



Section 3

Managing Risk



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Section Introduction

This section of the Health, Safety and Wellbeing Manual explains how to manage risks. First we identify risks within the workplace, and then we ensure that Risk Assessment Guidance and control measures are in place. These steps must be continually communicated to all employees involved in the activities.

A **hazard** is anything that may cause harm, such as chemicals, electricity, working from ladders, an open drawer, etc.

The **risk** is the possibility (high or low) that these hazards could harm someone, and if so, how serious that harm could be.

Identifying hazards and risks form the basis of developing a Risk Assessment Guidance and Toolbox Talk, which detail the following:

- The activity or operation
- The hazard and hazardous event
- Who is at risk
- The control measures needed
- Steps to communicate the risk



All workplaces have hazards and risks related to the activities taking place, which include services carried out by Thames Water contractors. Employees must attend the Thames Water Passport Course to learn about different workplace hazards and risks.

The Steps to Managing Risk Effectively for Health and Safety are:



Step 1

Identify the Hazards

Identify the type of work being carried out and its related workplace hazards. Refer to the list of hazards in the [Work Safety Checklist \(SHE 1\)](#).



Step 2

Evaluating the Risk

Identify the appropriate Risk Assessment Guidance, and ensure all control measures are in place before work starts. Risk Assessment Guidance and Toolbox Talks covering Company-Wide, Operations and Substances ([SHE 3](#)) are listed in Appendix A, B and C in this document.

Prepare a [Safe System of Work \(SHE4\)](#) for very specific kinds of work. Also ensure you complete the [Job Health and Safety Checklist \(SHE 5\)](#) when starting the work, to ensure risks resulting from changes in circumstance are controlled. When circumstances change, the job may be cancelled until appropriate controls are in place. Both these practices form part of the Risk Assessment Guidance.



Step 3

Communicating the Risk

Deliver Toolbox Talks to members of your team, covering the Risk Assessment Guidance and/or Safe Systems of Work.



Step 4

Monitoring and Review

Monitor and review the risks, as new practices and products will be regularly introduced into the workplace.

Appendix D provides various forms, checklists, procedures, Risk Assessment Guidance and Toolbox Talks you will need to manage risks effectively.



Step 1 - Identify the Hazards

Carrying out a desk-top-review

Ensure everyone is aware of workplace hazards.



The manager of a team must conduct a desk-top-survey to discuss and identify the tasks their team carries out, and to determine the hazards they are exposed to. The team must be involved in this process, as they are experienced, and may be aware of other hazards and risks related to their work.

Fill in all information regarding the nature of works and the related hazards in the appropriate Work Safety Survey Checklist (SHE 1) sections. For assistance, refer to the guidance on the back of SHE 1, or the Help Text on Safeguard.

Walking the workplace

Walking the workplace will give you a better idea of the nature of the hazards.



When walking the workplace, consider how each team member interacts with the workplace, where they carry out their tasks, and the plant and equipment involved in the work. For example, what maintenance tasks and operational tasks are carried out?

Remember to add any extra notes in the comments section of the Work Safety Survey Checklist.



NOTE: If necessary, the Work Safety Survey Checklist can also be used to:



- Survey only part of the workplace.
- Get information about a specific task to be carried out.
- Re-survey part of the workplace where there's been a change in the activities being carried out.
- Survey an area in the workplace where a contractor will be working.

Risk Assessment Guidance and Toolbox Talk / key health and safety procedures / Essential Standards

Once you have completed the Work Safety Survey Checklist, you must ensure information on the workplace activities and hazards is covered in a Risk Assessment Guidance and Toolbox Talk (SHE3). Refer to appendix A, B and C to locate the Risk Assessment Guidance (RAGs). Contact the Health, Safety and Wellbeing Team if certain activities are not covered. They will develop the new RAG and will tell you if the activity involves multiple or complex tasks, which needs a Safe System of Work.

As soon as these details are confirmed, the Work Safety Survey Checklist must be updated to reflect the relevant RAGs and Toolbox Talk. Also refer to key health and safety procedures and Essential Standards when developing Safe Systems of Work and control measures (see Appendix D).



Step 2 - Evaluating the Risk

Risk Assessment Guidance and Toolbox Talk

Once you have identified the hazards and risks, set up a standard package of available RAGs, relevant to your team's activities and workplace.

Make sure all control measures are put in place. It may also be necessary to add extra control measures to some of the RAGs and Toolbox Talks. If this is the case, tell the Health, Safety and Wellbeing Team, as these control measures may also be applicable to other areas of Thames Water, and may require updating other RAGs and Toolbox Talks as well.

