HUMBERSIDE FIRE AND RESCUE SERVICE

HEALTH, SAFETY & ENVIRONMENT

RISK ASSESSMENT

Owner	**Director of Service Improvement**
Responsible Person	**Head of Health and Safety**
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1. INTRODUCTION

Humberside Fire and Rescue Service (HFRS) recognises that Regulation 3 'Risk Assessment' of The Management of Health and Safety at Work Regulations 1999 (MHSWR) applies to all of its work activities.

As well as the legal reasons for managing risk, the Service recognises that it has a moral obligation to maintain a safe and healthy workplace.

The Service is committed to ensuring that assessments of the risk to the health and safety of employees and others that may be affected by its work activities are carried out and that these assessments are suitable and sufficient.

HFRS will ensure that those personnel carrying out risk assessments are competent. The minimum mandatory qualification required for completing and reviewing risk assessments is the Institute of Occupational Safety and Health (IOSH) accredited Managing Safely course. The Service will provide this training to all personnel performing a supervisory role which will be refreshed on a three yearly

Risk will be controlled as far as is reasonably practicable. Significant findings of specific risk assessments at all Service and off-site locations will be recorded and made accessible to all relevant personnel via the electronic health and safety recording system.

- For risk assessments of activities at Service locations, the electronic form HS_14 should be used.
- For risk assessments of training and exercises utilising external venues, the electronic form HS_14a should be used.

The other types of risk assessment templates available on the electronic health and safety recording system (i.e. manual handling and PUWER), will be performed by personnel in specialist roles.

Guidance as to how to produce risk assessments is contained within the "User guides" section of the "Library" tab of the electronic health and safety recording system and on the Health, Safety and Environment team's page on the portal. Alternatively, contact the Health, Safety and Environment team for support.

As a general rule, assessments will be reviewed at least every 2 years, always on any other occasion when the assessment has been shown to be inadequate, significant changes have occurred or somebody has sustained an injury whilst carrying out the related work activity.

2. EQUALITY AND INCLUSION

HFRS has a legal responsibility under the Equality Act 2010, and a commitment, to ensure it does not discriminate either directly or indirectly in any of its functions and services nor in its treatment of staff, in relation to race, sex, disability, sexual orientation, age, pregnancy and maternity, religion and belief, gender reassignment or marriage and civil partnership. It also has a duty to make reasonable adjustments for disabled applicants, employees and service users.

3. AIMS AND OBJECTIVES

To provide and maintain formal planning and implementing arrangements to prevent harm to people by identifying risk and applying suitable and sufficient risk control measures, taking account of specific legal issues relevant to the Service.
Ensuring we have suitable and sufficient risk assessments in place to minimise the hazards and risks by having a tiered approach to risk assessment which is practicable for the different levels of risk across the Service.

4. LEVELS OF RISK MANAGEMENT

2.1 Strategic

The Strategic Leadership Team (SLT), in conjunction with Humberside Fire Authority (HFA), determines the Service's Health and Safety Policy, decides on priorities, provides resources and promotes a positive health and safety culture.

2.2 Systematic

Systematic assessment and management of health and safety enables the Service to identify, assess and control foreseeable risk.

The procedures and general principles for risk assessment are detailed below. They outline the framework for the assessment of risk in a methodical way that enables the Service to identify hazards and assess and control risk.

5. ASSESSING RISK

A risk assessment is carried out to identify the risks to the health and safety of any person arising out of, or in connection with, work or the conduct of their undertaking. It should identify how the risks arise and how they impact on those affected. This information is needed to make decisions on how to manage those risks so that the decisions are made in an informed, rational and structured manner, and the action taken is proportionate. Risk assessments are recorded on the Health and Safety electronic recording system, accessible on all HFRS computer desktops.

The electronic HS_14 form includes a hazard checklist that needs to be considered but is not exhaustive.

Any significant findings should be recorded on the electronic risk assessment HS_14 form, which identifies the following:

- The activity, equipment and location being assessed.
- The significant hazards.
- Persons at risk.
- Control measures required.
- Risk level.
- Additional control measures required.
- Safe system of work.
- Date review required.

Control measures must reduce the original risk level to low. If it is found during an assessment that the risk cannot be lowered to low, then additional control measures will be required; these should be recorded in the appropriate section on the form. Additional controls must reduce the risk to low.

Completed risk assessments for each work location will be stored on the electronic health and safety recording system so as to be available to all personnel across the Service.

