel with all the necessary knowledge and competence for the task involved.

Ensure that the team is guided systematically through the assessment process and kept on track.

Ensure that the detail of the assessment is agreed by the assessment team.

Ensure that the detail of the assessment is recorded and that the records are updated as appropriate.

3.4 Individual TRA Team Members

The principle responsibilities of individual team members are to:

Actively participate in any TRA related to the work activity.

Help identify hazards and control measures to reduce the likelihood of an incident/accident occurring.

Assist in the identification of any deficiencies in the work process and possible improvements.

3.5 TRA Team Members Carrying out the Work

The people involved in the work task have a crucial part to play in the TRA process through:

Understanding the hazards and recognise and understand the control measures or barriers associated with the task.

Actively monitoring the worksite and surroundings for changes in order to identify new or additional hazards.

Stopping the work at any time if they are concerned about safety or recognise that the barriers have been diluted or compromised.

Sharing knowledge and contributing toward the pre-task talk or Toolbox Talk.

Identifying any lessons learned from the job.

EVERYONE has both the authority and responsibility to STOP THE JOB if there is any doubt about the safety of the operation.

4 Preparation

Risk Assessment is a continual process that begins at the planning stages of a task, and continues throughout the task. During the TRA process all hazards are identified, risks assessed, barriers recognised and understood and controls implemented to reduce these risks.

4.1 Categorise the Task

When a task is identified, the first action is to establish what it will involve. This should include a review of:

- The steps required to complete the task (for tasks that are particularly complex or hazardous it may be necessary to perform a hierarchical task analysis or HTA).
- Whether the task has been performed and/or assessed previously (see Section 4.3.1 - Special Cases, for more detail).
- Whether the task can be classified as "Low Risk". (see Section 4.3.1 - Special Cases, for definition of low risk).
- The need for any special safety studies or assessments (e.g. hazardous substances, manual handling, etc).
- The personal competencies required of those who will assess the risks and perform the task.
- Whether it is immediately obvious that the task cannot be carried out safely and should be immediately discarded.

4.2 Form the TRA Team

The manager/supervisor for the worksite or work activity should select a TRA team leader and together they will agree on the composition of the TRA team. The size and composition of the team will vary according to the complexity of and/or the perceived level of hazard(s) associated with the task, however, all teams must include people who:

- Are responsible for the task.
- Will be involved in carrying out the task.
- Are knowledgeable of the location, area, plant, system or equipment and the hazard(s) present.
- Have knowledge, expertise, competence and experience in the task to be performed and an understanding of the hazard(s) it presents.
- Have specialised knowledge of the task(s) where it is relevant or appropriate to provide technical advice (e.g. process, electrical or instrument engineers, lifting and manual handling specialist, etc).
- Have an understanding of any relevant procedures and industry standards.
- Are competent to conduct TRAs and have the experience and ability to facilitate the process.

4.3 Define the Task

Before starting the TRA, the team should ensure that its members have sufficient background information on which to base their judgements. This should include reviewing the overall work programme and breaking it down into a sequence of tasks. The task steps should be documented at this point, along with notes for discussion during the TRA session.



The team should visit the worksite to see the physical layout of the area and current site conditions. Particular attention should be given to the plant and equipment and other activities taking place, or planned to take place, at the same time as the task to be performed. The team should also take account of any previous TRAs and current procedures, obtain copies, and review them.

During preparation the team should consider the following:

- What is the purpose of the task?
- What are the critical activities necessary to perform the task?
- Is the timing or sequence of the tasks critical to the operation?
- Who is going to carry out the task and are they capable/skilled/qualified/experienced?
- Will personnel be working alone?
- What level of supervision will be required?
- When is the task to be executed, e.g. time of day/ night (lighting, fatigue influences); time of year (weather/climate influences)?
- Could the task be done at a different time (e.g. during a shutdown)?
- Could the task be performed in a safer location (i.e. in a workshop)?
- Are there simultaneous operations that may have a significant safety impact on the task (e.g. other tasks occurring as part of the same scope of work, or other work in an adjacent area)?
- Is there a contingency/rescue plan in place (in particular for confined space and work at heights)?
- Inputs from special assessments e.g. work equipment and lifting operation assessments (both on and offshore)?
- Are there any other significant human factors (e.g. new or unfamiliar equipment; less experienced operatives)?

4.3.1 Special Cases

Task Previously Risk Assessed and/or Covered by Existing Procedures

Some tasks have documented procedures and work routines in place that identify how to undertake the task safely and state the controls required. These tasks **may not** require a new risk assessment provided that the procedure and any previously recorded assessment remains valid.

The TRA team should review these previous assessments and/or procedures to ensure:

- The procedures were developed to address the hazards involved in the work.
- The hazards and controls identified are still relevant.
- The controls identified are appropriate to the specific job, location and people involved.
- Concurrent operations have been considered.
- Any appropriate additional or alternative controls that have been adopted do not necessitate an additional TRA.

If all these elements are in place, and are acceptable, then a new TRA is not required for the job. In this case, the work team can go directly to the communication section of the process, see Section 6.

If previously used controls are not sufficient or practicable then a new assessment will be required.

Low-Risk Task

For some inherently low risk tasks, an individual's competency, skills, training and experience are sufficient and a formal recorded risk assessment is not required each time the task is performed. Examples are walking up and down stairs or taking a reading from unrestricted areas of a plant. In all cases, the individual must consider the associated hazards and remain vigilant to change (see Section 7).

A worksite assessment is still necessary; however, no formal recorded TRA will be required unless the assessment reveals additional hazards that cannot be considered Low-Risk.

5 Hazards, risk and controls

5.1 Hazard Identification

For each step in the work task, the TRA team must identify and record the associated hazards.

Recognising hazards is critical to the success and completeness of the TRA process. If a hazard is not identified, then the associated risk(s) cannot be addressed. Research conducted by the University of Aberdeen [i] shows that 70% of unsafe behaviours may be due to people not recognising hazards at the outset. Therefore, a company must have a programme in place to assist employees to recognise (perceive, understand and anticipate) hazards. See Section 7.2.

The "National Mineral Industry Safety and Health Risk Assessment Guideline" [ii] suggests the following technique for hazard identification:

The TRA leader should lead the team in a discussion identifying the types of hazards, their nature and magnitude. If any hazard is unclear, that uncertainty must be clarified.

