

## **Requirements for Sub Contractors**

Health, Safety and Wellbeing



Prepared for:  
Sub-Contractors

Prepared by:  
MWH UK SHEQual

2016 08

#### Table of Contents

|       |                                                                      |    |
|-------|----------------------------------------------------------------------|----|
| 1     | Introduction.....                                                    | 1  |
| 1.1   | Purpose .....                                                        | 1  |
| 2     | Safety, health and wellbeing legislation and other requirements..... | 2  |
| 3     | Pre-qualification and tendering guidance.....                        | 3  |
| 4     | Managing Construction (Design and Management).....                   | 4  |
| 4.1   | Accepting commissions .....                                          | 4  |
| 4.2   | Co-operation, co-ordination and communication .....                  | 4  |
| 4.3   | Employee consultation .....                                          | 4  |
| 4.4   | Designers (including Principal Designer) .....                       | 5  |
| 4.4.1 | Principal Designers.....                                             | 5  |
| 4.4.2 | Designers.....                                                       | 5  |
| 4.5   | Contractors (including Principal Contractors) .....                  | 5  |
| 4.6   | Construction Phase Plan (CPP) .....                                  | 6  |
| 4.7   | Health and safety file .....                                         | 6  |
| 5     | Risk Management.....                                                 | 7  |
| 5.1   | Risk assessment .....                                                | 7  |
| 5.2   | Safe systems of work.....                                            | 7  |
| 5.3   | Permits.....                                                         | 7  |
| 5.4   | Daily activity / pre-task briefing .....                             | 7  |
| 5.4.1 | Client Authorisations.....                                           | 8  |
| 5.5   | Monitoring .....                                                     | 8  |
| 5.6   | Emergency Arrangements.....                                          | 8  |
| 5.7   | Incident reporting .....                                             | 8  |
| 5.8   | Dangerous condition / hazards / near miss reporting .....            | 9  |
| 6     | Health and Wellbeing .....                                           | 10 |
| 6.1   | Worker .....                                                         | 10 |
| 6.1.1 | Fitness to Work .....                                                | 10 |
| 6.1.2 | Personal medical assessments.....                                    | 10 |
| 6.1.3 | Management of ill health.....                                        | 10 |
| 6.1.4 | Fatigue management .....                                             | 11 |
| 6.2   | Workplace .....                                                      | 11 |
| 6.2.1 | Risk assessment .....                                                | 11 |
| 6.2.2 | Health surveillance.....                                             | 11 |

# Requirements for Sub Contractors

## Health, Safety and Wellbeing

### Table of Contents

---

|        |                                                     |    |
|--------|-----------------------------------------------------|----|
| 6.3    | Wellbeing.....                                      | 12 |
| 6.3.1  | Psychological wellbeing .....                       | 12 |
| 7      | Training and competence .....                       | 13 |
| 7.1    | Induction.....                                      | 13 |
| 7.2    | Specific role competencies.....                     | 13 |
| 8      | Operational health and safety management.....       | 14 |
| 8.1    | Welfare .....                                       | 14 |
| 8.2    | Visitors / visiting workers .....                   | 14 |
| 8.3    | Mobile phones.....                                  | 15 |
| 8.4    | Personal Protective Equipment.....                  | 15 |
| 8.5    | Drugs and alcohol .....                             | 16 |
| 8.5.1  | Limits .....                                        | 17 |
| 8.6    | First aid .....                                     | 17 |
| 8.7    | Non-English speaking personnel .....                | 17 |
| 9      | Hazards .....                                       | 18 |
| 9.1    | Excavations (including temporary works) .....       | 18 |
| 9.2    | Underground services .....                          | 18 |
| 9.3    | Temporary works .....                               | 19 |
| 9.4    | Working at height.....                              | 19 |
| 9.4.1  | Edge protection.....                                | 19 |
| 9.4.2  | Ladders.....                                        | 20 |
| 9.4.3  | Open edges and openings.....                        | 20 |
| 9.5    | Working over or near water .....                    | 20 |
| 9.6    | Working in the highway .....                        | 20 |
| 9.7    | Lifting operations.....                             | 21 |
| 9.8    | COSHH .....                                         | 22 |
| 9.9    | Asbestos.....                                       | 22 |
| 9.10   | Manual handling.....                                | 22 |
| 9.11   | Confined spaces.....                                | 22 |
| 9.12   | Plant and equipment.....                            | 22 |
| 9.12.1 | Existing fixed plant & equipment.....               | 22 |
| 9.12.2 | Sub-contractor / supplier plant and equipment ..... | 23 |
| 9.13   | Tunnelling .....                                    | 23 |
| 9.14   | Vulnerable road users .....                         | 23 |

# Requirements for Sub Contractors

## Health, Safety and Wellbeing

### Table of Contents

---

|                   |                                 |    |
|-------------------|---------------------------------|----|
| 9.15              | Scaffold .....                  | 24 |
| 9.16              | Protecting the public .....     | 24 |
| 9.17              | Dust, noise and vibration ..... | 24 |
| 9.18              | Electrical safety .....         | 25 |
| APPENDIX A .....  |                                 | 1  |
| RAG Lists .....   |                                 | 1  |
| Red lists .....   |                                 | 1  |
| Amber lists ..... |                                 | 1  |
| Green lists ..... |                                 | 2  |

## **1 INTRODUCTION**

MWH engage with suppliers and sub-contractors to help deliver a diverse range of works and / or the provision of a variety of services in respect of water and waste water installations, facilities and infrastructure at various locations.

### **1.1 Purpose**

This document has been produced for the use of management and supervisory staff of MWH and our supply community. The purpose of the document is to establish and outline the minimum acceptable safety, health and wellbeing standards expected to be maintained by all sub-contractors and suppliers when working on behalf of MWH UK Ltd. All organisations working on behalf of MWH are required to implement the relevant standards and inform and instruct all their employees and other personnel under their control, on the requirements contained within this document.