3.1 Hazard and Risk

A hazard can be defined as something with a potential to cause injury or

Risk can be defined as the likelihood of injury or loss arising from a particular hazard and the severity of that injury or loss.

HFRS uses a semi-quantitative five by five, likelihood versus severity matrix to calculate risk rating. A risk rating is obtained by multiplying the likelihood of harm by the severity of the hazard.

LIKELIHOOD

5 – Very Likely (50/50)
4 – Likely (1 in 100)
3 – Fairly Likely (1 in 1000)
2 – Unlikely (1 in 10,000)
1 – Very Unlikely (1 in 1,000,000)

SEVERITY

5 – Catastrophic (Death)
4 – Major (Broken Bones, Amputation, Dislocation)
3 – Moderate (over 3 days)
2 – Minor (First Aid Only)
1 – Insignificant (no Injury)

5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
	1	2	3	4	5

SEVERITY

LIKELIHOOD

Risk Level

17 - 25	UNACCEPTABLE	Stop work activity and make immediate improvements.
10 - 16	TOLERABLE	Introduce practicable control measures. Reviews required within specified time scales.
5 - 9	ACCEPTABLE	Introduce reasonably practicable control measures.
1 - 4	INSIGNIFICANT	No further action required.

3.2 Methodology

The Service has adopted the Health and Safety Executive (HSE) five steps to risk assessment guidance as the process for assessing risks in the workplace:

- **Step 1:** Identify the hazards.
- **Step 2:** Decide who might be harmed and how.
- **Step 3:** Evaluate the risks and decide on precautions.
- **Step 4:** Record your findings and implement them.
- **Step 5:** Review your assessment and update as necessary.

Step 1:

This step in the risk assessment process is best carried out using multiple sources of information such as:

- Walk around the workplace and look at what could reasonably be expected to cause harm.
- Speak to workers and their representatives to find out if they consider anything in the workplace to be a hazard that may not be obvious to the assessor.
- Inspect relevant records, for example accident records, manufacturer's instructions or data sheets.

When considering the hazards at this point you must hypothetically remove the controls that are already in place. It is easy to consider that the task or process is of low likelihood or low severity because the risk is already beingcontrolled.

Step 2:

For each hazard you need to be clear about who might be harmed and how i.e. what type of injury or ill health might occur; this will assist in identifying the best way of managing the risk. This doesn't mean listing everyone by name, but rather identifying groups of people such as:

- Operational staff.
- Non-operational
- staff.
- Visitors and members of the public.

Identify groups who might be at particular risk such as:

- Young or inexperienced workers.
- New and expectant mothers.
- Night shift workers.
- Home workers.
- Lone workers.
- Disabled staff.

Step 3:

Risk can be defined as the likelihood of injury or loss arising from a particular hazard and the severity of that injury or loss.

Evaluating the risk posed by a hazard is based on the experience of the person undertaking the risk assessment which will always be subjective. The risk level estimator should be used to provide a semi-quantitative risk rating. The significance of the risk is determined by the combination of the severity of the harm with the likelihood of its occurrence and the numbers of people exposed to the risk.

A risk level may be given to each identified hazard in Step 1 by multiplying the likelihood of harm by the severity of the hazard using the 5 x 5 matrix.

All those hazards with a risk rating of 5 or above are considered significant and need to be recorded. Hazards with a risk level of 4 or less are not considered to be significant.

Having spotted the hazards and estimated the level of risk, you then have to decide what to do about them. The law requires you to do everything "reasonably practicable" to protect people from harm. A "hierarchy" of risk control measures can be used to determine reasonably practical risk control. Consider the following:

- Eliminate - total elimination of risk is frequently not reasonably practicable and other measures will need to be implemented in order to reduce and effectively control risk.
- Substitute for a less risky option (e.g. use a less hazardous chemical).
- Isolate or prevent contact (e.g. barriers, guards etc.).
- Reduce exposure (e.g. reduce number of people, level of noise, time exposed etc.).
- Safe systems of work; use a recognised and understood procedure.
- Good housekeeping; simple actions like keeping workplaces clean and free from unnecessary obstructions will reduce the likelihood of slips and trrips.
- Information, instruction, training and supervision by competent personnel.
- Personal protective equipment. This is the last line of defence against risk used as a physical barrier.
- Disciplined use of said personal protective equipment and compliance with recognised procedures.

The most effective control measures are those that do not rely on people using them, therefore, always aim to start with eliminating the hazard altogether. If you cannot, then progressively work down the hierarchy.