The inputs to hazard identification may come from a wide variety of sources including:

- Major Hazards from risk analysis studies.
- Information from Safety Case.
- Information developed through Management of Change.
- Incident Reports.
- Hazard Reports.
- Job Safety Analyses (JSAs).
- Audit Reports.
- Inspection Reports.
- Unavailability of safety critical equipment.
- Reviews.
- Lessons learnt from previous TRA's and/or completed tasks.

A useful concept for identifying hazards in any system is to consider what residual or stored energies are contained within the system, or at the workplace. Energy that has the potential to do harm is by definition a hazard. It is a lack of control or containment of the energy that leads to risk.

Relevant energy sources and some examples of how associated harm might manifest itself are as follows:

- **Gravity**: is a naturally occurring energy that causes things or people to fall or move downhill. Includes roof/rib-back/sides, high/low wall, elevated equipment, and people working at heights.
- **Electrical**: includes all types and voltages of electricity from HV to batteries to induction, static.
- **Mechanical**: includes mobile equipment as well as moving parts on stationary equipment.
- **Chemical**: energy in the form of gases, liquids, solids of which some are natural e.g. water, methane, coal whilst others are introduced e.g. acetylene, solvents, explosives.
- **Pressure**: air, water, pneumatics, springs, gases are all possible stores of pressure energy.
- **Noise**: is also pressure energy but is considered separately.
- **Thermal**: energy that comes from hot or cold surfaces.

- **Radiation**: in the form of sunlight or nuclear/isotope radiation.
- **Body Mechanics**: includes the human bodies own energy to move which includes lifting, pushing, pulling, climbing, and positioning.
- **Biological**: covers the many sources of energy in other forms of life from wildlife to small viruses or bacteria e.g. to be found in platform sewage systems, drain lines.

The listing is a prompt when working through identifying hazards for assessment. It provides an alternative frame of reference and use of this or any equivalent aid increases the probability that hazards will not be overlooked.

While this is an example of good practice, there are many other equally suitable methods available.

5.2 Identifying Those Potentially Affected

The TRA team must identify those persons and/or groups of persons who may be affected by the identified hazards. This step is important as it will help to better determine the nature of the hazard effects and the nature and range of appropriate mitigation measures.

5.3 Initial Risk

The TRA team must assign a risk rating to each hazard identified in the previous step.

Risk Rating expresses the risks associated with a particular task as a value, and can be used to judge whether the risks are acceptable and 'as low as reasonably practicable' or ALARP.

Risks created by each identified hazard should be evaluated according to:

- The worst credible **Severity** if the hazard effects were to result.
- The **Likelihood** of the hazard effects resulting.

These evaluations may be made either qualitatively (subjective rating of high, medium or low) or semi-quantitatively (rating risk by calculation of numbers). In both cases, the evaluation helps focus attention on the most significant risk(s). In each case, acceptance criteria must be established to allow personnel to determine whether the identified hazards present unacceptable levels of risk or are not yet ALARP. Note: This document is not intended to advise on quantitative risk assessment (QRA) as this technique does not lend itself to Task Risk Assessment.

Initial Risk Ratings are determined without consideration of any existing controls/barriers or mitigation plans associated with the hazard. Examples of methods for making evaluations are detailed in Appendix 2. While these are examples of good practice, there are many other equally suitable methods available.

5.4 Controls/Barriers

When the Initial Risk Ratings have been determined the TRA team must work systematically through the list of ***unacceptable*** risks to specify the controls/barriers needed to reduce these risks to an acceptable level and ALARP. For a risk to be ALARP it must be possible to demonstrate that the effort, time or cost involved in reducing the risk further would be grossly disproportionate to the benefit gained.

During this process, it is important to consider the combined effects from the interaction of several different hazards, not just each hazard in isolation. The controls/barriers specified must be based on good, safe working practice in order to reduce the risk. A control guideline hierarchy is useful to aid and structure this process. An example of such a hierarchy is shown in Appendix 3.

When controls/barriers have been assigned to reduce the risks, ask the following questions:

- Have all the necessary control measures been fully identified and understood?
- Are any of the controls/barriers ineffective?
- Are any additional competencies required to complete the task?
- Is the risk controlled and ALARP?

The team should consider introducing "Hold Points" in the task. Hold Points should be assigned at points in the task where there is a potentially high consequence outcome thus requiring a high degree of confidence that the defined controls are effective. Before proceeding past the Hold Point the work team must stop and confirm that the defined controls are in place, that they are adequate and hold a Toolbox Talk to review the potential risks with the team.

To determine whether the assigned controls/barriers will sufficiently reduce the risk the Residual Risk must be considered.

5.5 Residual Risk

The Residual Risk Rating is determined in much the same manner as the Initial Risk Ratings. However, in the case of Residual Risk, the assessment is made based on the assumption that the controls/barriers determined in the previous step are fully and effectively implemented.

If the Residual Risk is still not acceptable and ALARP, then the TRA team must assign additional or more robust control measures. This process continues until the Residual Risk is acceptable and ALARP. If control measures cannot reduce the Residual Risk sufficiently, then the task may not proceed unless alternative controls or tasks are found.

Determining that risks have been reduced to ALARP involves weighing the risk to be avoided against the sacrifice (in money, time and trouble) involved in taking measures to avoid that risk. This decision must be weighted in favour of health and safety, so that the process is not one of balancing the costs and benefits. Measures should only be ruled out when the extent of the risk reduction they achieve is grossly disproportionate to the cost in applying them.

Once the Residual Risk is acceptable and ALARP, the TRA team may recommend that the work go ahead with the identified control measures in place.

5.6 Document and Record

Formal TRA findings should be documented on a proforma that includes the following:

- Description of the activity to be assessed (location, time, etc.).
- List of task steps.
- Hazards associated with each step.
- Identify those persons who may be harmed.
- Initial Risk Rating for each identified hazard.
- Control measures to reduce risks to within acceptable levels and ALARP.
- Residual Risk Rating for each hazard requiring control measures.
- Names of the TRA team.
- Date of the Assessment.

An example of a proforma is included in Appendix 4. While this is an example of good practice other suitable examples are currently in use.

5.7 Review and Approval

Before starting the task, the TRA must be reviewed and the requisite level of approval obtained.