If any workplace activities involve exposure to harmful chemicals or substances, refer to the relevant COSHH Information Sheet (in Appendix D) for extra controls that may be required.

Preparing Safe Systems of Work

A written Safe System of Work might be very specific and apply only to "once-off" hazardous operations. However, it may also detail the standard method for a task often carried out at a location.

Complete a Safe System of Work for activities involving multiple or complex tasks that are not fully covered by risk assessments and/or key health and safety procedures. For example, a complex confined space activity, or a local site activity involving multiple tasks.

Use the Safe System of Work form (SHE 4) where safe methods of work need to be recorded to support risk assessments and key health and safety procedures. It can also be used to support Permits to Work, but not to replace them.



All control measures must be in place before work starts.

Job Health and Safety Checklist

It is your responsibility to ensure a SHE 5 has been completed before work starts. No activity must be carried out if there are serious risks to health and safety. Workers have the authority to stop activities that cannot be carried out safely.

Complete the Job Health and Safety Checklist (SHE 5) for each activity. Ensure you take time to **STOP** and **THINK** about the work, rather than just ticking the boxes.

Where there is a serious risk to health and safety, **DO NOT** start the work until appropriate controls are put in place. Report any problems that cannot be fixed to your line manager and/or Health, Safety and Wellbeing Advisor. They will discuss, identify and put the necessary control measures in place before work starts.



Where there is a serious risk to health and safety, **DO NOT** start the work until appropriate risk controls are put in place. NB: If you cannot fix the problem, discuss it with your supervisor/manager.



Step 3 - Communicating the Risk

Essential briefing of Risk Assessment Guidance and Toolbox Talk

It is important to communicate RAGs and Toolbox Talks to all those doing the work.

Make sure you talk specifically about the risk assessment and control measures. During the brief, extra control measures might be identified. If this is the case, tell the Health, Safety and Wellbeing Team, as these control measures may also be applicable to other areas of Thames Water, and may require updating other RAGs and Toolbox Talks as well.

Everyone who has received the Toolbox Talk must sign to confirm they have heard and understood the briefing. Make sure to keep this on record.

Many RAGs and Toolbox Talks will have to be delivered across the teams, so it is a good idea to deliver one or two of them each week – possibly at team meetings, and starting with the high priority ones.

Essential briefing of Safe Systems of Work

Where Safe Systems of Work have been developed for an activity, ensure all those involved are briefed on the main points.

Everyone who has received the briefing must sign to confirm they have heard and understood the briefing. Make sure to keep this on record.



Step 4 - Monitoring and Review

Active monitoring (SHE6 series)

When completing a workplace health and safety inspection, you must include a review of the relevant RAGs and Toolbox Talks. Along with viewing the records, it is also good practice to pick a key activity and ask the following:

- Is there a Risk Assessment Guidance and Toolbox Talk (SHE 3) covering the activity?



- Is the activity covered by a Safe System of Work (SHE 4) if it's considered a multiple or complex task?

- Have all staff been briefed and attendance signatures been recorded (SHE 3 or SHE 13)?
- Are all persons carrying out the activity competent?
- Has a Job Health and Safety Checklist (SHE 5) been completed correctly?
- Is further training required?
- Are contractors carrying out the activities, and if so, have their risk assessments and safe systems been reviewed?



Reviewing the Work Safety Survey Checklist (SHE 1)

Review your Work Safety Survey Checklist (SHE 1) on an annual basis and if there are any changes in the workplace. Remember, you can contact the Health, Safety and Wellbeing Team for assistance.

If the change involves your team using new equipment or plant, consider further training if required.

Appendix A

Risk Assessment Guidance – Company Wide

Use these Risk Assessment Guidelines when completing a site or location-specific risk assessment. Include any relevant information in your specific risk assessment, along with any extra control measures identified on the SHE 3 form.

The Risk Assessment Guidelines listed here are available on the Health, Safety and Wellbeing section of the Portal.