## **2 SAFETY, HEALTH AND WELLBEING LEGISLATION AND OTHER REQUIREMENTS**

In addition to the requirements set out within this document, all work carried out by suppliers / sub-contractors to MWH, shall be done so in accordance with all applicable statutory requirements. Management of all activities shall also take account of other applicable standards and publications such as British, European & International Standards and relevant guidance and publications from industry bodies that may enrich health and safety performance.

MWH clients may have also developed their own standards, relating to health, safety and wellbeing. Where additional standards exist, they will be brought to the attention of the sub-contractor / supplier by the MWH Project Manager.

### **3 PRE-QUALIFICATION AND TENDERING GUIDANCE**

MWH shall only award work to organisations who can demonstrate a suitable level of safety, health and wellbeing competence and meet the pre-qualification criteria. Please refer to the MWH procurement team for information on pre-qualification and tendering requirements.

## **4 MANAGING CONSTRUCTION (DESIGN AND MANAGEMENT)**

Work undertaken by MWH includes construction activities and as such, the requirements of the Construction (Design and Management) Regulations 2015 shall apply.

### **4.1 Accepting commissions**

No one working on behalf of MWH is to accept an appointment to undertake design or construction work without being able to demonstrate that they have the necessary health and safety skills, knowledge and experience to carry out the work.

Members of the supply community who wish to sub-contract any work awarded by MWH, must ensure that they have robust arrangements in place for assessing and ensuring the ongoing competence of anyone they appoint.

### **4.2 Co-operation, co-ordination and communication**

MWH recognise that effective co-operation, co-ordination and communication between parties is fundamental to achieving good health and safety performance and safeguarding the health and safety and welfare for all concerned.

We will proactively support this collaborative approach ensuring that all work is co-ordinated and that there is clear communication between parties such that everyone understands the risks and measures put in place to control them.

### **4.3 Employee consultation**

Workplaces where people are consulted and engaged in decisions about health and safety are safer and healthier. MWH is committed to encouraging positive engagement with the workforce on all health and safety matters. We recognise that in addition to meeting health and safety legal obligations, effective consultation and engagement is a fundamental mechanism for achieving health and safety excellence.

All sub-contractors / suppliers are encouraged to engage with their site personnel and develop effective mechanisms for involving site personnel in the development and implementation of effective health and safety policies, procedures and safe systems of work. Arrangements for ensuring worker engagement may include:

- Personnel understanding that they are allowed to stop work if they feel at risk
- Details of the mechanism for raising health and safety concerns
- Regular visits by senior managers to engage
- All personnel addressing others in a civil manner
- Opportunities for worker involvement when producing safe systems of work
- Personnel being encouraged to participate and comment on 'toolbox talks' and other briefings
- Taking reported H&S issues seriously and not being negative or critical



Recognition of trade unions and appointed safety representatives and respect of the appointments and the benefits of their involvement (representatives of employee safety or direct communication with employees in small organisations or where no union is present).

#### **4.4 Designers (including Principal Designer)**

The earliest decisions in a project can fundamentally affect the health, safety and wellbeing of those who will construct, operate and maintain the finished asset. Health and safety must therefore be at the forefront of the design approach with a key focus to be on the elimination or reduction of hazards and risk.

##### **4.4.1 Principal Designers**

Construction (Design and Management) Regulations 2015 includes the role of Principal Designer. Where MWH accepts the role of Principal Designer, MWH will:

- Plan, manage and monitor the pre-construction phase, co-ordinating matters to ensure proper management of hazards and risks
- Take into account the principles of prevention and consider the contents of any relevant health and safety file and other information held by the client
- Identify and eliminate or control foreseeable risks, so far as is reasonably practicable. Information on residual risks will be included within the pre-construction information and passed to those who will be undertaking the construction activity

##### **4.4.2 Designers**

Designers are also reminded of their duties under the Construction (Design and Management) Regulations 2015 and the key aspects of compliance including:

- Manage risks by applying the principles of prevention
- Cooperating and communicating with others and coordinating work
- Take account of any pre-construction information
- Provide information with the design to the Principal Designer, Principal Contractor or anyone else who may need it

The HSE have produced 'red, amber, green' lists of process and substances which should be considered when developing the design. The lists are contained within Appendix A of this document.

#### **4.5 Contractors (including Principal Contractors)**

A Principal Contractor co-ordinates the construction activities ensuring that work is carried out in a way that good management of health and safety on site. Where the role of Principal Contractor is accepted by MWH, we will:

- Take account of the general principles of prevention in planning, managing, monitoring and co-ordinating the construction phase
- Liaise with the Principal Designer and client (Principal Contractor)
- Provide suitable information, instructions and supervision commensurate with the complexity and risk of the work

- Ensure that individuals working for, or on behalf of, MWH have the necessary skills, knowledge, training and experience to carry out work in a way which protects the health, safety and wellbeing of others
- Ensure continued safety on site by providing suitable inductions, preventing unauthorised access, providing welfare facilities and complying with the requirements of Part 4 of the CDM Regulations (Principal Contractor)
- Comply with directions given by the Principal Contractor & Designer and contained in the construction phase plan (contractor)
- Consult and engage with people carrying out construction work

Anyone who directly employs or engages construction workers or managing construction is a contractor. Duties on contractors apply whether the workers under their control are employees, self-employed or agency workers.

#### **4.6 Construction Phase Plan (CPP)**

Pre-construction information must be provided to the contractor / principal contractor so that he can use the information contained within it to develop the construction phase plan.

A construction phase plan will be developed by the Contractor / Principal Contractor, for all construction work, before setting up site.

#### **4.7 Health and safety file**

Health and safety files will be developed and passed to the client for retention. These will be developed by the Principal Designer and Principal Contractor with input from others as appropriate.

## **5 RISK MANAGEMENT**

### **5.1 Risk assessment**

A site specific risk assessment is required for all work activities where significant hazards are present. These may be based on model risk assessments but must be adapted and further enhanced to consider the working environment of the activity. Examples could include working in the highway, operational areas, schools etc. Risk assessments must be reviewed by MWH prior to work commencing. Sub-contractors / suppliers must ensure that everyone involved in the activity is briefed on the findings of any risk assessments in a clear concise manner so that they understand:

- What control measures have been put in place for their protection
- What action is expected of them
- What to do if the control measures cannot be implemented or do not provide adequate protection

Signatures of those briefed must be obtained and kept for review.