This review is a critical assessment of the TRA to ensure that the team has thoroughly addressed the issues. It is meant to ensure that a suitable and sufficient assessment has been performed and that adequate controls or barriers have been identified to reduce the risks to an acceptable level and ALARP.

If the reviewer feels that the team has not been thorough enough, the TRA will be returned for further assessment. Wherever possible, the feedback should be specific so that the TRA team can revisit the areas of concern and make improvements.

The level of approval must be commensurate with the ***Initial Risk Rating*** (e.g. higher initial risks require a more senior level of management approval).

6 Communication

The success of a TRA will depend upon how effectively it has been communicated. No matter how thorough the TRA process, its ultimate success depends on the awareness of the people carrying out the tasks.

Open two-way dialogue must take place prior to the start of the activity, usually at pre-job meetings, referred to here as Toolbox Talks (TBTs).

A Toolbox Talk should be held at or near the worksite and should include all people involved in the work and, where possible, those who may be affected by it (e.g. subcontractors, vendors and base crew). The completed TRA should be used to lead the team systematically through the tasks ahead.

The Toolbox Talk should achieve four goals:

1. Demonstrate that everyone involved in the task has a thorough understanding of:
    - The detail of their own activities and responsibilities and those of others involved.
    - The potential hazards identified for each stage of the task.
    - The importance of recognising changes to the task that might create new hazards.
    - The control measures or barriers in place or to be put in place to mitigate the hazards.
2. Provide the opportunity for those involved in the task to identify further hazards and control measures, which may have been overlooked in the initial assessment. This is especially useful for identifying hazards at the worksite, which may not have come to light in the earlier stages and to confirm the key barriers (equipment, processes and people) to prevent incidents.
3. Reach agreement of the work team on proceeding with the activity. If agreement cannot be reached the job may not start. The team must review and update the TRA to address the concerns of the group and have it re-approved prior to starting the job.
4. Make clear to all involved that should conditions or personnel change or assumptions made when planning the activity prove false, they should reassess the situation and, if in any doubt, STOP THE JOB.

A Toolbox Talk Risk Identification Card (TRIC), is a robust method to structure the Toolbox Talk and TRA review process. This format is not the only means of ensuring that the TRA has been effectively communicated however, whatever system you use; it should cover the same elements.

Appendix 5 shows an example of a Hazard Recognition and Toolbox Talk Card. This complements the TRIC and TRA process and prompts dynamic risk assessment and situational awareness. The format of the card is suitable for both permit controlled and non permit controlled tasks. It has been designed to tie all the stages of the work scope together, facilitate on-site assessment and promote confidence and empowerment for any member of the team to stop the job if they think it is unsafe.

It is critical that if new or additional personnel join the team, the TRA is reviewed with them in the same manner.

7 Execution of task

Once the work team is satisfied that all the hazards have been identified and that the controls or barriers discussed in the TRA have been implemented, they can start the task.

Although controls or barriers have been implemented, the team should remain aware of the potential for new hazards and not become complacent. By monitoring the operation the team should be aware of any changes that may impact the safety of the operation or any compromise to the controls and barriers in place and take action to avoid problems. If necessary, they should STOP THE JOB and reassess the task.

7.1 Dynamic Risk Assessment

Dynamic Risk Assessment is defined as the continuous process of identifying hazards, assessing risks, taking action to eliminate or reduce risk, monitoring and reviewing, in the rapidly changing circumstances of an operational environment. That is to say that the TRA process does not end once the work starts.

It is critical that hazard identification and risk assessment continues throughout the task in order to ensure the safest possible workplace. In some circumstances the dynamic risk assessment activity can be informal, and occurs without any discussion or documentation e.g. a worker notices debris in a walkway and clears it away without incident. However, in other cases dynamic risk assessment will require stopping the job and formally assessing the situation and updating the TRA e.g. while working outside, an ice storm moves into the area and equipment begins to freeze, or if the scope or sequence of the task changes.

In cases where the job is stopped, it is critical that the TRA be updated and reviewed with the work team at a Toolbox Talk, prior to restarting the task.

7.2 Situational Awareness

Situational Awareness refers to an individual's ability to continually assess the work environment for potential hazards, understand the consequences of those hazards if they are realised, and take action to mitigate the potential negative impacts. Poor workplace situational awareness may be a contributory factor in many unsafe behaviours and accidents.

On the basis of research conducted in the aviation sector, it is generally accepted that there are three phases of situational awareness:

1. Perception
2. Understanding
3. Anticipation

Perception refers to an individual's ability to notice a new hazard, i.e. to see, hear, or feel it;

Understanding refers to the ability to recognise and understand something to be a hazard and

Anticipation refers to the ability to accurately foresee and appreciate the potential negative consequences of this hazard. A more thorough discussion on the consequences of poor perception, understanding and anticipation of hazards follows in Section 7.3.

Research conducted in the offshore industry by the Industrial Psychology Research Centre at the University of Aberdeen[i] suggests that unsafe behaviours and accidents at the workplace are often the result of workers not perceiving a hazard (Phase 1). In the cases where the hazard is perceived (about 30% of the time), workers are frequently unable to understand the risks posed (Phase 2) and so continue working in an unsafe manner. In some cases (about 10% of the time), workers continue to perform unsafe acts even though they understand the hazards but fail to anticipate the potential outcome of their activities accurately (Phase 3).

There are many factors that can influence an employee's ability to recognise and respond appropriately to hazards. These are referred to as performance shaping factors and the most common in an oilfield setting are fatigue and stress. To improve situational awareness, and in turn safety, action must be taken to reduce the impact of these and other performance shaping factors, e.g. perceived lack of management commitment to safety. Appropriate training, through programmes such as Safety Leadership Training can improve situational awareness by focusing on the factors that can affect it and how communication about risk and safety is critical to maintaining ongoing identification, understanding and anticipation of hazards and hazardous situations.

In addition to providing specific training on situational awareness, training should also be provided on hazard identification, (discussed in Section 5.1, Hazard Identification). As an aid to help reassess and refocus attention on safety factors during the process of a job an individual worker can refer to a personal prompt card (see Appendix 6).

7.3 Consequences

As outlined above appropriate training in situational awareness and the factors that can affect it enables workers to understand the potential consequences of a hazard. In most cases, the "real" consequences of an unsafe act or hazard reach far more widely than workers realise.