FIRE PREVENTION

Ref No	Title
RAG001	Fire general
RAG002	Fire prevention – electrical and other plant
RAG003	Fire prevention hot work operations



MANUAL HANDLING

Ref No	Title
RAG004	Manual handling of packages
RAG005	Manual handling of bagged materials
RAG006	Manual handling of fragile apparatus and equipment
RAG007	Loading and storage of equipment in vehicles
RAG008	Manual handling of plant and equipment



WORKING AT HEIGHT

Ref No	Title
RAG009	Ladders used for access
RAG010	Scaffold – fixed
RAG011	Scaffold – mobile
RAG012	Work at height – general
RAG013	Work at height off ladders for inspections or short term work
RAG014	Using mobile elevated working platforms



PLANT AND EQUIPMENT

Ref No	Title
RAG015	Portable power tools



SITE

Ref No	Title
RAG016	Pedestrian access and egress
RAG017	Vehicle access and egress to operational sites



OCCUPATIONAL HEALTH AND HYGIENE

Ref No	Title
RAG018	Disposal of needles and syringes – treatment of needle stick injuries



ELECTRICAL WORK

Ref No	Title
RAG019	Electrical Work General



YOUNG PERSONS

Ref No	Title
RAG020	Young persons above minimum school leaving age - offices
RAG021	Young persons above minimum school leaving age - field
RAG022	Young persons above minimum school leaving age – operational site
RAG023	Young persons below minimum school leaving age - offices
RAG024	Young persons below minimum school leaving age - field
RAG025	Young persons below minimum school leaving age – operational site



LONE WORKING

Ref No	Title
RAG026	Lone working



DRIVING

Ref No	Title
RAG027	Driving on company business



WATER BOTTLE DISTRIBUTION

Ref No	Title
RAG028	Volunteers handing out bottle water to members of the public (Spring, Summer and Autumn)
RAG029	Volunteers handing out bottle water to members of the public (Winter)



Please [click here](#) to view the Risk Assessment Guidelines listed above.

Appendix B

Risk Assessment Guidance - Operations

Use these Risk Assessment Guidelines when completing a site or location-specific risk assessment. Include any relevant information in your specific risk assessment, along with any extra control measures identified on the SHE 3 form.

The Risk Assessment Guidelines listed here are available on the Health, Safety and Wellbeing section of the Portal.



FIRE PREVENTION

Ref No	Title
RAG101	Working with flammable liquids
RAG102	Working with flammable gasses



WORKING NEAR WATER

Ref No	Title
RAG103	Launching of boats
RAG104	Operation of boats on enclosed waterways
RAG105	Operation of boats on open waterways
RAG106	Off site water safety
RAG107	On site water safety
RAG108	Recreational and educational water safety
RAG109	Fisheries and angling



MANUAL HANDLING

Ref No	Title
RAG110	Lifting manhole covers
RAG111	Operating valves
RAG112	Handling of liquids
RAG113	Handling of loose materials



WORKING AT HEIGHT

Ref No	Title
RAG114	Working on lorries
RAG115	Work over chambers



PLANT AND EQUIPMENT

Ref No	Title
RAG116	Driving and operating mobile plant and equipment
RAG117	Operation of Klampress
RAG118	Mobile plant entry into slow sand filter beds
RAG119	Oxy-acetylene welding

PLANT AND EQUIPMENT (Continued)

Ref No	Title
RAG120	Metal arc welding
RAG121	Cylinder and drum changing for disinfection
RAG122	Noise
RAG123	Operation of auger screw conveyors
RAG124	Operation of flowtex belt conveyors
RAG125	Using woodworking machinery
RAG136	Working with fixed power tools
RAG137	Operating fixed plant and machinery with moving parts - general
RAG138	Using portable petrol driven plant
RAG139	Maintaining fixed plant with moving parts - general
RAG145	Operation of the Simon Hartley aqua belt
RAG152	Avoidance of contact with overhead electric power lines
RAG153	Avoiding danger from underground services
RAG154	Pressure systems
RAG155	Use of pressure washing equipment



SITE AND FIELD ACTIVITIES

Ref No	Title
RAG126	Workplace operational sites
RAG127	Visiting construction sites
RAG128	Short duration road works
RAG129	Pedestrian entry into slow sand filter beds
RAG130	Pedestrian entry into slow sand filter beds using ladders
RAG131	Explosive atmosphere
RAG140	Working in inadequate lighting
RAG141	Working in adverse weather
RAG142	Visiting operational sites
RAG143	School parties visiting operational sites
RAG144	Adult parties visiting operational sites

SITE AND FIELD ACTIVITIES (Continued)

Ref No	Title
RAG148	Entry into and work in confined spaces
RAG149	Portable field work management device used in the field
RAG150	Portable field work management device used in vehicles
RAG151	Avoidance of overhead cables and pipe work on site



OCCUPATIONAL HEALTH AND HYGIENE

Ref No	Title
RAG132	Working with sewage, sewerage sludge and polluted water



ELECTRICAL WORK

Ref No	Title
RAG133	Electrical work high voltage
RAG134	Electrical work dangerous substances explosive atmosphere regulation (DSEAR)



LIFTING

Ref No	Title
RAG135	Mechanical lifting and handling



to view the Risk Assessment Guidelines listed above.