### **5.2 Safe systems of work**

For many activities, properly prepared risk assessments are sufficient to manage the risks. However, where the task is particularly complex or where the sequence of events is paramount to maintaining safety, the risk assessment may need to be supplemented by a method statement and necessary permits.

Where required, safe systems of work must be provided to a member of MWH for review, prior to the activity commencing.

### **5.3 Permits**

Work activities of a high risk or complex nature will require additional control in the form of permits. Activities requiring the issue of a permit include:

- Breaking ground / excavation
- Hot works
- Confined spaces
- Specialist lifting operations (including with cranes)
- Lifting with excavators

All permits must be issued by a competent person from the sub-contractor, who has been nominated and given authority (in writing) to do so.

### **5.4 Daily activity / pre-task briefing**

To ensure workers are put to work safely on a daily basis, supervisors or others in control of the work activity on static sites should deliver a pre-task or daily briefing to everyone who is under their control. Pre-task briefings should take place at the point of work and include:

- A brief description of the work including diagrams as appropriate
- Task specific risks (including those related to the working environment)

- Control measures required to manage the risks
- Details of any permits or authorisations required
- Emergency arrangements
- Contact details for reporting and escalation purposes

#### 5.4.1 Client Authorisations

Clients may have specific requirements and authorisations when working on their assets. Their purpose is usually to provide a two-way transfer of key information relating to existing hazards and the work being carried out. When working on a Clients operational asset, it is essential that sub-contractors working on behalf of MWH obtain any site specific hazards that may impact on the health, safety and welfare of those undertaking the activity.

It is essential that the MWH Project Manager is aware of these and that they are communicated to the sub-contractor / supplier.

### 5.5 Monitoring

Sub-contractors must ensure that all work activities are subject to regular routine monitoring and inspection by competent persons. The purpose of such inspections is to ensure that work activities are being carried out accordance with relevant legislative requirements and local standards identified in risk assessments, health and safety plans, site rules etc. Actions arising from all inspection and monitoring activities must be documented and monitored until resolution.

In addition and as part of demonstrating management commitment to safety, health and wellbeing arrangements must be in place for effective monitoring of work activities by all levels of managements. Arrangements must include ensuring that inspections are carried out at a frequency which is suitable for the nature of the work provide clear instructions / guidance to managers on what to look for and how to deal with actions arising.

### 5.6 Emergency Arrangements

Sub-contractors working on behalf of MWH shall have a set of site / activity specific emergency arrangements for incidents including, fire, flooding, evacuation and summoning the emergency services etc. These arrangements must be notified to management, displayed on site (where static) and brought to the attention of all relevant personnel.

Such arrangements must be regularly tested to ensure ongoing adequacy and effectiveness.

### 5.7 Incident reporting

Incidents must be reported to MWH as soon as reasonably practicable but always by the end of the working day.

This must be followed by a written report identifying the facts and circumstances (as known at the time) of the incident.

MWH require that all incidents are investigated. The level of investigation should be in proportion to the severity of the incident, identifying the following as a minimum:

- Key details of the incident (circumstances, personnel involved, environment etc.)
- Immediate action taken
- Analysis of assessment of risk and application of safe system of work
- Immediate and root causes
- Constructive recommendations in the form of an action plan, based on the identified causes, which are both achievable and attainable

Clients may have additional requirements for reporting incidents. Where these exist, the MWH project Manager is responsible for ensuring that such requirements are complied with.

## **5.8 Dangerous condition / hazards / near miss reporting**

Everyone undertaking construction work has a duty to report instances where they or others are working in a way that puts them or anyone else in danger. Any such instances must be reported to the person in control of the work.

MWH recognise the benefits of near miss reporting and encourages our supply community to report hazards and near misses using HSF 001.03 – improvement opportunity - BOB cards.

## **6 HEALTH AND WELLBEING**

It is the express aim of MWH that we protect the health and enhance the wellbeing of our people and our sub-contractors / suppliers.

MWH sub-contractors / suppliers are encouraged to actively participate in improving the health and wellbeing of their employees. Competent personnel are available within MWH to support its sub-contractors in developing strategies to reduce exposure to health risks, provide guidance on monitoring performance and the promotion of health and fitness, as part of a holistic approach to improving health and wellbeing.

MWH support a proactive health, safety and wellbeing culture by raising awareness of both work related and lifestyle health through campaigns, communication materials and workshops.

### **6.1 Worker**

#### **6.1.1 Fitness to Work**

Sub-contractors / suppliers are expected to ensure that their personnel are fit to do the job for which they have been employed. Personnel who are deemed to undertake 'safety critical' roles should be subject to regular medical assessments. Those undertaking non safety critical work should be evaluated by a health questionnaire with referrals by the employing company for further checks, as required.

#### **6.1.2 Personal medical assessments**

The health and wellbeing of everyone working for MWH is of paramount importance and we understand the benefits of having a healthy workforce. As such MWH encourage its sub-contractors and suppliers to provide personal medical assessments at regular intervals. Regular assessments offer an opportunity for health professionals to provide information to individuals on their health and wellbeing and provide advice and guidance enabling people to make informed choices about their own health and wellbeing.

These assessments will complement the monitoring provided to safety critical workers and those who are subject to health surveillance.

#### **6.1.3 Management of ill health**

All sub-contractors / suppliers should ensure that arrangements are in place to manage individual health problems when they arise. Support should be provided to assist the individual to remain in work or to return to work as soon as possible.

Where a case of ill health (individual) is identified, a risk assessment should be carried out which considers:

- The normal activities carried out and how these affect the problem or recovery
- The recovery requirements as advised by a suitably qualified health professional
- Activities that should be prohibited in order to prevent exacerbation of the problem or hinders recovery

The risk assessment should be reviewed by a suitable qualified occupational health professional. It must be agreed to by the individual and monitored at suitable intervals.