The perception of consequences can have an impact on risk assessment, even when the likelihood of an incident remains the same. A proper assessment of the "real" severity of a hazard will, in most cases, lead to more stringent controls and subsequently result in a safer work environment. It is important that people understand that the potential consequences and outcomes in an unsafe situation are not only those that may happen to them, but also who else may be affected if an accident was to occur e.g. co-workers, family and friends.

If personnel are able to understand the full extent of consequences (both immediate and long term), they may be less likely to allow unsafe situations and/or unsafe acts to commence or continue, or to engage in unsafe behaviours themselves.

There are many resources available to assist in communicating the importance of accurately projecting consequences to the workforce. Dramatic performances like "Davy's Baby"[iii] and "Gail's Red Shoes"[iv], as well as more traditional training materials, such as the Hazard and Effect/Consequences Table, shown in Appendix 1, can be used to promote awareness.

7.4 Stopping the Job

Every individual has an obligation and a legal requirement to STOP THE JOB if they believe it to be unsafe.

Many incidents happen when conditions at the worksite change, when conditions are not as foreseen, or when there is a deviation from the work programme. It must be made clear to all personnel, especially during Toolbox Talks, that when such issues arise the expectation is that the individual or work team will stop work and reassess the situation. Only when the reassessment indicates that the risks are acceptable and ALARP should the task continue.

It is essential that supervisors make it clear to all individuals in the work team that they will be fully supported when taking action to stop the job. Being critical of a decision to stop the job, even in questionable circumstances, will decrease the likelihood of the next job being stopped, even in the face of a real threat. It is considered good practice for managers and supervisors to actively demonstrate encouragement for stopping the job in the face of an unsafe situation – this is a key element in the establishment of a good safety culture.

7.5 Monitoring Effectiveness

The work team must continuously monitor the effectiveness of the controls or barriers previously implemented. Well planned monitoring provides a demonstration that controls/barriers are adequately reducing the identified risks.

Active monitoring (before things go wrong) is a means of verifying the adequacy of, and the degree of compliance with, the controls or barriers that have been established. It is intended to identify deficiencies for subsequent remedial action, and thus prevent accidents.

The results of monitoring will highlight where controls or barriers are not adequate, and target areas where improved controls and barriers are required. Monitoring can also demonstrate that further control/barriers are not required.

8
Review and capture lessons learned

Whenever practicable, a post-job TRA review should take place in order to establish the deficiencies, weaknesses, or particular areas of strength within the risk assessment process.

It is important that these learnings are captured and incorporated into the process. This may be in the form of changes to:

- Procedures used.
- Risk assessment records.
- The TRA process itself.

The TRA must be reviewed following an accident, incident or near miss. The findings from incident investigations, near miss reporting and procedural review should be applied to the TRA process.

9 Training

Proper training, competence and experience are essential to producing a useable, thorough and robust TRA. All personnel should complete training in the following areas:

- Hazard Identification.
- Risk Rating.
- Task Risk Assessment (TRA).
- Situational Awareness.
- Consequences Awareness.

This training need not all be formal in nature. Classroom presentations, computer based training, safety meetings, dramatic performances, mentoring, etc. are all effective ways to get the message across.

10 Summary

There are many examples of robust TRA methods in place throughout industry. Which of these systems is used is not important.

What is of prime importance is a rigorous process of:

- Thorough hazard identification.
- Accurate assessment of risk.
- Implementation of controls or barriers to reduce identified risks to an acceptable level and ALARP before any work is carried out.
- Clear communication of the risks assessed and recognition and understanding of the controls or barriers that are applicable.
- Dynamic assessment and control of risks throughout the job.

Appendices

1 Example: Hazard and Effects/Consequence Table.

2 Good Practice Examples – Risk Matrices.

3 Control Guidelines of Hierarchy of Control Considerations.

4 TRA Recording Proforma.

5 Hazard Recognition and Toolbox Talk Card.

6 Personal Prompt Card.

7 Key Terms and Definitions

8 Workplace Checklist – Task Risk Assessment

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[i] Sneddon A., Mearns K., & Flin, R (2006) Situation awareness and safety in offshore drill crews. Cognition, Technology and Work, 8, 255-267.

[ii] Professor Jim Joy and Dr Derek Griffiths, National Minerals Industry Safety and Health Risk Assessment Guideline, Version 4, Jan 2005

[iii] Davy's Baby – performance message by Acting Up Ltd. Edinburgh, phone: 0131466 54 55

[iv] Gail's Red shoes – performance message by Acting Up Ltd. Edinburgh, phone: 0131466 54 55

EXAMPLE	HAZARD
PEOPLE	• Insufficent Supervision • New/Inexperienced Personnel • Visitors/Unauthorised Personnel • Inadequate Communications • Insufficient Resources • Competence
EQUIPMENT	• Scaffolding/Ladders • Incorrect Use of Tools • Stability/Collapse of Equipment • Inadequate Maintenance • Equipment Failures • Damaged/Faulty Equipment
MATERIALS	• Hazardous Substances • Radioactive Substances • Flammable • Explosive Substances • Dimension/Weight • Waste
ENVIRONMENT	• Confined Space • Working at Heights • Noise • Temperature • Lighting • Ventilation • Vibration • Weather Extremes
PROCESS	• Incorrect Procedure Process • Emergency Arrangements • Inadequate Safety Management System • Inadequate Planning • Lack of Training • Lack of Information/Instruction/Supervision • No or Inadequate Risk Assessment

AN EVENT

EXAMPLE	HAZARD EFFECT/CONSEQUENCES
PERSONAL INJURY OR DEATH	• Physical - Lacerations - Abrasions - Crush/Nip Injuries - Burns - Muscular Skeletal • Occupational Illness - RSI - Asbestosis - Dermatitis - Hazardous Substance Exposures • Psychological - Stress
ENVIRONMENTAL IMPACT	• Pollution - Air - Water - Land • Societal Effects • Flora/Fauna • Excess Waste • Financial Liability
EQUIPMENT/ PROPERTY DAMAGE	• Fires/Explosions • Structural Failures • Dropped Object Damage • Financial - Loss of Production - Repair/Replacement Costs - Reputation

Qualitative

Using the information from the hazard identification together with the hazard effect, and considering the number of people to be involved, a risk rating is established. This is determined using a risk evaluation matrix where the risk rating equals the likelihood of an occurrence times the severity of the hazard. Two examples of a qualitative risk evaluation matrix are shown.