Step 4:

Regulation 3 of the Management of Health and Safety at Work Regulations 1999 requires employers who employ more than 5 people to record the significant findings of their risk assessment; this may be recorded in writing or electronically. The record must be retrievable for use by management and safety representatives and accessible to all persons identified in the assessment.

To be suitable and sufficient an assessment of risk should:

- Correctly and accurately identify hazards and prioritise control measures.
- Disregard inconsequential risk (and those everyday risks associated with life in general).
- Determine the likelihood of injury or loss.
- Quantify the severity of any injury or loss.
- Identify all persons potentially at risk whether employees, visitors, contractors or members of the public.
- Take account of any existing control measures.
- Identify legal duty or requirement relating to the hazard.
- Remain valid for a reasonable time and include a specified review date.
- Provide information to identify additional control measures.
- Be signed off by the appropriate person conducting the risk assessment.

The time and effort spent on a risk assessment should be proportionate to the seriousness of the risk and the context of the activity.

In other words, the greater the risk, the more time and effort invested.

Step 5:

All risk assessments will be reviewed at least biannually or:

- On any other occasion when the assessment has been shown to be inadequate.
- Significant changes have occurred.
- Failure of control measures has the potential for serious or imminent danger.
- There are changes in personnel or new information comes to light.
- There is reason to suspect that it is no longer valid.
- After the introduction of new legislation.
- Following an accident or an injury sustained whilst carrying out the related activity.
- When new equipment, technology or procedures are introduced.

Where risk ratings are low, regular reviewing is still necessary in order to ensure that control measures applied remain effective.

6. ASSESSMENT UNDER OTHER REGULATIONS

Other regulations also contain requirements for risk assessment specific to the hazards and risks they cover, these include:

- Display Screen Equipment Regulations 1992
- Provision and Use of Work Equipment Regulations 1998
- Lifting Operations and Lifting Equipment Regulations 1998
- Manual Handling Operations Regulations 1999
- Control of Substances Hazardous to Health Regulations 2002
- Control of Noise at Work Regulations 2005

In the majority of cases, adopting good practice will be enough to ensure risks are reduced sufficiently. Authoritative reference sources are specific legislation, Approved Codes of Practice and guidance produced by the Government and the HSE; all of which are available from the Health, Safety and Environment team. These types of specific risk assessments will be performed by those in specialist roles.

7. RISK REDUCTION

Total elimination of risk is frequently not possible and so other reasonably practicable measures will need to be implemented in order to reduce and effectively control risk.

The 'hierarchy' of risk control measures stipulated in Section 3 can be used to determine reasonably practical risk control and should also be considered as part of a safe system of work.

A safe system of work must be considered for all tasks, and activities that have a risk rating of medium or high during the initial assessment. If no significant findings are found and all of the risk ratings come out as low, then the hazard checklist should be kept for reference.

If a safe system of work is referred to as a control measure, then specific clarification must be provided in the appropriate section on the Risk Assessment HS_14 Form, which must be completed on the electronic health and safety recording system. The control measures towards the top of the list are usually the most effective. At non-operational incidents, personnel should work through the hierarchy shown in Section 3, with PPE considered as the last resort.

8. PREPARING A SAFE SYSTEM OF WORK

Considerations are:

- Do any of the existing systems of work or instructions apply? If so, are they still adequate for this task or should they be revised?
- Is the job to be done by Service staff, maintenance staff, outside contractors or some combination of these?
- Which people are required to carry out the work and what will be their individual roles?
- Will they need extra training?
- Who will control or supervise the task?
- Are any special tools, equipment or clothing necessary?
- Can the job be done with the machine or equipment stopped?
- What precautions (e.g. locking off, or permits to work) are required and who will authorise them?
- Will PPE need to be used?
- How will people involved communicate with each other?
- Will it be necessary to inform other departments or areas about the work?

9. OFF-SITE RISK ASSESSMENT

Scenario-based training or exercises at off-site venues are actively encouraged by HFRS to allow crews to experience realistic and challenging environments in preparation for their operational duties. However, to gain maximum benefit from the training whilst also remaining safe and justifiable, the risks posed must be appropriately identified and controlled.

Therefore, any off site training must be planned in advance with a specific Off-site risk assessment completed and signed off by an appropriate FBU safety representative to cover the premises and the activities planned. This is an essential element of planning and undertaking operational training exercises.

Further details of the process for creating off-site risk assessments is contained within the policy “Realistic Training and Development, Use of Off Station Venues”.