#### 6.1.4 Fatigue management

MWH recognises that fatigue can directly affect a number of key physical and mental abilities leading to poor performance, errors and mistakes.

Sub-contractors / suppliers must ensure that due consideration is given to the effect of working hours, travel time and shift patterns. A risk assessment should identify:

- The activities and hazards which can put people at risk of fatigue
- Personnel who are at risk of fatigue
- Measures required to eliminate or alleviate the risks

### 6.2 Workplace

#### 6.2.1 Risk assessment

Physical and psychological health risks should be included for consideration and evaluation in all general risk assessments.

Activity / task specific risk assessments should include the following where identified as hazards:

- Physical agents (noise and vibration)
- Contact with substances hazardous to health
- Musculoskeletal risks and the ergonomic environment

Role based health and wellbeing assessments must be completed for personnel taking the following into account:

- Working hours, repetitive tasks and fatigue
- Physiological and psychological health risks presented by the tasks performed
- Key stressors in the performance of the role which can be reasonably identified as having an impact on wellbeing

#### 6.2.2 Health surveillance

Sub-contractors / suppliers must have in place, health surveillance arrangements to check the health status of personal exposed, or potentially exposed to significant health risks. Exposure to the following hazards could require ongoing monitoring in the form of health surveillance:

- Vibration - Hand Arm Vibration Syndrome
- Noise – audiometry
- Confined space – fitness to enter
- Regular night work
- Skin exposure to substances
- Respiratory exposure to substances / agents

## 6.3 Wellbeing

### 6.3.1 Psychological wellbeing

The Health and Safety Executive defines stress as 'the adverse reaction people have to excessive pressure or other types of demand placed on them'.

MWH recognises that stress can have a detrimental effect on the health and wellbeing of those working with us and is committed to reduce any work related causes of stress and to provide support, where possible, to personnel where personal or external factors are the source of stress.

MWH supports the management standards developed by the HSE in this respect. These standards cover the primary sources of stress at work. They are:

- **Demands** including workload, work patterns and the working environment
- **Control** how much say the person has in the way they do their work
- **Support** includes encouragement, sponsorship and resources provided by the organisation, management and colleagues
- **Relationships** includes promoting positive working to avoid conflicts and dealing with unacceptable behaviour
- **Role** whether people understand their role within the organisation and whether the organisation encourages that they do not have conflicting roles
- **Change** how organisational change (large or small) is managed and communicated in the organisation

These management standards represent a set of conditions that, if present, reflect a high level of health and wellbeing.



## **7 TRAINING AND COMPETENCE**

MWH are committed to promoting the need for competency development within our sub-contractors / suppliers. To demonstrate this commitment and recognising that training is a key component of competence, it is a requirement for everyone working for MWH to hold a health and safety related qualification at a level which is commensurate with their role.

### **7.1 Induction**

MWH has developed an induction briefing which will be given to all sub-contractor / supplier personnel, before they commence work on an MWH site / office.

From time to time, it may be necessary for a person to receive a re-induction, for example due to a period of absence lasting more than one month.

### **7.2 Specific role competencies**

MWH has established minimum health and safety competencies (role dependent) that all sub-contractors working on behalf of MWH are encouraged to hold, or be working towards. These are:

- Managing and Operational Directors should attend a one day IOSH directing safely course
- All operational managers should hold a valid site managers safety training scheme (SMSTS) certificate or NEBOSH certificate
- Anyone who is responsible for putting people to work on site, for example, supervisors and team leaders, should hold a valid site supervisors safety training scheme (SSSTS) certificate or equivalent.
- All confined space courses attended must meet the City & Guilds 6150 standard
- Anyone who works or supervises work in the proximity of underground services shall have attended a service avoidance training course consisting of both theory and practical sessions
- Anyone who is required to use cable avoidance equipment must be trained on the use of the equipment
- At least one member of each team to be trained in emergency first aid
- All plant training to be accredited to CPCS, NPORS or other national scheme
- All teams working on the public highway to be NRSWA trained to appropriate level

## **8 OPERATIONAL HEALTH AND SAFETY MANAGEMENT**

### **8.1 Welfare**

Ensuring that everyone has access to adequate welfare arrangements is a fundamental requirement, especially in the environment in which we work. Good facilities can positively benefit health and well-being and can help prevent ill-health. Sub-contractors must ensure that suitable welfare facilities are provided for all work activities, taking into account the nature and duration of work.

This means providing:

- Access to suitable toilet and washing facilities (using hot and cold running water where possible). The following hierarchy should be adopted:
- Fixed facility on site
- Fixed welfare unit within 10 minute journey
- Mobile water flushing unit on site (min requirement for work exceeding two weeks duration)
- Mobile chemical flushing unit on site (suitable for work up to two weeks)
- Chemical toilet plus hand washing in vehicle (for work lasting 3-5 days)
- Local facilities with hand washing in vehicle (1-2 days)
- Ample supply of clean fresh drinking water from mains supply, or in suitable containers
- Facilities to store and dry wet clothes
- A means of heating water and food
- Facilities and rest / eating areas, maintained in a clean and hygienic condition

All facilities should be within a 10 minute journey from the work location.

### **8.2 Visitors / visiting workers**

Every effort must be made to ensure that unauthorised visitors do not enter work sites. Children and animals are not allowed on any MWH sites, either as pedestrians or in vehicles.

MWH recognises that situations may arise when it is necessary for occasional visitors or visiting workers such as delivery drivers, plant fitters etc. to attend site. Visitors or personnel who will be working on site for a period of less than one day and who do not receive a full induction must as a minimum be:

- Issued with information identifying the site safety rules and site-specific hazards
- Provided with appropriate PPE and advised on its correct use
- Accompanied at all times by a competent person, who is formally allocated responsibility for the visitor (including in the event of an emergency)

Drivers delivering goods and materials should remain with their vehicles, except to visit welfare facilities or offices to deal with paperwork. When outside of the vehicle, all drivers / operators must wear appropriate PPE and be under direct supervision when away from the vehicle.