		Likelihood of Occurrence			
		Very Unlikely Little or no chance of occurrence	**Unlikely** Could occur, less than 50/50 chance	**Possible** 50/50 chance	**Probable** More likely to occur than not
Hazard Severity	**Minor** No or minor injury	CARE	CARE	CARE	CAUTION
	Moderate Off-site medical treatment or DAFW	CARE	CARE	CAUTION	ALERT
	Serious More than one DAFW – long-term absence	CARE	CAUTION	ALERT	ALARM
	Major Permanent disability or fatality	CAUTION	ALERT	ALARM	ALARM

CARE	Minor harm possible, serious harm very unlikely to occur
CAUTION	Minor harm probable, major harm very unlikely to occur
ALERT	Moderate harm probable, major harm unlikely to occur
ALARM	Serious or major harm will probably occur

Likelihood of Occurrence	Hazard Severity: Negligible Negligible injury, no absence from work	Slight Minor injury requiring first aid treatment	Moderate Injury leading to a lost time accident	High Involving a single death or serious injury	Very High Multiple deaths
Very Unlikely A freak combination of factors would be required for an incident to result	LOW	LOW	LOW	LOW	LOW
Unlikely A rare combination of factors would be required for an incident to result	LOW	LOW	LOW	MEDIUM	MEDIUM
Possible Could happen when additional factors are present but otherwise unlikely to occur	LOW	LOW	MEDIUM	MEDIUM	HIGH
Likely Not certain to happen but an additional factor may result in an accident	LOW	MEDIUM	MEDIUM	HIGH	HIGH
Very Likely Almost inevitable that an incident would result	MEDIUM	MEDIUM	HIGH	HIGH	HIGH

LOW RISK	May be acceptable; however, review task to see if risk can be reduced further.
MEDIUM RISK	Task should only proceed with appropriate management authorisation after consultation with specialist personnel and assessment team. Where possible, the task should be redefined to take account of the hazards involved or the risk should be reduced further prior to task commencement.
HIGH RISK	Task must not proceed. It should be redefined or further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to task commencement.

By redefining the hazard severity, risk evaluation matrices can be used to assess health, production and environmental risk as well as the risk of accident and injury. An example of these definitions may be:

Negligible — Negligible injury or health implications, no absence from work. Negligible loss of function/production with no damage to equipment or the environment.

Slight — Minor injury requiring first-aid treatment or headache, nausea, dizziness, mild rashes. Damage to equipment requiring minor remedial repair, loss of production or impact to the environment.

Moderate — Event leading to a lost time incident or persistent dermatitis, acne or asthma. Localised damage to equipment requiring extensive repair, significant loss of function/production or moderate pollution incurring some restitution costs.

High — Involving a single death or severe injury, poisoning, sensitisation or dangerous infection. Damage to equipment resulting in production shutdown and significant production loss. Severe pollution with short-term localised implications incurring significant restitution costs.

Very High — Multiple deaths, lung diseases, permanent debility or fatality. Major pollution with long-term implication and very high restitution costs.

Semi-quantitative

Although this approach uses numerical values to assess risk, the results are still largely of a qualitative nature and are similar to the previous examples. Some people find this approach easier to use than the wholly qualitative approach. Two examples of a semi-quantitative matrix are shown.

These numerical values are quite often correlated to the low, medium and high categories as detailed previously.

Likelihood of Occurrence	Hazard Severity: 1 Negligible injury, no absence from work	2 Minor injury requiring first aid treatment	3 Injury leading to a lost time accident	4 Involving a single death or serious injury	5 Multiple deaths
1 A freak combination of factors would be required for an incident to result	1	2	3	4	5
2 A rare combination of factors would be required for an incident to result	2	4	6	8	10
3 Could happen when additional factors are present but otherwise unlikely to occur	3	6	9	12	15
4 Not certain to happen but an additional factor may result in an accident	4	8	12	16	20
5 Almost inevitable that an incident would result	5	10	15	20	25

1 – 6	May be acceptable; however, review task to see if risk can be reduced further.
7 – 14	Task should only proceed with appropriate management authorisation after consultation with specialist personnel and assessment team. Where possible, the task should be redefined to take account of the hazards involved or the risk should be reduced further prior to task commencement.
15 – 25	Task must not proceed. It should be redefined or further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to task commencement.

Severity (consequences)	Likelihood: <Low (1) Not credible ie the team have never heard of event occurring in industry	Low (2) Conceivable but would require multiple failures of systems and controls	Medium (3) Less than average ie easy to postulate a scenario for accident but considered unlikely	>Medium (4) More than average ie the team do not have direct knowledge but suspect that event may have occurred and represents a credible scenario	High (5) Likely to occur and the team have knowledge of a similar event
<Low (1) Injury is not credible	1	2	3	4	5
Low (2) Only a minor injury is credible	2	4	6	8	10
Medium (3) A single serious injury is credible	3	6	9	12	15
>Medium (4) Fatality or multiple serious injury is credible	4	8	12	16	20
High (5) Multiple fatality is credible	5	10	15	20	25

1 – 6	May be acceptable; however, review task to see if risk can be reduced further.
7 – 14	Task should only proceed with appropriate management authorisation after consultation with specialist personnel and assessment team. Where possible, the task should be redefined to take account of the hazards involved or the risk should be reduced further prior to task commencement.
15 – 25	Task must not proceed. It should be redefined or further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to task commencement.