10. OPERATIONAL RISK ASSESSMENT

At operational incidents the Fire Service may have to rely on control measures lower down the hierarchy, as those higher up may be impossible to implement; i.e. control measures of the work environment. This is the basis of dynamic risk management and the “Safe Person Concept”.

8.1 Task Based Risk Assessments

National Operational Guidance(NOG) for Fire Service activities have been produced by the National Fire Chiefs Council. In HFRS these have been used to formulate our Task Based Risk Assessments(TBRA) for each NOG scenario.

The National Operational Guidance Programme for UK fire and rescue services is an electronic “live” resource and the service regularly reviews its content to ensure TBRA’s stay accurate and relevant

- Dynamic Risk Assessment (DRA) (Appendix A)
- Analytical Risk Assessment (ARA) (Appendix B)

8.2 Dynamic Risk Assessment (DRA)

Dynamic Risk Assessment (DRA) is used to describe the continuing assessment of risk that is carried out in a rapidly changing environment at incidents. See DRA flowchart Appendix A

DRA takes into account the continually, and sometimes rapidly, evolving nature ofan incident and is a continuous process. This is further complicated for the FRS Commander in that often rescues have to be performed, exposures protected and stop jets placed before a complete appreciation of all material facts have been

obtained. It is nevertheless essential that an effective risk assessment is carried out at all operational incidents.

Dynamic management of risk is the continuous process of identifying hazards, assessing risk, taking action to eliminate or reduce risk and monitoring and reviewing, in the rapidly changing circumstances of an operational incident. The following statement embraces the philosophy of the Service approach to managing risk at an incident.

8.3 The Firefighter Safety Maxim

There is a balance between ensuring firefighter safety and carrying out the role of the fire and rescue service. This is known as the Firefighter Safety Maxim and is as follows:

> "At every incident, the greater the potential benefit of fire and rescue actions, the greater the risk that is accepted by commanders and firefighters. Activities that present a high risk to safety are limited to those that have the potential to save life or to prevent rapid and significant escalation of the incident."

The benefits of proceeding with a task must be weighed against the risk; it is important to **'think before you act' rather than 'act before you think'.**

For more detailed information on DRA see National Operational Guidance for Incident Command.

Having carried out a Dynamic Risk Assessment (DRA) and established a tactical mode, the Incident Commander (IC) will be aware of the immediate hazards, people at risk and the control measures necessary to protect those people.

8.4 Analytical Risk Assessment (ARA)

Due to the changing nature of the environment at an incident, the IC must ensure that as soon as resources permit, a more analytical form of risk assessment is carried out and, when necessary, new control measures implemented whenever the hazard or degree of risk demands it.

The purpose of the Analytical Risk Assessment (ARA) is to confirm that the Dynamic Risk Assessment (DRA) and chosen tactical mode is correct. See Appendix B

8.5 Handing Over/Closing of Incidents

(i) External

In certain circumstances when HFRS operations at an incident cease, there may be a requirement to hand over an incident to a responsible person or agency. In the following cases, the Incident Commander **must** complete an external handing over form (EHOF REV04/19) and leave it with the identified person on scene:

- Hazards are still present.
- HFRS equipment is being left at the scene.
- Responsibility for securing of property is being passed on.
- Or the IC needs to make the responsible person/agency aware of any other relevant information.

The form is used to acknowledge the residual hazards specific to HFRS operations remaining and the relevant control measures in place. As such, any findings of the most recent ARA must be transferred, in addition to any further significant hazards identified as a result of HFRS leaving the scene. Completion is self-explanatory with guidance notes provided. All applicable boxes must be completed with as much detail as possible in a legible format.

The four FRS of the Yorkshire and Humber region use a consistent approach and the same form to promote shared understanding of handover at any cross-border incidents.

Once signed by the responsible person, the top copy must be given to them to retain and the carbonated copy sent to the Health, Safety and Environment/Operational Assurance team.

(ii) Internal

Internal handing over of incident forms, (IHOF REV04/19) are used to provide the oncoming IC with a formal recorded assessment of the incident particulars prior to assuming command. They are designed for all incident types, not just fires.
Use of internal handing over forms is essential for protracted and complex incidents and also when resources permit:

- during rapid escalation;
- during scaling down of operations; and
- when reliefs are utilised.