### 8.3 Mobile phones

The inappropriate use of mobile phones / smart devices during work activities, for example whilst driving or operating plant / equipment, represents a significant risk of harm to the user and others around them. Therefore, the use of mobile phones for making or receiving calls, emails or text messages shall only be permitted outside of the working area or in designated safe areas on the site. Mobile phone usage is permitted inside welfare facilities or offices, however their use on landing and whilst climbing stairs is discouraged.

### 8.4 Personal Protective Equipment

Sub-contractors shall ensure that everyone is provided with and wears the following mandatory PPE when on an MWH site.

- Hi-visibility outer layer to EN471: Class 3
  - Long sleeved for all personnel
- Head protection to EN 397
  - To be worn at all times on an operational site to protect the head against the risk of injury either from falling materials or from striking the head against projections.
  - All head protection shall have a completed ICE tag attached.
  - Sikhs wearing turbans do not need to wear head protection, however consideration must be given to ensure they remain safe whilst undertaking their tasks.
- Safety footwear to EN345
  - Safety footwear must include mid-sole protection and have a covered steel toe cap
  - Footwear should be provided which is most suitable for the activity they are carrying out and focus on reducing the risk of foot / ankle injury. Anyone undertaking excavation activities must be provided with footwear with metatarsal protection as a minimum. Metatarsal protection may also be provided where a significant risk of foot injury is highlighted during the risk assessment process.
  - 'Rigger' style footwear is not permitted
  - When working with asbestos, boots without laces should be worn to assist with decontamination.

Where the need for additional PPE is identified during the risk assessment process, an assessment must be made to ensure that all items are compatible. The following standards apply to task specific PPE:

- Eye Protection to EN166.1.F
  - Visitors and worker who wear prescription spectacles may use over spectacles on an occasional basis but prescription safety glasses are recommended for site workers and continued use
  - Where impact protection is required, eye protection must meet EN 166 1B 349.
  - Face visors are to be worn where a risk of liquid drops or splashes is identified. Visors must be to standard EN 166 1F3
- Hand protection to EN388

- Task specific hand protection will be outlined in the risk assessment
- Respiratory protection (RPE) to FFP3
  - Anyone who is required to wear RPE as a control measure for a specific activity must be fit tested. Please note that RPE should be worn in addition to undertaking dust suppression.
  - Wearers of full or half-face masks must be clean shaven to enable a seal to be made between the mask and their face; long hair or sideburns can also create problems as they can become trapped in the seal and cause leaks.
- Flame retardant / arc resistant clothing
  - Anyone carrying out excavation work in the vicinity of underground services or if as a result of the risk assessment process, the need to wear flame retardant and arc resistant clothing is identified, such clothing should meet the standards below:  
EN ISO 11612:2008 A1, B1, C1  
EN 61482-1-2 Class 1

## 8.5 Drugs and alcohol

MWH is committed to maintaining a safe and healthy working environment and understands how the inappropriate use of drugs, alcohol and other substances can adversely affect a person's judgment, behaviour, capability, safety and health.

MWH will work with sub-contractors and suppliers to provide information, education and guidance on the effects and symptoms of alcohol, drug and substance abuse to safeguard our workplaces and activities from the effect of these risks and as part of our commitment to maintain a safe and healthy working environment for everyone.

The following rules apply to everyone working on behalf of MWH activities regardless of their employer.

No one shall:

- Report or try to report for work (at any point during the working day) when under the influence of alcohol, drugs or other substances
- Be in possession of illegal drugs in the workplace, or prescription drugs which have not been specifically prescribed to the individual
- Be in possession of alcohol at work with the intention to consume at work or during working hours
- Consume alcohol or illegal drugs or misuse any substance whilst at work
- Allow or promote the consumption of alcohol or illegal drugs or the misuse of any substance

Sub-contractors / suppliers working for MWH must have in place, arrangements for the following:

- Pre-employment drugs and alcohol testing
- For-cause testing, in the event of a suspected breach of the above rules.
- Random drugs and alcohol testing programme
- Support available for those who seek assistance

#### 8.5.1 Limits

- Drugs: Recent introduction of new legislation means that it is now illegal to drive if either:
  - You're unfit to do so because you're on illegal or legal drugs
  - You have a specified level of illegal drugs in your blood (even if they haven't affected you're driving).

The maximum blood drug level for all sub-contractors and suppliers working on behalf of MWH are based on the national limits set for driving, regardless of whether the person is driving or not.

- Alcohol: The maximum blood alcohol levels for sub-contractors and suppliers working on behalf of MWH are based upon national limits (currently 35 milligrams per 100 millilitres of blood, in England and Wales and 22 milligrams in Scotland)

Please be aware however, that clients may set their own tolerance levels which may be lower than that stated above. Where these are set, the higher standard shall take precedence. Any breach of the above rules, or those set by a client will be referred to the individuals employing organisation to be dealt with in line with their guidance and rules, including any disciplinary action where appropriate. Breaches of the above rules will result in the individual being removed from undertaking MWH activities.

#### 8.6 First aid

Sub-contractors must ensure that, when undertaking construction work, at least one member of a team is trained in emergency first aid. On larger static construction sites and in depots there will be a least one trained first aider on site at all times.

#### 8.7 Non-English speaking personnel

Personnel who are not competent in the English language are permitted provided that it can be demonstrated that:

- Appropriate arrangements are in place to ensure that instructions are communicated effectively and understood by all team members
- Other team members are able to provide oral instructions and warning to non-English speaking personnel
- Everyone has received training to the same standard

## 9 HAZARDS

Sub-contractors and suppliers must exercise caution on site against hazards, some of which are common to the construction industry in general and others which are industry specific.

Site specific hazards must be identified whilst planning work activities. Sub-contractors must adopt a hierarchical approach to managing hazards and their associated risks, recognising that elimination should always be the first focus.

### 9.1 Excavations (including temporary works)

Excavation activities can only commence following the development of a risk assessment and safe system of work.

Sub-contractors must ensure that excavation activities do not take place until a permit to break ground / permit to dig has been completed and issued.