By redefining the hazard severity, risk evaluation matrices can be used to assess health, production and environmental risk as well as the risk of accident and injury. An example of these definitions may be:

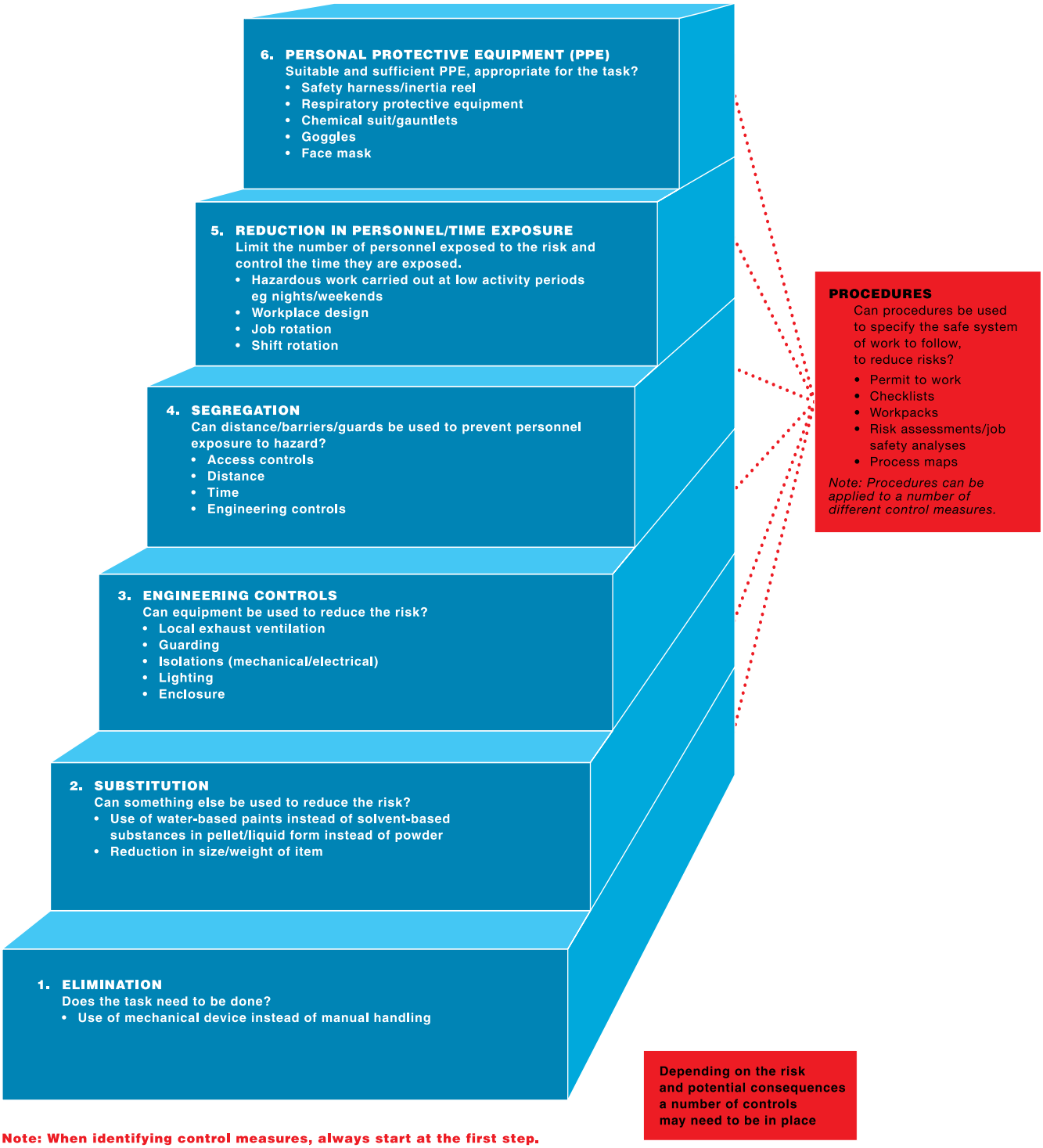
1 Negligible injury or health implications, no absence from work. Negligible loss of function/production with no damage to equipment or the environment.

2 Minor injury requiring first-aid treatment or headache, nausea, dizziness, mild rashes. Damage to equipment requiring minor remedial repair, loss of production or impact to the environment.

3 Event leading to a lost time incident or persistent dermatitis, acne or asthma. Localised damage to equipment requiring extensive repair, significant loss of function/production or moderate pollution incurring some restitution costs.

4 Involving a single death or severe injury, poisoning, sensitisation or dangerous infection. Damage to equipment resulting in production shutdown and significant production loss. Severe pollution with short-term localised implications incurring significant restitution costs.

5 Multiple deaths, lung diseases, permanent debility or fatality. Major pollution with long-term implication and very high restitution costs.



Note: When identifying control measures, always start at the first step.

TASK RISK ASSESSMENT

TRA Number:.....

Job Description:.....

Job Steps	HAZARD		INITIAL RISK			CONTROLS	RESIDUAL RISK		
	Hazard Description and Effect	Population at Risk	Hazard Severity	Likelihood of Occurrence	Risk Rating	List all Controls Required	Hazard Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify severity with no controls in place for each hazard.	From matrix, identify likelihood with no controls in place for each hazard.	Classify risk rating from matrix for each hazard.	Describe fully all controls applicable for each hazard eg if PPE is used as a control, it must be specifically described. If a control can only be verified by documentation then it must be available. All controls must be valid in that they reduce severity, likelihood or both.	From matrix, identify severity with controls in place for each hazard.	From matrix, identify likelihood with controls in place for each hazard.	Classify risk rating from matrix for each hazard.

Assessor's signature:	Date:

HAZARD RECOGNITION & TOOLBOX TALK CARD

Installation Name: _____

Date: ___/___/___ Time: _____

Task to be supervised by: _____

Hazard Identification - Delete the hazard that will **NOT** be encountered during this task:

- Potential dropped objects
- Moving objects
- Pressurised equipment
- Poor lighting or visibility
- Lifting equipment
- Manual handling
- Hazardous substance
- Green hat (new personnel)
- Work at height
- Dangerous equipment
- Potential spills
- Tight or confined space
- Portable electrical equipment
- Vibrating equipment
- Heat hazard
- Concurrent operations
- Radiation hazard
- Biological hazard
- Cold hazard
- Weather
- WHAT IF? What if? - Other

Permit: _____ Procedure: _____ Lifting Plan Ref: _____

Manual Handling Ref: _____ COSHH Ref: _____ Other: _____

TASK STEPS: Describe the steps taken to perform the task.	**HAZARDS & EFFECTS:** What could go wrong & what would happen if it did?	**CONTROLS:** How can damage or harm be prevented?	**WHO:** Name the person who will put the controls in place?	**READY?** Controls in place? (*Initials*)

Talk Leader Prompts

These questions should be directed at relevant personnel to confirm understanding of the task and hazard

- What energy sources could be released or contacted during this job?
- What must you do to make the task safe?
- What are your responsibilities for implementing the control measures?
- What might go wrong with this job?
- At which step will we hold a planned TOFS?
- How will you be communicating with the team?
- What do we do if we see changes to the work plan arising?
- Is everyone familiar with and know how to use all tools and equipment safely?
- Do we have an effective energy management plan to produce a safe outcome?
- Are we ready to start the job?