The form must confirm any relevant ARA's or decision logs have been communicated appropriately and also identify the current incident structure. Again, as much detail as possible must be provided before both the IC handing over and the IC taking over sign to validate. Completed forms must be kept with Command Support for the duration of the incident and then forwarded to the Health, Safety and Environment/Operational Assurance team.

11. RESPONSIBILITIES FOR RISK ASSESSMENT

9.1 Line Managers and Supervisors

Line managers and supervisors are ultimately accountable for the suitable and sufficient assessment of risk of all the activities undertaken at the place of work for which they are responsible; although this does not preclude any employee of their own individual responsibilities under the Health and Safety at Work etc. Act 1974 or the Management of Health and Safety at Work Regulations 1999. Relevant training in this area for all first-time line supervisors and managers of HFRS is mandatory. Support and guidance are available from the Health, Safety and Environment team.

Managers in charge of particular premises are also responsible for the Health, Safety and Environmental Plan which gives them responsibility to inspect the premises as per a stated audit frequency and/or whenever the need arises. This can be done by means of a daily walking tour in order to ensure that the workplace is safe and control measures are in place. Any defects will be identified, and a specific risk assessment carried out as appropriate. Suitable control measures will be set in place and risk assessment information will be communicated to all relevant persons. Permanent remedial action will be taken as soon as reasonably practicable.

The manager will also carry out any specific risk assessments that relate to the particular premises. They will communicate significant findings and review assessments for which they are responsible as required.

9.2 Emergency Preparedness Section

This Section will be responsible for evaluating the information contained in National Operational Guidance along with local intelligence to produce the relevant TBRA.TBRAs will be reviewed regularly and contain a specific risk assessment to capture all the hazards identified within the related NOG.

9.3 Incident Commanders of Operational Incidents

The Incident Commander of every operational incident has the main responsibility for implementing control measures identified within the NOG, TBRA and for carrying out dynamic assessment of the risk to personnel and members of the public

Incident Commanders and FDS Managers are responsible for conducting ARA's as laid down in Appendix B below.

9.4 Fleet and Equipment Section

The Fleet and Equipment Section is responsible for production and review of all risk assessments of new and existing engines, uniform and operational equipment. Any appropriate technical guidance will also be provided at the time of issue by the Fleet and Equipment Section.

9.5 Operational Training Section

The Operational Training Section is responsible for the risk assessment of all training courses carried out in the Service and all of the Operational Training Section premises.

Significant findings will be communicated via the electronic health and safety recording system.

9.6 Medical Circumstances

In all situations where it becomes necessary to make specific risk assessments of the workplace in regard to an individual employee's medical circumstances, the Occupational Health Advisor must be consulted.

9.7 General

In addition to the above, all employees have a duty to carry out risk assessments to ensure the safety of themselves and other persons.

When the need arises for a risk assessment to be completed, the first point of contact should be the Line Manager. The assessment should then be carried out, where possible by an assessment team, including a competent assessor and a safety representative from the representative bodies.

12. COMPETENCE OF ASSESSORS

Personnel carrying out risk assessments must be competent to do so. The assessor must have an understanding of the workplace and activities. They must also have the ability to make sound judgements and have knowledge of risk reduction.

Personnel who carry out risk assessments within HFRS must possess an in-date IOSH Managing Safely qualification. This course is the mandatory level of safety training for supervisors and managers. Competency may be defined as a combination of knowledge, skills, training and experience.

13. RECORDING

It is essential that all risk assessments are recorded on the Service's electronic health and safety reporting system. The system provides a credible audit trail as required by The Management of Health and Safety at Work Regulations 1999.

14. EMPLOYEE'S DUTIES

Regulation 14 of The Management of Health and Safety at Work Regulations 1999 places the following duties on all employees:

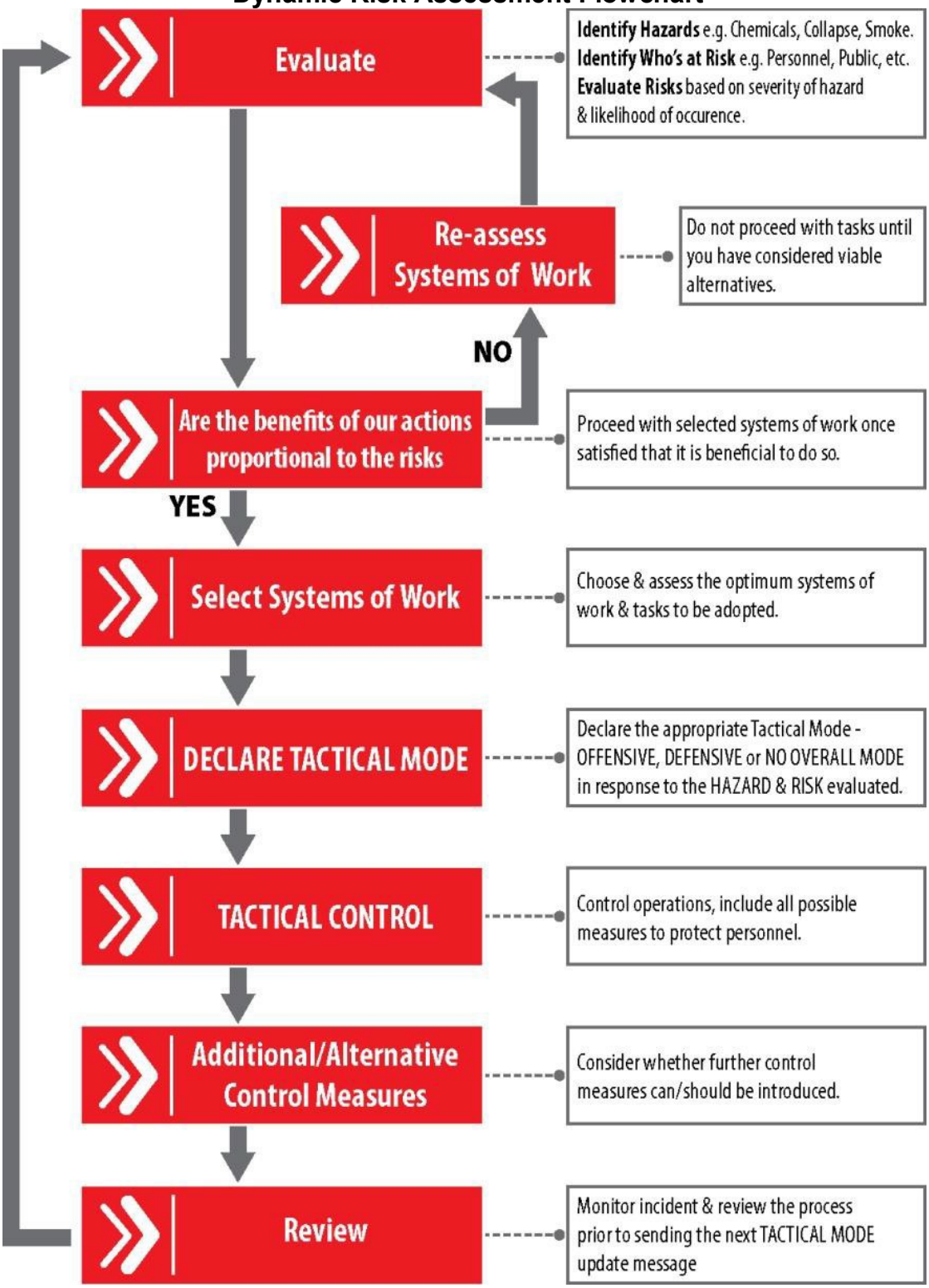
- Using the equipment, safe systems of work and procedures provided by the Service in accordance with training and instruction given.
- Informing their line manager without delay of any situation which may present a serious and imminent danger.
- Notifying their line manager of any shortcoming in the health and safety arrangements.

15. MONITORING AND REVIEW

Periodic monitoring and review will take place to ensure that control measures required by risk assessments are being used as intended and remain effective. More detail as to requirements for review are stipulated in Section 3.

APPENDIX A

Dynamic Risk Assessment Flowchart



APPENDIX B

ANALYTICAL RISK ASSESSMENT (ARA)

Guidance for Completing Analytical Risk Assessments HSE_32

Having carried out the Dynamic Risk Assessment and established tactical mode, the Incident Commander (IC) will be aware of the immediate hazards, people at risk and the control measures necessary to protect those people.

The purpose of the Analytical Risk Assessment (ARA) is to document and build upon the findings of a DRA at incidents. The outcomes of the ARA should inform the Incident Commander (IC) of the suitability of existing risk controls balanced against the effectiveness of the current tactical plan.

Criteria for Use

An ARA should be carried out as soon as practicably possible at an incident and kept constantly under review at a time appropriate to the risks on the incident ground. In addition, subsequent ARA's will be completed as detailed below:

Whenever the tactical mode is changed.