Risk Assessment Guidance – Substances

Use these Risk Assessment Guidelines when completing a site or location-specific risk assessment. Include any relevant information in your specific risk assessment, along with any extra control measures identified on the SHE 3 form.

The Risk Assessment Guidelines listed here are available on the Health, Safety and Wellbeing section of the Portal.

Please
click
here



to view the Risk
Assessment
Guidelines listed
above.

Ref No	Title
RAG201	Working with solvents and adhesives
RAG202	Working with cryogenic substances
RAG203	Handling of hazardous substances
RAG204	Transportation of bulk chemicals
RAG205	Transportation of small volume chemicals
RAG206	Transportation of toxic gases
RAG207	Use of intermediate bulk containers (IBCs)
RAG208	Bulk cryogenic chemical deliveries
RAG209	Bulk liquid chemical deliveries
RAG210	Bulk powder chemical deliveries
RAG211	Sampling pollution incidents
RAG212	Sampling offsite
RAG213	Sampling onsite
RAG214	Entry into toxic gas rooms

Use COSHH information, available from the Health, Safety and Environment section of the Portal, to support your risk assessment:

Ref No	Title
CI001	Acetate buffer solution
CI002	Aluminium sulphate
CI003	Ammonia
CI004	Ammonium sulphate
CI005	Calcium nitrate
CI006	Carbon activated granular
CI007	Carbon dioxide
CI008	Chlorine
CI009	Ferric chloride
CI010	Ferric sulphate
CI011	Fuel oil diesel
CI012	Hexafluorosilicic acid
CI013	Hydrated lime
CI014	Hydrochloric acid
CI015	Hydrogen peroxide
CI016	Hydrogen sulphide
CI017	Man made mineral fibre
CI018	Mercury
CI019	Mono ethylene glycol
CI020	Odour control chemicals
CI021	Oxygen
CI022	Ozone
CI023	Pesticides
CI024	Phosphate buffer solution
CI025	Phosphoric acid
CI026	Polyaluminium chloride

Ref No	Title
CI027	Potassium permanganate
CI028	Sequest
CI029	Sludge conditioners
CI030	Sodium bisulphite
CI031	Sodium hydroxide
CI032	Sodium hypochlorite
CI033	Sodium chloride
CI034	Sulphur dioxide
CI035	Sulphuric acid
CI036	Virkons
CI037	Welding fume or similar process
CI039	Woodwork dust
CI039	Antiscalant
CI040	Blue green algae
CI041	Defoamer
CI042	Ferrous Chloride
CI043	Legionnaires disease
CI044	Lubricant oils
CI045	Magnesium sulphate
CI046	Sewage and sludge
CI047	Sodium chlorite
CI048	Nitric Acid
CI049	Bio-gas

 Please click here to view the COSHH information listed above.

Reference	Available from	
Work safety survey checklist SHE1	Health, Safety and Wellbeing Portal <i>Safeguard</i>	
Risk assessment guidance and toolbox talk form SHE3	Health, Safety and Wellbeing Portal	
Safe systems of work form SHE4	Health, Safety and Wellbeing Portal	
Job health and safety checklist SHE5	Operational Toughbook's SAP+ Health, Safety and Wellbeing Portal	
Key health and safety procedures HSP	Health, Safety and Wellbeing Portal	
Key health and safety information	Health, Safety and Wellbeing Portal	
Essential Standards	Health, Safety and Wellbeing Portal <i>Health and Safety Hub</i>	
Risk assessment guidance and toolbox talk - COMPANY WIDE	Health, Safety and Wellbeing Portal <i>As outlined in Appendix A of this document</i>	Appendix A
Risk assessment guidance and toolbox talk - OPERATIONS	Health, Safety and Wellbeing Portal <i>As outlined in Appendix B of this document</i>	Appendix B
Risk assessment guidance and toolbox talk - SUBSTANCES <i>(inclusive of COSHH information sheets)</i>	Health, Safety and Wellbeing Portal <i>As outlined in Appendix C of this document</i>	Appendix C

Maintenance of records associated with this procedure

Keep records of the following, either in hard copy, electronically, or in the local health and safety record filing system:

- Work Safety Survey Checklist (SHE 1)
- Risk Assessment Guidance and Toolbox Talk (SHE 5)
- Safe System of Work (SHE 4)
- Toolbox Talk Form (SHE 13)
- Job Health and Safety Checklist (SHE 5)