Once work commences sub-contractors must ensure that the following are considered and necessary controls implemented:

- Assessment of ground type, stability and requirement for temporary works
- Service location, identification and protection
- Suitable excavation support (required to prevent collapse for all excavation >1.2m deep and where necessitated by ground conditions)
- Defined method when battering or stepping an excavation
- Suitable edge protection to prevent people and materials falling
- Competent and sufficient resources - supervision and workforce
- Access and egress
- Arrangements for daily inspection and weekly statutory examination

### 9.2 Underground services

Underground services represent one of the most significant hazards present when excavating. Prior to any activity taking place where the ground is to be broken, designers must make every effort, following industry guidance, to identify the presence of and locate all underground services in the vicinity, that may impact on the health and safety of the workforce and members of the public. In order to safeguard personnel and prevent harm through contact with underground services the following shall apply:

- When excavating in areas that are particularly congested with services or have known complex arrangements, the sub-contractor shall consider the use of ground probing radar to improve confidence in the location of underground services.
- All supervisors and operatives engaged in work activities on or near services must have attended a minimum one day service avoidance course (consisting of both theoretical and practical session).
- All cable avoidance tools (CAT) must be of the type that can log data for later download and examination.
- Anyone who is expected to locate underground services must be provided with a Genny

- All users of CAT and Genny equipment must be trained in its use and limitations
- All utility damage (including pre-existing) must be reported to MWH
- All hand excavation around services should be carried out using fully insulated tools. Planned works should consider the use of an air lance where ground conditions allow. Air lances should be available for teams to use

### 9.3 Temporary works

Temporary works must be designed, constructed, used and dismantled in accordance with the guidance contained in BS5975 - Code of practice for temporary works procedures and the permissible stress design of falsework.

All excavations less than 1.2m in depth must be assessed by a competent person within the sub-contractor organisation, to determine any requirement for temporary support. All excavations deeper than 1.2m shall be adequately supported, battered or stepped to an approved design.

A temporary works co-ordinator must be appointed with the responsibility for the co-ordination of all activities related to temporary works on MWH sites.

Sub-contractors must ensure that all temporary works are installed / constructed in accordance with the design provided. Any required deviation from the design must first be approved by the temporary works designer.

The presence of signage on open mesh fencing can greatly affect wind loading and has led to injuries to members of public, as a result of the fencing blowing over. Signage must not be placed on open mesh fencing without an approved temporary works design.

Temp works designs must also be produced for works associated with support of vertical reinforcement cages and walls, prior to concrete pour, to ensure they do not collapse / fall over.

### 9.4 Working at height

Working at height remains one of the most hazardous activities and biggest cause of serious injuries in any industry. Taking appropriate measure to eliminate the risk of working at height, where possible, giving priority to collective measure over individual measures, will help protect the safety of our workforce and others who may be affected by our work activities.

Sub-contractors will minimise risk of fall through adopting the minimum standards outlined below:

#### 9.4.1 Edge protection

- All edge protection shall be a minimum of 950mm high and include a 150mm toe board and intermediate guard rail, such that there is no vertical gap exceeding 470mm. Additional protection in the form of netting / guards will be provided where there is a foreseeable risk of tools or material falling
- All edge protection must be of sturdy construction, so as to prevent breach by a person falling against it
- Edge protection must be erected, maintained and dismantled by competent persons

- Where practicable, physical stops will be used to prevent vehicles and other mobile plant impacting the edge protection
- Edge protection on excavations must be designed and erected in a manner which does not impede safe access and egress

#### 9.4.2 Ladders

- Ladders are only to be used as a means of access / egress from one level to another or for short duration light work (where the task allows three points of contact to be maintained)
- When working at height, equipment should be selected following the appropriate hierarchical approach. Preference should be given to the use of working platforms, for example, mobile scaffold, mobile elevating work platform or podium steps
- The use of trestle platforms is prohibited
- All ladders must have a unique identification, be inspected prior to use and on a weekly basis by a competent person. All inspections must be recorded
- All equipment used for working at height must be erected, operated and maintained by competent persons who have received the required training.

#### 9.4.3 Open edges and openings

- All work activities must be planned such that there are never exposed (unprotected), edges or floor openings
- All edges and opening at excavations, slabs, floors, decking etc., must at all times be effectively protected, using edge protection, to prevent people and / or materials falling through
- Wherever possible all openings and excavations, especially those in public areas, should be securely covered and fenced if left unattended
- Covers over openings should be secured in position to prevent unintentional movement and be clearly marked 'danger hole below' or similar

### 9.5 Working over or near water

Work activities should be planned to avoid the need to work near water where possible.

When working near water collective protective measures should be provided in the first instance. Where this is not possible, personal fall arrest equipment may be used

### 9.6 Working in the highway

Sub-contractors must ensure that everyone working in the highway is trained to the appropriate level.

All works are to follow the requirements set out in the 'red book' code of practice, wherever possible.

Site specific traffic management plans must be developed, implemented and monitored where it is not possible to establish a standard layout set out in the 'red book'



Managers must ensure that teams are provided with sufficient equipment to establish a safe working layout for roadworks and streetworks.

## 9.7 Lifting operations

Sub-contractors must ensure that all lifting operations are planned and co-ordinated by a lifting appointed person.

Anyone with specific appointments e.g. crane supervisor, machine operator and slinger / signaller must be trained and competent to carry out their duties. These people must be in possession of a Construction Plant Competence Scheme card (CPCS) or National Plant Operators Registration Scheme (NPORS).

Excavator operators who are engaged in lifting activities must be competent in lifting with an excavator, familiar with rated capacity indicators, the duty chart for the equipment and understand the use of quick hitch attachments. Under no circumstances are excavator to be used for lifting people.

All equipment use for lifting must be fitted with hose rupture check valves and be subject to statutory inspection, examinations and tests as set out in the Lifting Operations and Lifting Equipment Regulations.

All lifting equipment and accessories must be checked daily by a competent person (usually the operator).