- When new hazards have been identified by the IC or Sector Commander that are not covered in the relevant NOG/TBRA.
- Immediately following an accident or a near miss that had the potential to cause serious injury or damage to Service assets.

At incidents where the Command Unit is mobilised, a Flexible Duty System Officer (FDS) will be mobilised as a Safety Officer (SO) for the incident. The primary functions of the SO are:

- To survey operational sectors, identify hazards and advise the IC and/or Sector Commanders (SC) as appropriate.
- To confirm the validity of previous analytical risk assessments.
- To act as an extra pair of eyes and ears to IC/SC in monitoring the safety of all personnel.

At incidents requiring sectorisation, more than one SO may be operating and the IC should consider nominating an officer to co-ordinate these Sector Safety Officers. The person nominated will be referred to as the **Safety Sector Commander** whose responsibilities are to:

- **Collate and record Analytical Risk Assessments.**
- **Liaise with the IC or Operations Commander.**
- **Liaise with Sector Safety Officers, to support and exchange information.**
- **Take responsibility for Health and Safety issues. (e.g. accident investigations).**

FDS officers mobilised to attend any incident have the option to either provide tactical advice or take command of the incident. Subject to the demands of the incident, as soon as is reasonably practicable, consideration should be given to conducting an analytical risk assessment when taking command of the incident.

Completing Analytical Risk Assessments

Commence each risk assessment form HSE_32 for the incident by completing standard information:

- Address.
- Is the assessment for an incident or sector.
- Date and time.
- Current tactical mode.

Use the hazards checklist to identify significant hazards. Treat each hazard separately, decide who is at risk and list the control measures in place.

Use the 5 x 5 matrix to decide the severity and the likelihood associated to each hazard.

Multiply the severity and likelihood together and enter the risk level. Decide if existing control measures are adequate, if the answer is NO, list the control measures needed to reduce the risk.

Completed forms must be taken to the IC for approval, signature and to put any recommendations in place.

Following the completion of an incident, completed and signed ARA's should be used as a tool to feed relevant information from the incident ground via the tactical debrief, back into the risk assessment process at the systematic level, thereby confirming or amending the Service's Task Based Risk Assessment.

All completed forms should be sent to Health, Safety & Environment, SHQ.

If you require any further information regarding this document please contact Health, Safety and Environment Team.

Analytical Risk Assessment

Incident no.		**Date:**		**ARA Start time**	**:**	**ARA No:**	**of:**
Address					**Incident**	**Incident Type:**	
					Sector	**Sector Name or No.**	
Risk to Environment	**Environmental impact form required** ***(4000LPM/4 Pumping Appliances)***				**Reason/Impact:**		

Current Tactical Mode	**Previous Tactical Mode**	**REASONS FOR SPECIFIC OR CHANGE OF TACTICAL MODE MUST BE RECORDED IN THE DECISION LOGBELOW**

Decision log relevant to this Incident/ARA

Time :	…….....
Time :	…….....
Time :	…….....
Time :	…….....
Time	……

Form completed by:		**Sector Commander** ***(when applicable)***		**Incident Commander*** ***I confirm this ARA is suitable and sufficient***		
Name	No	Name	No	Name	No	Time
Signature		Signature		Signature		

ARA review (every 20 minutes)

1	Time	Signature	Number	**4**	Time	Signature	Number
2	Time	Signature	Number	**5**	Time	Signature	Number
3	Time	Signature	Number	**6**	Time	Signature	Number

At larger or protracted incidents this responsibility may be devolved to the Safety Sector Commander

Primary SOP No:

No.	**Standard Operating Procedure**	**Time**
2.1	Rescues from Ice/unstable ground	
2.2	Rescues from lifts/escalators	
2.3	Rescues from sewers	
2.4	Silo incidents	
2.5	Rescues from trench/pits	
2.5.1	Trapped persons/body recovery	
2.6	Rescues from collapsed structures	
2.7	Working at height	
2.8	Water rescues (inc. flooding)	
2.9	Rescues involving animals	
2.10	Suicide attempts	
3.1	Fires in dwellings (buildings)	
3.1.2	Sandwich panels	
3.2	High-rise buildings	
3.3	Chimney fires	
3.4	Rural areas	
3.5	Farm fires	
3.6	Ventilation (inc. PPV)	
3.7	Refuse (secondary) fires	
3.8	Public entertainment venues	
3.9	Secure accommodation/prisons	
3.10	Petrochemical installations	
3.10.1	Gas	
4.1	Incidents on roadways	
4.2	Railways	
4.3	Aircraft	
4.3.2	Helicopters	
4.4	Marine incidents	
5.1	Electricity	
5.2	Acetylene	
5.2.1	Gas cylinders	
5.3	Chemical/biological hazards	
5.3.1	Decontamination	
5.3.3	Mass decontamination	
5.3.5	Asbestos	
5.5	Confined space	
5.6	Civil disturbance	
5.7	Explosives	
5.8	Flashover/backdraft	
5.9	Radiation	
5.10	High volume pumping	