Golden Rules for Safety

Delete the categories that do not apply

Permit To Work

Ground Disturbance

Working At Heights

Driving Safety

Lifting Operation

Confined Space Entry

Energy Isolation

Management of Change

Simultaneous Operations

(Think about Location, environment, timing, etc.)

___

___

___

___

___

___

Dynamic Risk Review

As the job progresses, conditions change and the hazards, risks and controls should be reassessed.

As a minimum, we will reassess the job at the following stages:

1. ___
2. ___
3. ___
4. ___

STOP the Job Triggers

I/we will stop the job if any of the following happens:

- ___
- ___
- ___
- ___
- ___
- ___

Time Out For Safety

Reason for TOFS:

___

Action(s) taken:

___

___

___

___

___

Post Job Review

Lessons Learned
Incidents or near misses during task? Yes/No (Delete as Appropriate) ___

___

Update Procedure (s) ___ Update Risk Assessment(s) ___

Companies/ People to be informed/consulted: Yes/No (Delete as Appropriate) ___

Work Party Declaration

Names and signatures of persons involved in job.

- I have participated in the toolbox talk
- I know the hazards involved and controls required to make the job safe
- I have read and will follow the relevant procedures
- I will stop the job if unsafe or if I observe any of our agreed upon Stop-the-Job Triggers

1.	Signature: ___	1.	Name: ___
2.	Signature: ___	2.	Name: ___
3.	Signature: ___	3.	Name: ___
4.	Signature: ___	4.	Name: ___
5.	Signature: ___	5.	Name: ___
6.	Signature: ___	6.	Name: ___
7.	Signature: ___	7.	Name: ___
8.	Signature: ___	8.	Name: ___

All new persons joining the work party to be given a thorough handover and make reference to this HART Card

Persons new to task:

1. ___ 3. ___

2. ___ 4. ___

Supervisor Sign-Off

To be completed by the Supervisor

Position: ___ Date: ___ Was active monitoring done on this task? Yes/No (Delete as Appropriate)

Name: ___ Signature: ___

Before the Job

What does the task involve? Consider the following:

1. Procedures & Previous Risk Assessments:
What are the relevant procedures, assessments, rules, regulations, etc.? Take into account any previous TRA's, and current procedures, obtain copies, and review them.

2. Hazards:
What are the hazards? Assess them using the prompt words overleaf as a guide. Add to the list if necessary.

- What are the hazards?
- How could others or I get hurt?
- Could I cause damage to equipment or the environment?

3. Controls:
How do I control my work? What controls must be implemented? Use the prompt list overleaf as a guide. Add to the list if necessary.

4. Communication:
What are the lines of communication, have they been established?

5. Responsibility:
Who is responsible/accountable?

6. Implement:
Now that you have identified the hazards and controls, do what you say and put the controls in place BEFORE you start the job.

During the Job

- ❑ Stay focussed.
- ❑ Keep your eyes and ears open.
- ❑ Identify and address new hazards as you see them.
- ❑ **BE AWARE of CHANGE**
  If anything changes during the task you must stop and reassess.
- ❑ Communicate with the Team.
- ❑ If in doubt, **STOP THE JOB** and reassess.

Name: _____

Position: _____

Location: _____

Task: _____

_____

_____

_____

Date: _____

STEP CHANGE IN SAFETY

Task Risk Assessment Personal Prompt Card

If in doubt - STOP THE JOB

STEP CHANGE IN SAFETY

Task Prompt Words

Health & safety

- ❑ Confined space
- ❑ Electrical work
- ❑ Energy isolation
- ❑ Forklift operations
- ❑ Fuel transfer
- ❑ Function testing equipment
- ❑ Hand tools
- ❑ High pressure washdown
- ❑ Hydraulic equipment
- ❑ Lifting/rigging/slinging
- ❑ Loading/unloading
- ❑ Manual handling
- ❑ Man riding
- ❑ Mechanical equipment
- ❑ Mixing/handling, paint, chemicals
- ❑ New personnel/third party
- ❑ Painting
- ❑ Power tools
- ❑ Pressure/stored energy
- ❑ Removing assemblies
- ❑ Removal of hatches/grating/deck plates
- ❑ Scaffolding/towers/ladders
- ❑ Stacking/storing equipment
- ❑ Use of cranes/lifting appliances
- ❑ Welding/torch use
- ❑ Work at heights
- ❑ Work over the side
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Environmental

- ❑ Handling/use of chemicals/substances
- ❑ Lithium batteries handling
- ❑ Radioactive material
- ❑ Explosive materials
- ❑ Maintenance of equipment
- ❑ _____
- ❑ _____
- ❑ _____

If selected item is shown in **red** then a formal TRA must be performed.

Hazard Prompt Words

- ❑ Asphyxiation
- ❑ Back strain/injury
- ❑ Burns (thermal/chemical)
- ❑ Caught in/between
- ❑ Changes to programme
- ❑ Chemical/substance spill
- ❑ Crushing/trapping
- ❑ Cuts/abrasion
- ❑ Dropped objects
- ❑ Drowning
- ❑ Entanglement
- ❑ Equipment failure
- ❑ Electrical shock
- ❑ Eye injury
- ❑ Exposure to radiation
- ❑ Fall from height
- ❑ Fire/explosion/ignition
- ❑ Flying/falling materials
- ❑ Gases/fumes/vapours/particles
- ❑ Hazardous substances
- ❑ Inexperienced personnel
- ❑ Insufficient/incorrect material
- ❑ Noise/vibration
- ❑ Pinch points (hands and feet)
- ❑ Pollution of air/land/waterways
- ❑ Poor light
- ❑ Simultaneous operations
- ❑ Skin irritation
- ❑ Slips, trips, falls
- ❑ Stored energy/pressure
- ❑ Struck by
- ❑ Temperature extremes
- ❑ Toxic gas/vapours
- ❑ Weather
- ❑ Wrong equipment
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Control Prompt Words