- An excavator used for lifting must be fitted with the following equipment and is only permitted to lift once an 'excavator lifting' permit has been issued:
- Object handling table with diff. radius
- Load hooking device (hooks must be fitted with a clip)
- If maximum lift is over 1000kg (1 tonne), a boom lowering control e.g. hose burst check valves
- Acoustic or visual limiter / indicator
- Outriggers / blades to manufacturers standards
- All attachments must be compatible, have the SWL indicated and be included within the weight of the load

A defect reporting system must be in place to ensure that defects are noted, corrected and equipment / accessories taken out of service, where necessary.

Acceptable types of quick-hitch on MWH work activities are:

| Lifting equipment | Quick hitch                              |
|-------------------|------------------------------------------|
| 8t and over       | Double locking fully automatic           |
| Between 3t and 8t | Manual or double locking fully automatic |
| 3t and below      | Manual only                              |

Semi-automatic quick hitches are not permitted on any MWH work activity.

## 9.8 COSHH

Sub-contractors shall make every effort to minimise the use of hazardous substances through effective elimination and substitution practices. Any material / process outlined on the red / amber list should be avoided (see Appendix 1).

Relevant COSHH assessments, based on manufacturers' material data sheets must be easily available on site to anyone using the substance.

## 9.9 Asbestos

Sub-contractors may find asbestos containing materials during normal work activities. There are known geographical areas where the presence of asbestos cement mains are more likely to occur. Personnel who carry out work activities which could give unintentional asbestos disturbance, for example those carrying out intrusive structural work in buildings, must have attended a half day asbestos awareness course.

Where work activities require the disturbance or removal of asbestos containing materials, MWH arrange for this work to be carried out in accordance with the Control of Asbestos Regulations. This work will be carried out by a specialist contractor who is licensed and approved by the Health and Safety Executive. Under no circumstances should the sub-contractor attempt to remove asbestos using its own personnel.

## 9.10 Manual handling

Manual handling hazards must be identified as part of the risk assessment process and an emphasis placed on using mechanical lifting aids / equipment wherever possible.

## 9.11 Confined spaces

Through good design, MWH is committed to avoiding the need to work in confined spaces. Sub-contractors must not permit any person to enter a confined space without the permission of MWH.

All working in confined spaces will be controlled by strict adherence to an agreed safe system of work.

All personnel working in confined spaces must have attended a nationally accredited training course (such as City & Guilds or Water UK) which is commensurate with their role. Occasionally it is acceptable for people to have attended a training course run by the local water utility, providing they are working within that region.

## 9.12 Plant and equipment

### 9.12.1 Existing fixed plant & equipment

When working on, or around existing plant and equipment, be aware of the following:

- Some equipment starts automatically with no warning
- Never operate a control switch or valve unless authorised
- Keep doors to electrical switch rooms and panels closed and locked

- Isolate all equipment and obtain relevant permits prior to working on a system
- Place danger notices and ensure lock off controls are in place
- Never operate plant or equipment with a danger notice on it
- Never break into any commissioned or operational service pipe or main without a written permit for that operation

#### 9.12.2 Sub-contractor / supplier plant and equipment

When selecting and using plant and equipment, it is essential that:

All personnel using plant and equipment are competent to do. In some cases it is necessary for the person to attend formal training as part of their demonstration of competence. Example would include construction plant where training courses should be CPC or NPORS accredited.

Plant and equipment selected must be suitable for the working environment. Consider the ground conditions, nearby operations, specification of the plant / equipment, visibility / protection of the operator and guarding arrangements.

All plant / equipment must be regularly inspected and tested. This includes daily visual checks by the operator, regular more thorough inspections carried out by a competent person and periodic servicing in accordance with manufacturer / industry recommendation.

Any defects identified must be remedied immediately or reported and the vehicle put out of service. Records of inspection, maintenance and repairs must be kept.

All activities involving the use of mobile elevating work platforms (MEWPS) must be planned by a person who has successfully completed the 'IPAF MEWPS for Managers' course.

The use of 1 tonne dumpers is prohibited unless approved by MWH SHEQual team and subject to a suitable and sufficient risk assessment.

#### 9.13 Tunnelling

All shaft, tunnelling and heading activities must be carried out in accordance with the requirements of the Confined Space Regulations and BS6164 – Code of Practice for Safety in Tunnelling in the Construction Industry.

Attention is also drawn to the Tunnelling and Pipejacking: Guidance for Designers (produced jointly between HSE, British Tunnelling Society and the Pipe Jacking Association) which provides information on drive lengths and internal dimensions of tunnels and headings.

#### 9.14 Vulnerable road users

Sub-contractors and suppliers working on behalf of MWH must ensure that other road users are afforded sufficient protection from work activities. In particular, consideration must be given to the guidance given in the 'Construction Logistics and Cyclist Safety' (CLOCS). The guidance includes reference to safety devices which should be fitted to vehicles in order to safeguard, in particular, with pedestrian and cyclist safety. It also provides guidance on driver training and other aspects of managing occupational road risks.

MWH expects all sub-contractors and suppliers to meet or have a plan in place to meet the standard.

#### 9.15 Scaffold

Only sub-contractors who are full members of the National Access and Scaffolding Confederation (NASC) are to be employed to erect 'tube and fitting' standard and designed scaffold.

Scaffolds must be designed, erected, altered and dismantled by competent personnel and in accordance with NASC Guidance documents such as TG20, SG25 and SG4.

All scaffolders must be in possession of a Construction Industry Scaffolders Record Scheme (CISRS) card. Anyone with a labourer's card must work in a position of safety at all times

Scaffolding must be regularly inspected by a competent person who has been specifically trained on scaffold inspection.

#### 9.16 Protecting the public

Sub-contractors must ensure that all site boundaries are defined physically by suitable fencing. The appropriate selection of fencing shall be subject to risk assessment. The risk assessment must address the issues of public protection and should consider the following as a minimum:

- Location of works e.g. hazards associated with working on public highway including the speed limits, road use and visibility. Alternatively work may be carried out across open fields with little or no space restrictions
- Environment – nearby schools, hospitals
- General security – protection against vandalism and theft of equipment
- Duration of the work
- Nature of work being undertaken, for example, deep excavations
- Attendance on site – manned or unmanned

All fencing must be erected in accordance with manufacturers' recommendations and must not be altered in any way which could affect their stability, for example by adding signage to open mesh fencing.