NOTES / PLAN/ ACTIONS TAKEN (to be used in support of any decision logged relevant to this ARA only)

Incident/Sector Name or No:	(circle as

Hierarchy of Risk Control

Eliminate; **S**ubstitute; **I**solate; **R**educe; **S**afe systems of work; **G**ood house-keeping; **I**nformation, instruction, training & supervision; **P**PE

Current tactical mode: Offensive ☐ Defensive ☐ (Tick as necessary)											
Time Identified	**Significant Hazards**	**Who is at Risk and Number**	**What is the risk with existing control measures?** (Hazardous event and consequences)	**Risk**			**Additional Control Measures**	**Residual Risk**			
				L	**S**	**R**		**L**	**S**	**R**
:											
:											
:											
:											

SEVERITY					
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
			LIKELIHOOD		

LIKELIHOOD

5	Very likely (50-50)
4	Likely (1 in 100)
3	Fairly likely (1 in 1000)
2	Unlikely (1 in 10,000)
1	Very unlikely (1 in 1,000,000)

SEVERITY

5	Death
4	Major (Fractures, amputation, dislocation)
3	Moderate (Over 3 days)
2	Minor (First aid only)
1	Insignificant (No injury)

EVALUATION	
17-25	Unacceptable
10-16	Tolerable
5-9	Acceptable
1-4	Insignificant

Persons at risk – **A**= Operational Personnel, **B=** Control Personnel, **C**= Non-uniformed, **D**= Other Agencies, **E=** Members of the Public, **F=** Young Persons

Notes for completion of Analytical Risk Assessment (ARA)

First page

An ARA must be started & completed:

- Immediately when risks arise that are not identified within the SOPs.
- As soon as resources permit.
- The incident is sectorised.
- Crews are actively working in the hazard area in excess of 20 minutes.

A new ARA must be started & completed when:

- When the tactical mode changes.
- Immediately following an accident or a near miss.
- All new or additional ARAs must be collated together.

Third page

Tick appropriate Tactical Mode.

- □ Identify the hazards not highlighted in selected SOPS (potential to cause harm e.g. large number of hose lines)
- □ Identify the groups of people at risk and how many. (The more people exposed the higher the likelihood).
- □ Identify the risk (how do people interact with the hazard and what are the consequences e.g. persons may trip over hose lines causing minor, moderate or major injury).
- Multiply the likelihood and severity (1–25) to show risk level.
- □ Record the control measure in place.
- Multiply the likelihood and severity to give the risk rating (1–25). Residual risk must be reduced to as low as reasonably practicable.

Form to be completed by Command Support or a Safety Officer

- □ Insert incident number.
- □ Insert primary SOP number.
- □ Insert address.
- □ Tick box for incident or sector, if sector confirm sector name or number.
- □ Insert date and time.
- □ Record the time next to relevant SOP number for when it was fully accessed (*not just the aide memoire*).
- □ Complete the current tactical mode (for new ARAs).
- □ Enter current and previous tactical mode (ensure decision rationale factors are logged).
- □ Complete risk to environment boxes.
- □ Draw a plan of the incident or sector.
- □ Log all significant decisions relevant to the ARA.
- □ Individual completing form to add name, number and signature.
- □ IC/ Safety Officer **must** confirm ARA is suitable and sufficient before signing off.
- □ Review every 20 mins. Once IC has signed off as suitable and sufficient, insert time, signature and service number if no changes are made.
- □ Final signature by IC at close of incident.
- □ Form to be submitted by Incident Commander.

HIERARCHY OF CONTROL MEASURES

Eliminate
Substitute
Isolate
Reduce
Safe system of work (S.S.O.W.)
Good housekeeping
Information, Instruction, Training, Supervision (I.I.T.S.)
Personal Protective Equipment (the last resort)

Top (original white) copy to be signed and forwarded to the Health, Safety and Environment section.
Bottom (duplicate green) copy to be forwarded to the Emergency Response Station Manager of the person completing the form.