- ❑ Absorbent material/spill kit
- ❑ Airline whip checks
- ❑ All lines pressure tested
- ❑ Appropriate PPE
- ❑ Appropriate supervision
- ❑ Assistance (extra people)
- ❑ Barrier cream
- ❑ Barriers around/below worksite
- ❑ Communication/radios/signs
- ❑ Contingency plan in place
- ❑ Correct transport containers
- ❑ Correct hand placement/body posture
- ❑ Correct tools
- ❑ Chemical hazard assessment (MSDS)
- ❑ Escape routes/safe access routes
- ❑ Fall arrestor /harness
- ❑ Fire extinguisher/fire watch
- ❑ Gas detection
- ❑ Housekeeping
- ❑ Mentoring/coaching
- ❑ Operating manuals
- ❑ Permit to work (hot/entry/isolation)
- ❑ Review relevant procedures/manuals/documents
- ❑ Safe storage of tools
- ❑ Scaffolding (certified)
- ❑ Secondary restraints
- ❑ Suitable/certified slings, shackles, etc
- ❑ TRA – task risk assessment completed
- ❑ Tag lines
- ❑ Tannoy announcements
- ❑ Training/competency/experience
- ❑ Work instruction/job flow/assessments
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Key Terms and Definitions

ALARP	As Low As Reasonably Practicable.
COSHH	Control of Substances Hazardous to Health Regulations.
DAFW	Days Away From Work.
DOG	Drilling Operations Guidelines.
HOD	Head of Department.
LOLER	Lifting Operations and Lifting Equipment Regulations.
PPE	Personal Protective Equipment.
PTW	Permit to Work.
PUWER	Provision and Use of Work Equipment Regulations.
TBT	Toolbox Talk.
TRA	Task Risk Assessment.
TRIC	Toolbox Talk Risk Identification Card.
Accident	An undesired event which results in actual loss (ie injury to personnel, impact on or release to the environment, property/equipment damage and/or production/productivity loss).
Competence	The ability to be able to perform an activity to the expected standard.
Competent Person	A person who, by reason of their training, knowledge and experience, is considered capable of adequately assessing the Health, Safety and Environmental risks associated with the task(s).
Controls	Precautionary measures which reduce or eliminate the risk.
Hazard	A condition in the workplace, equipment, or a method of carrying out an activity which has the potential to cause harm.
Hazard Effect	The potential outcome/consequences of the relevant hazard.
Likelihood	The expectation, possibility or chance of something happening, sometimes referred to as probability or frequency.
Near Miss	An undesired event which does not result in physical loss but has the potential to do so.

Residual Risk	The risk that remains after all the identified control measures have been put in place.
Risk	The result of the Hazard Severity x Likelihood.
Risk Rating	A means of expressing the risk of a task in terms of a value that represents both its likelihood and severity.
RSI	Repetitive Strain Injury.
Task	An individual work assignment being a job or part of a job carried out by one or more persons.
Toolbox Talk	A meeting, involving a two-way dialogue, to ensure that everyone clearly understands what the job entails along with its hazards and the precautions to be put in place.

STEP CHANGE IN SAFETY

WORKPLACE CHECKLIST – TASK RISK ASSESSMENT

Notes:

1) The checklist is intended primarily for use offshore and is based on the actions identified in the flow chart in the TRA Guide. It may also be used at onshore workplaces, for example: workshops, storage and logistics bases and offices.
2) Where possible, observe several types of task typical in that workplace. You will need to speak to those involved to get answers to some of the questions, do this before viewing the RA documents and then check their responses against the paperwork.
3) The expected performance standard is that all applicable questions can be ticked 'yes'.
4) When multiple tasks are observed, put a mark in the relevant boxes for each task and then total the boxes when you have completed all observations.

Location: …… Date: ….. /….. /…….

Tasks observed: Give details		Y or N
1.	Low Risk, or procedure, with generic RA _____	
2.	Low Risk, or procedure, with generic RA _____	
3.	Repeat – previous TRA reviewed _____	
4.	Repeat – previous TRA reviewed _____	
5.	New – TRA documented _____	
6.	New – TRA documented _____	

Question	Y	N	N/A
Worker(s) - for all tasks			
• Can demonstrate they have suitable, assessed task competences?			
• Have relevant RA training, including situational awareness?			
• Can identify key hazards, precautions/barriers, any Hold Points?			
• Check all precautions/barriers are in place before beginning the task?			
• During the task, actively check for what might change?			
• Willing to stop the task if unsure about something?			
Workers - for team tasks			
• Understood the Toolbox Talk? (task details, hazards, controls)			
• Felt able to ask questions and contribute their experience?			
• Agree who is in charge?			
• Understand individual roles, including their own?			
• Are hazard spotting for each other, in case something changes?			
Task was stopped when the following changes were identified?			
Task no. _____ Change _____			
Task no. _____ Change _____			
Task no. _____ Change _____			
Task no. _____ Change _____			
Task no. _____ Change _____			
Task no. _____ Change _____			
Totals carried forward			

Question	Y	N	N/A
Totals brought forward			
Risk Assessment process			
Either Task covered by procedure or previous TRA			
• Documented RA available?			
• Generic RA – documented check for changes within past 2 years?			
• Repeat TRA – checked for changes, hazards and controls all relevant?			
• Repeat TRA – no new hazards or controls?			
Or Task with new TRA			
• Team visited the worksite?			
• Hazards identified systematically?			
• TRA reviewed & approved, review level linked to Initial Risk Rating?			
Risk Assessment record			
• RA completed by a team?			
• Team included someone who does this work/task?			
• Team had sufficient experience of: work/task; area and equipment; specialist knowledge?			
• RA identifies who might be harmed and how?			
• RA considers concurrent operations?			
• For all identified hazards, controls listed are sensible, not over-the-top?			
Risk Assessment use			
• Pre-job briefing or toolbox talk at or near the worksite?			
• Good alignment between what work team says about hazards and controls and what is documented in the RA?			
• Toolbox talk recorded?			
• All pre-task actions documented in RA were completed?			
Review and Lessons Learned			
• Evidence from these tasks that changes/lessons learned are captured?			
• Any injury, damage or near-miss during these tasks? If so, did the generic RA or TRA identify the hazard? were specified controls/barriers fully implemented?			
Totals – Yes column = Y; No column = N			
Compliance gap = 100 N/ (Y+N) % – ignore all N/A's			

Action points?

Check completed by: _____ Position: _____

Checklist based on:
Task Risk Assessment Guide, Step Change, re-issued 2007
Five Steps to Risk Assessment, HSE INDG 163(rev 2) 06/06

Task risk assessment team

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