The feet of fencing that protrudes into the working or public area is to be a conspicuous colour so as to be easily visible to prevent trips.

Arrangements must be in place to facilitate inspection and maintenance of temporary fences. Controls may include nominating an individual to undertake regular inspections. The frequency of any inspection regime will depend upon the identified level of risk.

#### 9.17 Dust, noise and vibration

Poor management of activities that produce dust, noise and vibration can have a significant effect on the health of those who are exposed to it. These health hazards should be considered alongside traditional safety hazards as part of an effective risk assessment process.

Sub-contractors must ensure that effective plans are in place to mitigate, manage and monitor the risk associated with dust, noise and vibration, giving due consideration to the hierarchy of control. Where a risk assessment identifies the need for respiratory protective equipment (RPE), such equipment must be face-fit tested using qualitative or quantitative techniques.

Regular monitoring of noise and vibration must be carried out on site to verify that risk control systems are effective.

#### **9.18 Electrical safety**

All electrical installations must be planned, installed, maintained and inspected by a trained and competent person. Sub-contractors must comply with the requirements of HSG141 'Electrical Safety on Construction Sites' and have written arrangements in place for the inspection and testing of all portable electric tools.

When used on site all portable electric tools, must be inspected prior to use, every month thereafter, and be tested / inspected every three months as a minimum.

All generators must be suitably earthed with the following exceptions:

- For small-scale work of less than one day duration, portable generators with outputs up to 10kva need not be earthed, provided that they are only used with Class II (double insulated, or all insulated) tools and equipment
- Small, single phase generators used for 110v supplies (ratings up to 5kVA) need not be earthed if all of the equipment used is double insulated, or it supplies only one item of earthed equipment and the equipment is bonded with the frame of the generator

The following appliances are not permitted on site:

- Radiant space heaters unless with the consent of MWH SHEQual team
- Heaters without thermal overload
- 3KW heaters used in conjunction with a 13-amp plug and socket – fixed heaters must be wired directly into the wall socket
- Tubular heaters not fitted with a wire cage
- Portable and hand held tools for use with voltages above 110v
- 240V chargers for cordless power tools are only permitted following approval by the MWH SHEQ team and only then in agreed designated locations

## APPENDIX A

---

### RAG Lists

## RED LISTS

**Hazardous procedures, products and processes that should be eliminated from the project where possible.**

- Lack of adequate pre-construction information (e.g. asbestos surveys, details of geology, obstructions, services, ground contamination and so on)
- Hand-scabbling of concrete (e.g. 'stop ends')
- Demolition by hand-held breakers of the top sections of concrete piles (pile cropping techniques are available)
- Specification of fragile roof lights and roofing assemblies
- Processes giving rise to large quantities of dust (e.g. dry cutting, blasting and so on)
- On-site spraying of harmful substances
- Specification of structural steelwork which is not purposely designed to accommodate safety nets
- Designing roof mounted services that require access (for maintenance and so on), without provision for safe access (e.g. barriers)
- Glazing that cannot be accessed safely. All glazing should be anticipated as requiring cleaning replacement, so a safe system of access is essential
- Entrances, floors, ramps, stairs and escalators not specifically designed to avoid slips and trips during use and maintenance, including taking into account the effect of rain water and spillages
- Design of environments involving adverse lighting, noise, vibration, temperature, wetness, humidity and draughts or chemical and / or biological conditions during use and maintenance operations
- Designs of structures that do not allow for fire containment during construction

## AMBER LISTS

**Products, processes and procedures to be eliminated or reduced as far as possible and only specified or allowed if unavoidable. Including amber items would always lead to the provision of information to the Principal Contractor.**

- Internal manholes and inspection chambers in circulation areas
- External manholes in heavily used vehicle access zones.
- Specification of 'lip' details (i.e. trip hazards) at the tops of pre-cast concrete staircases.
- Specification of small steps (e.g. risers) in external paved areas.
- Specification of heavy building blocks (e.g. those weighing more than 20kgs).
- Large and heavy glass panels.
- Chasing out concrete, brick or blockwork walls or floors for the installation of services.
- Specification of heavy lintels (slim metal or hollow concrete lintels are better alternatives).
- Specification of solvent-based paints and thinners, or isocyanates, particularly for use in confined areas.
- Specification of curtain wall or panel system without provision for tying or raking scaffolds.
- Specification of blockwork wall more than 3.5 metres high using retarded mortar mixes.

- Site traffic routes that do not allow for one-way systems and / or vehicular traffic segregated from site personnel
- Site layout that does not allow adequate room for delivery and / or storage of materials, including site specific components.
- Heavy construction components which cannot be handled using mechanical lifting devices (because of access restrictions / floor loading and so on).
- On-site welding, in particular for new structures.
- Use of large piling rigs and cranes near live railways and overhead electric power lines or where proximity to obstructions prevents guarding of rigs.

## GREEN LISTS

### Products, processes and procedures to be positively encouraged.

- Adequate access for construction vehicles to minimise reversing requirements (one-way systems and turning radii)
- Provision of adequate access and headroom for maintenance in plant room, and adequate provision for replacing heavy components
- Thoughtful location of mechanical and electrical equipment, light fittings, security devices and so on to facilitate access, and placed away from crowded areas
- Specification of concrete products with pre-cast fixings to avoid drilling
- Specification of half board sizes for plasterboard sheets to make handling easier
- Early installation of permanent means of access, and prefabricated staircases with handrails
- Provision of edge protection at permanent works where there is a foreseeable risk of falls after handover
- Practical and safe methods of window cleaning (e.g. from the inside)
- Appointment of a temporary works co-ordinator (BS 5975)
- Off-site timber treatment if PPA- and CCA-based preservatives are used (boron or copper salts can be used for cut ends on site)
- Off-site fabrication and prefabricated elements to minimise on site hazards
- Encourage the use of engineering controls to minimise the use of personal protective equipment